



COMPASSION SATISFACTION OF PHYSICIANS AND ITS IMPACT ON PATIENT CONSULTATION SATISFACTION IN OUTDOOR MEDICAL PATIENTS: A CROSS SECTIONAL ANALYTICAL APPROACH.

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KEYWORDS	ABSTRACT
Physicians; Compassion Satisfaction; Patient Satisfaction; Physician-Patient Relations.	Background: Physicians' compassion satisfaction can have positive impact on patient care, however, its association with patients' consultation satisfaction is not well explored in Pakistan. To find out the relationship between Physicians Compass Satisfaction and the Patients Satisfaction with Consultation in the Out Patient Department of District Teaching Hospital Kohat, Khyber Pakhtunkhwa Province, Pakistan. Materials and Methods: The study was Cross Sectional descriptive study, conducted in the Medicine and Allied outpatient department from 5th March 2024 to 5th March 2025. Following the ethical approval, 10 qualified physicians were chosen using simple random sampling and patients who had chronic medical conditions were recruited. The Compassion Satisfaction Subscale of the Professional Quality of Life Scale (ProQOL-5) was used to measure the physicians' compassion satisfaction, and the Consultation Satisfaction Questionnaire (CSQ) was adopted to measure the patients' satisfaction of consultation. The data obtained were analyzed using SPSS version 22 through the process of self-administered questionnaires and structured interviews. The criteria for statistical significance were set as $p < 0.05$. Results: Moderate and significant positive association was found between physicians compassion satisfaction and patients consultation satisfaction ($r = .597$, $p = .009$). Regression analysis was significant ($F(1,13) = 7.216$, $p = .019$), explaining 35.7% of the variance. Conclusions: Compassion satisfaction was positively correlated with patient satisfaction with the consultations, suggesting a need for physicians to take care of their emotional health to enhance patient-physician interactions.
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Introduction

The ideal of caring about patients in a healthcare facility, may be a reward in itself to the doctors. During treatment, observing improvement in patients, gives doctors an increased feeling of responsibility and motivation to serve the society. Stamm explains compassion-satisfaction as “resilience of human spirit”, and argues it to be potentially attainable that might serve as barrier against compassion-fatigue, among professionals (Chen et al., 2022; Stamm, 2010). Compassion is a key concept in healthcare that determines quality of interactions between doctors and patients and eventually determines the outcome of treatment. It can be described as a feeling of pity towards the plight of another, and a wish to relieve that plight (Ahmed et al., 2024; Mascaro et al., 2020). In the clinical practice, compassion is not limited to empathy, but it encompasses active participation, empathic and supportive communication with the patients. Compassionate physicians tend to be more trustful, have better communication and develop a therapeutic relationship with their patients (Varghese & Khakha, 2025). Almost similar to this idea is compassion satisfaction that is the positive emotion experienced when assisting others and when one can reach their professional responsibilities in an effective manner (Stamm, 2010). It is a feeling of achievement, job satisfaction, and emotional gratification to the healthcare providers. A high compassion satisfaction has been related to less burnout, enhanced resilience, and overall job performance among medical practitioners (El-Bar et al., 2013; Huggard et al., 2013; Hundall Stamm, 2009). Conversely, low compassion satisfaction can adversely affect the behaviour of the physicians, resulting in diminished empathy, ineffective communication and quality of care. This, subsequently, can influence the perception of healthcare services by the patients. It is well-known that effective doctor-patient communication is a pillar of quality healthcare and correlates with patient satisfaction (Bensing, 1991b; Ryu & Shim, 2022). Physicians practicing patient-centered communication make the patients feel heard, respected, and valued; therefore, improve their overall experience during consultations (Kwame & Petrucka, 2021).

