

Patients' perspectives on physiotherapist's empathy and its association with therapeutic alliance: a cross-sectional study

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Abstract

Background: Empathy and therapeutic alliance play a central role in patient-centered physiotherapy and contribute to better treatment outcomes. However, evidence on the relationship between them remains limited, particularly in Pakistan. Therefore, this study aimed to examine the relationship between empathy and therapeutic alliance among patients receiving physiotherapy.

Material and methods: Convenience sampling was used to identify 373 participants for this cross-sectional study, which took place in the Physical Therapy Department of Rehman Medical Institute between June and November of 2024. The 10-item CARE questionnaire was used to measure empathy with a Cronbach's alpha value of 0.95, while the 12-item Working Alliance Inventory–Short Revised (Cronbach's alpha = 0.85) was used to measure therapeutic alliance. IBM SPSS Statistics v22 was used to analyze the data.

Results: Of the 373 participants, the majority were female (53.4%) and fell within the 31–40 age range (28.2%). 40.2% of patients had chronic diseases, whereas 79.1% of patients were receiving treatment for musculoskeletal disorders. The findings showed that a better therapeutic alliance between patients and therapists was substantially correlated with higher empathy levels. Pearson's $r = 0.506$, 95% CI [0.42, 0.58].

Conclusion: Higher therapist empathy is associated with a better patient-therapist interaction, as evidenced by a moderate positive correlation between empathy and TA. This implies that more effective, person-centered physiotherapy care can be supported by empathic communication, which can also increase trust and patient participation.

Keywords: Empathy, therapeutic alliance, patients, physical therapist

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Submitted: Sep 09, 2025. Revisions Submitted: May 14, 2026, Accepted: June 14, 2026

This article may be cited as: Taslim T, Rauf K, Zaman R, Zubair MM, Obaid S, Qazi M, Aziz S. Patients' perspectives on physiotherapist's empathy and its association with therapeutic alliance: a cross-sectional study. Ann Allied Health Sci. 2026;12(1):9-13.

INTRODUCTION

Empathy is a multifaceted notion that encompasses the capacity to comprehend and share the thoughts, feelings, and attitudes of another. It is a term used to describe a variety of distinct psychological phenomena. It covers a wide range, including feeling concern and determination to help or care for other people, experiencing emotions that mirror another individual's emotions, and knowing what the other is thinking or feeling.¹ Empathy is crucial for interaction and social interaction because it allows people to share their needs, wants, and experiences and acts as an emotional link to promote prosocial behavior.² Physician empathy is considered an important element in doctor-patient communication and in providing

patient-centered care.³ Empathy, good communication, and personalized care were found to be important factors in determining patient satisfaction and a better patient-clinician interaction in a comprehensive evaluation of patients with sciatica and low back pain.⁴ According to a 2018 systematic review and meta-analysis, empathic communication enhances therapeutic results, lowers anxiety and pain, and increases patient satisfaction. Accurate diagnosis and successful treatment depend on a strong patient-clinician relationship, which is further strengthened by effective communication.⁵ The cooperative and trustworthy relationship between a patient and their healthcare provider is referred to as a therapeutic alliance.⁶ The impact of TA on physical

therapy outcomes for many diseases, such as brain injury, musculoskeletal disorders, heart disorders, and numerous other pathologies, was evaluated in a comprehensive study. According to the findings, a strong TA has a good impact on patient motivation, physical and emotional health, pain, and disability in a therapeutic context.⁷ Research conducted demonstrated a favorable correlation between TA and treatment adherence, patient satisfaction, and patient-centered outcomes.⁶ A study including patients with chest myofascial pain and adhesive capsulitis indicated that physiotherapy relieved pain and shoulder mobility while maintaining a good therapeutic connection throughout the rehabilitation period.⁸

A recent systematic review highlighted the need for more research on empathy in healthcare practice while identifying empathy as a critical factor in favorable patient care experiences and clinical outcomes.⁹ Few studies have looked at the relationship between empathy and therapeutic partnership in physiotherapy practice in South Asian and other low- and middle-income nations, such as Pakistan, despite the growing body of research on these topics. To improve rehabilitation outcomes in various contexts and guide patient-centered physiotherapy practice, locally generated evidence is therefore required.⁹

