

# AWARENESS OF PHYSICAL THERAPY AS A PROFESSION AMONG PRE-MEDICAL STUDENTS OF PRIVATE AND GOVERNMENT COLLEGES

## ABSTRACT

### OBJECTIVE

To determine the awareness and perception of Physical Therapy as a career among the intermediate students of Karachi.

### STUDY DESIGN

It is a cross sectional study.

### STUDY SETTINGS AND PARTICIPANTS

The settings of this study were two Private and two Government sector Intermediate colleges, offering Pre-medical and participants were students studying in these colleges.

### SAMPLING TECHNIQUE

Non-probability convenience sampling technique.

### RESULTS

Results revealed that only 13.5% of students were well aware of physical therapy as a profession in government and private colleges whereas, 31% in government colleges and 26.5% in private colleges had little knowledge. While 28% government and 30.5% in private were totally unaware of it. 75.7% and 83.5% from government and private sector students responded that physical therapy will be most rewarded in Orthopedic/Musculoskeletal fields respectively.

### CONCLUSIONS

The awareness of Physical Therapy as a career among intermediate students would help in creating more effective marketing strategies. Unfortunately, a small percentage of the students are aware of physiotherapy and the services provided by this profession which implies that there is an urgent need for marketing campaign.

### Key Words

Awareness, Profession, Physical Therapy, Government, Private, Intermediate, Pre-medical.

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## INTRODUCTION

A profession is a rewarded occupation, especially one that involves prolonged training and a formal qualification<sup>1,2</sup> whereas, a professional is engaged in a specified activity as main paid occupation rather than as an amateur<sup>3</sup>. Health professionals play a central and critical role in improving access and quality health care for the population. They provide important services that promote health, prevent diseases and bring health care services to individuals, their families and their societies<sup>4</sup>. Physical therapy, as a health care profession, was formally recognized in the second decade of the 20th century<sup>5</sup>, after the World War I (1914-1918)<sup>6</sup> whereas the profession was endorsed due to numerous emerging cases of poliomyelitis after World War II<sup>7, 8</sup>.

World Confederation for Physical Therapy (WCPT) defines Physical Therapy as "A profession which is concerned with identifying and maximizing quality of life and movement potential within the spheres of promotion, prevention, intervention, habilitation and rehabilitation. This encompasses social, psychological, physical and emotional wellbeing"<sup>9</sup>.

Similarly, Australian Physiotherapy Association (APA) illustrate Physical Therapists (PT) as health care professionals capable of carrying out a complete examination, assessing the findings, formulating a diagnosis, prognosis and treatment plan thus maintaining optimal functioning and physical wellness in the society<sup>10</sup>.

The profession of Physical Therapy started off as a diploma program progressing to Bachelor and now leading to Master and MPhil programs. It has grown such rapidly that the basic educational process required to become a PT is upgraded to the Doctor of Physical Therapy (DPT) degree. After DPT the need for further advancement in studies emerged realizing the need for equal credentials of old Bachelors in the market with the new graduates coming with the DPT degree. Hence, the Post Professional degree program was introduced<sup>11</sup>. Similar concerns were raised when the mode was to move from Bachelor to the professional Master degree<sup>12</sup>. The Post-Professional DPT degree permits PT to achieve degree uniformity with PT that holds the skilled DPT degree by filling in any gaps between their skilled baccalaureate academic degree education and current skilled DPT degree education<sup>13</sup>.

American Physical Therapy Association (APTA) represents more than 80,000 PT, PT assistants, students<sup>14</sup> and in U.S. Physical Therapy is ranked fifth in best healthcare jobs and eight in the 100 most excellent jobs in 2013<sup>15</sup>. According to Vision 2020, the new graduates taking the national licensure examination in the field after 2020 will be required to hold at least DPT degree<sup>16</sup>. PT practice independently of other health care providers and also within interdisciplinary rehabilitation programs<sup>17</sup>. Clinical specialization opportunities are also available, for PT, in the fields of, Neurology, Orthopedics, Geriatrics, Pediatrics, Women's Health, Sports and Clinical Electrophysiology<sup>18</sup>.

A study conducted by Prati and Liu, in October 2006 showed that the students have a positive attitude towards physical therapy. College students also observed the DPT as educating more competent practitioners. However, DPT programs should put in efforts to advocate their programs not only on-campus but also off-campus. DPT programs and APTA should promote more seriously to the public, the changes undergoing in the field of PT<sup>19</sup>.

