

Awareness of Physical Therapy Scope Among Non-Medical Undergraduates

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ABSTRACT

Background: Physical therapy plays a crucial role in modern healthcare by enhancing human movement and functionality. Awareness of its scope among non-medical university students is essential for broader recognition and utilization.

Objective: This study aimed to assess the awareness and knowledge of physical therapy among undergraduate non-medical university students and identify knowledge gaps that could be addressed through educational reforms.

Methods: A cross-sectional survey was conducted among 250 non-medical university students at Government College University Faisalabad, Layyah Campus, using a self-designed questionnaire. Data were analyzed using SPSS version 25.

Results: The survey found that 90.4% of students were aware of the Doctor of Physical Therapy program, but only 25.6% knew about specialization options. Non-surgical treatment knowledge was recognized by 69.6% of participants, and 22.4% were aware of the modalities used in physical therapy. Additionally, 58.6% were aware of mandatory house job requirements after a DPT degree.

Conclusion: While awareness of basic physical therapy concepts is high among non-medical students, knowledge of specializations and modalities is limited, highlighting the need for targeted educational initiatives.

INTRODUCTION

The importance of physical therapy as a vital component of healthcare systems globally cannot be overstated, focusing on enhancing human function and movement and mitigating the impact of physical ailments through therapeutic interventions (1-3). Despite its significance, the level of awareness and understanding of the scope of physical therapy among non-medical university students remains under-explored (1). This gap in knowledge could potentially hinder the utilization of physical therapy services, suggesting a need for comprehensive educational strategies to enhance the understanding of this field among those outside the medical and health sciences disciplines (4).

Physical therapy has evolved significantly over the years, moving from basic manual therapy techniques to a more integrated approach involving various specialized interventions aimed at promoting, maintaining, and restoring physical function (2-5).

This evolution emphasizes the need for awareness among the general population, particularly those in academic settings who might later influence healthcare policy or decisions. Recognizing the importance of physical therapy in pain management, rehabilitation, and overall wellness, it becomes essential to assess the level of awareness among non-medical students who represent a significant portion of the university population (3-6).

This study is set against the backdrop of a limited but growing body of research indicating varying levels of awareness and misconceptions about physical therapy among different demographic groups, including medical and non-medical students. For instance, studies have shown that while there is a general awareness of physical therapy's role in pain management, deeper knowledge about its scope, such as specialization options and non-surgical treatment capabilities, is often lacking (4-7). The emerging importance of physical therapy in non-surgical treatment, sports injuries, neurology, and other specialties underscores the necessity for broader educational initiatives (5). Our research aims to fill the knowledge gap by evaluating the awareness of the scope of physical therapy among undergraduate non-medical students at a large university. The objectives of this study are twofold: to quantify the current level of awareness and understanding of physical therapy as a profession and to identify potential areas where further education might be beneficial. By conducting a cross-sectional survey, we seek to gather data that could guide future educational and advocacy efforts to enhance the visibility and understanding of physical therapy across non-medical disciplines, thereby fostering a more informed university community that can advocate for and utilize physical therapy services effectively (6-9).

MATERIAL AND METHODS

The study employed a cross-sectional design, conducted over a six-month period following the approval of the

research topic. The setting for this research was the Government College University Faisalabad, Layyah Campus, where a diverse student body provided a suitable demographic for evaluating non-medical students' awareness of physical therapy. The sample comprised 271 undergraduate students from various non-medical faculties, chosen to adequately represent the target population's awareness and understanding of physical therapy.

To ensure a comprehensive and unbiased approach, we utilized a non-probability convenient sampling technique. This method was selected due to its feasibility within the academic setting, allowing for efficient data collection across a broad section of the student population. Inclusion criteria were set to include undergraduate students aged between 17 and 25, who were willing to participate and provided informed consent. Conversely, students from medical-related faculties such as Doctor of Physical Therapy (DPT) or Bachelor of Science in Physical Therapy (BS-PT), postgraduate students, and those do not present on the day of data collection were excluded from the study (10). The primary tool for data collection was a self-designed questionnaire, which had been developed with support from existing literature (1). This questionnaire included a range of questions to assess students' knowledge and perceptions regarding physical therapy, including its effectiveness, educational pathways, and professional scope. To maintain the integrity of the research process and the confidentiality of the respondents, all data collection procedures adhered to the ethical guidelines outlined in the Declaration of Helsinki. Prior to participation, all students were informed about the study's aims and procedures, and written informed consent was obtained. Ethical approval was granted by the ethical committee of GCUF Layyah Campus, ensuring that all research activities were conducted in

accordance with ethical standards concerning human subjects (11-13).