Satisfaction with patient consultation is an important measure of healthcare quality and a measure of how the expectations and needs of patients are fulfilled during medical encounters (Mularczyk-Tomczewska et al., 2025). Satisfaction on consultation has been associated with increased compliance to medical advice, better health outcomes and enhanced trust in medical practitioners. Research has revealed that patients are more satisfied with doctors who exhibit empathy, give them clear explanations and engage them in the decision-making process (Langebeek et al., 2014). Although the role of compassion in healthcare has been acknowledged, the bulk of the research available has centered on compassion fatigue and burnout but not compassion satisfaction. Besides, the interaction between the compassion satisfaction of physicians and consultation satisfaction of patients has not been studied extensively, especially in developing nations. Most of the previous studies have been carried out in the Western context and among nursing populations, and there is scanty research on physicians (Bageas et al., 2021; Ghazanfar et al., 2018). The Pakistani healthcare system has been struggling with several issues, such as excessive patient load, insufficient resources, and physician to patient ratio (Khalid & Abbasi, 2018; Khan et al., 2023). These could interfere with the capacity of physicians to have a compassionate relationship with their patients, and this may

impact patient satisfaction. With unique healthcare dynamics and sociocultural differences in Pakistan, the study on the impact of compassion satisfaction on patient experience by physicians in Pakistan is vital. The current study is cross-sectional and focuses on exploring how the satisfaction of physicians with their compassion affects the consultation satisfaction of patients in outpatient clinics. The knowledge of this relationship can be useful in enhancing patient-centered care and overall better quality of healthcare services.

Literature Review

Physicians' Professional Well-being and Compassion Satisfaction

The quality of the clinical encounter is shaped by what doctors know and do, as well as how they feel about and engage with their work. Doctors have to deal with sickness, uncertainty, emotional strain and extremely busy work routines on a regular basis. These experiences can impact their work and, consequently, their work with patients. Professional Quality of Life (ProQOL) offers a useful model to think about the positive and negative aspects of caring professions. The good side of this experience is called compassion satisfaction, which is the feeling of satisfaction that may be derived by helping others. Over the past few years, a number of studies have maintained the connection between compassion satisfaction and psychological health among health care workers. In their study, Fioriti et al. (2024) observed that positive psychological resources such as psychological well-being and flexibility were related to compassion satisfaction, thus indicating that positive psychological resources can support healthcare workers in engaging in a positive relationship with the healthcare role. In the same way, Jung and Jung (2025) found that self-compassion was correlated with increased compassion satisfaction and decreased negative professional outcomes. The findings from Pakistan also suggest that professional quality of life is among the significant issues for healthcare workers. The data from this study indicated the presence of positive (compassion satisfaction) and negative (burnout and secondary traumatic stress) phenomena of professional quality of life in the same sample of healthcare workers. The findings have significance for patient care because compassion satisfaction is not just a personal sense of accomplishment and success. Physicians who continue to find meaning and satisfaction in taking care of patients may be more likely to be attentive, responsive, and emotionally available in encounters with patients. There is limited direct evidence, however, to support a connection between physician compassion satisfaction and patient's experience of consultation immediately.

Physician Empathy and the Quality of Clinical Interaction

Empathy should be compared to Compassion satisfaction as well, as the two ideas are related but not synonymous. Compassion satisfaction refers to a good feeling in the professional relationship with patients, and empathy is a feeling of the doctor's in relation to the patient's attitude and emotional state. In real life, these traits could overlap – for instance, listening attentively, respecting patients' concerns, offering explanations that patients can understand, demonstrating respect during decision-making processes.

Recent data clearly indicates that empathy is relevant to patient experience. In the systematic review of physician empathy, the researchers Zhang et al. (2024) noted that patient satisfaction and enhanced doctor–patient communication are among the points of importance that stem from physician empathy. Keshtkar et al. (2024) conducted a systematic review of 14 randomized trials that contained 1,986 patients, and reported that all the trials reported improved patient satisfaction after interventions to increase practitioner empathy indicators. Research also exploring actual consultation behaviour support the relationship. Campos et al. (2024) examined verbal and non-verbal cues to patient communication during clinical consultations and discovered that physicians' attention to patient communication cues correlated with patient satisfaction and physician empathy. Some behaviors were negatively related to patient-rated outcomes, such as interruptions and disapproval, and some were positively related to more positive ratings such as giving the right advice and attending to patient cues. This indicates that there are discernible behaviors that patients can identify and assess that convey the emotional and interpersonal quality of a consultation.