This study fills a knowledge gap regarding physiotherapist empathy and its connection to TA in Peshawar, making it noteworthy. Empathy is a significant factor that can affect patient outcomes and healthcare quality. By examining its role across various clinical contexts, the study shows how empathetic interactions strengthen TA and improve healthcare delivery. There seemed a little local data on how patients view empathy, making it difficult to understand how it affects the therapeutic alliance and to develop plans to enhance patient-centered physiotherapy care in the area. This study was carried out to find patient's perspectives on physical therapist's empathy and its association with therapeutic alliance at RMI Peshawar.

MATERIAL AND METHODS

The research study was a cross-sectional study and comprised patients visiting the physiotherapy department of RMI Peshawar. The sampling technique was a non-

probability sampling technique (convenience sampling). Patients visiting the physiotherapy department of RMI were included in the study. The study excluded patients who did not give their consent, were younger than 18, and were unable to communicate effectively due to language barriers. OpenEpi was used to determine the sample size. Based on the target population, a minimum sample size of 373 participants was determined, assuming a 95% confidence level, a 5% margin of error, and an expected frequency of 50%. Empathy was assessed by a 10-item CARE questionnaire ranging from 10-50 (Cronbach's $\alpha = 0.95$)¹⁰ where 10 indicates the lowest level of empathy, and 50 indicates the highest. TA was assessed by the 12-item Working Alliance Inventory (short revised) questionnaire, which ranges from 12 to 60 (Cronbach's $\alpha = 0.85$)¹¹ where 12 indicates the lowest level of therapeutic alliance and 60 indicates the highest. Data were collected after approval from the graduate study committee of Rehman College of Rehabilitation Sciences and incharge physical therapy department, RMI. Before data collection, each participant gave their informed consent. Confidentiality was maintained throughout the research procedure, and participants were made aware of the study's goal. For data analysis, IBM SPSS Statistics v22 was used. The duration of conditions was classified by three categories: acute, sub-acute, and chronic. Pearson correlation was applied to find the correlation between empathy and TA, while a chi-square test was applied to find the association between empathy and TA. Continuous CARE and WAI-SR scores were divided into low and high groups for Chi-square analysis using cut-off values obtained from the study data distribution to enable categorical analysis. WAI-SR scores were categorized as low (12–50) and high (51–60); CARE scores were categorized as low (10–44) and high (45–50). Participants were classified using study-specific cut-off values obtained from the distribution of the current dataset in order to perform Chi-square analysis. These categories were created especially for the current study and were only utilized for statistical analysis because there are no widely recognized or validated cut-off values for the CARE Measure and WAI-SR in the

literature.

RESULTS

The study included 373 patients in which 174 (46.6%) were male and the rest, 199 (53.4%) were female population. See table-I for further demographic details of the included patient, displays participant characteristics.

Table-I: Demographics details of the included population

Variables	Categories	Frequency	Percentages
Age	20-30 years	82	21.9%
	31-40 years	105	28.2%
	41-50 years	78	20.9%
	51-60 years	66	17.7%
	61-70 years	42	11.3%
Gender	Male	174	46.6%
	Female	199	53.4%
Duration	Acute	114	30.6%
	sub-acute	109	29.2%
	chronic	150	40.2%
Condition	Musculoskeletal	295	79.1%
	Neurological	78	20.9%

Table-II. Table showing Associations

Care categories	WAI-SR Low (12–50), n (%)	WAI-SR high (51–60)	Total	Pearson χ^2 (df)	P-value	Cramer's V
Low (10–44)	119 (69.2)	53 (30.8)	172	53.124 (1)	<0.001	0.377
High (45–50)	63 (31.3)	138 (68.7)	201			

DISCUSSION

This research aimed to find patients' perspective regarding physical therapist empathy and its association with therapeutic alliance from patients visiting Rehman medical institute. In this study the total number of 373 patients was taken from the physiotherapy department. The study had not targeted a specific branch in the field of the physiotherapy but instead just sampled a general population of patients seeking treatment in the field of the physiotherapy with the aim to assess empathy from different branches of physiotherapy as the condition of the patients vary across.

