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## RESEARCH ARTICLES

# Attitudes and Beliefs of Physical Therapists in Saudi Arabia Regarding Direct Access and Scope of Practice

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### ABSTRACT

**Purpose.** This study aimed to better understand what practicing physical therapists know and believe about direct access (DA) and scope of practice (SOP) for physical therapy in Saudi Arabia (SA). **Methods.** A pilot study was first performed to ensure the clarity of the questions. Then, a cross-sectional survey was sent through emails, and social media platforms included three main sections: demographics, opinions, and beliefs questions. **Results.** A total of 150 respondents met the inclusion criteria. About 55.3% of the participants reported never or rarely using an SOP document as a reference for knowing their practice. Moreover, nearly 48% learned about the SOP through an informal discussion. Only 24.7% of the participants correctly identified which practice setting DA is permitted. Most of the participants felt confident or strongly confident of their abilities to assess (67.3%) and treat (72%) patients without physicians' referral. Around 84% of the participants agreed or strongly agreed that DA should be expanded to include all healthcare settings. **Conclusion.** We found that physical therapists are confident about their ability to treat and assess patients without physicians' referrals. There is uncertainty about where DA is permitted in SA.

**KEYWORDS:** Attitudes, physical therapist, scope of practice, direct access, Saudi Arabia.

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### INTRODUCTION

Musculoskeletal disorders (MSD) are defined as "injuries or dysfunctions affecting muscles, bones, nerves, tendons, ligaments, joints, cartilages, and spinal discs." [1] Musculoskeletal disorders are considered a threat to individuals' healthy aging. [2] The World Health Organization (WHO) acknowledged MSD as a problem affecting older and younger populations worldwide. [3] Moreover, MSD is the second most common condition in the middle east region. [4] They are connected with other sociological and psychological conditions, leading to an increased risk of developing chronic conditions. Physical therapists (PTs) are one of the primary healthcare providers involved in managing MSD. Early physical therapy (PT) intervention is effective for patients with musculoskeletal impairments. [5]

To achieve the concept of early intervention, direct access (DA) to PT is recommended. [5] Direct access to PT is defined as the ability of patients to receive PT services directly without a physician's referral. [6] The Saudi

Physical Therapy Association (SPTA) report stated that DA is not permitted for public health hospitals, centers, and facilities in Saudi Arabia (SA). [7] However, DA for PT is permitted in private sittings. [8] According to Aljuaid et al. [9], 60.2% of health services in SA are provided by public hospitals, while other special governmental hospitals provide 17.7%. Conversely, only 22.1% of health services are provided by private hospitals.

Scope of practice (SOP) is defined as "the full spectrum of roles, functions, responsibilities, activities and decision-making capacity that individuals within the profession are educated, competent and authorized to perform." [8] Recently, there have been many countries that have debated their SOP in PT. Some countries have a wide range of privileges in SOP, whereas others have less across all areas of healthcare systems such as emergency, neurology, pediatric, orthopedic, and respiratory. [10, 11] In Canada, the United Kingdom (UK), and Australia, PTs have the right to order X-rays, magnetic resonance

imaging, and blood tests and to practice the manipulation of the spine and extremity joints. [12] Moreover, PTs in the UK have the right to perform joint and soft tissue injections such as injecting corticosteroids, local anesthetics, and viscosupplementation. [10, 11, 13] In the United States (US), PTs have the right to treat patients independently within their state's SOP. Moreover, in 2015 all the 50 states achieved some form of DA. [14] In SA, the SOP is very limited compared to other countries such as the UK. Furthermore, the SOP of PT in SA consists of the following: assessing patients, making a diagnosis, offering preventative advice, and referring patients to other specialists. The SOP is limited because DA in SA is not permitted in public settings. [8, 15]

The World Confederation of Physical Therapy (WCPT) (2019) recommended that PTs, as independent professionals, should have the right to practice their professional judgment and their decision within the PTs' knowledge, skills, and SOP. [8] Additionally, primary health care (PHC) is "the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community." [16] In PHC, PTs are considered primary assessors of patients with MSD, and patients will have more health care utilization when PTs have DA. Delayed access to MSD care and lack of PHC provider availability might affect the quality of healthcare. [17, 18] Many studies have shown a positive effect on cost-effectiveness, patient satisfaction, and patient interaction when PTs have DA. [11, 19, 20] Additionally, about 55% of the WCPT countries have DA. [18]