Board of Intermediate Education Karachi (BIEK) was established in 1974<sup>20</sup> and certifies students who want to pursue career in physical therapy. Pre-med from BIEK is a requirement for bachelors in physical therapy in Karachi Pakistan<sup>21</sup>.

Despite Physical Therapy being such a rapidly growing and emerging field there is not much work done to check the awareness of Physical Therapy and thus this study is being conducted as having the knowledge of awareness would help in creating more effective marketing strategies as many of these students could become practitioners as well as patients in future. Also understanding the factors for which the students do not choose Physical Therapy as their first option for career choices, would help in learning the misconceptions regarding the profession that need to be corrected. The objectives of the study are to determine the awareness and perception of Physical Therapy, to compare the frequency of physical therapy as career preference among students of government and private sector colleges and to identify the factors for which students do not choose Physical Therapy as first option for career choices.

## METHODOLOGY

### Study Design

This is a cross-sectional survey conducted amongst Intermediate (Pre-medical) students of Karachi.

### Settings

The settings of this research were two Private (Pvt) and two Government (Govt) sector Intermediate colleges, offering Pre-medical, in Karachi.

### Duration

The length of study over which it was conducted is one year.

### Sampling Technique

Using Raosoft calculator<sup>22</sup> a sample size of 375 was calculated. The population of intermediate students, in Karachi, in 2011 was 15,527<sup>23</sup> and margin error of 5% was kept with a response distribution of 50%. To avoid wasting of data sample size was taken as 400. Non-probability convenience sampling technique was used.

### Sample Selection

Intermediate (Pre-medical) students, both male and female, from Private and Government colleges of Karachi city, who were present on the day of data collection, were included in this study.

This study excluded students other than Intermediate (Pre-medical) and from colleges out of Karachi. Non responsive students who were not signing the consent form were excluded as well and those students who were mentally disabled were barred from this choice of survey.

### Procedure

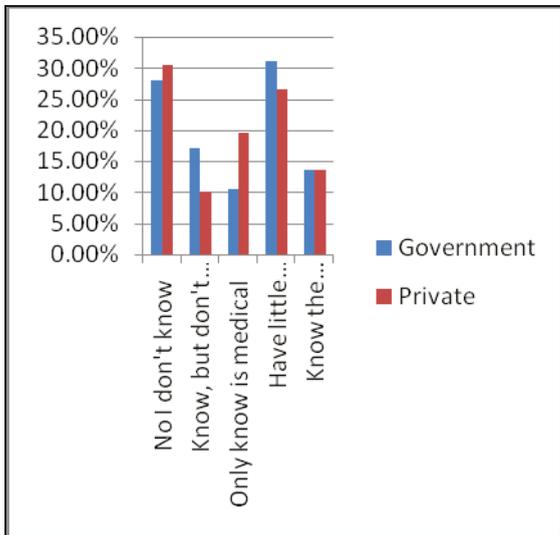
A self administered questionnaire was distributed amongst 400 college students present on the day of data collection. Data was analyzed using SPSS version 20 and Excel 2007.

**RESULTS**

TABLE 1: ARE YOU AWARE OF PHYSICAL THERAPY AS A PROFESSION

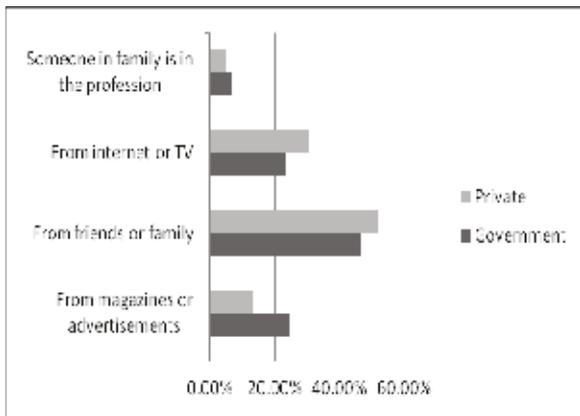
Colleges	No, I don't know	Know but don't know what it's based on	Only know is medical	Have little knowledge about it	Know the profession very well
Govt	28%	17%	10.5%	31%	13.5%
Pvt	30.5%	10%	19.5%	26.5%	13.5%

Based upon the questionnaire and the optional responses provided accordingly we have calculated the results, however the nature of this research is as such that free opinionated responses had to be equally appreciated. With reference to chart 1 above, the result shows, 13.5% were well aware of physical therapy as a profession in government and private colleges whereas 31% in government colleges and 26.5% in private colleges had little knowledge about it. 10.5% in government and 19.5% in private only knew about physical therapy as a profession related to medicine. 17% in government and 10% in private only heard the name but did not know what it was about. 28% government and 30.5% in private were totally unaware about it.