Physician Communication and Patient Satisfaction

One of the most obvious factors involving the doctor/patient relationship is communication. Consultations can be evaluated by the patients, whether the doctor listens carefully, whether he explains the problem clearly, whether he answers concerns, whether he gives enough time for patients to ask questions. This means that even if treatment is appropriate, communication can affect the way patients view the quality of treatment they receive.

This has been supported by recent research. Arshad et al. (2024) conducted a study on patients visited in public and private hospital of Rawalpindi and Islamabad, and found that there were significant positive relationships between communication skills of physicians, physician empathy and patient satisfaction. Their analysis also indicated that relationship between communication skills and patient satisfaction was mediated by physician empathy. This is especially pertinent to the current study given that the interpersonal attributes of the physician have been found to affect patient experience of their clinical interaction.

Studies at a behavioral level of communication have also been studied more recently. In outpatient care, Chen et al. (2025) found that the overall doctor–patient communication was positively correlated with patients' satisfaction. They also found that using regression analysis, communication satisfaction accounted for a significant portion of the variance in patient satisfaction. In a similar study, Ashley et al. (2025) determined that communication skills training improved physician-related outcomes and patient satisfaction, the latter of which remained over time. All these findings suggest that communication is not only a desirable interpersonal skill, but it's also a potentially modifiable part of the patient experience.

Patient-Centered Communication in Pakistan

In Pakistan, health care interactions take place in a complex social and organisational context, which may be especially relevant to the importance of communication. Patients might come to

consultations with expectations about doctors' skills and competence, attention, respect and willingness to listen. If these expectations are not met, there can be a sense of dissatisfaction without effective medical care.

This is reflected in recent Pakistani studies. In a cross-sectional study carried out in Karachi, Irshad et al. (2024) reported that the members of the public had high expectations from physicians but their experiences with healthcare were not necessarily positive. The authors highlighted the importance of a patient-oriented health-care system. There have also been reports of problems in communication between physicians and doctors in Pakistan. Clinicians acknowledged their duty in communicating tough news, but there was limited formal training in this area, according to Abdullah et al. (2024). Some of the areas identified by the study that need improvement include rapport building, having to deal with interruptions and understanding patients' points of view. Similarly, Afzal et al. (2024) studied patient-resident physician communication in Pakistan, and found that communication was an essential part of patients' evaluation of quality of health care.

The results are important context for understanding the experiences of physicians' compassion satisfaction. As a busy physician in the clinical setting, it may be partially dependent on the physician's own experience of professional well-being to be able to remain engaged, attentive and emotionally responsive. So it's not just about learning about burn out and occupational stress; it's about learning about the positive aspects of physicians' work experience as well.

Consultation Satisfaction as a Patient-Reported Outcome

Consultation satisfaction is a measure of the patient's judgement of his/her experience in a clinical interaction with a health care provider. It covers aspects of the consultation such as interpersonal behaviour, communication, information exchange, perceived time and attention, and involvement in decision making (Poulton, 1996; Tates et al., 2018). Additionally, patients' involvement in the decision making process and their comprehension of information during the consultation have been linked with higher satisfaction with the consultation and treatment choices (Légaré et al. 2018). Importantly, it is essential to differentiate the satisfaction with consultation from the overall satisfaction with hospital services, as patients may be satisfied with the care received from their doctor but not satisfied with the other services provided in the hospital, such as waiting time, registration process, physical facilities, the service provided in the pharmacy and the laboratory (Kanwel et al., 2024).

