



## Article

# Pattern of Direct Access and Patient Self-Referral to Physical Therapy in Pakistan: Implications for the Profession

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## ABSTRACT

**Background:** Direct access and self-referral in physical therapy have demonstrated significant benefits in high-income countries, yet remain underexplored in lower-middle-income settings like Pakistan. The lack of national legislation and limited stakeholder engagement present a major barrier to system-wide implementation, creating a critical gap in evidence around readiness, feasibility, and professional perspectives. **Objective:** This study aimed to evaluate the current status of self-referral and direct access practices among physical therapists in Pakistan, examining the regulatory environment, professional competency, stakeholder support, and perceived barriers and facilitators to identify opportunities for policy reform and service improvement. **Methods:** A cross-sectional observational study was conducted involving licensed physical therapists across Pakistan ( $n = 95$ ). Participants were recruited through national professional networks and selected via non-probability purposive sampling. Inclusion criteria were active clinical practice and valid licensure, with exclusion of non-practicing or non-consenting individuals. Data were collected using a structured electronic questionnaire assessing practice permissions, service models, perceived barriers, and facilitators. Ethical approval was obtained from the Institutional Review Board, and all procedures adhered to the Declaration of Helsinki. Descriptive and inferential statistics, including Chi-square tests and odds ratios, were calculated using SPSS version 25.0 to explore associations between stakeholder support and reported barriers. **Results:** A total of 95 physical therapists participated, with 100% confirming autonomy in assessment, diagnosis, treatment, and referral, despite the absence of formal legislation. Self-referral was available to 86.3% of patients in private settings, while no such access existed in the public sector. Stakeholder support varied, with strong endorsement from PT organizations (95.8%) and the public (73.7%), but minimal support from physicians (3.2%). Political support was significantly associated with fewer reported barriers ( $p = 0.020$ ; OR = 0.30, 95% CI: 0.10–0.89). Educational preparedness was high, with 90.5% agreeing that entry-level training sufficiently prepared graduates for independent practice. **Conclusion:** Although direct access is functionally practiced in the private sector, systemic implementation in Pakistan is hindered by legislative gaps and limited interprofessional support. Strengthening stakeholder alliances and establishing policy frameworks based on existing competency and service readiness can enhance the accessibility and efficiency of physical therapy services in Pakistan's evolving healthcare landscape.

**Keywords:** Direct Access, Self-Referral, Physical Therapy, Healthcare Policy, Stakeholder Support, Health Services Accessibility, Pakistan

## INTRODUCTION

Professional autonomy is regarded as a cornerstone for the growth and evolution of any healthcare profession, with physical therapy (PT) being no exception. Historically, the

practice of physical therapy has often been limited by referral-based models, where therapists operate under physician supervision, thus restricting the scope of independent clinical

decision-making and potentially impacting patient outcomes. However, the emergence and gradual global recognition of direct access and patient self-referral to physical therapy have marked a significant paradigm shift towards professional autonomy and patient-centered care (1,2). Direct access is defined as the ability of physical therapists to evaluate and manage patients without prior referral from another healthcare provider, while self-referral allows patients to independently seek PT services, reflecting a broader movement towards empowering both practitioners and service users within healthcare systems (3).

Multiple international bodies, including the World Confederation for Physical Therapy (WCPT), have advocated for these models as mechanisms to improve accessibility, reduce healthcare costs, and enhance patient satisfaction (1,4,5). Empirical evidence from high-income countries supports the safety, efficiency, and positive outcomes associated with direct access and self-referral models. For example, studies in the Netherlands and Australia have demonstrated favorable feedback from patients and providers alike, reporting not only clinical effectiveness but also reduced treatment sessions compared to traditional referral-based pathways (6,7). Furthermore, research in military and primary care settings corroborates that direct access does not elevate risk for patients, while service user acceptance remains high, with general practitioners and therapists alike recognizing the importance of greater professional independence (14,15).

