

AWARENESS OF PHYSICAL THERAPY AMONG MEDICAL DOCTORS IN SWABI

Zahoor Ahmad¹, Zohra¹**Submitted:** November 11, 2020**Accepted:** April 24, 2021**Published:** June 30, 2021

Authors' Affiliation

¹Department of Rehabilitation Sciences NCS University System, Swabi Campus

Corresponding Author

Zahoor Ahmad

Head of Department

Department of Rehabilitation Sciences

NCS University System, Swabi Campus

E-mail:

zahoor_riphah@hotmail.com

ABSTRACT

Introduction: Physical therapists work in a number of environments including hospitals, private practitioners, outpatient clinics, health care agencies, colleges, sports and recreation centres, workplaces and nursing homes. In Pakistan, the referral of patients to the physical therapy is mainly by physicians or doctors. It is important for the doctors to have awareness about the role of physical therapists.

Material & Methods: This was a cross sectional survey conducted from Jan 2020 to August 2020. The research was based on a self-structured questionnaire which was provided to medical doctors at a hospital in Swabi, Khyber Pakhtunkhwa. The total number of participants in this survey was 145 doctors. The sampling techniques used for this survey was convenient sampling. Inclusion criteria of the study was medical doctors holding MBBS or equivalent degree. Data collected was analysed through SPSS version 22.

Results: Out of 145 participants, 112 (77.2%) were males and 33 (22.8%) were females. Questionnaire was filled by 11.7% orthopaedic specialists, 11.0% neurologists, 13.1% paediatricians, 20.7% gynaecologists and 43.4% by doctor of other specialties. From the total participants, only 98 (67.4%) were aware about the eligibility criteria of entering in the field of physiotherapy, 77.9% were aware about the specialization in physiotherapy and 90.3% were aware about the treatment of physiotherapy. Those who agreed that physiotherapy helps in reducing pain were 132 with percentage 91.0%. 120 (82.8%) doctors agreed that physical therapy is crucial in community-based recovery. According to 125 doctors, early intervention through physical therapy leads to an effective rehabilitation. A total of 61 (42.1%) doctors agreed that physiotherapy was an excellent field.

Conclusion: It was found out that nearly 60% of the medical doctors in District Swabi were familiar with physiotherapy care and with the field of physiotherapy. A big number of these doctors (80 percent of doctors) were aware that physiotherapy helps in reducing pain, provide appropriate care and plays an important role in the community.

Key Words: awareness, medical doctors, physical therapy.

The authors declared no conflict of interest and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. All authors contributed substantially to the planning of research, question designing, data collection, data analysis and write-up of the article.

This article may be cited as Ahmad Z, Zohra. Awareness of physical therapy among medical doctors in Swabi.

Rehman J Health Sci. 2021;3(1). 43-47

INTRODUCTION

Physical therapy is one of the oldest healthcare professions with great medical practitioners like Hippocrates and Galen practicing it as early as in 460 BC. From the 18th century onwards, events such as the First World War, the Polio epidemic and the rise of disability led to rapid advancement and modernization of physiotherapy.¹ Physical therapists are health care providers who help people of all ages maintain, repair and improve their movement and health. The terms Physical Therapist or Physical therapist are same addressed in different regions. Individuals benefit from physical therapists' involvement in health promotion, disease prevention and care to ensure optimum functioning and a higher quality of life.^{2, 3} They create and implement screening and prevention services for common physical illnesses and disorders.⁴ Physical Therapists evaluate, manage and deliver therapeutic programs to recover or enhance motor activities, enhance capabilities of movement, decrease pain problems and maximize post injuries recovery after diseases or impairments. Physical therapists use wide range of physical techniques and modalities or equipment such as

therapeutic ultrasound, TENS, laser, heating agents as diathermy, traction and movement techniques.⁵ Physical therapy, unlike the other allied health programs, is an independent practice and is an essential part of any rehabilitative approach or health care team.⁶⁻⁸ Over the years, physical therapy has grown and progressed from general forms to advanced forms of physical therapy services in health care facilities with the increased number of casualties, accidents and illnesses. Despite the advancements in physical therapy that have been made and seen around the world, there is still a lack of knowledge of physical therapy services among the medical doctors. In health care professionals, there is a vast opportunity of interdisciplinary interaction among different specialised health care practitioners for achieving optimal health.^{5, 9} In most of the countries everyone has right to have access to primary health care and physical therapists are an integral part of the primary healthcare team. In 1999, the World Confederation for Physical Therapy (WCPT) declared that Physical Therapy means the provision of services to patients/clients for maintaining and developing problems