This is especially important in the context of healthcare in Pakistan. Kanwel et al. (2024) assessed various dimensions of service delivery in the hospital such as doctor services, nursing services, laboratory services, pharmacy services, registration services, physical facilities and doctor-patient communication for the study conducted with 879 patients in the outpatient departments of South Punjab. They found that patient satisfaction was significantly associated with the laboratory, pharmacy, doctor, nursing and digital-payment services, while doctor-patient communication was not statistically significant in their final model. The results indicate that patient satisfaction is a multidimensional concept, which means that interpersonal communication of the clinical encounter

plays a complementary role to other organizational and hospital-service aspects (Kanwel et al., 2024).

Meanwhile, data from the physician–patient research suggests that the interpersonal encounter is also significant. Mostafapour et al (2024) summarized the factors affecting patient–physician relationship and found that communication, trust, empathy and other related factors were key determinants of patient satisfaction and complaints. Thus assessing satisfaction with consultation separately offers a chance to look specifically at the physician–patient interaction aspect of the patient's experience.

Linking Physicians' Well-being With Patients' Experience

A new view in research in healthcare is that the well-being of physicians and patient experience should not be seen as entirely unrelated goals. An emotional and psychological reaction in a physician might affect the way he or she communicates, listens and reacts during a consultation. This can, in turn, affect patients' expectations of care.

There is some indirect support for this pathway in recent research. The study by Zheng et al (2025) explored the relationship between patient-centered communication between physicians and other factors, and found that patient-centered communication was indirectly linked to recovery in non-work time via work–home enrichment and dimensions of empathy. This implies that the personal resources and well-being of physicians can have impact on patient-physician interaction.

Likewise, the evidence on communication training from Ashley et al. (2025) stands out as recent, given that the intervention resulted in improvements at the level of the physician as well as the patient. While these studies do not provide any evidence that compassion satisfaction is a cause of higher levels of patient satisfaction, they do lend support to the broader notion that psychologic and interpersonal attributes of physicians can be important factors of patient-reported experiences.

This separation is crucial for the current research. Compassion satisfaction is not the same as empathy, communication skill or patient satisfaction. Instead, it is a positive component of physicians' quality of professional life that can manifest itself in the way physicians approach and interact with patients. An analysis of this relationship can thus provide a new perspective on the current body of knowledge.

Research Gap

Abundant evidence exists in the existing literature that is correlated between physician empathy/physician communication and a satisfaction with the consultation; however, there is a significant amount less literature that is correlated between a physicians' satisfaction with their level of compassion and a patient's satisfaction with their consultation. Recent research has tended to focus on empathy, communication skills, burnout, and/or professional quality of life or overall patient satisfaction as separate constructs (Zhang et al., 2024; Keshtkar et al., 2024; Ashley et al., 2025). From the Pakistani literature, an important gap is also revealed. There are studies that have looked

at public expectations of physicians, communication problems, and patient satisfaction with health care services, but little evidence is available in which the physician's positive professional experience is directly related to the satisfaction reported by the physician's own patients.

To fill this gap, the present study explores the consultation satisfaction of physicians as well as their compassion satisfaction among their patients in a public sector teaching hospital in Khyber Pakhtunkhwa. The study does not assume a causal relation, but instead attempts to determine whether or not variation in physicians' compassion satisfaction is related to variation in consultation satisfaction among patients. This physician–patient linkage offers an immediate examination of the potential link between a positive dimension of physician professional well-being and patient's immediate clinical consultation.

Materials and Methods

Study Design and Setting

This study employed a descriptive cross-sectional design to examine the impact of physicians' compassion satisfaction on patients' consultation satisfaction. The study was conducted in the outpatient departments (OPDs) of District Headquarter (DHQ) Teaching Hospital, Kohat Khyber Pakhtunkhwa Pakistan as a first part of our research that addressed the first objective that lasted over a period of one year from 5th March 2024 to 5th March 2025 after due approval from Research Ethics Committee of the Khyber Medical University (KIMS) reference no: KIMS-ECC/23/11.

Study Population, Sample Size and Sampling

The research participants included physicians in medicine and allied OPDs, and their respective patients with chronic medical conditions.

