

Evaluation of Awareness of Scope of Physical Therapy Field amongst Intermediate Pass Students

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Abstract

Physical therapy is one of the healthcare professions concerned with human function and movement. According to Higher Education Commission "Physical Therapy is an essential segment of modern health care system. This study was conducted to identify the knowledge of physiotherapy as a profession and the level of awareness amongst intermediate pass students. A cross-sectional study with 348 college students were selected by using convenience sampling technique and a self-designed questionnaire was circulated to them for data collection and data were analyzed using descriptive statistics, conducted by SPSS. Results show that knew 50% about the sub-specialties, 70% & 60% have knowledge of treatment modalities and their uses in physiotherapy practice. This study concluded that high school students are having good awareness about physiotherapy as a profession. Further education to the schools is needed to enrich the knowledge about the physiotherapy profession to the school students.

Keywords: Physical therapy, Professional practice, Student awareness, Scope of Physical Therapy, Physiotherapy education.

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INTRODUCTION

Physiotherapy as described by World Physiotherapy is a health care profession concerned with human function and movement and maximizing physical potential. It is concerned with identifying and maximizing quality of life and movement potential within the spheres of promotion, prevention, treatment/intervention, habilitation and rehabilitation [1]. It uses physical approaches to promote, maintain and restore physical, psychological and social well-being, taking into account variations in health status. It is science-based, committed to extending, applying, evaluating and reviewing the evidence that underpins and informs its practice and delivery. The exercise of clinical judgment and informed interpretation is at its core [2]. This profession encourages development, facilitates recovery, and enables people to be fit and healthy; it plays a significant role in rehabilitating pain and function. It also works closely with other professionals [3]. Physical therapy involves the interaction between the physical therapist, patients/clients, other health professionals, families, care givers and communities in a process where

movement potential is assessed and goals are agreed upon, using knowledge and skills unique to physical therapists [4]. Physiotherapy is an internationally recognized profession, where the physiotherapist works with service users to identify and encourage their ability to maximize their movement and function while ensuring treatment is patient-centered, effective and ethical [5]. A physiotherapist has professional autonomy, allowing the physiotherapist to have the ability and freedom to use their professional judgment regarding assessment, diagnosis, treatment and care within their scope and limits of knowledge and competence [6]. Physiotherapists can work in a variety of environments from hospitals, private practice clinics, community-based rehabilitation centers, outpatient clinics, to schools and workplaces. The scope of physiotherapy is not limited to the role played in a clinic surrounding patient care, but also includes influencing public health strategies, advocating patient health, teaching, research, and helping to develop health policies [7]. Physiotherapists are able to carry out a variety of tasks that can be beneficial for recipients of Physical Therapy early-on even before the injury or

returning back to work after injury, which include: Identifying the probable cause of injury, Developing safe and smart orientated return to work programs including exercises to help with work conditioning, Developing safe and realistic restrictions to prevent further injury when returning to work, Reducing the likelihood of further injury by addressing areas such as posture, manual handling techniques, ergonomics and workplace practices [8]. There are also benefits to those who are sick or disabled to stay at work where health status permits which include: Helps promote recovery within the rehabilitation process, Minimizes the side effects of long-term sickness absence, which can include physical, mental and social effects, reduces long term incapacity, helps people feel like they contribute to society, maintain their independence, and have autonomy. Improves quality of life [9]. Few studies have identified that many people require or need regular physiotherapy services; because of the lack of knowledge, they are unaware of the services available and lack of availability to them [10]. A considerable number of populations were satisfied with physiotherapy services, and it was found that about 83.4% of physicians prescribe physiotherapy as their routine treatment for people with various illnesses [11]. Physiotherapy is an integral part of the health care system, without a referral from the physicians the people are not volunteering to visit. One of the reasons was identified as poor knowledge about the profession and a smaller number of public educational institutions. Because of it, there is a marked shortage of qualified physiotherapists, especially in developing countries [12]. Physical therapists are considered as wanted and treasured team members in primary health care (PHC) teams [13]. There is urgent need of suitable infrastructure along with the background knowledge about the physical therapy profession [14] and its practice. In order for Physiotherapy to grow as a profession, we are in dire need of a strong referral system by physicians and also introducing Physiotherapy as a strong career choice to students who wish to grow their career in various other medical practices. As El Baky in 2014 concluded that there were

deficits in the perception in different areas regarding to physical therapist profession and this lack of awareness must [15] be overcome.