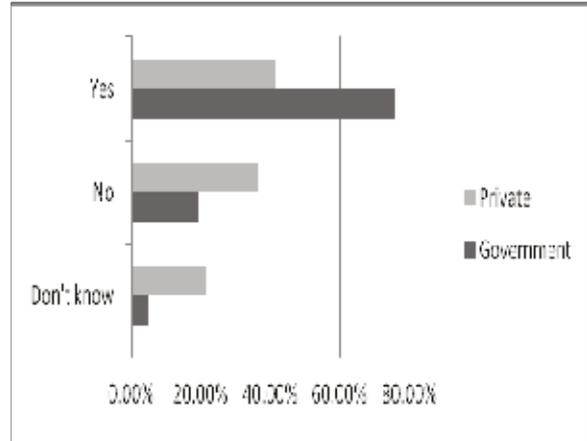
**Sources of Information**

6.3% from government and 5% from private said that someone in their family is in the same profession. 22.9% from government and 30.2% from private said that they had heard from internet. 46.5% from government and 51.8% from private said that they heard from friends or family. 24.3% from government and 12.9% from private said that they heard from magazines or different sources of advertisements.



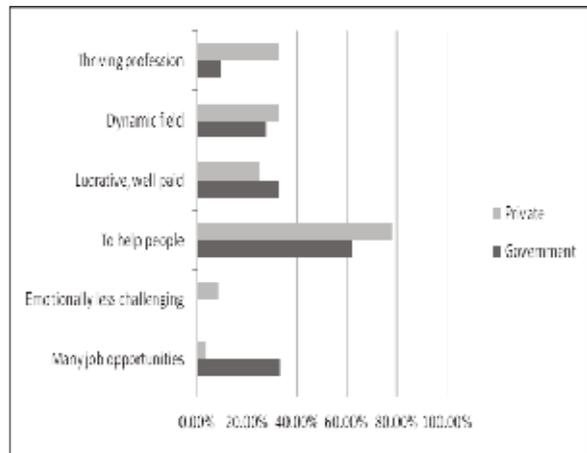
**Choice Of Career**

A comforting 75.7% percent from the government and 41.7% from private sector preferred to choose physical therapy as a career. In government colleges 19.4% said no, 4.9% said that they do not know whereas in private 36.7% said no and 21.6% said that they do not know.



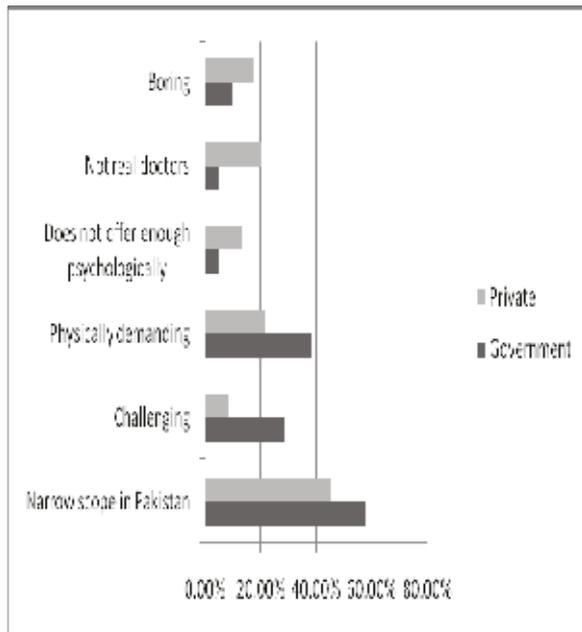
**Reasons For Career Preference**

A fair 33.1% from the private sector said that physical therapy is a thriving profession and a dynamic field, whereas both the private and the government college students were motivated because it offered a generous monetary value. A minor 8.6% from the private sector considered it as a relaxing and emotionally less challenging work. 33.3% from the government and 3.6% from private considered it as a field which presents good job opportunities.



