



## Original Article

## Attitude of Final Year Doctor of Physical Therapy Students Towards Direct Access

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## ABSTRACT

Direct access in physical therapy means the removal of a medical practitioner's referral directed by the country's law to access services of physical therapists for patient evaluation and treatment. students are the future of any country. **Objective:** To describe the attitude of physical therapy students in their final year towards direct access in Pakistan. **Methods:** A cross-sectional study was conducted on a sample size of 500, over a period of six months. A semi-structured questionnaire was developed to determine the desired objectives. Data was analyzed by using SPSS 21. **Results:** 62.8% students agreed and 30% students strongly agreed to practice under direct access after graduating. **Conclusions:** The study concludes that most physical therapy students are ready to practice under direct access in Pakistan after graduating.

## INTRODUCTION

Physiotherapy or Physical therapy is defined as an independent health care profession that deals with identifying and increasing the current quality of life and the ability to move freely to prevent, examine, evaluate, and treat certain conditions to promote patient rehabilitation [1]. Physical therapy employs primarily physical agents and techniques to deliver efficient treatment sessions for patients and clients suffering from various musculoskeletal and neuromuscular disorders and pathologies [2]. Physical therapy may be defined as the management of pain, movement dysfunctions and/or

physical disabilities (caused by one or many disorders), by employing certain exercises, manual techniques, and manoeuvres, without employing medicines (drugs) or surgical procedures [3]. Physical therapists are a key part of the health care system and play a vital role in the life of many patients suffering from life threatening and debilitating disabilities that may be a result of some underlying pathology or disease condition [4]. Such disabilities and disorders may lead to faulty biomechanics which in turn could lead to abnormal movement patterns and imbalances. These factors may impose abnormally

increased stresses upon various muscular, neural, or vascular tissues leading to difficulty performing activities of daily life (ADLs) and as a result, may decrease or adversely affect a person's quality of life [5]. Direct access to physical therapy is defined as the act of visiting or seeing a physical therapist without the use of physician or medical specialist referral dictated by an area's law or rules and regulations to approach physical therapy services for the patient's assessment and treatment [6]. To restrict direct access services would result in delays in providing the physical therapy services to those individuals who would greatly benefit from treatment by a physical therapist [7]. In one study, only 34–38% students in the final year of their Masters' programme felt that they were ready to practice physical therapy via direct access [8]. Lack of amount of clinical hands-on skills and insufficient knowledge of non-musculoskeletal pathologies and conditions appeared to be the main reasons for their lowered perceptions regarding direct access [9]. Direct access denotes the ability of patients and/or clients to seek treatment from physical therapists without a prescription or referral from any other health care provider, primarily a physician [10]. Direct access allows physical therapists to act as a primary entry-point into the health care system [11]. Physical therapists provide care via direct access in different states. Greater perceived competence with direct access among students is critical as they are the future of the profession. There is a significantly increased student perceived competence with direct access to physical therapy [12]. This descriptive cross-sectional survey determines the attitude of final year DPT students towards direct access in Pakistan.

## METHODS

This is a descriptive cross-sectional survey to assess the attitude of physical therapy students towards direct access in Pakistan. This study was completed in 6 months i.e., from August 2019 to January 2020. The chosen sample size was 500 participants (students) in different universities from all over Pakistan including Rawalpindi, Islamabad, Sargodha, and Lahore. Non-probability convenient sampling technique was used for recruiting individuals (students) into the study. DPT students in their final year (9th and 10th semester). Only those students who were willing to take part in this study were included. DPT students from 1st to 4th year (1st to 8th semester) were excluded. DPT students who were unwilling to take part in the study were excluded. The research was conducted to determine the attitude of final year physical therapy students towards direct access in Pakistan. To fulfil this requirement, a semi-structured questionnaire was developed based on basic demographic questions and 20

questions related to our study. The inclusion criteria were based on all the students being in their final year (9th and 10th semester) of DPT. The exclusion criteria based on all students who did not meet the inclusion criteria. The data was also analysed using SPSS 21.

## RESULTS

There was a total sample of 500, 120 (24%) males and 380 (76%) females participated in the study. Figure 1 show that the frequency of people aged 18, 20, 21, 22, 23, 24, 25 and 26 years is 1, 4, 20, 123, 188, 158, 5 and 1 respectively. Figure 2 shows that 255 participants belong to 9th semester and 245 participants belong to 10th semester.