METHODOLOGY

This is a Cross sectional study The area of selection of study took place Karachi in different university settings like Memon College of physical and rehabilitative medicine Hospital, Liaquat National school of physiotherapy, Jinnah Postgraduate Medical Center college of physical therapy, Zia Uddin University, Baqai Medical University and DOW university OJHA campus. Duration of the study took place in the period of six months. The study descriptively involves 348 Intermediate passed pre-medical students in the population sample in research. Non- probability convenience sampling was applied. Sample size was small. Total 300 participants were included in the study. Simple randomize technique was used. 300 intermediate passed premedical students from above mentioned universities will be interviewed through a questionnaire. Data will be collected by questionnaire by the meeting of individually sample or online. Data analysis was done by using the Statistical Package for the Social Sciences software. Descriptive statistics was used to describe the global knowledge base regarding physical therapy. The information regarding knowledge analyzed first the total number of accurate responses to the items on the questionnaire was calculated and the independent Student's *t*-test was done to determine whether there were differences in the mean number of correct responses between gender, academic level and according to the universities. The Chi-square test was used to assess whether there was a significant difference in proportion of correct and incorrect responses to each question on the instrument by gender, academic level, according to universities, intended career and sources of knowledge. All statistical analyses were analyzed using SPSS at and α level of 0.05 and are shown in the tables.

RESULT

Table: 1

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Do you know what is a DPT	male	269	1.14	.353	.022
	female	79	1.09	.286	.032
Are you aware about the eligibility criteria	male	269	1.36	.481	.029
	female	79	1.22	.414	.047
Do you know that MBBS and DPT are different	male	269	1.09	.291	.018
	female	79	1.18	1.141	.128
Are you aware about the specialization program in Physical therapy	male	269	1.45	.498	.030
	female	79	1.46	.501	.056
Do you agree that Physical Therapy is effective in reducing pain	male	269	1.23	.424	.026
	female	79	1.11	.320	.036
Do you know that DPT is a graduation programme	male	269	1.21	.407	.025
	female	79	1.15	.361	.041
Does Physical Therapy follow a definite assessment	male	269	1.46	.500	.030
	female	79	1.35	.481	.054
Physical Therapy can provide treatment without surgical	male	269	1.27	.444	.027

intervention	female	79	1.22	.414	.047
Physical Therapist work in in-patient and out-patient services	male	269	1.39	.490	.030
	female	79	1.25	.438	.049
Are you aware of the modalities used	male	269	1.52	.500	.031
	female	79	1.56	.500	.056
you are required to work one year of house job	male	269	1.34	.474	.029
	female	79	1.27	.445	.050

Table 1 show n=348 participant include in this study, most of the subject were n=269 (77%) males and

n=79(23%) females within the age range of 19 to 25 years.

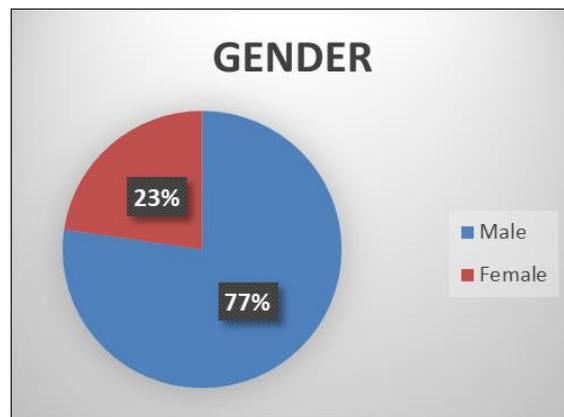


Figure 1: Gender characteristics of participants

Group statistics were applied to the data collected and it was declared that male participants were more aware of the questions being asked than the female ratio, the details can be seen in the chart below along with their mean, standard deviation and standard error mean, Questionnaire was based on total 11 questions.