A sampling strategy was implemented with multistages. A total of 15 physicians were first chosen (through simple random sampling i.e. lottery method) in various OPDs. After that, 10 patients each with the help of the purposive sampling were recruited which made 150 patients in total. Each doctor was associated with his or her patients through a special identification number. The sampling structure was informed by the physician –patient study of Anagnostopoulos et al , 2012, which investigated the relationship between physician burnout and patient satisfaction with consultation in primary healthcare settings. That study employed a one with many design involving 30 specialist physicians and 300 patients having 10 patients per doctor. Interestingly, the investigators took the patients as nested within physicians and used mixed effects multilevel modeling to account for the eventual clustering. These findings revealed that 34.4% of the variance in patient satisfaction that was attributed to physician level differences (Anagnostopoulos et al., 2012).

The present study adapted this established physician –patient sampling structure to a single centre setting keeping physician –patient ratio of 1: 10 by recruiting 15 physicians and 150 patients. The

distribution ensured balanced representation of physicians and to prevent physicians with larger out patient volumes from contributing disproportionately to the analysis.

Inclusion and Exclusion Criteria

Patients

Inclusion criteria included patients aged 18 years and above, of either gender, diagnosed with chronic medical conditions, able to understand Urdu, and willing to provide informed consent.

Patients referred to surgical OPDs were excluded from the study.

Physicians

Specialist physicians of both genders working in medicine and allied OPDs were included.

Data Collection Instruments

Data were collected using standardized and validated instruments:

Compassion Satisfaction Subscale of Professional Quality of Life Scale (ProQOL-5) was used to assess physicians' compassion satisfaction (Hundall Stamm, 2009; Stamm, 2010).

Consultation Satisfaction Questionnaire (CSQ) was used to evaluate patients' satisfaction with the consultation process (Baker et al., 2011).

Data Collection Procedure

Ethical approval was obtained and data was collected from selected OPDs. Physicians were approached and provided with the self-administered ProQOL-5 questionnaire. Patients meeting inclusion criteria were recruited from the same physicians' OPDs and were interviewed using a structured questionnaire to assess consultation satisfaction.

Informed consent was obtained from both physicians and patients prior to participation. Data were collected in a confidential setting, and each physician-patient group was assigned a unique code to maintain linkage while ensuring anonymity.

Statistical Analysis

Statistical Package of Social Sciences (SPSS) version 22 was used to enter and analyze the data. The data were summarized using descriptive statistics such as means, standard deviations, frequencies, and percentages. The relationship between the physicians and the patients in terms of compassion satisfaction and consultation satisfaction were assessed through inferential analysis. The p-value of 0.05 was taken as a significant value.

Ethical Considerations

The institutional ethical committee granted ethical approval. All the participants gave informed consent and participation was voluntary. The data were kept confidential and anonymous during the study.

Results

Participants

The study was conducted with 15 specialist physicians and their 150 patients attending OPDs of District Headquarter (DHQ) Teaching Hospital Kohat who had chronic medical conditions. Patients were recruited at a rate of 10 patients for each physician. One hundred and fifty patients and all 15 physicians completed the Compassion Satisfaction subscale of the Professional Quality of Life Scale (ProQOL-5) and the Consultation Satisfaction Questionnaire (CSQ). There were no missing data elements in the data.

Descriptive Statistics

Table 1 shows the descriptive statistics of the main study variables. Physicians' mean compassion satisfaction score was 4.52 (SD = 0.46), suggesting a high overall level of compassion satisfaction in the sample. The patient's mean consultation satisfaction score (grouped by the physician) was 2.49 (SD = 0.27). The standard deviations for both of the two variables showed relatively small variation in the participants.

Table 1 : Descriptive Statistics for Physicians' Compassion Satisfaction and Patients' Consultation Satisfaction

Variable	N	Mean	SD
Physicians' Compassion Satisfaction (ProQOL-5)	15	4.52	0.46
Patients' Consultation Satisfaction (CSQ)	15	2.49	0.27

Note. SD = standard deviation. Patient consultation satisfaction scores represent aggregated mean values per physician.