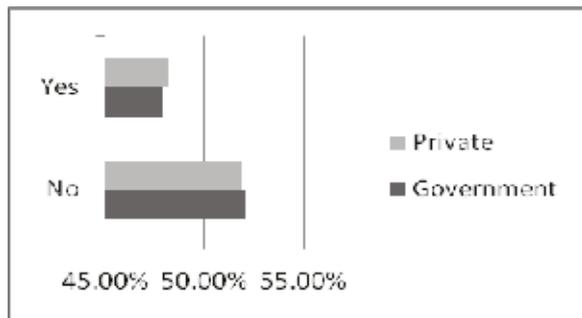
**Negative Reasons for Choice of Career**

9.7% and 17.3% from government and private college students thought of physical therapy as a plain or boring profession. 4.9% and 20.1% from government and private college students did not consider them as real doctors. 4.9% from government colleges and 12.9% from private thought that physical therapy does not offer psychologically. 38.2% from government and 21.6% from private colleges said that the profession was physically demanding. 28.5% from government colleges and 8.6% from private colleges found physical therapy challenging and 57.6% and 45.3% from government and private colleges said that physical therapy had Narrow scope in Pakistan.



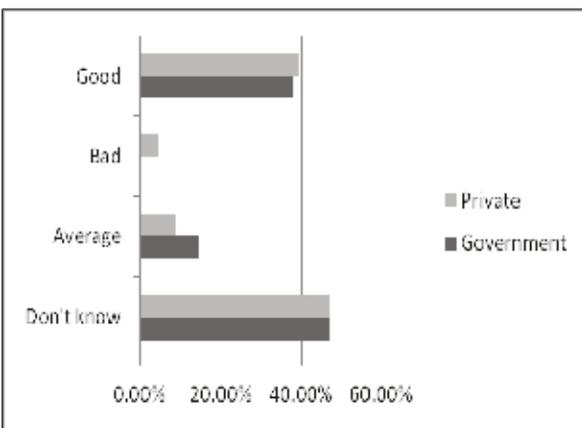
**Visit to a Physical Therapist**

In government colleges 47.9% said they have been to a PT, whereas 52.1% said no they have not. Similarly In private 48.2% said yes, 51.8% said no.



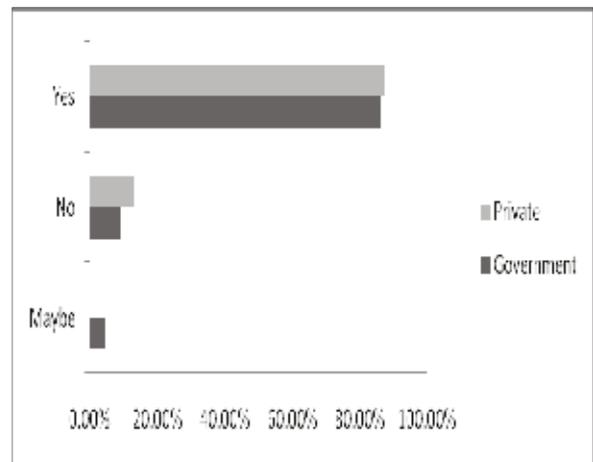
**Feedback Concerning Their Experience with a Physical Therapist**

In government colleges 38.2% said it was good, 14.6% said it was average. Only a small 5% reported their experience as being poor. In private colleges 39.6% said it was good, 4.3% said it was bad, 8.6% said it was average and 47.5% said that they do not know.



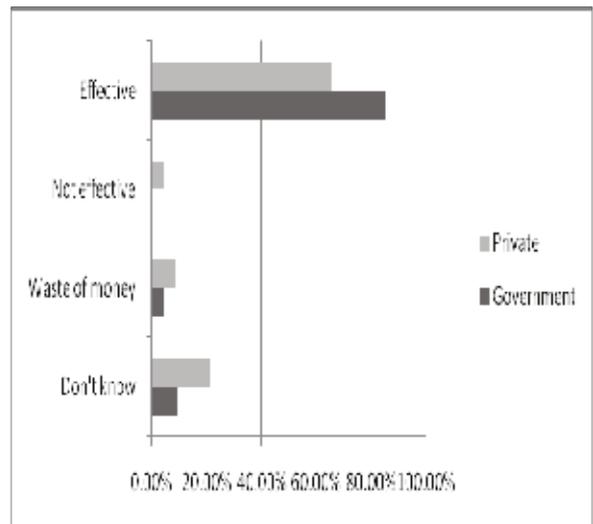
**Predilection Regarding Visit to a Physical Therapist**

86.1% in government and 87.1% in private said yes they would like to go to a PT, only 9% in government and 12.9% in private said they would not. 4.9% from government colleges answered maybe.