Awareness of DPT Program amongst Intermediate Students

Based upon the questionnaire which was distributed amongst 348 Intermediate students, we found out that most of the intermediate students were informed that Physiotherapy is an indigenous treatment practice; Figure 2 illustrates the response rate/frequency of awareness of DPT program amongst Intermediate students:

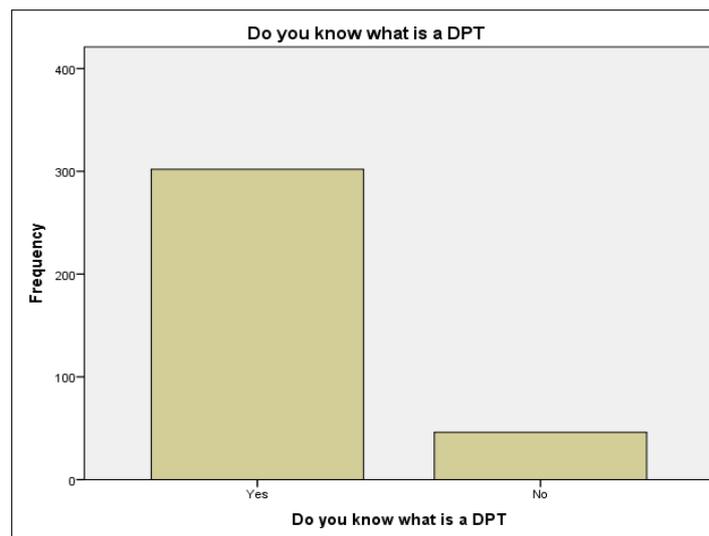


Figure 2: Awareness of DPT program amongst students

Awareness of Eligibility Criteria of DPT Program

Figure 3 depicts that almost 70% of the Intermediate students were cognizant of the eligibility

criteria to pursue DPT program that they should have done their Intermediate from Pre-medical, must have secure aggregate percentage of 60% minimum.

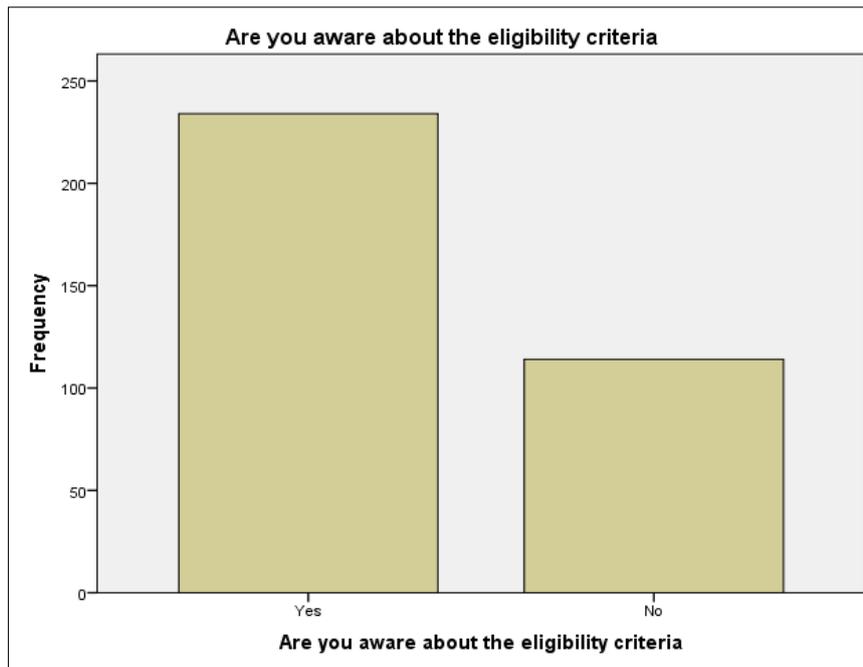


Figure 3: Awareness of eligibility criteria of DPT program

Awareness of the Difference between MBBS and DPT Program

Figure 4 depicts that most of the Intermediate students had adequate awareness about the difference between MBBS and DPT programs, that even though eligibility for both courses requires Pre-medical as

prerequisite but MBBS is an undergraduate program that deals with practicing medicine and students can opt for surgery programs later on and DPT program deals with rehabilitation for curing physical injuries and impairments manually and via exercise programs.