Correlation Analysis

A Pearson product-moment correlation was performed between physicians' compassion satisfaction and patients' consultation satisfaction to explore the bivariate relationship. This analysis found a moderate correlation between the two variables ($r = .597, p = .009$, one-tailed). This means that more compassion satisfaction was correlated to more consultation satisfaction for physicians. The correlation matrix is given in Table 2.

Table 2: Pearson Correlations Between Physicians' Compassion Satisfaction and Patients' Consultation Satisfaction

Variable	1	2
1. Patients' Consultation Satisfaction	1.000	
2. Physicians' Compassion Satisfaction	.597*	1.000

Note. N = 15. * $p < .05$ (one-tailed).

Simple Linear Regression

Simple linear regression was conducted to check the predictive effect of physicians' compassion satisfaction on consultation satisfaction of patients. Physicians' compassion satisfaction (dr_cs) was the independent variable and patients' consultation satisfaction (Pt_cs) was the dependent variable entered using the Enter method.

Model Summary. The correlation coefficient for the regression model was a moderate ($R = .597$). Approximately 35.7% of the variance in patients' satisfaction with consultation was accounted for by the physicians' compassion satisfaction ($R^2 = .357$). R^2 was 0.307 (moderate level of explanation when accounting for sample size). There was no significant autocorrelation in the residuals with a Durbin-Watson statistic of 1.381. The results are given in the Table 3.

Table 3: Model Summary for Regression of Patients' Consultation Satisfaction on Physicians' Compassion Satisfaction

Model	R	R^2	Adjusted R^2	SE of the Estimate	Durbin-Watson
1	.597	.357	.307	.224	1.381

Note. Predictor: (Constant), Physicians' Compassion Satisfaction. Dependent Variable: Patients' Consultation Satisfaction.

ANOVA. The overall regression model was statistically significant, $F(1, 13) = 7.22$, $p = .019$, suggesting that the regression model of physician compassion satisfaction predicted patients' consultation satisfaction. Table 4 provides a summary of the results of ANOVA.

Table 4: Analysis of Variance (ANOVA) for Regression Model

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.362	1	.362	7.216	.019
Residual	.653	13	.050		
Total	1.015	14			

Note. Predictor: (Constant), Physicians' Compassion Satisfaction. Dependent Variable: Patients' Consultation Satisfaction.

Regression Coefficients. Physician's compassion satisfaction had a positive unstandardized regression coefficient that was statistically significant ($B = .347, SE = .129, p = .019$). A moderate positive effect was indicated by a standardized beta coefficient ($\beta = .597, p = .019$). The regression equation is given by:

The patients' Consultation Satisfaction is linear combination of the physician's Compassion Satisfaction and a constant, 0.915.

That is, an increase of one unit in physicians' compassion satisfaction led to a .347 unit increase in patients' consultation satisfaction. There were no multicollinearity concerns based on collinearity statistics (Tolerance = 1.000 and VIF = 1.000). Table 5 gives the details of the coefficients.

Table 5: Regression Coefficients for Prediction of Patients' Consultation Satisfaction

Model	B	SE	β	t	Sig.	Tolerance	VIF
(Constant)	.915	.587		1.559	.143		
Physicians' Compassion Satisfaction	.347	.129	.597	2.686	.019	1.000	1.000

Note. Dependent Variable: Patients' Consultation Satisfaction.

Diagnostic and Residual Analysis

4.5.1 Collinearity Diagnostics. The condition index of the model was 20.250, which is lower than the critical value of 30 for severe multicollinearity. There were no serious problems of collinearity as shown by eigenvalues and variance proportions. Table 6 shows these results.

Table 6: Collinearity Diagnostics

Model	Dimension	Eigenvalue	Condition Index	Variance (Constant)	Proportions	Variance Proportions (dr_cs)
1	1	1.995	1.000	.00		.00
	2	.005	20.250	1.00		1.00

Note. Dependent Variable: Patients' Consultation Satisfaction.