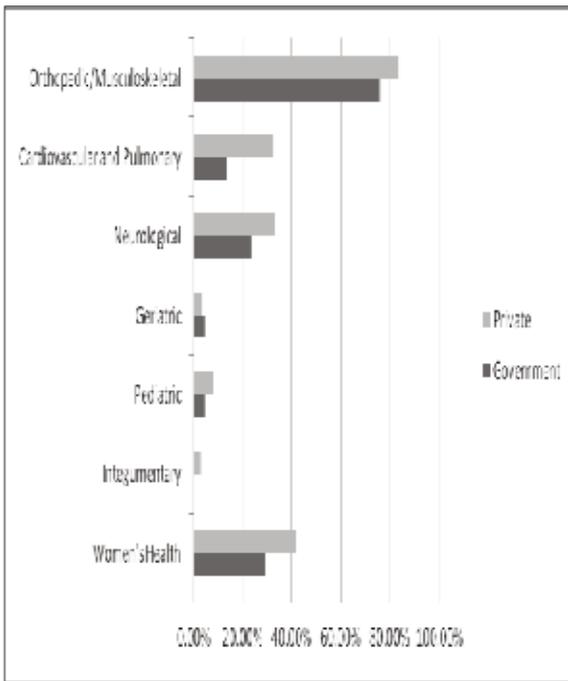
**Effectiveness of Physical Therapy as a Treatment**

A reasonable 85.4% and 65.5% from government and from private were positive about physical therapy as an effective treatment. A small 8.6% in government and 4.3% in private said it as waste of money. 9.7% in government and 21.6% in private did not know whereas 4.3% in private colleges found physical therapy not effective.



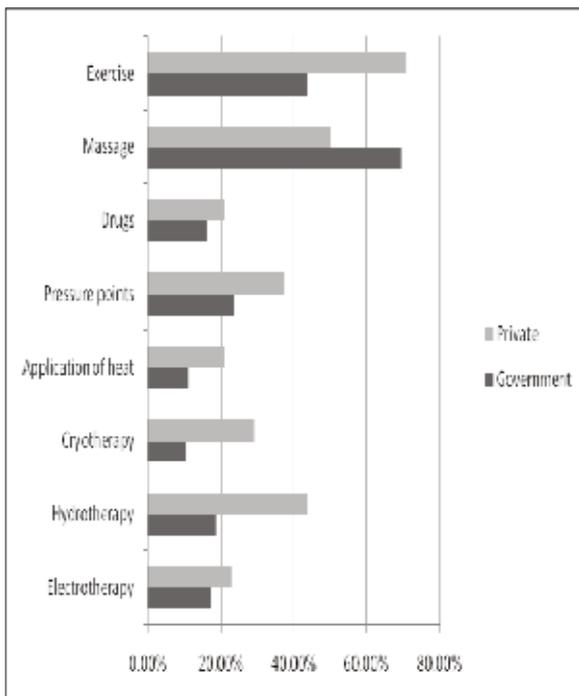
**Most Rewarding Fields in Physical Therapy**

75.7% and 83.5% from government and private said physical therapy will be most rewarded in orthopedic/musculoskeletal. 13.9% and 32.4% from government and private said Cardiovascular and Pulmonary. 23.6% and 33.1% from government and private answered neurological. 29.2% and 41.7% from government and private said Women's Health. 4.9% from government and 3.6% from private colleges said geriatrics whereas 4.9% from government and 7.9% from private colleges said pediatrics.



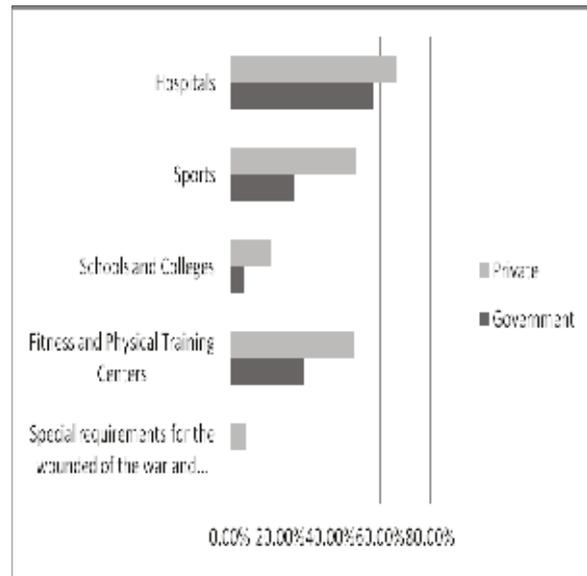
**Awareness About Interventions Used By A Physical Therapist**