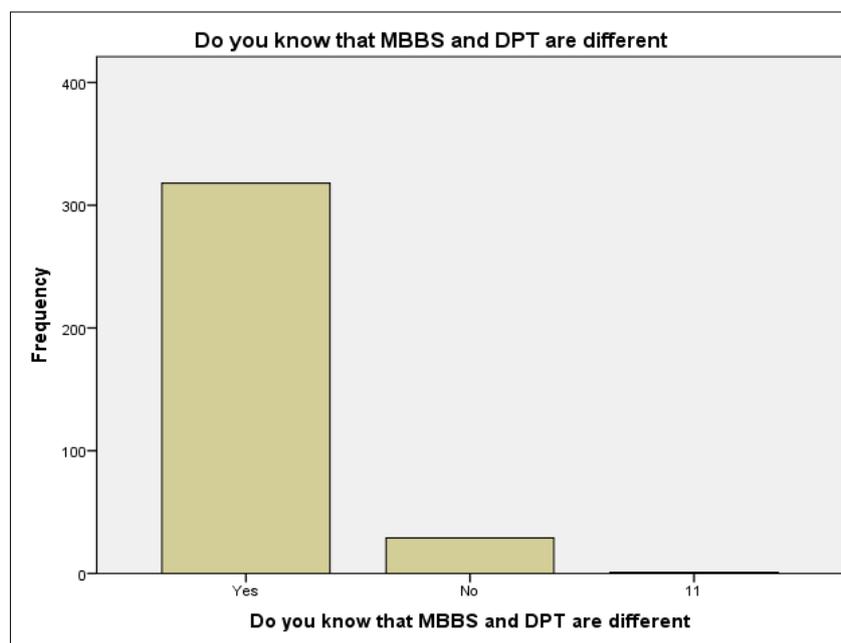


Figure 4: Awareness of the difference between MBBS and DPT program

Awareness of Physical Therapy Specialization Program

Figure 5 reveals that half of the Intermediate students knew ambiguously about the Post-graduation courses that can be done after DPT program, mostly

students knew about specialization program in Musculoskeletal, cardiac rehabilitation and neuromuscular rehabilitation post-graduation programs and none other like Geriatric and gynecological rehabilitation.

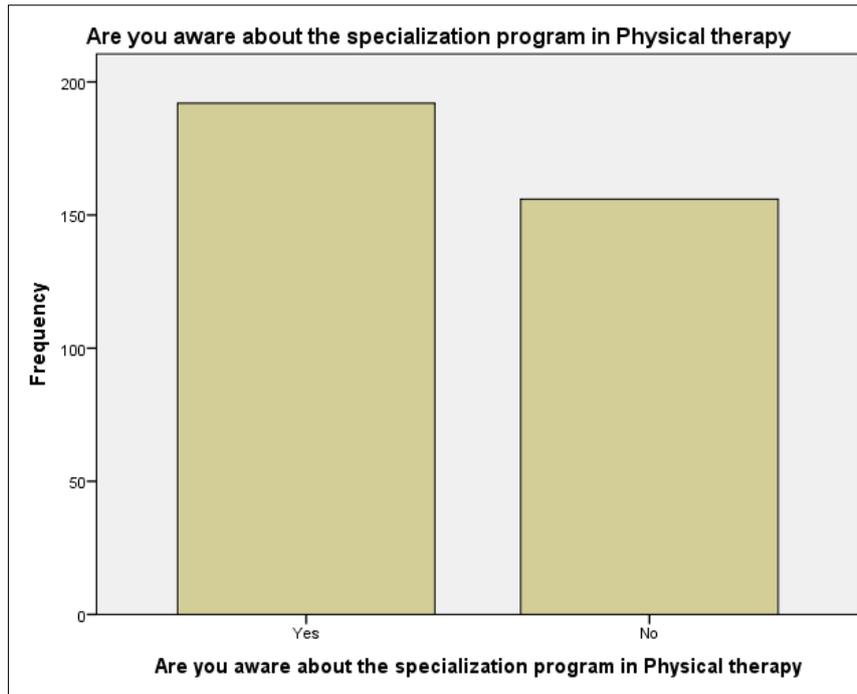


Figure 5: Awareness of Physical Therapy specialization program

Awareness of Effectiveness of Physical Therapy in Reducing Pain

Figure 6 reveals that most of the majority Intermediate students were aware that treatment with

Physical Therapy aims to reduce disability and suffering by reducing pain and increases tolerance to movement via manual therapy exercise program.