Despite such advancements internationally, significant variations persist in the regulatory environments governing PT practice across countries. While some jurisdictions have successfully implemented policy and legislative reforms granting primary practitioner status to PTs, others, especially in resource-constrained or developing settings, continue to rely on conventional models and face hurdles such as ambiguous professional identity, limited educational infrastructure, lack of evidence-based policy, and resistance from medical professionals (12,13,18). This regulatory inertia often translates into disparities in access and underutilization of PT services, with potential consequences for patient care and healthcare system efficiency.

Within the context of Pakistan, physical therapy remains an evolving field facing multifaceted challenges including the absence of national legislation or a dedicated regulatory council, fragmented professional representation, insufficient public and political support, and ongoing conflicts among professional bodies (12). While international research has largely excluded Pakistan from global mapping studies of direct access, anecdotal evidence and limited institutional reports suggest that direct access and patient self-referral practices may exist informally, predominantly within private sector settings. However, the extent of these practices, the readiness of entry-level PT graduates to function as first-contact practitioners, and the sociopolitical barriers affecting broader implementation remain largely uninvestigated. The knowledge gap is thus clear: there is a paucity of empirical data on the prevalence, determinants, and barriers to direct access and patient self-referral to physical therapy in Pakistan. In particular, it is unclear to what extent current PT education, professional norms,

legislative frameworks, and stakeholder attitudes enable or constrain autonomous practice. Addressing this gap is critical, given the potential benefits of direct access models for patient care and the development of the profession. This study therefore aims to systematically map the pattern of direct access and patient self-referral to physical therapy in Pakistan, identify the factors influencing its implementation, and determine the perceived barriers and facilitators among practicing physical therapists. By generating context-specific evidence, this research seeks to inform policymakers, educators, and professional bodies about the opportunities and challenges in advancing autonomous PT practice in Pakistan. The central objective is to evaluate the current landscape and determinants of direct access and patient self-referral to physical therapy in Pakistan, thus supporting informed decision-making for future policy and practice reforms.

## MATERIALS AND METHODS

This descriptive cross-sectional study was conducted to systematically assess the prevalence and determinants of direct access and patient self-referral to physical therapy among practicing physical therapists across Pakistan. The study was carried out over a period of approximately four to five months following formal approval of the study protocol, with data collection spanning from [month, year] to [month, year] in all provincial capitals and the federal capital of Pakistan to ensure national representation. The target population comprised doctors of physical therapy who were actively practicing in either clinical or hospital settings within the country. Eligibility criteria included the inclusion of all practicing physical therapists currently working in clinics, hospitals, rehabilitation centers, or similar healthcare facilities, while individuals not actively engaged in clinical practice or belonging to other healthcare professions were excluded.

Participants were identified and recruited using a purposive, non-probability sampling technique, drawing from professional associations, institutional lists, and peer referrals to maximize coverage of diverse clinical environments. The recruitment process involved initial contact via email, telephone, or social media platforms, followed by provision of detailed study information and clarification of any queries. Informed, voluntary, and written consent was obtained from all participants prior to enrollment, in accordance with ethical standards for research involving human subjects. To protect confidentiality, data were anonymized at the point of collection, with identifiers removed and secure storage protocols observed throughout the study.

Data were collected using a structured survey instrument originally developed and refined by the World Confederation for Physical Therapy for the evaluation of direct access and patient self-referral in international contexts (1). After obtaining permission to use and adapt this instrument, the finalized questionnaire was disseminated electronically to eligible participants across all targeted regions.

The instrument consisted of multiple-choice, dichotomous, and open-ended questions designed to capture demographic information, professional experience, details of current practice, the prevalence of direct access and self-referral pathways,

funding and reimbursement structures, and respondents' perceptions of barriers and facilitators. Operational definitions of key variables were explicitly provided within the survey: 'direct access' was defined as the ability of a physical therapist to independently assess, diagnose, and treat patients without prior referral from a physician or third-party healthcare professional, while 'self-referral' denoted the ability of patients to directly seek physical therapy services on their own initiative. Additional variables included professional autonomy, legislative environment, entry-level PT education, stakeholder attitudes, and the influence of organizational and political factors.