According to Al-Jadid 2013; as cited in Alshehri et al. [21], providing rehabilitation services to patients should be done as early as possible to provide efficient care for all patients. Patients who received PT directly without referral experienced a quicker recovery and returned to work faster than those who had a physicians' referral. [22] Direct access to PT has a great advantage in reducing pressure on physicians and is expected to reduce pressure on hospital-based outpatient clinics. [23]

Mohammed et al. [24] conducted a cross-sectional survey aimed to investigate the awareness and knowledge of the public about PT in SA. A pilot test was sent to 11 non-participants. The questionnaire was sent online to individuals through various social media platforms. They found that most 964 participants had awareness and previous knowledge of various services that PTs could treat. Moreover, the authors found that most participants were aware of conditions that PTs could treat. However, there was a slight split between participants in dealing with PTs without physicians' referrals. Around 60% of the participants were against that idea. Only about 5% of participants believed that PTs were capable of prescribing medication. The authors concluded that the general population in SA had an average level of awareness and knowledge of PT services. Also, they suggested that the public needs to be more educated about the PT profession. [24]

Al Eisa et al. [25] designed a questionnaire for physicians working in SA to investigate their opinions about PT. A pilot study was sent to two senior PTs and ten physicians. The survey was sent to 350 physicians via email, and they

received around 280 responses. Approximately 75% of the participants reported having some knowledge about PT. However, only 11% of the participants usually referred patients to the PT department, while almost 14% referred patients to PT from time to time. Furthermore, they found that 26% of the participants rarely referred patients to PT. Surprisingly, almost half of the participants never referred patients to PT at all. Finally, the authors concluded that physicians need to attend various lectures and workshops discussing the benefits of PT. The authors suggested that PTs bear responsibility for clarifying their roles to other healthcare professionals. [25]

Holdsworth et al. [26] conducted a study surveying 64 PTs and 97 general practitioners (GP) about their views and perceptions of self-referral and SOP in PT in the UK. They found that 70% of both PTs and GP felt comfortable with PTs having DA. They asked PTs questions about their level of agreement with key statements relating to DA, and around 84% of PTs were able to accept DA without additional training. Additionally, about 78% of PTs agreed that they could confidently accept DA. Only 53% of PTs believed they had sufficient experience to accept DA. Moreover, around 95% of PTs agreed that DA should be available through the National Health Service. The authors concluded that the GP and PTs had a positive view and high levels of comfort and confidence about PTs having DA. [26]

Ojha et al. [6] conducted a systemic review to observe health care costs and patients outcome disparities between PT by DA and physician referral PT for patients with MSD. The review of eight studies suggested that PT in a DA has the potential to decrease costs and improve outcomes in patients with MSD without prescribing medications and ordering adjunctive testing that could introduce harm to the patient. Finally, despite self-referring to PT, it appears that patients continue to be engaged with physicians throughout their course of care. [6]

Alshehri et al. [21] investigated physicians working in SA about their beliefs in implementing PT services in SA. An electronic survey was sent with a convenience sample of 108 physicians who worked in clinical or academic settings. There was diversity in the physicians' attitudes about PT practice. Only 44.4% thought that PTs could efficiently reevaluate patients when necessary. At the same time, more than half felt that PTs are qualified enough to be trustworthy in providing care to patients and in prescribing rehabilitation or exercise programs for patients independently. Moreover, only 17.6% believed that patients have the right to DA to PTs. For the physicians' opinions about PT services, half of the participants did not have enough information about PT services or thought that PT did not build a good understanding of PT services. About 63% of the physicians noted 'skills and knowledge to assess and treat patients,' and 48% indicated it was their own limited understanding of the range of potential PT services. [21]

This literature review suggests that physicians and the public in SA lack awareness about the PT profession. Additionally, DA to PT is feasible because many studies have shown the advantages of DA and report no harm. There have been no studies investigating the opinions and attitudes of practicing PT in SA regarding DA and SOP. Therefore, the purpose of the study is to better understand

what practicing PTs know and believe about SOP and DA to PT. If we can better understand what the typical PTs in SA think, feels, and does about SOP and DA, then the findings derived from our work will be useful for the Ministry of Health (MOH) to move forward in planning for the best PT care and education.

The following research questions guided this study:

1. What are the beliefs of practicing PTs about DA and SOP in SA?
2. What are the attitudes of practicing PTs about DA and SOP in SA?

## MATERIALS AND METHODS

**Design:** A cross-sectional online survey via Qualtrics Survey Software was used to collect data for this study. A survey design was chosen for its ability to collect a large amount of data, including personal facts, attitudes, and opinions, in a relatively short period.