Residual Statistics. Residual analysis showed the standardized residuals were within the acceptable range of -1.545 to 1.740 and neither one to the left of the line nor one to the right of the line was extreme. Mean residual value was .000, which means there were no overall errors of prediction of the

model. These findings validate that there are no serious outliers and the regression assumptions are good. The results of the residual statistics are summarized in Table 7.

Table 7: Residuals Statistics

	Minimum	Maximum	Mean	SD	N
Predicted Value	2.096	2.652	2.485	.161	15
Residual	-.346	.390	.000	.216	15
Std. Predicted Value	-2.418	1.036	.000	1.000	15
Std. Residual	-1.545	1.740	.000	.964	15

Note. Dependent Variable: Patients' Consultation Satisfaction.

Summary of result

Overall, the findings demonstrated a moderate and statistically significant positive association between physicians' compassion satisfaction and patients' consultation satisfaction ($r = .597$, $p = .009$). The simple linear regression model was also statistically significant ($F(1,13) = 7.216$, $p = .019$) and explained 35.7% of the variance in patients' consultation satisfaction. Physicians' compassion satisfaction was positively associated with patients' consultation satisfaction ($B = .347$, $\beta = .597$, $p = .019$). These findings indicate that higher physicians' compassion satisfaction was associated with greater consultation satisfaction among their corresponding patients in this study sample.

Discussion

The aim of the present study was to explore the relationship between physician's compassion satisfaction with patients' consultation satisfaction in the setting of public sector teaching hospital in Pakistan. Our results showed a statistically significant and positive moderate correlation of these two variables, explaining about 35.7% of the variations in patients' satisfaction with consultation. These findings provide a first foray into the empirical basis of the clinical intuition that physicians who feel fulfilled in their work through compassionate care will see a difference in their patients' consultation experience.

Current studies show the positive correlation that we have found ($r = .597$) is consistent with the emerging literature that highlights the importance of the doctor's internal emotional state to patients' perceptions. In a systematic review of physician empathy in the doctor-patient interaction, Zhang et al. found that "empathic engagement" is a consistent predictor of satisfaction and trust reported by patients in their interactions with physicians (Zhang et al., 2024). Likewise, Matsuoka et al. found that physician-patient communication had a significant impact on treatment satisfaction in the communication of treatment decisions, which is especially crucial in chronic disease settings where consistent rapport between the doctor and patient is needed, using structural equation modeling (Matsuoka et al., 2021). Our findings build on these observations by examining, not only

empathy or communication skills, but also the positive, energizing aspects of professional quality of life, known here as compassion satisfaction.

However, it is important to note that a significant amount of the literature that has been developed around the concept of compassion satisfaction has come from Western healthcare environments with a high resource base and primarily centered on nursing populations (El-Bar et al., 2013; Thornton, 2017). For example, Thornton's research among pediatric nurses in the United States revealed that compassion satisfaction had an impact on patient satisfaction by virtue of the quality of nurse-patient interactions (Thornton, 2017). Our study adds the eyes of a physician from a South Asian perspective where the ratio of doctors to patients is alarmingly insufficient and clinical interactions are often rushed and over packed (Khalid & Abbasi, 2018; Khan et al., 2023). This compassion satisfaction, which still appears to be a powerful predictor in these limited circumstances, indicates that the therapeutic effect of the physician's internal sense of satisfaction may be strong in widely variegated health care environments.

In contrast, other research has doubted the importance of relational factors in contexts in which structural issues are predominant in shaping patient experience in the public sector. A recent multicenter study in Pakistan revealed that patients' perception of the quality of the care received was influenced very little by doctor-patient communication compared with other factors like cleanliness, waiting period and the presence of a pharmacy (Kanwel et al., 2024). Our results provide a nuanced counterpoint; although it is clear that the structural aspects of the consultation influence the overall patient satisfaction, the interpersonal quality of the consultation is a statistically significant and meaningful predictor of consultation-specific satisfaction, seemingly related to the physician's compassion satisfaction. This is in line with Boissy et al. who have shown that in the busy clinical setting, training physicians on communication skills leads to an increase in patient satisfaction (Boissy et al., 2016).