43.8% of government students and 70.8% of private students said exercise whereas 69.4% of government students and 50% of private students answered massage as the most commonly used intervention. 16% and 20.8% from government and private colleges believed Drugs. 23.6% and 37.5% from government and private said pressure points. 11.1% of government students and 20.8% of private said application of heat. 10.4% and 29.2% from government and private said cryotherapy (cold application). 18.8% of government students and 43.8% of private college students said hydrotherapy. 17.4% and 22.9% from government and private colleges said electrotherapy respectively.



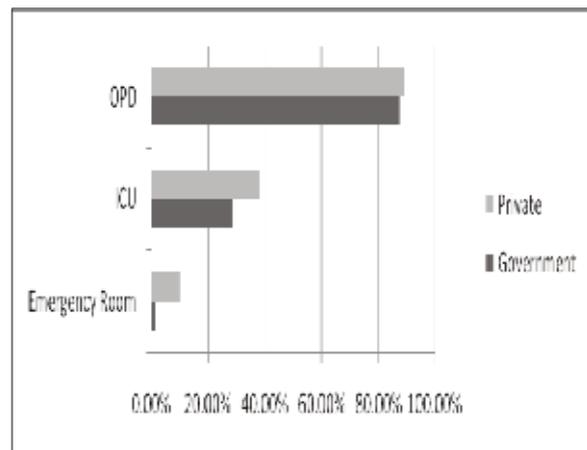
**Requirement Of Physical Therapy**

In Different Setups 56.9% and 66.2% from government and private college students answered hospitals as the setup in which PTs are needed. 25.7% and 50.4% said sports. 5.6% and 16.5% government and private college students thought that physical therapy is required in schools and college setups respectively. 29.2% and 49.6% government and private said fitness and physical training centers and a mere 0.7% from government colleges and 6.5% from private said special requirements for the wounded of the war and trauma, domestic violence etc.



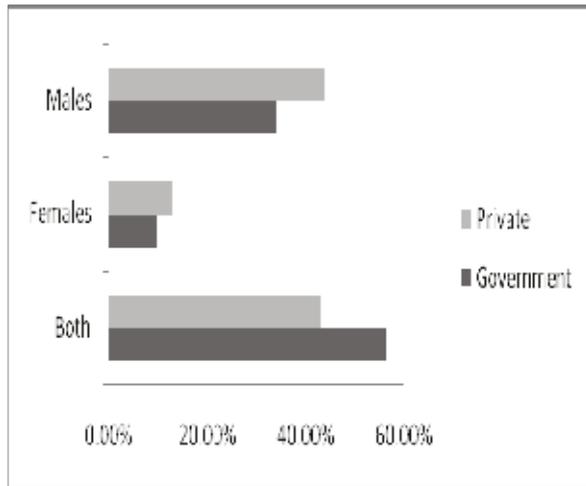
**Need of a Physical Therapist**

in Different Hospital Units 87.5% and 89.2% from government and private said physical therapy is best needed in OPD (Outpatient Department). 28.5% and 38.1% from government and private said ICU (Intensive Care Unit). And 1.4% from government and 10.1% of private college students said Emergency Room (ER).



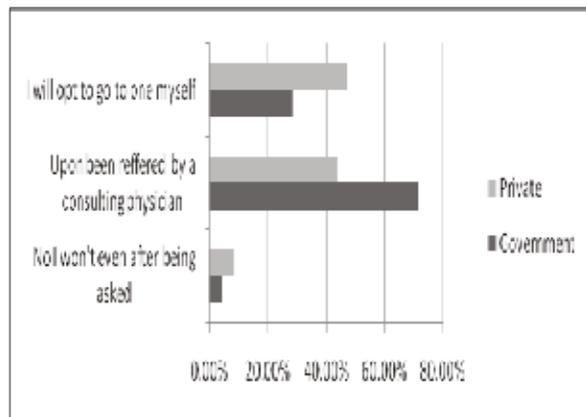
**Gender Preference**

56.3% from government college students and 43.2% from private colleges were in favor of both. 34% from government and 43.9% from private sector responses were in favor of male gender whereas 9.7% in government and 12.9% in private colleges said females.