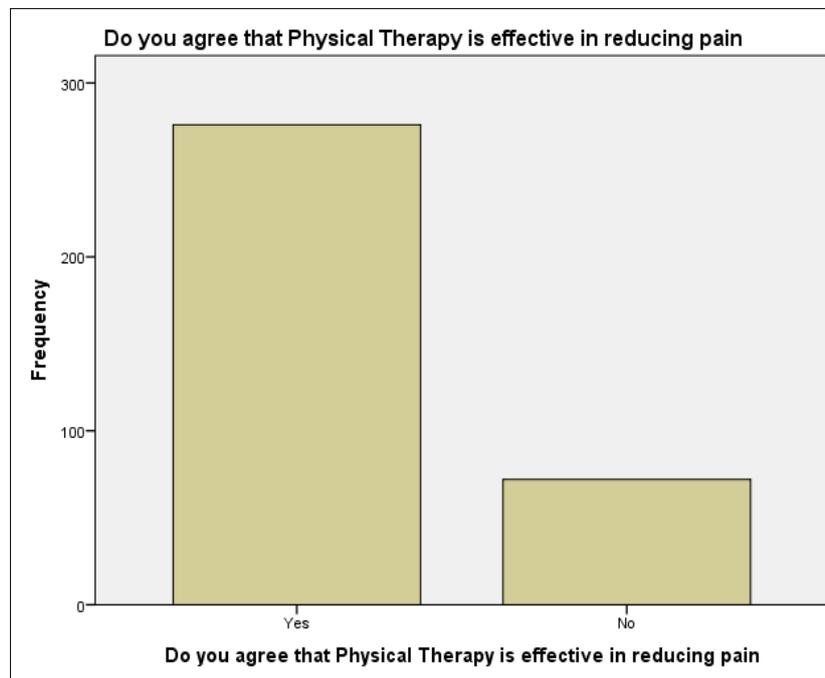


Figure 6: Awareness of effectiveness of Physical Therapy in reducing pain

Awareness of DPT as A Professional Graduate Program

Figure 7 portrays the awareness of DPT program as a professional graduate program amongst Intermediate students, the ratio of awareness was pretty

high and students were well aware of the DPT program as a clinical degree consisting of five years' bachelors program requiring one-year house job after the graduation to start clinical practice.

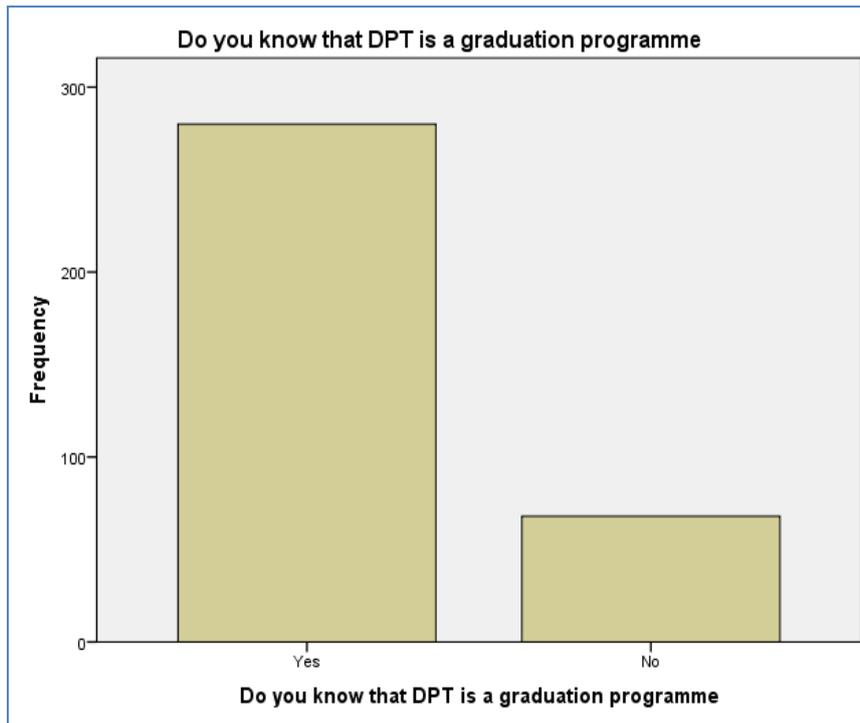


Figure 7: Awareness of DPT as a professional graduate program

Awareness of Assessment Protocols of Physical Therapy

Figure 8 exhibits that most of the Intermediate students showed apprehension for the knowledge about

a definite assessment criteria of Physical Therapy whilst most were also oblivious about the assessment protocols of Physical Therapy.

