

# A Survey on Level of Awareness of Physiotherapy as a Career Option among Private School Students

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## ABSTRACT

**Background:** High school students have a far-reaching discernment when it comes to opting a vocation this is because decisions made in the senior year of school concretizes their future. Physiotherapy is a health-maintenance craft that necessitate appraisal and drawing out a diagnosis to heal deterioration, improve vigor, and hence improve standard of living. This study evaluated the perception of high school students about physiotherapy as a profession and career option.

**Methodology:** Based on the inclusion and exclusion criteria 200 high school students were selected using cluster sampling. Outcome measures used a self-made questionnaire sculpted as Google form which was sent to students from standard IX to XII. Bearing physiotherapy as an option within health sciences domain in mind, various types of questions specific to physiotherapy department, its practice areas, and the course study were put forth to these students through the online questionnaire.

**Results:** The percentage of students who considered physiotherapy as a career option in medicine was 59% but, 72.5% were not aware of the eligibility criteria for entering a physiotherapy degree program and 73.5% did not know about the pathological conditions treated in physical therapy although, 81% agreed that physical therapy is effective in reducing pain. Mixed opinions were noted on physical therapy as profession as good (46.5%), very good (24%), excellent (23%) and not good (6.5%).

**Conclusion:** Conclusion of above study is that the awareness among students of senior secondary section of private schools across the city of Ludhiana in Punjab is less than half of the percentage in most of the questions of surveyed population. None of the students were able to complete the whole questionnaire perfectly.

**Keywords:** awareness; physiotherapy; private schools; career options; students

## INTRODUCTION

It is believed that the first exponents of physical therapy were medics like Hippocrates and Galen, advocating soft tissue manipulation, manual therapy techniques and hydrotherapy to treat people in 460 BC.<sup>1</sup> As the preliminary filed origins of actual physiotherapy as a professional group antecede to Per Henrik Ling known as the Father of Swedish Gymnastics who founded the Royal Central Institute of Gymnastics (RCIG) in 1813 for soft tissue manipulation and exercise. Sweden's National Board of Health and Welfare gave

formal authorization to Physiotherapists in 1887.<sup>2</sup>

Physiotherapy career is a gratifying craft, especially one that involves extended grounding and an official refinement. White-collar individuals are engaged in a designated venture as main paid employment rather than as a dilettante. Health executives play a leading and disparaging role in improving access and class health for the community. They evaluate, diagnose and manage various maladies with ease.<sup>3</sup>

At present, physiotherapy amenities are accessible at a majority of settings mostly at health institutions, private practices, school, sports, and workplace settings involving interlinkage between the physical therapists, patient, other health professionals, families, caregivers, and communities.<sup>4</sup>

If compared to other professions like those of nurses or doctors other paramedical occupation like physiotherapy lacks recognition in the medical field because of dearth in awareness and knowledge about the field in general population of India. However, this is not the case on a global level as physical therapist bear a paramount part in bestowing health care therefore heading to highly glorified profession. Horizons that a physical therapist works are wide spread among health settings encompassing motion, function, and geriatric care etcetera.<sup>5</sup>

It's a known thing that to possess information about various occupations and spheres that are linked to field of study is very important when drafting one's future career. Albeit very scarce amount of people have a clue about their upcoming career alleys in advance, preponderance are unsure about it. The period of pre-adulthood lays down the stepping stone of their career for many because of the decisions. A mass of school students are also unenlightened about occupation options available to them and a big number of them scrutinize their career prospects by looking at the eminence of the profession of their choice and the right set of circumstances for career prosperity.<sup>6,7</sup>

This study was carried out to determine that how physiotherapy is considered as a profession to opt for by young budding minds which further aids to tell where the noble profession stands out in awareness level

## **MATERIALS AND METHODS**

**Study design:** This study was of cross-sectional design.

**Sampling Technique:** The subjects were selected by cluster sampling.

**Sample size:** 200 subjects

**Source of data:** Private Schools in the city of Ludhiana.

### **ELIGIBILITY:**

#### **Inclusion Criteria:**

- Children between 14 to 18 years of age.
- Subjects are private school students
- Able to comprehend the requirements of the study

#### **Exclusion Criteria:**

- Auditory, visual or perceptual deficits
- Government school students
- Non-cooperative students

### **PROCEDURE**

The study population included 200 high school students which were selected using purposive sampling, which is selecting students from different zones of Ludhiana. Outcome measures used a self-made questionnaire was mailed electronically and verbal consent was taken, some agreed to reveal identity and provide proofs. Bearing physiotherapy as an option within health sciences domain in mind, various types of questions specific to physiotherapy department, its practice areas, and the course study were put forth to these students through the online questionnaire using Google Docs.