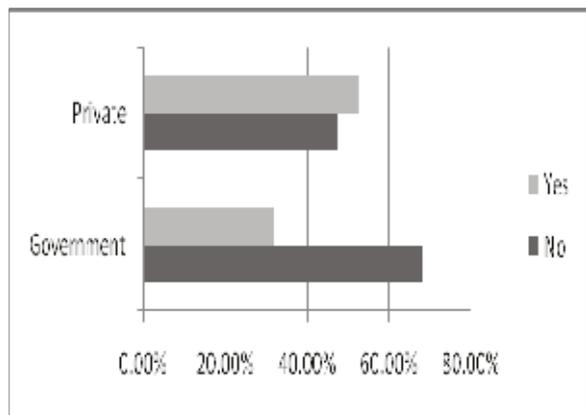
**Assessment for Motivation to Visit a Physical Therapist**

28.5% from government and 47.5% from private responded that they would opt to go to a PT their self. 71.5% in government and 43.9% in private said that they would visit upon been referred by a consulting physician. A meager 4.2% in government and 8.6% in private colleges said they would not go under either situation.



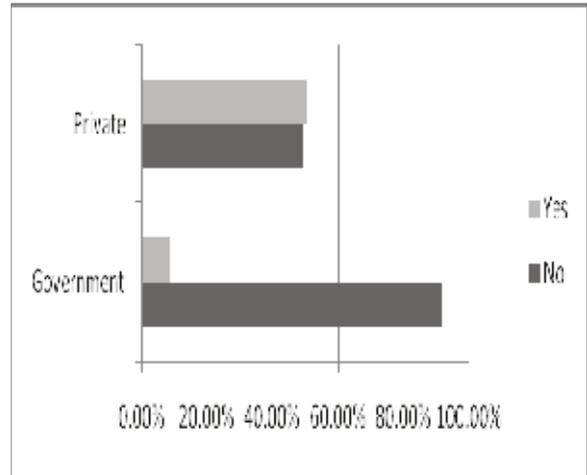
**Awareness about DPT**

Majority of students were unaware about DPT. 31.9% in government and 52.5% in private said yes they are, 68.1% in government and 47.5% in private said no they do not know about DPT.



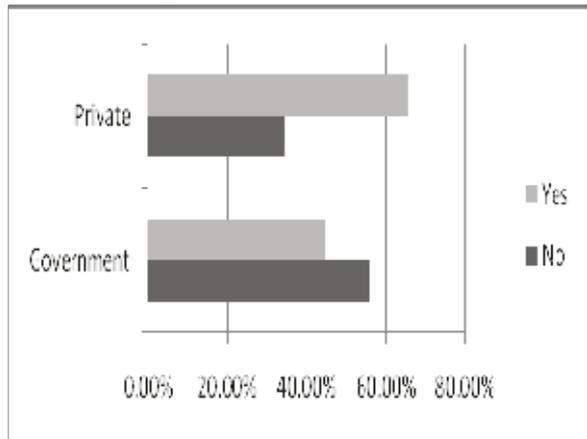
**Promotion of Physical Therapy as a Career by Teachers**

Private colleges are promoting physical therapy as a healthy profession greatly about 50.4%, while an 8.3% from government said yes. 91.7% in government and 49.6% in private said no to physical therapy being encouraged by teachers as a profession.



**Support by Parents as a Career Choice**

44.4% in government and 65.5% in private said yes their parents supported the profession as career choice, while 55.6% in government and 34.5% in private said their parents were against it.



**DISCUSSION**

This survey was conducted to evaluate the knowledge and perception of the students, from various private and government colleges, regarding the profession of physical therapy and its practical efficacy.

**Sources of Information**

This study shows that the most common source of information regarding the profession were friends/ family and internet amongst TV, magazines, advertisements or somebody they know who is personally in this profession.

Similarly according to another interactive survey by Zogby, internet is by far the most popular source of information<sup>24</sup>.

### Choice of Career

Physical therapy holds many reasons which would attract potential students of pre-medical to choose for it. This study showed that majority of students held different interests in taking up physical therapy as their career and they perceived it as a worthwhile profession. Our study presents results in contrast to another study conducted in Tamilnadu India showing unwillingness amongst their high school graduates to select for physiotherapy<sup>25</sup>.

### Reasons for Preferring or Not Preferring As a Career

A wide variety of reasons were received among which the spirit to help people was the highest whereas physical therapy, being well paid and holding many job opportunities came next. A minor percentage considered it as a relaxing and emotionally less challenging work, mostly females had this reason because physical therapy is a field indirectly related or secondary to life or death situations.