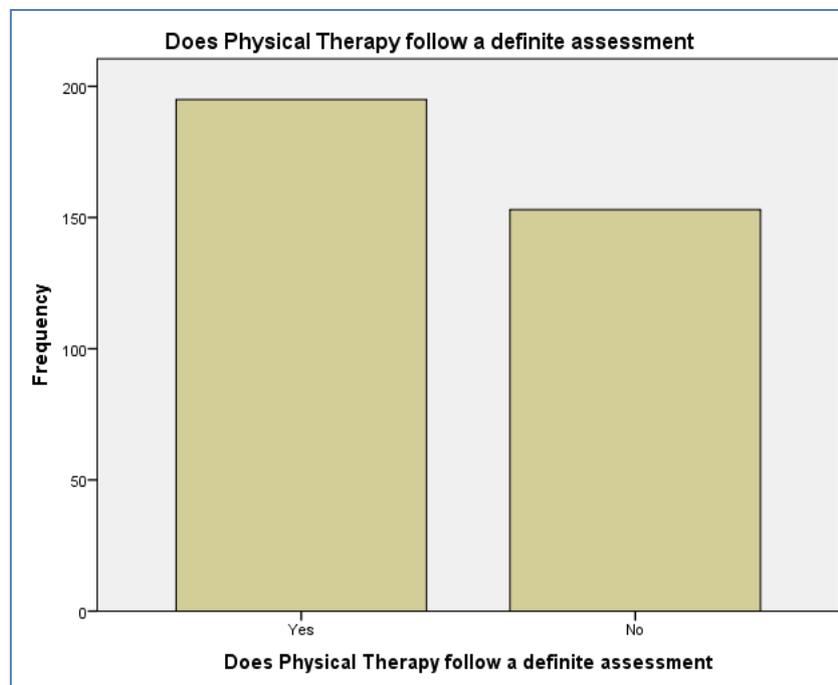


Figure 8: Awareness of assessment protocols of Physical Therapy

Awareness of Physiotherapy as a Non-Surgical Intervention Method

Figure 9 elucidates that most Intermediate students knew about Physical Therapy as a means of

providing non-surgical treatment and treating physical impairments conservatively.

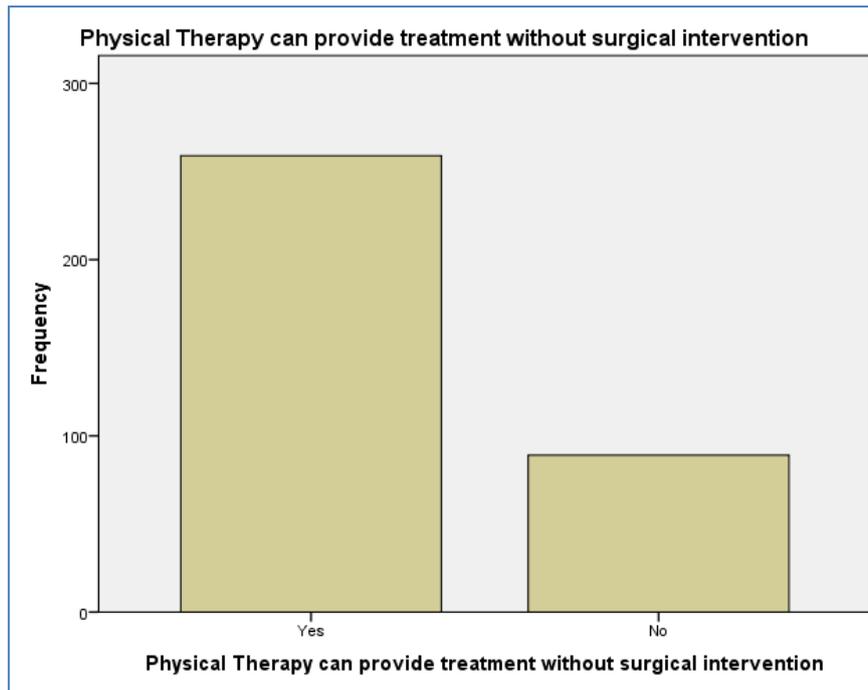


Figure 9: Awareness of Physiotherapy as a non-surgical intervention method

Role of Physiotherapist in Outpatient and Inpatient Department

Figure 10 shows that Intermediate students somehow knew about the role of physiotherapist in in-

patient and out-patient services but were not fully aware of the treatment that they provide in hospital and out-patient and out-reach services.