related to movement and functional disorders.¹⁰ According to the United States Department of Labour, physical therapists are primary healthcare professionals that diagnose and treat people of all ages, from newborns to the elderly, who have medical disorders or other health-related disabilities, diseases, or accidents that hinder their ability to travel and perform functional tasks in their everyday lives. Physical therapists are highly trained health practitioners who specialize in a wide range of medical fields. As a result, they serve as part of the health care team to strengthen the community's health outcomes.¹¹ Physiotherapy is a well-established and regulated profession, but its techniques and practices differ in different countries according to their health needs, economic and health care systems.^{12, 13} Various studies indicate that medical practitioners around the world lack awareness about physical therapy. According to a review, medical professionals do not have a thorough understanding of all physical therapy programs and about how physical therapy can improve patients with different disorders.^{14,15} Another survey on medical doctors concluded that they did not have sufficient experience and understanding of the physical therapy profession.^{5,16} As a professional having weak knowledge regarding the professions of fellow members, inter-professional problems are always a high risk to the treatment of patient.¹⁷ Paul and Mullerpartan concluded in a review that literature related to the awareness of physical therapy as a crucial partner in the health care system was limited and there is a need for awareness of physical therapy profession. Similarly, Holdsworth et al. concluded that those general physicians who have been at least involved with physical therapists for 3 years reported a high percentage (70%) of comfort level for their patients rather than those who have not.¹⁸ Physiotherapy professionals mainly depend upon referrals from the medical practitioners. The malpractice of prescribing physiotherapy by a non-physiotherapy professional is one of main concerns by physiotherapy professionals worldwide.^{17,19} A medical doctor must know the principles and approaches being used by a physical therapists which might be helpful for a doctor to have follow a proper referral system. Moreover, there should be proper communication between physicians and therapists as rapid advancement have been reported in physical therapy service over the time.²⁰ Physicians lacking knowledge regarding physiotherapy intervention and its importance leads to decreased referrals.²¹ There is dire need to have awareness regarding the field of physical therapy so that proper team work amongst the medical professionals might be created.¹⁷

Pakistan faces the same problem of lack of awareness regarding physical therapy services and medical professionals are included those who have limited knowledge about the scope of physical therapy. As physical therapists are mostly dependent on patients' referrals from medical doctors, therefore, a limited number of patients using physical therapy services has been reported. The physical therapy awareness is one of serious and essential matter in Pakistan and without physical therapy services most of the medical conditions remained partially treated.^{22,23} Physicians have a reflective impact on all health professions including physical therapists, being 'top of the pyramid' in health care. Patients have always relied upon the physicians for

referrals to other professionals. Such sort of referrals not only increase the number of patients receiving physical therapy services but also a mean for communication between the medical doctors and physical therapists. Many of the developed countries have labelled physical therapists as an independent practitioners and patients are accessing physical therapy services without being referred by the physician.²⁴ However, still the first contact of patients remains physicians in most of the cases and ,therefore, awareness of these physicians regarding physical therapy is very important specially in developing countries.

MATERIAL AND METHODS

After approval of our research proposal by the Institutional Review Board, permission for the study to be carried out was taken from the ethical committee of NCS University System Swabi. This cross-sectional survey was conducted in district Swabi on medical professionals having at least MBBS or equivalent degree. The duration of this study was 6 months (from Feb 2020 to August 2020). For this survey, a self-structured questionnaire was developed from literature and expert opinion. The questionnaire was distributed among medical doctors at Bacha Khan Medical College, District Head Quarter Hospital and all private medical centres in district Swabi, Khyber Pakhtunkhwa. The sample size was 145 participants including consultants, house officers, medical officers and trainee medical officers. Sample size was calculated with the help of an online sample size calculator 'Raosoft'. A convenient sampling technique was used i.e. the doctors who were present in wards or their respective departments and who were willing to participate in the study, were given the questionnaire to fill. One of the team members was present with the participant who was responsible to clear queries. Both genders male and female medical doctors having at least 2-year practical experience were included. Informed consent was obtained from them. Data were analysed using SPSS 22.

RESULTS

A total of 145 medical doctors having an experience of at least 2-years participated in this survey. Out of the total, 112 (77.2%) were males and 33 (22.8%) were females. The medical doctors having age less than 40 were 87 (60.0%) and those with age more than 40y year were 58 (40.0%).