Data were collected through direct distribution of questionnaires, which were filled out anonymously to ensure privacy and minimize bias. Once collected, the data were coded and input into the Statistical Package for the Social Sciences (SPSS) version 25 for analysis. Descriptive statistics were applied to summarize the data, with measures of central tendency and dispersion such as mean, median, mode, and standard deviation used to describe the demographic and questionnaire variables. The analytical approach also considered subgroup analyses to explore the differences in awareness levels across various demographic factors like age and gender.

RESULTS

The table presents a comprehensive overview of the awareness and knowledge of physical therapy among non-medical university students, based on responses from 250 participants. A significant majority, 226 students (90.4%), were aware of the Doctor of Physical Therapy (DPT) program, while 24 students (9.6%) were not. Knowledge of the eligibility criteria for the DPT program was less widespread, with 116 students (46.4%) aware and 134 students (53.6%) unaware. A notable 230 students (92%) understood the difference between MBBS and DPT, leaving 20 students (8%) without this knowledge

Awareness of specialization programs within physical therapy was limited, with only 64 students (25.6%) aware and a substantial 186 students (74.4%) unaware. However, 213 students (85.2%) recognized the effectiveness of physical therapy in pain management, compared to 37 students (14.8%) who did not. The recognition of DPT as a graduation program was also high, with 194 students (77.6%) aware and 56 students (22.4%) unaware.

Table 1: Awareness and Knowledge of Physical Therapy Among Non-Medical University Students

Variable	Yes (n=250)	Aware (%)
1. Awareness of Doctor of Physical Therapy Program	226	90.4
2. Knowledge of Eligibility Criteria for DPT Program	116	46.4
3. Differentiation Between MBBS and DPT	230	92.0
4. Awareness of Specialization in Physical Therapy	64	25.6
5. Perception of Physical Therapy's Effectiveness in Pain Management	213	85.2
6. Recognition of DPT as a Graduation Program	194	77.6
7. Awareness of Assessment Protocols in Physical Therapy	124	49.6
8. Knowledge of Non-Surgical Treatment by Physical Therapy	174	69.6
9. Role of Physiotherapy in Outpatient and Inpatient Services	116	46.4
10. Awareness of Modalities Used in Physical Therapy	56	22.4
11. Knowledge of Mandatory House Job After DPT	146	58.6

Regarding assessment protocols in physical therapy, awareness was almost evenly split, with 124 students (49.6%) aware and 126 students (50.4%) unaware. Knowledge of non-surgical treatment options provided by physical therapy was relatively high, with 174 students (69.6%) aware and 76 students (30.4%) unaware. Awareness of the role of physiotherapy in both outpatient and inpatient services was reported by 116 students (46.4%), while 134 students (53.6%) were not aware of this

aspect. The knowledge of the modalities used in physical therapy was quite low, with only 56 students (22.4%) aware and a considerable 194 students (77.6%) unaware. Finally, awareness of the mandatory one-year house job after completing the DPT program was known to 146 students (58.6%), whereas 104 students (41.4%) were unaware. These results highlight varying levels of awareness and knowledge among non-medical university students

regarding different aspects of the physical therapy profession.