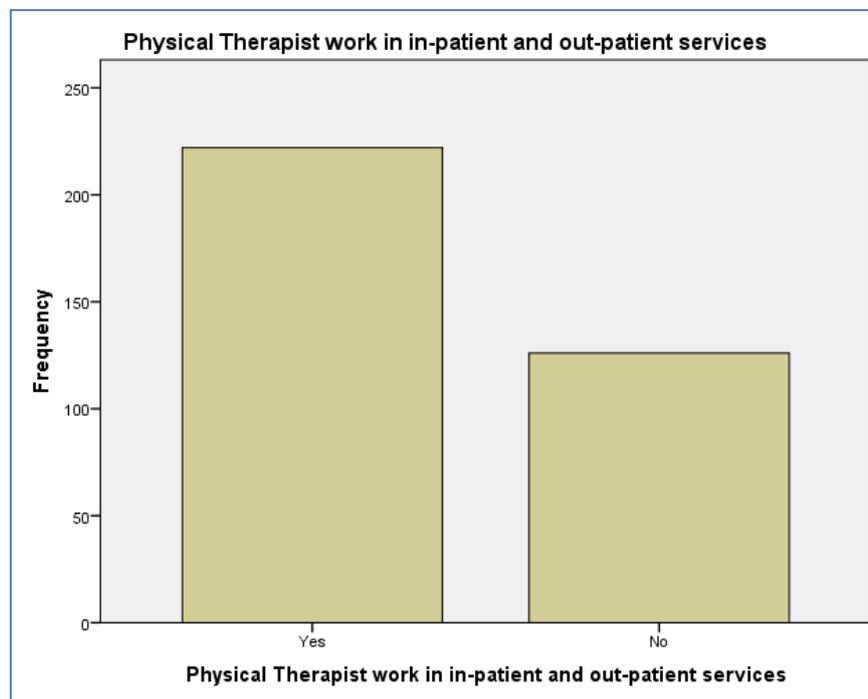


Figure 10: Role of Physiotherapist in Outpatient and Inpatient department

Awareness of Modes of Physical Therapy Treatment

Figure 11 depicts that most students were oblivious to the modes of treatment and modalities used in Physical Therapy treatment method, most were aware

about manual therapy and exercise therapy, heat and ice therapy but were not fully aware of the electrotherapy and modalities being used for treatment purposes such as TENS, Ultrasound therapy etc.

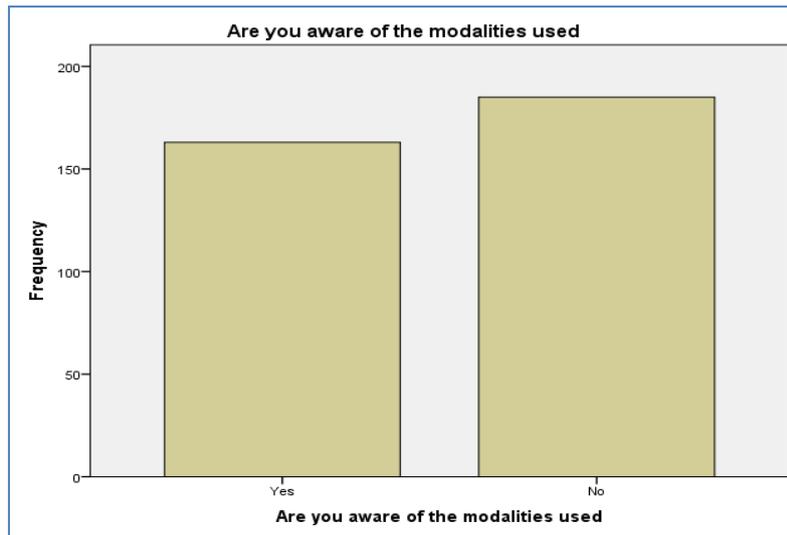


Figure 11: Awareness of modes of Physical Therapy treatment.

Awareness of House Job Program after Completion of DPT

Figure 12 highlights the ratio of awareness of having to work mandatory one-year house job after the

completion of DPT program to be eligible to start clinical practice independently.