#### **Materials used:**

- Consent form
- Data collection sheet
- Self-made Questionnaire which was made by combining previously published questionnaires with permission.

### **STATISTICAL ANALYSIS**

Descriptive statistics was conducted. Tables

**Table 01: Demographics of participants**

| DEMOGRAPHIC CHARACTERISTICS | FREQUENCY (n=200) | PERCENTAGE (%) |
|-----------------------------|-------------------|----------------|
| <b>Age (years)</b>          |                   |                |
| >14                         | 01                | 0.50           |
| 14                          | 14                | 07.0           |
| 15                          | 36                | 18.0           |
| 16                          | 64                | 32.0           |
| 17                          | 46                | 23.0           |
| 18                          | 39                | 19.5           |
| <b>Sex</b>                  |                   |                |
| Male                        | 100               | 50.0           |
| Female                      | 98                | 49.0           |
| Prefer not to say           | 02                | 01.0           |
| <b>Class</b>                |                   |                |
| IX                          | 21                | 10.5           |
| X                           | 45                | 22.5           |
| XI                          | 75                | 37.5           |
| XII                         | 59                | 29.5           |
| <b>Stream</b>               |                   |                |
| Medical                     | 16                | 08.0           |
| Non-medical                 | 34                | 17.0           |
| Commerce                    | 58                | 29.0           |
| Humanities/Arts             | 27                | 13.5           |
| X class                     | 44                | 22.0           |
| IX class                    | 21                | 10.5           |

**Table 02: Awareness of Physiotherapy in General**

| QUESTION  | OPTIONS                           | FREQUENCY (n=200) | PERCENTAGE (%) |
|---|-----------------------------------|-------------------|----------------|
| Do you consider physiotherapy as a career option in medicine ?                          | Yes                               | 118               | 59.0           |
|   | No                                | 45                | 22.5           |
|   | Can't say                         | 26                | 13.0           |
|   | Don't know                        | 11                | 05.0           |
| Physiotherapy is  | Practiced by doctors              | 69                | 34.5           |
|   | A branch of acupuncture           | 52                | 26.0           |
|   | Practiced by masseurs             | 05                | 02.5           |
|   | An indigenous treatment method    | 74                | 37.0           |
| Are you aware about the eligibility for entering into Physical Therapy Degree program ? | Yes                               | 55                | 27.5           |
|   | No                                | 145               | 72.5           |
| How many years of training are there in physical Therapy Degree program ?               | 03.5                              | 33                | 16.5           |
|   | 04.5                              | 87                | 43.5           |
| Physiotherapy treatment   | 03                                | 09                | 04.5           |
|   | Manual therapy                    | 20                | 10.0           |
| Includes ?  | Ice/heat therapy                  | 05                | 02.5           |
|   | Hydrotherapy                      | 05                | 02.5           |
|   | Exercise therapy & electrotherapy | 18                | 09.0           |
|   | All of the above                  | 152               | 76.0           |
| What does a physiotherapy Department includes ?   | Gym                               | 16                | 08.0           |
|   | Electrical modalities             | 20                | 10.0           |
|   | A therapeutic pool                | 24                | 12.0           |
|   | Tapes, bandages, splints          | 10                | 05.0           |
|   | All of the above                  | 130               | 65.0           |

**Table 03: Awareness of Physical Therapy Specializations**

| QUESTION  | OPTIONS          | FREQUENCY (n=200) | PERCENTAGE (%) |
|---|------------------|-------------------|----------------|
| Are you aware that physical Therapy has specialization ?  | Orthopaedics     | 19                | 09.5           |
| If yes, then list out the specialization you are aware of | Neurology        | 12                | 06.0           |
|   | Cardio pulmonary | 11                | 05.5           |
|   | Obstetrics       | 00                | 00.0           |
|   | Sports           | 28                | 14.0           |
|   | Gynaecology      | 05                | 02.5           |
|   | Paediatrics      | 11                | 05.5           |
|   | Veterinary       | 03                | 01.5           |
|   | Dermatology      | 00                | 00.0           |
|   | Geriatrics       | 01                | 0.50           |
|   | Manual Therapy   | 32                | 16.0           |
|   | All of them      | 04                | 02.0           |
|   | Don't know       | 74                | 37.0           |