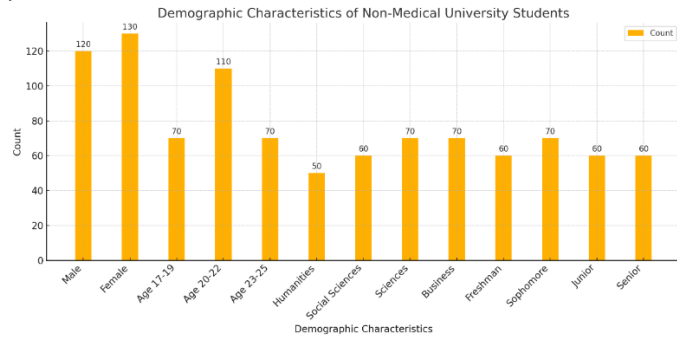


Figure 1 Demographic Characteristics

The graph displays the demographic characteristics of non-medical university students who participated in the study, with categories including gender, age groups, academic majors, and year of study. The distribution shows a slightly higher number of female participants (130) compared to males (120). The largest age group is 20-22 years (110), followed by equal counts for the 17-19 and 23-25 age groups (70 each). Academic majors are fairly evenly distributed, with Sciences and Business each having 70 students, Social Sciences 60, and Humanities 50. Each year of study (Freshman, Sophomore, Junior, Senior) is well-represented, with counts ranging from 60 to 70 students. This demographic distribution provides a comprehensive view of the sample population's characteristics.

DISCUSSION

The study revealed significant insights into the awareness and knowledge of physical therapy among non-medical university students, highlighting both strengths and areas requiring improvement. The overall high awareness of the Doctor of Physical Therapy (DPT) program (90.4%) indicated a positive general understanding of the profession. However, this broad awareness did not extend to more detailed knowledge about the field, such as specialization programs and specific modalities used in physical therapy. This gap suggests that while students recognize the profession, they may not fully understand its depth and scope (12-14).

The differentiation between MBBS and DPT qualifications was well recognized, with 92% of students aware of the distinction. This awareness likely stems from the distinct roles these professionals play in healthcare. However, only 25.6% of the participants were aware of the specialization programs available within physical therapy, indicating a significant knowledge gap that could affect the career decisions of students considering entering this field (2)

The perception of physical therapy's effectiveness in pain management was high (85.2%), which aligns with previous studies showing that individuals generally appreciate the practical benefits of physical therapy (3). However, awareness of the specific non-surgical treatments and the comprehensive assessment protocols followed by physical therapists was less robust, with 69.6% and 49.6% awareness, respectively. This limited understanding could influence how often non-medical students might consider

or recommend physical therapy as a treatment option (15-18).

Gender analysis showed a balanced distribution of awareness, with no significant gender differences impacting the overall understanding of physical therapy. However, the study did not delve deeply into whether specific educational backgrounds or academic majors influenced awareness levels, which could be a potential area for further research. The age and year of study also showed varied levels of awareness, suggesting that exposure to information about physical therapy might increase with age and academic experience (15).

One of the study's strengths was its sample size and demographic diversity, which provided a comprehensive overview of awareness across different student groups. However, there were limitations, including the reliance on self-reported data, which could introduce bias. The study was also limited to a single institution, which may affect the generalizability of the findings to other settings. Future research could expand to multiple institutions and include qualitative methods to explore the reasons behind the knowledge gaps identified.

The study's findings suggest a need for targeted educational initiatives to improve understanding of the detailed aspects of physical therapy among non-medical students. Awareness campaigns, inclusion of physical therapy topics in the broader university curriculum, and workshops led by physical therapy professionals could bridge the existing knowledge gaps. Additionally, integrating more comprehensive information about career paths and specializations within physical therapy could encourage more students to consider this profession, ultimately benefiting the healthcare system by fostering a more informed and supportive community (16). Overall, while the study confirmed that there is a good general awareness of physical therapy, it also highlighted significant gaps in detailed knowledge, especially regarding specialization and specific treatment modalities.

Addressing these gaps through targeted educational strategies could enhance the understanding and appreciation of physical therapy among non-medical students, leading to better-informed future professionals who can advocate for and utilize these essential healthcare services effectively.

CONCLUSION

The study concluded that while there is a high general awareness of the physical therapy profession among non-medical university students, significant gaps exist in the understanding of its specialized aspects and specific treatment modalities. These knowledge deficiencies highlight the need for targeted educational interventions to enhance awareness and appreciation of the full scope of physical therapy. Improving this understanding is crucial for fostering a well-informed community that can advocate for and utilize physical therapy services effectively, ultimately benefiting human healthcare by promoting early intervention, non-surgical treatment options, and comprehensive rehabilitation approaches.

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