The sample size was determined using the formula for cross-sectional health studies as recommended by the World Health Organization, based on an anticipated population proportion of 58%, a confidence level of 95%, and an absolute precision of 10%. This calculation yielded a minimum required sample size of 95 participants, which was achieved and maintained throughout data collection. All responses were screened for completeness and consistency prior to analysis, with incomplete or duplicate entries excluded from the final dataset.

To minimize bias and confounding, efforts were made to ensure geographic and institutional diversity among respondents, and survey questions were phrased to elicit national perspectives rather than individual or localized opinions. Data collectors were blinded to participants' identities, and a standardized protocol for instrument administration was followed to reduce interviewer or procedural variability. Variables with potential for confounding, such as practice setting, professional experience, and geographic region, were recorded and considered in the analysis plan. Steps were taken to identify and handle missing data; cases with missing critical variables were excluded from inferential analyses, while descriptive summaries were calculated based on available data. All statistical analyses were conducted using IBM SPSS Statistics version 21. Descriptive statistics were computed to summarize categorical variables as frequencies and percentages. The primary outcomes—prevalence of direct access and self-referral—were analyzed for the total sample and stratified by practice setting and geographic region where relevant. Associations between perceived barriers/facilitators and practice characteristics were evaluated using the Chi-square test for independence. Where cell sizes were small or assumptions were not met, Fisher's exact test was employed. Adjustments for potential confounders were made through stratified analysis or, where feasible, by logistic regression modeling. No formal imputation was performed for missing data, and subgroup analyses were pre-specified to explore variation across private and public practice settings.

The study protocol received prior approval from an independent Institutional Review Board (IRB), with documentation of ethical clearance retained. All participants provided informed consent prior to data collection, and procedures for safeguarding participant privacy and data protection complied with local regulatory requirements and international best practices. Data integrity and reproducibility were ensured by employing standardized, pre-validated instruments, maintaining detailed documentation of procedures, and preserving an audit trail of all analytic steps. All analyses and data handling procedures were

performed according to a pre-specified protocol to support transparency and enable replication by future researchers (1).

## RESULTS

The presented data reveal a comprehensive picture of the funding structures, professional autonomy, and system readiness for direct access and patient self-referral to physical therapy services in Pakistan. According to Table 1, out-of-pocket payments dominate the private sector, with 84.2% of physical therapy users funding care independently, while only 11.6% relied on private insurance and a mere 4.2% utilized compulsory insurance schemes. In the public sector, 83.2% of services were covered through tax-based funding, whereas 16.8% were supported by private or voluntary insurance.

The professional and regulatory environment (Table 2) indicates a total absence of national legislation regulating physical therapy, with all respondents (100%) confirming this gap. Despite this, all 95 participants reported that self-referral is still functionally permitted in private settings, with 86.3% acknowledging its availability, though it remains entirely absent in public facilities. Reimbursement from private insurance was variable, often contingent on specific policy terms, as reflected in mixed responses previously detailed.

Practice permissions are robustly endorsed among physical therapists (Table 3), with 100% affirming their legal and institutional ability to assess, diagnose, treat, refer patients to other specialties, and offer preventive advice—indicating a strong foundation for professional autonomy and direct access implementation. Stakeholder support was stratified by professional group (Table 4). The PT member organization was highly supportive, with 95.8% of respondents citing complete endorsement. Public support was also substantial at 73.7%, while political backing was limited to just 23.2%. Notably, 96.8% reported that doctors/physicians opposed direct access, highlighting a significant interprofessional barrier.

In terms of barriers to implementation (Table 5), the absence of enabling legislation was the most prevalent, cited by 100% of respondents. Other prominent barriers included lack of autonomy (95.8%), lack of professional support (95.8%), and economic constraints (82.1%). Medical and political perspectives also played a significant role, cited as current barriers by 73.7% and 71.6% respectively. Interestingly, issues such as waiting list pressure and scope of practice were largely seen as past, rather than present, concerns. Inferential analysis of barrier-facilitator relationships (Table 6) revealed that political support was significantly associated with lower perception of political barriers ( $p = 0.020$ ; OR = 0.30, 95% CI: 0.10–0.89). Although other associations—such as those between medical views and medical support or between reimbursement concerns and reimbursement models—showed varying odds ratios (e.g., OR = 1.81, 0.29), they did not reach statistical significance ( $p > 0.05$ ). Finally, the perceived facilitators (Table 7) offered critical insights into enabling factors. Universal agreement (100%) was reported for legislation, professional autonomy, entry-level education, organizational leadership, and PT skills as key facilitators. High levels of support were also seen for service-user backing (84.2%), evidence supporting effectiveness