Similarly, the study conducted by Prati and Liu showed students perception of physical therapy as a physically demanding, challenging, and well-paying career, where females having a high regard and interest for the profession<sup>19</sup>. As much as it might hold attraction for some, physical therapy suffers even today due to different reasons. The most widely answered reason in our study was that physical therapy had narrow scope in Pakistan.

### Visit to a Physical Therapist

A large number of students revealed that neither they nor someone else in their family has ever been to a PT, raising the need for awareness of physical therapy in order to create faith so that people may be encouraged to go to PT.

### Feedback Concerning Their Experience with a Physical Therapist

Those who had been to a PT gave fairly good answers regarding their overall experience. The responses gave credit to our current working PTs in Pakistan. This acknowledged the quality education and the effectiveness of the services provided by PTs.

### Predilection Regarding Visit To a Physical Therapist

A healthy number consented that they would like to pay a visit to a PT where as some were negative. Few were unsure in their decision to visit a PT. These responses showed their confidence and at the same time the requirement for further marketing campaigns regarding awareness about physical therapy.

### Effectiveness of Physical Therapy as a Treatment

In this research many students related a healthy feedback regarding the services and the reputation of PT in Pakistan. Most of them placed PT in better view by saying that physical therapy is an effective treatment. A very small percentage said it was not effective and a waste of money and some had no idea. Unfortunately, the evidences are difficult to collect in this aspect due to unavailability of research in Pakistan

### Most Rewarding Fields in Physical Therapy

According to the results, the response was highest for musculoskeletal and orthopedic. A survey conducted in Australia, to ascertain the public perception of physical therapy, revealed the same results. There was little awareness that PT provided special care for women and children<sup>26</sup>.

### Awareness About Interventions Used By A Physical Therapist

While PT uses a wide range of interventions, the public awareness about them is often limited; the most convenient answers were massage and exercise. The study by Prati and Liu also demonstrated that the most commonly recognized interventions used by PT were exercise, massages, electrical stimulations and ultrasound<sup>19</sup>. The study conducted in Australia also showed similar results that the public was generally aware of massage, exercise, heat and manipulation treatments<sup>27</sup>.

### Requirement Of Physical Therapy In Different Setups And Need of a Physical Therapist in Different Hospital Units

There was also less awareness regarding the setups where physical therapy may be needed. Large number of students answered hospitals and regarding the department, in a hospital setup, that is considered important for physical therapy, a healthy majority was in favor of OPD.

### Gender Preference

Both the genders are very well suited in the physical revealed by the responses but since, males are considered as a provider in eastern family system, more answers were in favor of males. Many females also expressed the view that they would like to go to a female physical therapist because they would feel more comfortable. Similarly, the male population also concurred with this response for male physical therapists. Thus this emphasizes more than ever the need for both the genders in this field equally.

### Assessment for Motivation to Visit a Physical Therapist

Advances and researches are one reason for holding the trust of students responding that they would opt to go to a PT their self however a large percentage stated their visit on referral basis by a consulting physician. A meager percentage of students from both the private and government sector colleges said that they would not go under either situation. The latter response is often subject to the discrimination held against many in this profession by the general masses that PT are compared equal to masseuses in their ignorance. Thus again emphasizing the need for awareness of physical therapy as a medical field.

### Awareness about DPT

Majority of students were unaware about DPT which yet again enlightens the lack of sufficient marketing techniques. Prati and Liu also indicate in their study the need for spreading awareness at high school level to inform future college students about the profession<sup>19</sup>. Teachers and professors in the field of medicine may perform a crucial role in creating awareness about DPT.

### Promotion of Physical Therapy as a Career by Teachers

Role of a teacher is very important when it comes to the common knowledge and proper guidance about anything. Teachers must council and guide the students about the benefits and advances of physical therapy. Our results shows that private colleges are promoting physical therapy as a healthy profession greatly, this practice should also be carried by the teachers in government sector colleges.

### Support by Parents as a Career Choice

Physical therapy is not only under estimated as a profession by students but also by their parents and relatives. PT plays a vital role in rehabilitation of a patient and helps him to revert to the normal aspects of his daily life. Colleges should hold career guidance councils and sessions with parents and children both in order to educate the importance of physical therapy.

### CONCLUSION

Accepted throughout the world, physical therapy, as a cure is not justified when it comes to the common knowledge in our country Pakistan of over 185 million populace<sup>27</sup>.

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.

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