**Participants:** Practicing PTs across all subspecialties from three governmental hospitals and two private clinics in each of the 13 regions within SA were asked to take the survey. Inclusion criteria included all practicing PTs, internship students currently in their internship year, and PTs holding full-time faculty positions of all ages and genders. Exclusion criteria were non-practicing PTs, PT students, and PT assistants.

**Procedures:** A cross-sectional survey was conducted to explore what practicing PTs know and believe about DA and SOP to PT in SA. The questionnaire contained three main sections: demographic information, beliefs, and attitudes of practicing PTs about DA and SOP in SA. A draft version of the questionnaire was sent to colleagues in research design to evaluate the questionnaire style and content. Additionally, a pilot study was performed on non-participating PTs to ensure that the questions were clear and easy to understand. It also was helpful to estimate the time needed to complete the survey. The questionnaire was sent to PTs working in selected hospitals in different country regions who met the inclusion criteria after department heads had agreed to support this study. The researchers had no access to the email addresses of participants. The email included a cover letter explaining the purpose of the study, a consent form, and a statement about how long the questionnaire would take to complete. The second recruitment method included questionnaires sent out through social media platforms which were Twitter and WhatsApp. The participants were completely free to not participate in the study, ignore any questions, or stop any time after beginning the survey. Furthermore, after one week of the initial dispatch, a follow-up email was sent to all the participants to thank those who completed the survey and encourage those who have not. This study was approved by the Concordia University Wisconsin Institutional Review Board.

**Data Analysis:** The data were coded, entered, and analyzed using Statistical Package for Social Sciences (SPSS) version 28.0. Descriptive statistics including frequencies and percentages were used to describe the demographic data and to examine participants' beliefs and attitudes about DA and SOP in SA.

## RESULTS

**Demographic:** A total of 150 participants completed the questionnaire. Most of the participants ( $n = 107$ ) were bachelor's degree holders. Moreover, 62.6% of the participants had less than six years of experience. The

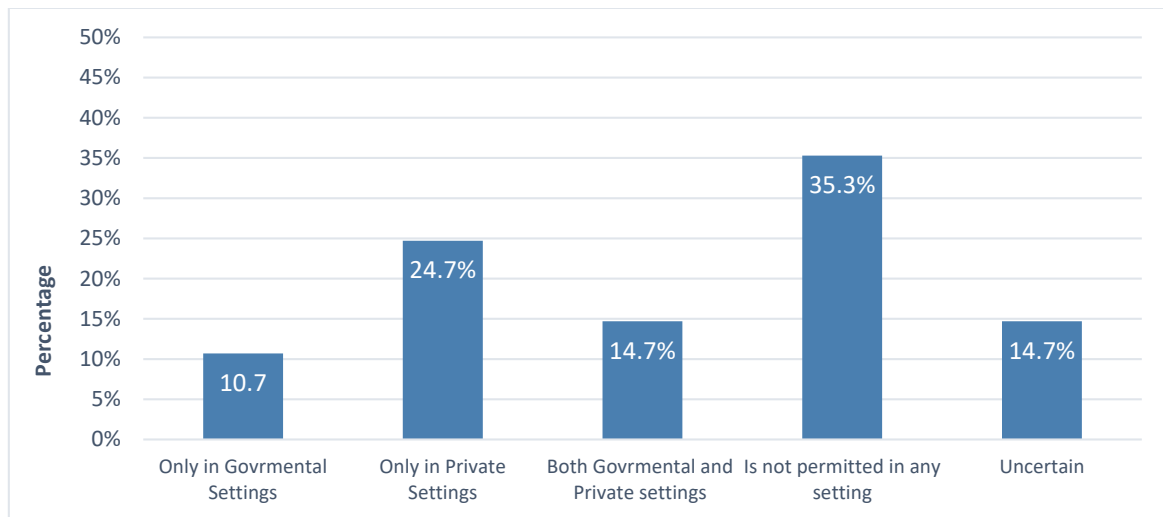
participants' demographic characteristics are shown in Table 1.