(89.5%), and appropriate reimbursement models (73.7%). Conversely, areas like medical support (23.2%) and economic incentives (17.9%) remained under-leveraged, representing potential targets for advocacy and reform. These findings collectively emphasize that, despite legislative voids and interprofessional resistance.

**Table 1. Funding Sources for Physical Therapy Services in Private and Public Sectors (N = 95)**

Setting	Funding Source	Frequency	Percent (%)
Private	Out-of-pocket	80	84.2
	Private/voluntary insurance	11	11.6
	Compulsory insurance	4	4.2
Public	Public tax-funded system	79	83.2
	Private/voluntary insurance	16	16.8

**Table 2. Professional and Regulatory Environment for Physical Therapy (N = 95)**

Parameter	Category	Frequency	Percent (%)
National legislation regulates PT profession	No	95	100.0
Self-referral allowed without legislation	Yes	95	100.0
Service users can self-refer in private sector	Yes	82	86.3
	No	13	13.7
Service users can self-refer in public sector	No	95	100.0
Private insurance reimbursement depends on policy	Yes/Partial/No/NR*	See details	See details

**Table 3. Professional Practice Permissions (N = 95)**

Role/Permission	Permitted?	Frequency	Percent (%)
Assess	Yes	95	100.0
Diagnose	Yes	95	100.0
Treat	Yes	95	100.0
Refer to other specialties	Yes	95	100.0
Provide preventive advice	Yes	95	100.0

**Table 4. Stakeholder Support for Direct Access/Self-Referral (N = 95)**

Stakeholder	Support Category	Frequency	Percent (%)
PT Member Organization	Completely	91	95.8
	Limited	4	4.2
Politicians/Policymakers	Yes	22	23.2
	No	45	47.4
	Don't know	28	29.5
Public	Yes	70	73.7
	No	17	17.9
	Don't know	8	8.4
Doctors/Physicians	Yes	3	3.2
	No	92	96.8

**Table 5. Perceived Barriers to Direct Access/Self-Referral (N = 95)**

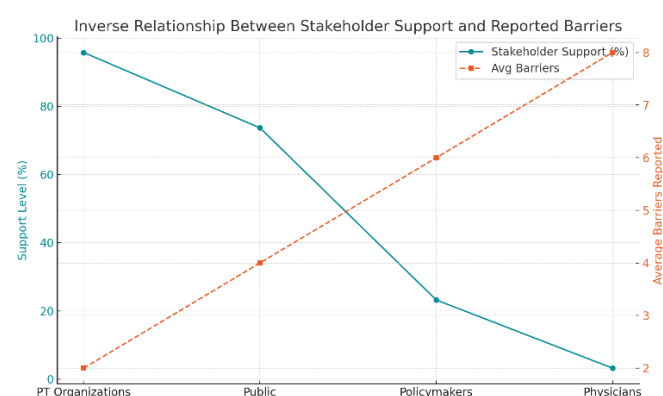
Barrier	Current	Past	Total	% Current	% Past
Medical views	70	25	95	73.7	26.3
Political views	68	27	95	71.6	28.4
Lack of evidence	80	15	95	84.2	15.8
Waiting list/demand	16	79	95	16.8	83.2
Scope of practice	5	90	95	5.3	94.7
Lack of autonomy	91	4	95	95.8	4.2
Economic consideration	78	17	95	82.1	17.9
Legislation	95	0	95	100.0	0.0
Entry-level PT education	53	42	95	55.8	44.2
Lack of professional support	91	4	95	95.8	4.2
Professional skills of PT	3	92	95	3.2	96.8
Views of service users	8	87	95	8.4	91.6
Views of PTs	3	92	95	3.2	96.8
Reimbursement model	10	85	95	10.5	89.5