The questionnaire was sent to doctors of various specialties, including orthopaedics (17%), neurology (16%), paediatrics (19%) and gynaecology (30%). The frequency of other specialties was 43.4 percent. Doctors with 1-5 years of experience were 17.9%, those with 5-10 years of experience were 15.1%, those with 11-15 years of experience were 34 % and those with more than 20 years of experience were 33 percent. Just 98 (67.4%) of the 145 participants were informed of the eligibility requirements for joining the field of physical therapy while 47 (32.4%) were unaware of the criteria. When it came to specialization in the field of physical therapy, 77.9% were aware while just 22.1 % were not aware of the specialties offered for physical therapy graduates. Doctors who were aware of the care given in physical therapy were 131 in number (90.3 %),and those who were not aware were 14 (9.7%).

Similarly, 98 (67.6%) participants were aware of the modalities used in physical therapy and the remaining 47

(32.4) were unaware of the modalities used by physical therapists. Doctors who believed that physical therapy and occupational therapy were the same were 9.4%, while those who believed they were different 60.6% and those who were not sure were 30%. Just 60% of the participants were aware of the bachelor of physical therapy course offered in the country. Regarding internship length for the physical therapy graduates, participants were having different opinions. According to the participants the internship program for doctor of physical therapy graduates is for 1, 3, 6 and 12 months. Medical doctors who received physical therapy services in the past were 67 (46.2%) and those who never received treatment were 78 (53.8%). Those who accepted that physical therapy helps to reduce pain were 132 (91%) while those who did not agree with the statement were 3 (2%) and 10 (6%) participants did not know if physical therapy helps to reduce pain or not.

Out of a total of 145 doctors, 124 (85.5%) were aware of the pathological disorders treated by physical therapists and 21 (14.5%) were not aware. In response to the query that a definite evaluation procedure is followed by physical therapists, 130 (89.7%) participants replied 'Yes', while 15 (10.3%) participants responded 'No' to the query. Just 3% of the physicians were aware of more than 10 modalities and 97% were aware of fewer than 5 modalities used in physical therapy. Physical therapy is costly, according to 19 (13.1%) and it is ineffective according to 112 (77.2%). Physical therapy plays an important role in community-based recovery, according to 120 (82.8%) doctors, while 11 (7.6%) doctors disagreed with the statement and 14 (9.7%) doctors were unaware of the role of physical therapy in the community. Almost 86% of the included medical doctors believe that early intervention by physical therapy leads to successful recovery and 14% believe that early intervention does not contribute to effective rehabilitation of patients. Doctors who agreed that exercise is recommended for Diabetes Mellitus were 40 (27.6%), disagreed 53(36.6%) and who were unaware of the fact were 52(35.9%). Physical therapists are paid enough in comparison to the efforts put in was agreed by 24 (16.6%) of the participants, 75 (51.7%) disagreed and 45 (31.7%) did not recognize.

Only 16 (11.0%) doctors believed that physical therapy was linked to orthopaedics, 117 (80.7 %) did not believe and 12 (8.3%) had no idea. Finally, 61 (42.1%) of doctors agreed that physical therapy was an outstanding profession, 54 (37.2%) categorised it as a really good field and 30 (20.7%) categorised it a good field.

DISCUSSION

This study aimed to find out medical doctors' knowledge, expectations and beliefs about physical therapy in district Swabi, Khyber Pakhtunkhwa. Majority of those who responded came from Swabi Bacha Medical Complex, which had a large number of medical practitioners available in the district. The findings indicate that despite respondents' moderate knowledge of physical therapy, there was heterogeneity in patients' referrals to Physical therapy units, which was based on physicians' specialization and work experience. According to the available literature regarding awareness of physical therapy amongst medical practitioners, only 45 percent of medical interns had awareness about physical therapy.⁵ Another study in India in 2017 showed that