**Table 1 :Demographic Characteristics of Responders (N=150)**

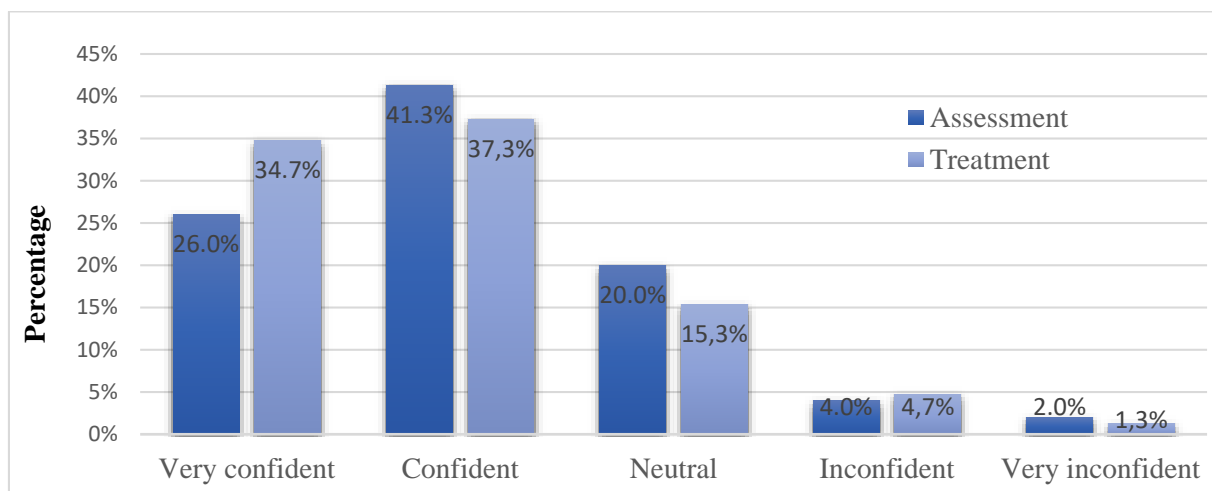
Variable	Personal data	N (%)
Gender	Female	52 (34.7)
	Male	97 (64.7)
	Prefer not to say	1 (0.7)
Highest degree earned	Physical therapy Internship	7 (4.7)
	Bachelor's	107 (71.3)
	Master's	25 (16.7)
	Clinical (DPT) Doctorate	1 (0.7)
	Research (PhD) Doctorate	9 (6.0)
Employment status	Full time	110 (73.3)
	Part time	13 (8.7)
	Temporarily unemployed	9 (6.0)
	Unemployed – previously worked	14 (9.3)
	Unemployed – never worked	4 (2.7)
Work setting	Governmental setting	93 (62.0)
	Private setting	42 (28.0)
	Both government and private	15 (10.0)
Years of experience	0 – 5	94 (62.7)
	6 – 10	30 (20.0)
	11 – 15	15 (10.0)
	16 – 20	6 (4.0)
	21 or more	1 (0.7)
Geographical region	Central	22 (14.7)
	Western	64 (42.7)
	Eastern	5 (3.3)
	Southern	48 (32)
	Northern	10 (6.7)
Physical therapy training	Within Saudi Arabia	138 (92.0)
	Outside of Saudi Arabia	12 (8.0)

## Direct Access

The results showed that only 24.7% of the participants correctly identified which practice setting PTs could assess and treat patients without physicians' referral, see Figure 1. Additionally, approximately half of the participants see patients without physicians' referrals. Moreover, most of the participants felt confident or strongly confident of their abilities to assess (67.3%) and treat (72%) patients without physicians' referral, as shown in Figure 2. Roughly 84% of the participants agreed or strongly agreed that DA should be expanded to include all healthcare settings. Finally, approximately 80% of the participants agreed or strongly agreed that PTs should pursue advanced education to practice independently in SA.