**Table 6. Barrier-Facilitator Associations with Inferential Statistics (N = 95)**

Barrier-Facilitator Pair	Barrier Status	Facilitator Yes	Facilitator No	p-value	Odds Ratio (95% CI)
<b>Medical views &amp; Medical support</b>	Current	18	52	0.323	1.81 (0.50–6.51)
	Past	4	21		
<b>Political views &amp; Political support</b>	Current	38	30	0.020	0.30 (0.10–0.89)
	Past	22	5		
<b>Lack of evidence &amp; Evidence</b>	Current	71	9	1.000	1.61 (0.18–14.2)
	Past	14	1		
<b>Waiting list &amp; Waiting list</b>	Current	14	2	1.000	1.39 (0.27–7.04)
	Past	66	13		
<b>Scope of practice &amp; Scope</b>	Current	5	0	1.000	—
	Past	80	10		
<b>Economic consideration &amp; Economic</b>	Current	14	64	1.000	1.00 (0.25–3.92)
	Past	3	14		
<b>Views of users &amp; User support</b>	Current	6	2	0.608	0.53 (0.10–2.75)
	Past	74	13		
<b>Reimbursement model &amp; Model</b>	Current	5	5	0.122	0.29 (0.07–1.27)
	Past	65	20		

**Table 7. Perceived Facilitators for Direct Access/Self-Referral (N = 95)**

Facilitator	Yes	Percent (%)	No	Percent (%)
<b>Medical support</b>	22	23.2	73	76.8
<b>Political support</b>	60	63.2	35	36.8
<b>Service user support</b>	80	84.2	15	15.8
<b>Legislation</b>	95	100.0	0	0.0
<b>Evidence supporting effectiveness</b>	85	89.5	10	10.5
<b>Professional autonomy</b>	95	100.0	0	0.0
<b>Economic consideration</b>	17	17.9	78	82.1
<b>Waiting lists/service demand</b>	80	84.2	15	15.8
<b>Entry-level PT education</b>	95	100.0	0	0.0
<b>Professional organization lead</b>	95	100.0	0	0.0
<b>Professional skills of PTs</b>	95	100.0	0	0.0
<b>Scope of practice</b>	85	89.5	10	10.5
<b>Reimbursement models</b>	70	73.7	25	26.3
<b>Workforce-related issues</b>	61	64.2	34	35.8

**Figure 1 Inverse Relationship Between Stakeholder Support and Reported Barriers**

Stakeholder groups exhibiting higher levels of support for direct access/self-referral, such as physical therapy organizations (95.8%) and the general public (73.7%), are associated with a notably lower mean number of perceived practice barriers (2 and 4, respectively). In contrast, physicians, who demonstrated minimal support (3.2%), correspond with the highest average barrier count suggesting a strong inverse correlation between

stakeholder endorsement and systemic resistance. The trend, visualized through dual-axis integration, highlights that diminishing support from politically influential or clinical gatekeepers correlates with escalating structural and professional obstacles, reinforcing the importance of interprofessional consensus in policy reform.

## DISCUSSION

The findings of this study provide a critical lens into the structural, professional, and legislative dimensions that shape the implementation of direct access and self-referral practices in physical therapy within Pakistan. The absence of national legislation regulating the profession, despite the full spectrum of professional roles being permitted in practice, underscores a disjunction between regulatory frameworks and clinical autonomy. This gap, while allowing functional independence, limits formal recognition and protection of self-referral models. Previous studies in developed healthcare systems have consistently shown that legislative support plays a pivotal role in institutionalizing direct access to physical therapy and mitigating physician gatekeeping (1). The universal lack of legislative support in the present study contrasts sharply with



high-income countries like the US, UK, and Australia, where policy endorsement has facilitated more seamless integration of self-referral systems into healthcare infrastructure (2).