there was reasonable awareness of physical therapy in general practitioners, however, there awareness regarding the recent advances in rehabilitation was limited.²⁵ Similar findings were reported in a study carried out in Nepal on the clinician regarding awareness of physical therapy.¹¹ Studies conducted in Papua New Guinea and Saudi Arabia reported lack of awareness regarding physical therapy services amongst medical practitioner.^{26, 27} A study on review of physical therapy across the globe shows that awareness of physical therapy is limited in medical professionals.²⁸ Another research found that general practitioners are well aware of the benefits of physical therapy. In the latter study, the research participants had a strong understanding of musculoskeletal physical therapy, neuro physical therapy, cardiopulmonary physical therapy and sports physical therapy. On the other hand, community-based physical therapy remained relatively less known among these medical practitioners. Furthermore, clinicians agreed that administering exercises is a therapist's primary intervention and there was scarcity of knowledge about recent advancements in recovery.²⁹ To the best of our knowledge, this is the first research in district Swabi to assess physician understanding of the physical therapy profession. Despite a high level of knowledge of the physical therapy profession among physicians working in district Swabi, the rate of patients being referred to physical therapy departments for care is low. Physical therapists are responsible for improving the understanding of their specialty among other members of the healthcare team and, therefore, physical therapists working district Swabi might raise awareness amongst these medical professions.

In study conducted in Nepal it was found that clinical doctors had a strong understanding of the physical therapy profession. However, understanding in terms of referrals and specialised services offered by physical therapists for possible patient benefits remained less explored. As a member of the healthcare team, physical therapists play a critical role in minimizing hospital stays, speeding up recovery and rehabilitation for a higher quality of life.³⁰ In a study carried out in India an urgent need to develop an understanding of physical therapy and its specialties was reported. To increase awareness and perceptions of physical therapy amongst medical and general public, a large-scale education program was proposed to be implemented.³¹ Further research into the various physical therapy services available in hospitals particularly in rural areas is needed. To see how public understanding of physical therapy has changed over time, a similar study with larger sample size and an equal representation of physicians' experience should be performed. According to another survey conducted on among medical and health sciences undergraduate students, even though 98.5 percent of students said they understood what physical therapy is, still there was lack of understanding and knowledge of the subject taught in physical therapy program. Findings of the later study indicated that medical and health sciences students only have a limited understanding of the field of physical therapy. Apart from musculoskeletal and sports physical therapy, awareness of other physical therapy specialties such as cardiopulmonary physical therapy and physical therapy for women's health was lacking. An effective strategy for improving physical

therapy awareness among medical and health sciences students must be adopted. This can be accomplished by putting a strong emphasis on inter-professional education during their undergraduate studies. For the advancement of quality health care services in Malaysia, relevant authorities and those in the field of physical therapy played a proactive role alongside raising awareness and appreciation of the growing physical therapy profession in the country.³² The study aimed to determine medical professionals' knowledge and perceptions of physical therapy. According to the current study, there is a dire need for medical professionals to be educated about physical therapy.

CONCLUSION

It may be concluded that almost 60% of medical doctors of district Swabi are aware of the physical therapy field and the treatment given. Moreover, 80% of the medical doctors agreed that physical therapists provided effective treatments that helps in reducing pain.