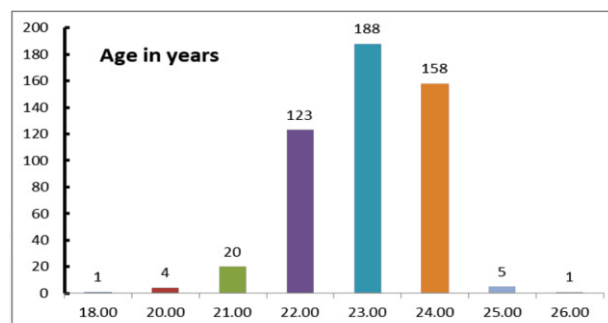


Figure 1: Frequency distribution of age

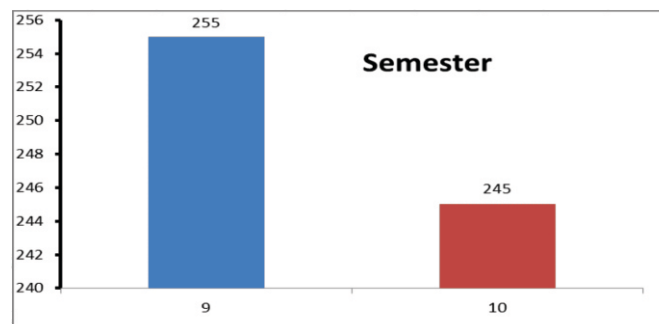


Figure 2: Frequency distribution of semester

	id	Age_in_yrs	Gender	CGPA1	University_category	Semester	Interest_before_admission	college_university
Mean	250.5000	22.9820	1.7600	1.6390	1.8080	1.4900	1.4660	4.41803
SD	144.48183	.95052	.42751	.48025	.41410	.50040	.49934	.43495

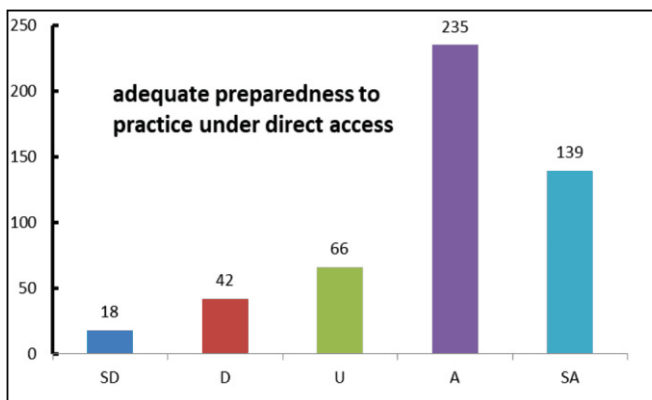
Table 1: Frequency distribution of Demographics

Table 1 shows that out of the total of 500 participants the mean values of age in years, gender, cGPA, university category, semester, interest before admission and college/university name are  $22.982 \pm 0.95052$ ,  $1.76 \pm 0.42751$ ,  $1.639 \pm 0.48025$ ,  $1.8080 \pm 0.4141$ ,  $1.49 \pm 0.50040$ ,  $1.466 \pm 0.49934$  and  $4.418 \pm 3.43495$  respectively.

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
SD	16	3.2	3.2	3.2
D	16	3.2	3.2	6.4
U	78	15.6	15.6	22.0
A	197	39.4	39.4	61.4
SA	193	38.6	38.6	100.0
Total	500	100.0	100.0	

**Table 2:** Frequency of adequate preparedness to practice under direct access

Table 2 shows that 18(3.6%) strongly disagree, 42(8.4%) disagree, 66(13.2%) are undecided, 235(47%) agree and 139(27.8%) strongly agree of being adequately prepared to practice under direct access. Figure 3 shows that 18 strongly disagree, 42 disagree, 66 are undecided, 235 agree and 139 strongly agree of being adequately prepared to practice under direct access



**Figure 3:** Frequency of adequate preparedness to practice under direct access

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
SD	7	1.4	1.4	1.4
D	19	3.8	3.8	5.2
U	53	10.6	10.6	15.8
A	185	37.0	37.0	52.8
SA	236	47.2	47.2	100.0
Total	500	100.0	100.0	

**Table 3:** Frequency of Nation-wide direct access

Among the research participants 7(1.4%) strongly disagree, 19(3.8%) disagree, 53(10.6%) are undecided, 185(37%) agree and 236(47.2%) strongly agree to nation-wide direct access being important to the PT profession. 25(5.0%) strongly disagree, 62(12.4%) disagree, 113(22.6%) undecided, 177(35.4%) disagree and 123(24.6%) strongly agreed to having knowledge of non-musculoskeletal pathologies to detect serious medical problem outside treatment capabilities. 10(2.0%) strongly disagree, 37(7.4%) disagree, 88(17.6%) have not decided, 229(45.8%) agree and 136(27.3%) strongly agree that were informed about common diagnostic procedures performed by other professionals. 15(3%) strongly disagree, 25(5%) disagree, 72(14.4%) have not decided, 232(46.4%) agree and