**Table 04: Awareness of various aspects of Physiotherapy**

| QUESTION   | OPTIONS              | FREQUENCY (n=200) | PERCENTAGE (%) |
|--|----------------------|-------------------|----------------|
| Physical Therapy services are available at               | Government hospitals | 13                | 06.5           |
|  | Private Clinics      | 43                | 21.5           |
|  | NGO's                | 04                | 02.0           |
|  | All of them          | 125               | 62.5           |
|  | None of them         | 15                | 07.5           |
| Do you know about the Pathological conditions            | Yes                  | 53                | 26.5           |
|  | No                   | 147               | 73.5           |
| Treated in physiotherapy                                 |                      |                   |                |
| Does physiotherapy follow a Definite assessment protocol | Yes                  | 171               | 85.5           |
|  | No                   | 29                | 14.5           |
| Do you agree physiotherapy is Effective in reducing pain | Yes                  | 162               | 81.0           |
|  | No                   | 08                | 04.0           |
|  | Can't Say            | 30                | 15.0           |
| Is physiotherapy and Occupational therapy same           | Yes                  | 30                | 15.0           |
|  | No                   | 67                | 33.5           |
|  | Can't Say            | 103               | 51.5           |

**Table 05: Descriptive statistics of opinion on Physical Therapy as a profession**

| Question   | Options   | PERCENTAGE | FREQUENCY |
|--|-----------|------------|-----------|
| What is your opinion on physical therapy as a profession ? | Excellent | 23.0%      | 46        |
|  | Very good | 24.0%      | 48        |
|  | Good      | 46.5%      | 93        |
|  | Not good  | 6.5%       | 13        |

## RESULTS AND DISCUSSION

Higher levels of literacy are associated with better understanding and knowledge about medical conditions and health care among general public. Also, for knowledge about scope of Physiotherapy profession, the educational level of subject is found to be a significant predictor. Therefore it becomes very essential to inculcate knowledge about physiotherapy as a profession in curriculum of school students.<sup>8</sup>

A study conducted in the state of Gujrat by Rathod et al in which 57% of the 74 respondents were not aware of the role of physiotherapy in many of the impairments and only 42% of the primary school teachers were informed during their training period regarding physiotherapy. Researcher also suggested that this situation could be improved if essential information is given regarding physiotherapy during their period of training. Only 42% teachers were informed about physiotherapy during the teaching training period.

The Descriptive analysis and mean is applied to find the frequency of awareness of physiotherapy as a career option among private school students. 200 subjects were taken from age group between 14 to 18 years, of which there were 0.5%

below 14 years which was the lowest, 7.0% 14 years, 18% 15 years, the highest 32% of subjects were of 16 years of age, followed by 23% 17 years and 19.5% belonging the 18 years of age group, both the genders were surveyed with almost 1:1, Males 50% and Females 49%, 1.0 % of subjects didn't prefer to say their gender (Table 01).

The senior secondary section of private schools including classes 9<sup>th</sup> to 12<sup>th</sup> was selected of which the lowest from 9<sup>th</sup> class constituting 10.5%, 22.5% of 10<sup>th</sup> class, the highest of 37.5% subjects was from 11<sup>th</sup> class followed by 29.5% from 12<sup>th</sup> class from which 8.0% students of classes 11<sup>th</sup> and 12<sup>th</sup> were from medical stream, 17.0% non-medical, with 29.0% the highest from commerce and 13.5% from humanities/arts stream, thereby leaving 22.0% class 10<sup>th</sup> students and 10.5% 9<sup>th</sup> graders (Table 01).

59% of the total subjects considered physiotherapy as a career option in medicine, whereas 22.5% didn't consider physiotherapy as a career option, 13.0% couldn't say about their opinion and 5.5% didn't know about physiotherapy as a career option. This could be because of the students of that age group don't get appropriate time & are not taught about

various courses to be opted after completing schooling (Table 02).

Almost equal proportions of population which is 34.5% and 37.0% (highest) spoke that physiotherapy is practised by doctors and is an indigenous treatment method respectively, albeit considerable number of subjects 26.0% think that physiotherapy is a branch of acupuncture along with 2.5% who think physiotherapy is practiced by masseurs (Table 02).