REFERENCES

1. Jo Pa, Doshi D, Jiandan M, Gadgil R, Shetty N. Physiotherapy awareness in medical and non medical population: a social media survey 2017.
2. Organization WH. Classifying health workers: Mapping occupations to the international standard classification. Geneva: WHO. 2010.
3. Rea BL, Marshak HH, Neish C, Davis N. The role of health promotion in physical therapy in California, New York, and Tennessee. *Physical therapy*. 2004;84(6):510-23.
4. Paul A, Mullerpatan R. Review of physiotherapy awareness across the globe. *International Journal of Health Sciences and Research (IJHSR)*. 2015;5(10):294-301.
5. Shemjaz AM, Anuj T, Saddam MH. Awareness and knowledge of physical therapy among medical interns a pilot study. *International Journal of Physiotherapy*. 2016;3(2):170-6.
6. Cohen JM, Young M, O'Young B, Stiens SA. Organ Transplantation and Rehabilitation: Process and CHAPTER Interdisciplinary Interventions. *Medical Aspects of Disability for the Rehabilitation Professionals*. 2016:415.
7. Rothstein JM. *Autonomy and dependency*. Oxford University Press; 2002.
8. Olawale OA, Adjabeng MT. Awareness and knowledge of physiotherapy among the general public in an african market in Accra Metropolis, Ghana. *Indian Journal of Physical Therapy*. 2014;2(1):32-6.
9. Hattie J, Marsh HW. The relationship between research and teaching: A meta-analysis. *Review of educational research*. 1996;66(4):507-42.
10. Broberg C, Aars M, Beckmann K, Emaus N, Lehto P, Lähteenmäki M-l, et al. A conceptual framework for curriculum design in physiotherapy education—an international perspective. *Advances in Physiotherapy*. 2003;5(4):161-8.
11. Acharya R, Khadgi B, Shakya N, Adhikari S, Basnet S, Sharma SWG, et al. Physiotherapy awareness among clinical doctors in Nepal. *Journal of Institute of Medicine*. 2012.
12. Higgs KR, Elizabeth Ellis, Joy. Portrait of the physiotherapy profession. *Journal of interprofessional care*. 2001;15(1):79-89.
13. Karthikeyan P, Jones A. Knowledge of physiotherapy services among hospital-based health care professionals in Papua New Guinea. *Papua New Guinea Medical Journal*. 2015;58(1/4):55.
14. Harris M. Management of chronic musculoskeletal conditions in general practice: Self care and use of community resources—A report of a qualitative process. *General practice evaluation and program work in progress report Canberra: Australian Government Printing Service*. 1992:3-5.
15. Summers M. General practitioners and information on local services. *Health Issues*. 1993;35:32-4.
16. Kenny D, Adamson B. Medicine and the health professions: issues of dominance, autonomy and authority. *Australian Health Review*. 1992;15:319-.
17. Abhichandani D, Radia V. Awareness of Various Aspects of Physiotherapy among Medical Residents. *IJSR*. 2015;4(10):1460-5.
18. Muhammad HaidarUllah Khan AA, Muhammad AbdUllah Khan MHI. Awareness and Perception of Physical Therapy Education, Role in Patient Management and Health Promotion Held by Senior Medical Practitioners. 2017;AJAHS.02(03).
19. Edwards I, Delany CM, Townsend AF, Swisher LL. New perspectives on the theory of justice: implications for physical therapy ethics and clinical practice. *Physical Therapy*. 2011;91(11):1642-52.
20. Agarwal V, Kumar MR, Khan AM, Bansal R. Hospital based study to assess knowledge, awareness and perception regarding physiotherapy among the patients in the physiotherapy OPD. *Indian Journal of Physiotherapy and Occupational Therapy-An International Journal*. 2009;3(1):62-5.
21. Science AJoAiM, Dhiraj R. Shete JTaRRK. Awareness of Physiotherapy in Medical Practitioners at Rural Area. *American Journal of Advances in Medical Science*. 2013;Vol-1: No-1: 2013.
22. Khalid M, Malik AN, Khan A. level of awareness of medical professionals about physical therapy. *Professional Med J*. 2013;20(6):948-950
23. Garn SN, Newton RA. Kinesthetic awareness in subjects with multiple ankle sprains. *Physical Therapy*. 1988;68(11):1667-71.
24. Odebiyi D, Amazu A, Akindele M, Igwe S, Olaogun M. Evaluation of the mode of referral of patients for physiotherapy by physicians. *African Journal of Physiotherapy and Rehabilitation Sciences*. 2010;2(1):14-20.
25. Agni P, Battin S. Awareness of physiotherapy among general practitioners; a pilot study. *International Journal of Physiotherapy*. 2017;4(4):253-61.
26. Al-Eisa ES, Al-Hoqail H, Al-Rushud AS, Al-Harthi A, Al-Mass B, Al-Harbi BM, et al. Awareness, perceptions and beliefs about physiotherapy held by physicians working in Saudi Arabia: a cross-sectional study. *Journal of physical therapy science*. 2016;28(12):3435-9.
27. Robert AA, Zamzami MM. Traumatic spinal cord injury in Saudi Arabia: a review of the literature. *The Pan African medical journal*. 2013;16.
28. Shree Vardhan MS, Raj DLAKIJS. Awareness of physiotherapy among general practitioners in a district punjab. *International Journal of Current Research* 2018;Vol. 10(Issue, 05,): pp.69154-6.