156(31.2%) strongly agree that they have ample information about direct access and its implication. 12(2.4%) strongly disagree, 28(5.6%) disagree, 82(16.4%) have not decided, 226(45.2%) agree and 152(30.4%) strongly agree that they would like to practice in direct access setting after graduation. 86(17.2%) strongly disagree, 138(27.6%) disagree, 94(18.8%) have not decided, 117(23.4%) agree and 65(13%) strongly agree that they would not be capable of practicing under direct access immediately after graduation. 14(2.8%) strongly disagree, 26(5.2%) disagree, 90(18%) have no decided, 202(40.4%) agree and 167(33.4%) strongly agree that they would like to legalize direct access in all provinces. Out of 500 participants, the attitude towards direct access was a minimum of 36, maximum of 98.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	D (21-40)	1	.2	.2	.2
	U (41-60)	35	7.0	7.0	7.2
	A (61-80)	314	62.8	62.8	70.0
	SA (80-100)	150	30.0	30.0	100.0
	Total	500	100.0	100.0	

**Table 4:** Frequency of the attitude towards direct access

Table 4 shows that out of 500 participants, 1(0.2%) disagree, 35(7.0%) have not decided, 314(62.8%) agree and 150(30%) strongly agree.

## DISCUSSION

A survey was conducted by Kristina Scheuneman in 1994 to investigate the perceptions of physical therapy students to see patients via direct access without requiring physician referral. The study targeted final year students of master's program. This study used *Chi square* to test and analyze the data. The study found that a few students thought that they could practice directly without using medical referral. According to the study, the cause came out to be lack of knowledge and skills regarding non-musculoskeletal issues and disorders as well as less know how of side effects of various medicines. This study differs in its results significantly from ours. It must be noted that the study is old and many advances in the field of physical therapy have been made including changes and revision in the curriculum to enhance student knowledge and know how on non-musculoskeletal and systematic diseases and pathologies[9]. A study was done by Kelly L Crout in 1998 to determine the different physical therapist's beliefs regarding the use of direct access in Massachusetts and in Connecticut. The survey was among 329 therapists from Massachusetts and 179 from Connecticut. Questionnaires were mailed to the therapists. The study employed independent t testing and chi square to analyze the difference of opinion between two states. They found that most of the physical therapists were in favour of treating

their patients via direct access instead of referral. As according to our study, the future physical therapists of our country (our students) mostly agree with the use of direct access to evaluate and treat their patients and clients [13]. A systematic review was done by Heidi A. Ojha in 2014 to determine cost of health care and prognosis of patients with the use of direct access as compared to referral from a medical practitioner. The study extracted 8 articles of level 3 and 4 studies. The data was collected via CINAHL, Web of Science and Pedro. The study found that the average cost of health care without direct access went up as compared to practicing with direct access. As in our study, most of our students favour direct access [14]. A retrospective study was done by Joseph H. Moore in 2005 to determine if practicing via direct access in physical therapy was associated with increased risk or not as compared to practicing without it. 6 army, 11 navy and 8 air force locations were selected as target. The study lasted for 40 months (October 1999 to January 2003). The study found that there was no probable risk or danger on practicing physical therapy via direct access. As in our study, most of the students prefer direct access over referral from other health care professionals [15]. A pilot study was performed by Chantal J Leemrijse in 2008 to determine if the patients who visited physical therapists via direct access were different from those who used referral system in Netherland. The data was collected via National Information Service for Allied Health Care. 12,369 patients were included in the study. The study made use of chi square test and Mann-Whitney U test and found that those patients who had recurring problems and were young used direct access more than others. As in our study, students prefer to use direct access instead of referral from medical practitioner [16]. A survey was done by William G. Boissonault in 2016 to find the level of use of direct access by hospitals in Wisconsin. 89 questionnaires were mailed to directors of hospitals. The study employed the 5-point Likert scale and used the Fischer exact test. The study concluded a lack of use of direct access in hospitals. It must be kept in mind that biasness was limitation of this study. Hence, the results come out to be different from our study in which most physical therapy students agreed that they would like to use direct access for patients [17]. A study was done by Diane U. Jette in 2006 to investigate the skills of physical therapists in working via direct access. 394 people took part in this study. A logistic regression model was used. The study concluded that most physical therapists were well versed regarding musculoskeletal and non-critical medical conditions. As in our study, most of our physical therapy students agreed that they had sufficient knowledge to handle musculoskeletal conditions [18]. A descriptive study was done by Christine A. McCallum in

2012 to find out the factors that affect direct access in physical therapy in Ohio. 32 physical therapists were selected for this study. Descriptive analysis was used such as chi square test, frequency, and percentages. Most participants favoured direct access instead of medical referral to see their patients if they had the means to do so. As in our study, most students agreed to support direct access instead of referral system [19]. A survey was conducted by to find out how students in college perceive physical therapy as a career. A total of 703 students participated in the study. The study employed descriptive statistics and *Pearson Chi square test*. The study found that most students were of view that the public should be seen by physical therapists via direct access [20]. As in our study, we found that most physical therapy students agree and support direct access environment for physical therapy.

## CONCLUSIONS

The results of the study conclude that many final year physical therapy students have difficulty in making differential diagnosis of medical conditions causing musculoskeletal issues and disorders. Many students agree that they are ill-prepared to identify problems in patients inappropriate for physical therapy. Many students agree to be doubtful of their education to serve as first point of contact for the patients. In general, most students agree to practice under direct access.

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