A possible reason for our results may be the actual behavioral dimensions of compassion satisfaction. Consultation satisfaction is positively associated with more patient-centred behaviours, such as active listening, emotional validation, and shared decision-making, which are positively associated with higher scores of this dimension. Higher scores on this dimension correlate to more patient-centred consultation behaviours, such as active listening, emotional validation, and shared decision making, which are well-documented as determinants of consultation satisfaction (Bensing, 1991a, 1991b; Kwame & Petrucka, 2021). Conversely, doctors who do not experience compassion satisfaction may show up as inhibited, quick to look away, seldom looking people in the eye, and ready to ask rapid-fire questions, all of which increase patient mistrust and dissatisfaction (Ahmed et al., 2024; Huggard et al., 2013).

In addition, compassion satisfaction could be a protective psychological resource. A recent study in Korea during the COVID-19 pandemic found that healthcare workers who scored higher in compassion satisfaction also exhibited higher scores in the professional quality of life and lower levels of burnout and secondary traumatic stress (Jung & Jung, 2025). That doctors who are emotionally satisfying are better able to maintain the cognitive and emotional load of interacting

with patients lead to a more satisfying consultation is a reasonable inference. This understanding of compassion satisfaction as the "resilience of the human spirit" that allows professionals to remain present and engaged with those they serve is consistent with Stamm's conceptualization (Stamm, 2010).

The medical system in Pakistan has a high load of patients, insufficient resources and a low ratio of trained physicians in comparison to the recommendations of the World Health Organization (WHO) (Khalid & Abbasi, 2018; Khan et al., 2023). One might think compassion satisfaction would be low across the board and that the negative impact of this on patient experience would be mitigated by general dissatisfaction with the system. However, our data indicate that there is some difference in physician compassion satisfaction that is relevant, even within this difficult setting, and that this difference has real implications for patient experience.

This discovery is of special significance for medical education and health policy in Pakistan. In one of the largest academic medical centers in South Asia, residents' communication competence was often inadequate and they wanted training to deliver bad news and be empathetic (Afzal et al., 2024). Our findings indicate that such training is not just a nice thing to do for the patient, but may be an effective tool to improve both quality of care and patient satisfaction, while simultaneously improving physician well-being. In other contexts, interventions to enhance compassion satisfaction, such as reflective practice groups, mentorship and mindfulness-based stress reduction, have been effective and could be adapted and evaluated in Pakistan (Patole et al., 2024).

Our findings, have implications for practice even with some limitations but hospital executives and policy makers need to understand that physician well-being and patient experience are not mutually exclusive objectives, but rather are linked. Investing in work factors that lead to a sense of compassion satisfaction (manageable workload, peer support, and acknowledgement of empathic work) could pay off in terms of patient satisfaction without significant infrastructural outlays.

Replication of the study is recommended in multicenter settings with larger samples of physicians, and with the incorporation of objective measures of consultation quality (e.g., audio-recorded consultations rated on patient-centeredness). In addition, qualitative inquiry might reveal the specific behaviors that help to manifest compassion satisfaction in patient perceived satisfaction which could offer more specific direction for educational interventions

Conclusion

This study brings new insights for the public hospital environment in Pakistan, where physicians' compassion satisfaction is a strong positive predictor of consultation satisfaction for patients. Although the challenges of the healthcare system are formidable in Pakistan, the quality of the relationship that is formed during the clinical encounter, influenced in part by the provider's own sense of professional fulfillment is very important. This study highlights the importance of caring for the emotional health of physicians as a goal in its own right, but also as a way to improve the experiences of patients for whom they care. As this study employed a cross-sectional design, the

findings describe an association at the time of consultation and do not establish a causal relationship. The second phase of the research will therefore extend these findings through a longitudinal follow-up study to examine whether physicians' compassion satisfaction is associated with patients' medication adherence over time. Together, these investigations may provide a broader understanding of the potential relationship between physicians' professional well-being and patient-related outcomes.

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