This study is among the few that have investigated the association between empathy and TA from a patient perspective. According to the result of this study there is a moderate positive association between empathy and TA. The empathic relationship between therapist and patient has shown that its contribution plays an important role in the better health outcomes. It has been recognized that health care professionals' empathic ability leads to better TA. In the present study data was collected from the participants with age groups ranging from 20-70 years. According to the results of this study there is

Empathy and therapeutic alliance show a positive link ($r = 0.506$, 95% CI[0.42, 0.58], $p < 0.001$). Furthermore, a moderate positive association between empathy and therapeutic alliance is shown by Chi-square analysis ($\chi^2 = 53.124$, $p < 0.001$) (table-II).

a positive association between empathy and TA. Positive results were gained from the patients who mentioned that their therapist understand their problems, was empathetic and motivated them to take care of their health. Similarly according to the study done in March 2018 identifies that both cognitive and affective aspects of empathy are important factors that improve the TA.¹²

While analyzing the current study, the results show maximum participants were in the age groups of 31 to 40 years old. Similarly, a study done in 2018 highlighted that age can be a greater influence on TA. This study indicates that patients recovering from MSK conditions, e.g., hip fracture, benefit significantly from strong TA because strong TA enhances motivation and adherence to rehabilitation.¹³

In accordance with the current study the total number of participants was 373, out of these 373 $n=295$ were treated for musculoskeletal condition and show greater positive feedback to physiotherapists' empathetic behavior and ultimately having great effect on TA similarly a study in June 2022 done by Friston, Francisco and their co-author show that bio behavioral synchrony between patient and therapist is a key component of TA. It

overcome the uncertainty, strengthen the TA and promote musculoskeletal conditions' recovery.¹⁴ Among the 373 participants, 20.9% (n=78) visited the physical therapy department for neurological rehabilitation. This indicates that the sympathetic behavior of physiotherapists affects their motivation and increases their optimism for recovery. Alejandra, Patricia, and their co-author conducted a systematic review in Switzerland on June 26, 2023, which found that 182 participants were acknowledged as individuals or as team members. They also came to the conclusion that empathy and a therapeutic relationship are important elements in stroke recovery. According to this systematic review, having a sense of understanding and being heard by medical professionals can strengthen relationships and foster a sense of support, both of which will aid in the healing process following a stroke.¹⁵

CONCLUSION

Patients getting physiotherapy care showed a moderate, positive correlation between the therapeutic alliance and the empathy of the physiotherapist. The majority of participants were women between the ages of 31 and 40, and the most frequent cause for therapy was musculoskeletal disorders. The results imply that in physiotherapy settings, a better patient-therapist relationship is linked to higher levels of perceived empathy.

STRENGTH

This study's strength is that it gives patients' experiences and viewpoints top priority, making sure their opinions are heard throughout the research process. Involving patients in the research, gives them a sense of validation and ownership, which encourages them to participate actively in healthcare conversations.

LIMITATION

The primary limitation of this study is that it was conducted at a single private institution, which may restrict how widely the findings may be used. Because patient experiences can be influenced by differences in patient demographics, care techniques, and resources, the opinions and experiences of patients at this institution may not be indicative of those in public healthcare facilities. Furthermore, the study's cross-sectional methodology makes it more difficult to determine the causal links between

therapeutic alliance and empathy. Additionally, participants' comprehension of the surveys may have been impacted because the instruments were neither formally translated nor verified in the local language.

RECOMMENDATION

To enable meaningful comparisons of patient experiences across various service configurations, future research should incorporate both private and public healthcare settings. Furthermore, using a longitudinal study design would make it easier to monitor changes over time and offer more solid proof of the connection between therapeutic collaboration and empathy.

CONFLICT OF INTEREST

The authors declare that they have no conflicts of interest with regard to the publishing of this work. There was no financial, business, or personal ties that might raise a conflict of interest while the study was carried out.

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