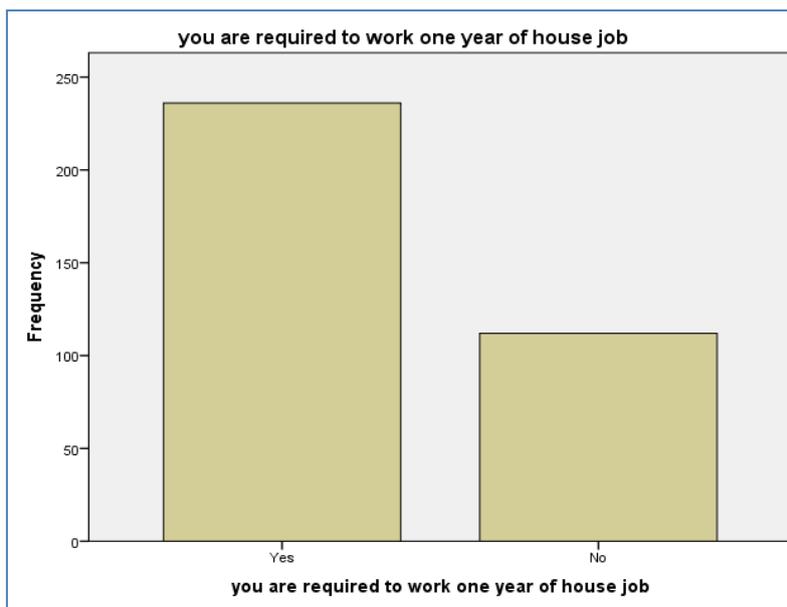


Figure 12: Awareness of house job program after completion of DPT

	p-value
Awareness of DPT program	0.007
Awareness of eligibility criteria for DPT program	.000
Awareness of difference between MBBS and DPT program	0.023
Awareness about the specialization program in Physical therapy	0.776
Awareness of Physical Therapy effectiveness in reducing pain	.000
Awareness of DPT as a graduation program	0.20
The awareness of Physical Therapy definite assessment plan	.000
Awareness of Physical Therapy as a non-surgical intervention method	0.47
Awareness of Physical Therapist work schedule in in-patient and out-patient services	.000
Awareness of the modalities used in physiotherapy	.228
Awareness of one year of house job after completion of DPT program	0.008

DISCUSSION

This study was conducted to find out about the awareness of Physical Therapy field in Intermediate pass students in different University settings whose names are aforementioned via questionnaires in which 11 questions related to the field of Physical therapy were asked from total 348 participants, upon which it was revealed that the respondent's familiarity with the profession of Physical Therapy were basic and the male counterpart was more aware of the Physical Therapy profession than the female counterpart. A pilot study was conducted in Malaysia in 2017, that awareness of the role of physiotherapist was moderate [16]. However, via this study it was found that most of the students were aware of the difference between MBBS and DPT profession and the type of services physiotherapists provide, 70% of the students knew the eligibility criteria for opting Physiotherapy as a profession which is Pre-Medical in Intermediate with at least 60% scoring percentage. Nowadays, students seem to be more cognizant of the Physical Therapy field and its ever-growing practices than before. A study conducted in Lahore, Pakistan, states the fact that Intermediate college students had a lack of awareness regarding physiotherapy as a profession. Social media was a powerful source of awareness for them [17]. On the other hand, this study also revealed the fact that however, students were aware of the Physical therapy field but not of its domain, the services physiotherapists provide in In-patient and Out-patient services and specialization program post DPT, neither they were fully aware of the modes of Physical Therapy treatment apart from manual therapy and exercises, may be because of the lack of persuasion and underestimation by family and peers to pursue this career. Another study conducted in Karachi, Pakistan reveals that only 13.5% of our country here is aware of physiotherapy, which limits it because knowledge brings awareness and belief in the profession as a cure and improvement. Physical therapy is a growing profession; however, it appears that public is unaware of the full range of physiotherapy services, which suggests that there is a need for appropriately focused marketing campaigns [18]. It indicates that we are in dire need of proper public campaigns and Physical Therapy awareness program at the very beginning so that people can choose this profession consciously and willingly to promote the scope of Physical Therapy practices in Pakistan.

CONCLUSION

This study reveals that people especially Intermediate Pre medical students are now more aware of the Physical therapy field but only seem to know only the basics and not very much aware of the vast variety of domains offered in physical therapy field neither do they seem to know about the specialties after post-graduation and pre requisites of starting clinical practice after the completion of DPT program which limits the further success rate of this field if students are

not fully aware of this field why would people opt as a profession which improves quality of life of so many people. Physical therapy is an ever growing field and there is further need of campaigning or counselling of students to be aware of full range of physiotherapy services.

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