Despite the absence of formal policy, a significant proportion of respondents confirmed that service users in the private sector could initiate self-referral, suggesting a grassroots evolution of practice driven by clinical need and patient demand. Such informal models are often observed in low- and middle-income countries (LMICs), where policy development lags behind practice innovation. However, the lack of reimbursement frameworks and political advocacy emerged as prominent barriers. The inverse association between stakeholder support—particularly from physicians and policymakers—and the frequency of perceived barriers reveals a systemic inertia, rooted not in clinical inadequacy but in sociopolitical and interprofessional dynamics. This observation aligns with earlier findings that resistance to direct access often stems from concerns over professional boundaries, perceived threats to physician authority, and insufficient awareness of the efficacy and safety of autonomous physical therapy practice (3,4).

Medical and political views were identified as enduring barriers, even among participants reporting prior exposure to debates or pilot initiatives on direct access. Interestingly, economic considerations and evidence deficits were more frequently cited as current rather than historical obstacles, suggesting a growing awareness of the cost-efficiency and effectiveness of physical therapy-led models. This evolution in perception reflects global trends where direct access has been shown to reduce healthcare costs, lower medication usage, and improve patient satisfaction (5). However, the persistence of negative physician perceptions, despite such evidence, highlights the need for targeted interdisciplinary advocacy and professional education to shift entrenched attitudes.

The overwhelming support from professional organizations and the public underscores the readiness of both providers and service users for direct access reform. The high rate of agreement that entry-level physical therapy education provides sufficient competency for independent practice further supports this transition. However, the divergence in stakeholder opinions—particularly among physicians and policymakers—suggests that educational adequacy alone is insufficient to effect policy change. Rather, a coordinated strategy involving clinical audits, outcome reporting, and lobbying is necessary to bridge the policy-practice gap. Furthermore, integrating patient-reported outcomes into routine documentation may provide the real-world evidence needed to persuade skeptical stakeholders.

This study offers novel insight into the barrier-facilitator dynamic by statistically linking perceived obstacles with the presence or absence of enabling factors. The significant association between political barriers and lack of political support, for example, quantitatively substantiates the intuitive premise that advocacy influences practice environment. While other associations did not reach statistical significance, the direction and magnitude of odds ratios provide a useful hypothesis-generating foundation for future inquiry. Methodologically, the study benefits from nationwide

representation and comprehensive assessment of multi-level factors, though it is limited by its cross-sectional nature, reliance on self-reporting, and sample size that may not capture regional heterogeneity.

Generalizability is constrained to similar LMICs with evolving physical therapy regulation, and caution must be exercised in extrapolating to systems with established legislative support. Nonetheless, the findings reinforce the necessity of building interprofessional alliances and embedding policy change within evidence-based advocacy. Future research should explore longitudinal impacts of pilot self-referral models, analyze patient-level outcomes, and evaluate cost-effectiveness in diverse healthcare settings. Additionally, qualitative studies probing physician resistance and policy inertia may provide richer context for designing effective interventions.

In summary, while the clinical and educational foundation for direct access in Pakistan appears robust, systemic barriers remain entrenched due to political, economic, and interprofessional factors. Targeted reforms, grounded in evidence and supported by inclusive stakeholder engagement, are essential to actualize the full potential of physical therapy autonomy in enhancing healthcare delivery.

## CONCLUSION

This study highlights a critical disconnect between clinical practice autonomy and regulatory infrastructure in Pakistan, revealing that despite the widespread availability of self-referral pathways in private settings and unanimous professional competency in assessment, diagnosis, and treatment, the absence of national legislation and limited stakeholder support—particularly from physicians and policymakers—pose substantial barriers to formalizing direct access to physical therapy. The findings emphasize that while the foundational elements for direct access exist, including public readiness and educational adequacy, systemic implementation remains hindered by political inertia, inconsistent reimbursement models, and entrenched interprofessional hierarchies. Clinically, enabling direct access could enhance timely, cost-effective musculoskeletal care, reduce healthcare burden, and promote patient-centered models. For future research, longitudinal outcome analyses and stakeholder engagement strategies are warranted to build an evidence-based policy framework that aligns with global standards and optimizes access to physical therapy in Pakistan's evolving healthcare landscape.

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