**Figure 1 : Beliefs About Permitted Direct Access Settings**

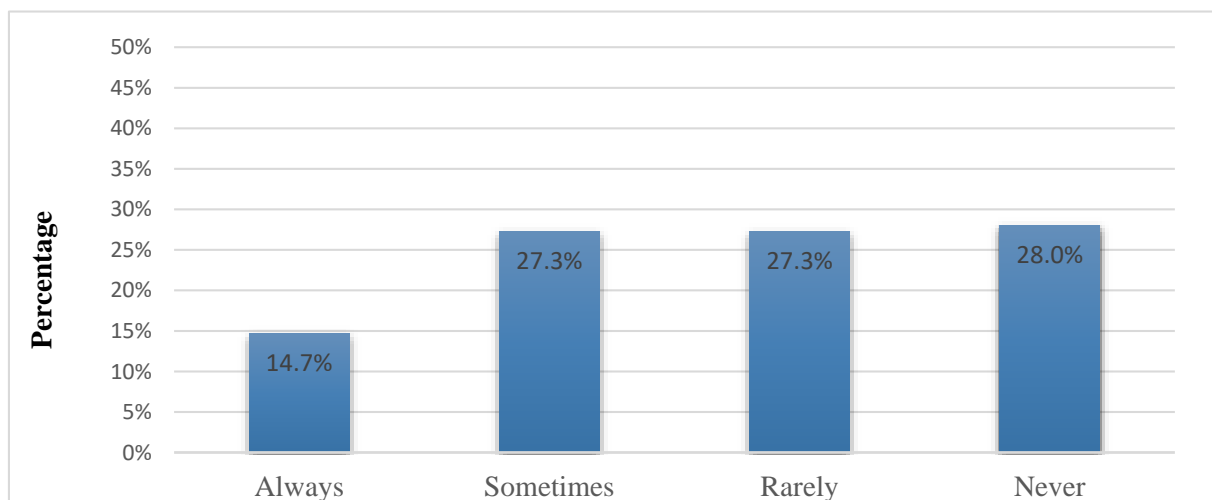


**Figure 2 : Confidence to Assess and Treat Patients Without Physicians' Referral**

**Scope of Practice**

Regarding SOP, 55.3% of the participants reported never or rarely using an SOP document as a reference for knowing their practice boundaries, as shown in Figure 3. Approximately 38% of PTs first learned about SOP during physical therapy education and 34.7% during their first

job, while 27.3% were never exposed to the SOP document. Furthermore, about 44% learned about SOP during informal discussions. Roughly 82% of the participants agreed that physical therapy programs should include more formal education about SOP.



**Figure 3: Frequency of Use Scope of Practice Document as a Reference**

## DISCUSSION

**Main Findings:** This study aimed to better understand what practicing PTs know and believe about DA to PT and what typical PTs in SA think, feel, and do about DA. Most of the participants (n = 107) were bachelor's degree holders, and 62.7% of the participants had less than six years of experience. These data are similar to Alghadir et al. [15], who indicated that PT is still at an early stage of development as the postgraduate programs in SA only began in 2000. Furthermore, most participants failed to correctly identify which practice settings PTs could assess and treat patients without a physician's referral. This shows a lack of knowledge about DA in SA among PTs. This might be explained by the fact that more than half of the participants in this study never or rarely used the SOP document as a reference, where it is stated that DA is only permitted in private settings. Another explanation might be the fact that only 42% of the participants learned about the SOP during PT formal education lectures, and 27.3% were never exposed to SOP documents either during PT education or during their job period. This suggests that the higher education system in SA needs to increase the amount and depth of teaching DA and SOP for PTs. In this study, 82% of the participants agreed that PT programs should include more formal education about SOP, further supporting the need for more discussion about SOP in university settings. A third main finding showed that 48% of the participants see patients without physicians' referrals. This might be because most of the participants felt confident or strongly confident in their abilities to assess (67.3%) and treat (72%) patients independently. This finding is consistent with Holdsworth et al. [26], who reported that about 84% of PTs agreed that they could confidently practice independently without further training. According to Alshehri et al. [21], more than half of the physicians who took their survey felt that PTs were qualified enough to be trustworthy in providing care to patients.

Additionally, they found that patients were more satisfied when they received PT through DA instead of physicians' referrals. Our results showed that the majority (84%) of the participants agreed or strongly agreed that DA should be expanded in SA to include all healthcare settings, and PTs should pursue advanced education to practice independently. These findings indicate that the participants acknowledged the importance of more advanced education before being allowed to practice without a physician's referral. Bindawas et al. [27] also argued that PTs in SA need further education to improve

certain competencies and skills such as assessment and treatment.

## LIMITATIONS

The limited number of the participants in this study may not represent PTs' actual beliefs and opinions in SA as it is mainly generalized to bachelor's degree holders and PTs who have been working less than six years. Consequently, a bigger sample size is needed to better represent all PTs in SA. This study could not run the appropriate inferential analyses due to an imbalance in participants' education levels and years of experience.

## SUGGESTIONS FOR FUTURE RESEARCH

There is a lack of certainty about where DA is permitted in SA. We suggest further investigation to better understand the reasons why there is uncertainty. This would include qualitative research methods either through interviews, focus groups, or surveys. Future studies could also explore the reasons why more than half of the participants do not use the SOP document as a reference for their practice.

## CONCLUSION

We found that PTs in SA have uncertainty about where DA is permitted. We also found that PTs are confident about their ability to treat and assess patients without physicians' referrals. Moreover, many PTs in SA did not use the SOP document to reference their practice.

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## AUTHORS' CONTRIBUTIONS

The participation of each author corresponds to the criteria of authorship and contributorship emphasized in the [Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly work in Medical Journals of the International Committee of Medical Journal Editors](#). Indeed, all the authors have actively participated in the redaction, the revision of the manuscript, and provided approval for this final revised version.

## COMPETING INTERESTS

The authors declare no competing interests with this case.

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None.

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