



AWARENESS OF PHYSIOTHERAPY AMONG HIGHER SECONDARY SCIENCE STUDENTS (BIOLOGY STUDENTS) IN MEHSANA DISTRICT – A CROSS SECTIONAL STUDY

Physiotherapy

Ashmi Chaudhari* Intern, Nootan College of Physiotherapy, Sankalchand Patel University, Visnagar, Gujarat, India-384 315. *Corresponding Author

Dr. Shivani Patel Tutor, Nootan College of Physiotherapy, Sankalchand Patel University, Visnagar, Gujarat, India-384 315.

ABSTRACT

Background: In the Indian education system students can pursue the physiotherapy course after their higher secondary study.

Aim: The aim of the study is to find out the awareness of physiotherapy among higher secondary science students (biology students). **Objective:** To find out the awareness of physiotherapy among higher secondary science students (biology students) with the use of a self-questionnaire.

Materials And Methodology: A cross sectional study was performed among 100 higher secondary science students (11th & 12th biology students) in Mehsana district to determine physiotherapy awareness in them. A self-questionnaire was used.

Result: 100 students were included to investigate awareness of physiotherapy among higher secondary science students, out of which (57%) students were having awareness of physiotherapy and 43% students are unaware.

Conclusions: The study concluded that 57% of the students are aware about physiotherapy, but there is still a lack of complete awareness and knowledge of physiotherapy among higher secondary science students (biology students) in Mehsana District.

KEYWORDS

Physiotherapy, Awareness, Higher Secondary Science Student, Mehsana District

1. INTRODUCTION

Physiotherapy is a very dynamic and well-recognized health care profession worldwide. Physiotherapy approach and treatment helps in the management of various diseases and disabilities.¹

Physiotherapy is one of the oldest occupation in health care practiced since 460 BC by great physicians such as Hippocrates and Galen.²

Physiotherapists are involved in the assessment, diagnosis, evaluation, management, and prevention of the dysfunction and impairments of movement within a wide range of contexts in people of all ages.³

They work in all sections of health care, including public hospitals, private practice, rehabilitation centers, sporting clubs, and community health.⁴

They can help people at any stage of life when movement and function are affected by aging, injuries, diseases, disorders, conditions, or environmental factors.⁵

Physiotherapy is used in multiple disease conditions which include musculoskeletal conditions like joint pain, stiff shoulder, a fracture, any sports-related injury, or any other problem. For neurological conditions like cerebral palsies, stroke, parkinsonism, spinal cord traumas, and several other ailments, physiotherapy has proved effective not only by making patients independent but also by making them live their life with dignity and confidence. In community-based rehabilitation, physiotherapists treat disease conditions that affect the geriatric population, prenatal, antenatal, and postnatal care, stress incontinence, prolapsed and other conditions related to women's health and work in the promotion and maintenance of general health and fitness among the people. Also, physiotherapists help individuals with cardio-respiratory and general surgical conditions (like asthma, COPD, other obstructive and restrictive diseases, tuberculosis, post-surgical cases, rehabilitation of patients with intensive care unit, burns, and other conditions).⁶

The term awareness refers to knowledge that something exists, or understanding of a situation or subject at the present time based on information or experience.⁷ A good awareness of the health care system would develop a faster recovery and an improved lifestyle.⁶

Awareness about physiotherapy is necessary not only for assessment, diagnosis, evaluation, management, and prevention but also for making one's future career option. Information about various occupations and profession is an important factor to make one's future career choice.⁸

In Indian education system, students can pursue the Physiotherapy course after their higher secondary course. The higher secondary

course comprises various branches like Science, Arts and Commerce. The students from science field (Group B) are eligible to pursue health courses like Medicine, Dental, Physiotherapy, Homeopathy, Ayurveda & Nursing. It is important for the biology students to have proper knowledge and awareness about the all above courses to choose future career plan and to have positive attitude about the professions.⁹

Need Of Study:

According to previous research, there is no evidence that this type of research has already been done in the Mehsana District. So, the need of study is to assess the Awareness of Physiotherapy among Higher Secondary Science students (Biology students) in Mehsana District.