29. Agni P, & Battin, S. (2017). Awareness of physiotherapy among general practitioners: a pilot study. *International Journal of Physiotherapy*, 4(4), 253-261. <https://doi.org/10.15621/ijphy/2017/v4i4/154724>.
30. Acharya RSK, B.; Shakya, N. R.; Adhikari, S. P.; Basnet, S. M. S.; Sharma, S.; Webb, G.; Saleh, Oraibi S. Physiotherapy awareness among clinical doctors in Nepal. *Journal of Institute of Medicine*. 2011;Vol. 33(Issue 2):p1-15. p.
31. DD, MJ, RG, NS. Physiotherapy awareness in medical and non medical population: a social media survey. *International Journal of Physiotherapy and Research*. 2017;Vol 5(2):1971-75.
32. Martin Ebenezer. C GCXH, Jemeela. S, Manoj Abraham. M, Jabbar. M. S. Awareness and Knowledge of Physiotherapy among Medical and Health Sciences Students: A Cross-Sectional Study. *Research J. Pharm. and Tech*. 2019; 12(4): 1695-1706. doi: 10.5958/0974-360X.2019.00283.X.

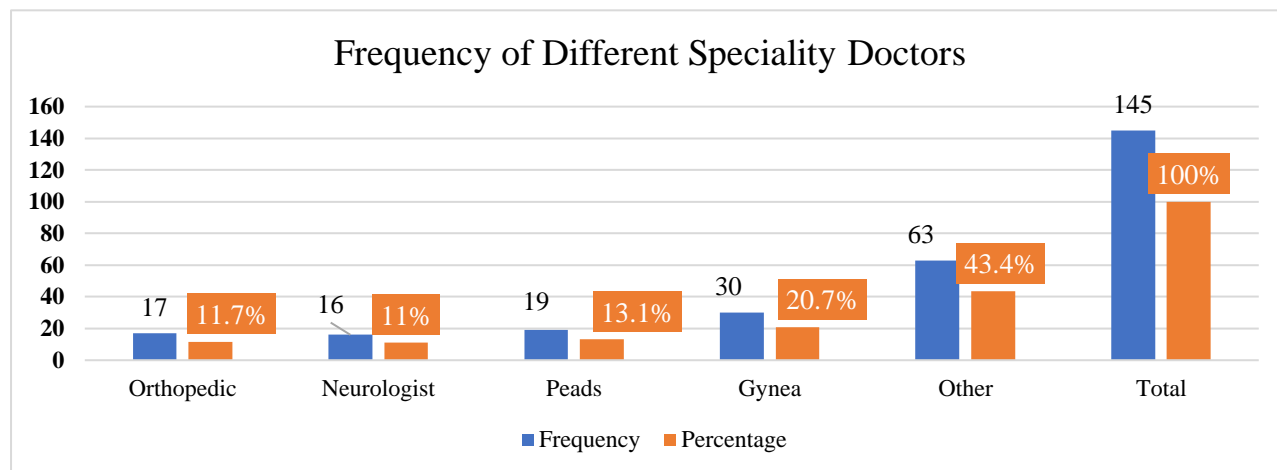


Figure 1: Showing the Frequency of Different Specialty Doctors who attend to fill the questionnaire of this study

Table 1: Mean of all questions reporting the awareness of physical therapy amongst doctors of district Swabi

Questions	Mean	sd
Are you aware of the eligibility for entering Physical Therapy Degree Program	1.3241	.46967
Are you aware that physical therapy has specialization?	1.2207	.41615
If yes then list out the physical therapy specialization you are aware of?	1.3931	.68004
Are you aware of the treatment provided in Physical Therapy?	1.0966	.29637
Are you aware of modalities used in physical therapy?	1.3241	.46967
Is physical therapy and occupational therapy the same?	2.2069	.59973
How many years of course in bachelor of a physical therapy?	4.8483	.72006
What is the duration of physical therapy internship?	2.9103	.92734
Among these which are the subjects that are thought in physical therapy course?	2.1310	1.20332
Have you ever had problems that required physical therapy?	1.5379	.50029
Do you agree physical therapy is effective in reducing pain?	1.1586	.52276
Do you know about the pathological condition treated in physical therapy?	1.1448	.35315
Does physical therapy follow a definite assessment protocol?	1.1034	.30560
Which modalities in physical therapy are you most aware of.	1.3379	.51668
Do you feel physical therapy services are expensive?	1.9655	.47746
Do you agree physical therapy plays an important role in community-based rehabilitation?	1.2690	.62644
Do you agree early intervention through physical therapy leads to effective rehabilitation?	1.2069	.55147
Do you know exercise prescription is done in physical therapy for type ii diabetes mellitus?	2.0828	.79498
Our physical therapy services paid enough compared to the efforts put in?	2.1517	.68039
Do you feel physical therapy is related only to orthopaedics?	1.9724	.44009
What is your opinion on physical therapy as a profession?	1.7862	.76545