Unfortunately 72.5% of the total population wasn't aware about the eligibility criteria for entering into physical therapy degree programme leaving only 27.5% subjects who were aware about the eligibility criteria for entering into physical therapy degree programme, on the plus side most of the subjects 43.5% knew the number of years of training in physical therapy degree programme which are 4.5 years but the proportion is still very less as 56.5% had wrong knowledge as about 35.5% said 5 years, 16.5% told 3.5 years and about 4.5% thought that the number of years of training in physical therapy degree programme are 3 years because of dearth in career counselling sessions for senior secondary students in schools (Table 02).

63.0% of the population is aware that physical therapy has specializations among which 16.0% are aware about manual therapy followed by sports (14.0%), orthopaedics (9.5%), neurology (6.0%), cardiopulmonary (5.5%), paediatrics (5.5%), gynaecology (2.5%), veterinary physical therapy, geriatrics (0.5%), obstetrics (0.0%), dermatology (0.0%), 2.0% of the total population is aware that physical therapy has all of these specializations and 37% of the population admitted that they don't know about any of the physical therapy specializations as in general. This may be because of the individual physiotherapy college setups rather than a collective setup in medical college as most of the colleges are individual without any hospital setup with them (Table 03).

When asked about places at which physical therapy services are available at 6.5% answered government hospitals, 21.5% told private clinics, 2.0% subjects mentioned NGO's, more than half about 62.5% people knew that physical therapy services are available at all of the above mentioned places leaving 7.5% of the subjects who believe that physical therapy services are available at none of the above mentioned places (Table 04).

As number of people undergoing physiotherapy treatment is increasing in the modern times thereby general knowledge regarding treatment techniques has also increased as about 76.0% of the total subjects know that all the mentioned therapies are included in physiotherapy rest believed that physiotherapy is inclusive only of manual therapy (10.0%) followed by exercise therapy and electro therapy (9.0%), ice/heat therapy (2.5%) and hydrotherapy (2.5%). The dynamics were similar when the subjects were asked that what does a physical therapy department include, 12.0% choose therapeutic pool followed by electrical modalities (10.0%), gym (8.0%) and tapes, bandages, splints (5.0%). 65.0% subjects know that a physical therapy department include all the above mentioned facilities and equipment (Table 03).

Moving forth, a large proportion of the total population which is about 73.5% said no when enquired whether they know about the pathological conditions being treated in physical therapy which is very high as compared to only 26.5% who answered yes. This may be because of lack in the level of awareness about applications and areas benefitted by physiotherapy treatment. A large number of about 85.5% of subjects know that physical therapy follow a definite assessment protocol leaving 14.5% subjects who don't think physical therapy follow a definite assessment protocol. This may be because of the improper boundary between the professions which leads to poor physiotherapy treatment as quacks treating



patients as a physiotherapist which don't use any definite assessment protocol (Table 04).

Out of the total population 81.0% agree that physical therapy is effective in reducing pain whereas 15.0% couldn't say and 4.0% didn't agree that physical therapy is effective in reducing pain. Almost half (51.5%) of subjects couldn't tell whether physical therapy and occupational therapy are same or not, 33.5% disagreed that physical therapy and occupational therapy are same, only 15.0% agreed that these two domains are same (Table 04).

46.5% of the population considered physical therapy as a good profession followed by 24.0% people who found physical therapy as a profession very good, about 23.0% of subjects' opinion was excellent on physical therapy as a profession, although a small proportion considered physical therapy not good as a profession. This may be because of poor awareness, ill practices by some quacks as physiotherapist and ill-defined boundaries among professions as many quacks, ward boys even residents and doctors prescribe exercises and inappropriate physical therapy techniques to the patients (Table 05).

So the lack of awareness and knowledge about physiotherapy may be due to lack of government council of physiotherapy in India which leads to inability to completely define, check the physical therapy quality and spread awareness about physical therapy.

## CONCLUSION

Conclusion of this study is that the awareness among students of senior secondary section of private schools across the city of Ludhiana in Punjab is less than half of the percentage in most of the questions of surveyed population. None of the students were able to complete the whole questionnaire perfectly. It was seen that the students definitely have some knowledge and are aware about physiotherapy but only as a treatment option but when students were asked regarding the academic and professional aspect of

physiotherapy. it was found that students lack awareness about these two aspects of physiotherapy field. It is essential to carry out awareness drives in schools to spread awareness of physiotherapy as a profession because it will help young minds to explore the field of physiotherapy and this will also further boost the reputation and image of physiotherapy for good.

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