2. AIM AND OBJECTIVES

AIM:

The aim of the study is to find out the awareness of Physiotherapy among Higher Secondary Science Students (Biology students).

OBJECTIVES:

To find out the awareness of Physiotherapy among Higher Secondary Science Students (Biology Students) with the use of a self-questionnaire.

3. METHODOLOGY

3.1 MATERIALS

- Pen & Paper
- Laptop & Mobile
- Google form
- Consent form

3.2 METHOD

- **STUDY DESIGN** – Cross sectional study
- **SAMPLE DESIGN** - Convenient Sampling
- **STUDY POPULATION** - Higher Secondary Science students (Biology students)
- **SAMPLE SIZE** - 100
- **STUDY SETTING** - Science Schools of Mehsana District
- **STUDY DURATION** - 6 Months

3.3 Criteria For Selection

Inclusion Criteria:

- Higher Secondary Biology (11th & 12th) Students
- Both girls and boys.

Exclusion Criteria:

- Mathematics, Arts and Commerce students
- Physiotherapist, Doctors, Nurses, and Technicians
- Any Psychological or Neurological problems

3.4. Data Collection Procedure

This cross-sectional study was accepted by the institutional ethical

committee of Nootan College of Physiotherapy, Sankalchand Patel University, Visnagar, Gujarat, India. The study was conducted among 100 higher secondary science students (biology students) in the Mehsana District about awareness of Physiotherapy. Participants were selected on the basis of criteria (Inclusion & Exclusion Criteria). All participants were identified by the convenience sampling technique. The whole procedure was clearly explained to all the participants and their consent was taken and then ask them to fill Google form. For the digital and quick collection of the information, a questionnaire was prepared with the help of Google form in the English language. Google form was comprised of 9 questions. The data was collected and then it was further used for Analysis.

4. RESULT

In this study, 100 higher secondary science students (11th and 12th biology students) were included for investigating awareness of physiotherapy in Mehsana District, out of which 57% of students aware about physiotherapy and 43% of students unaware about physiotherapy. Demographic data of genders are male (51%) and female (49%).

Graph 4.1: Awareness about physiotherapy

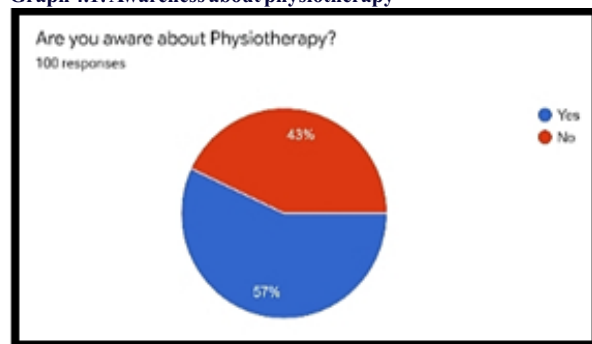


Table 4.1: Questionnaire

Question	Option	Result (%)
What is your source of information about physiotherapy?	Hospital	6%
	School	1%
	Family	9%
	Relatives	19%
	Media	13%
	Other	9%
	Do not know about physiotherapy	43%
Are you aware about eligibility to take physiotherapy course?	Yes	56%
	No	44%
How many years does it take to complete bachelor of physiotherapy including internship?	5 Year	5%
	4.5 Year	39%
	5.5 Year	5%
	4 Year	8%
	Do not know about physiotherapy	43%
Knowledge of various specialization in physiotherapy?	Musculoskeletal physiotherapy	15%
	Neuro physiotherapy	19%
	Community based rehabilitation	3%
	Pediatric physiotherapy	18%
	Cardio respiratory physiotherapy	1%
	Sport physiotherapy	1%
	All above	0%
	Do not know about physiotherapy	43%
Does physiotherapist prescribe medicine?	Yes	27%
	No	73%
Do you know the future career chances after completion of physiotherapy and if yes then what do you know?	Yes (Clinic, Hospitals, Home visits, Gymnasium)	37%
	No	63%

5. DISCUSSION

According to available research, there is no evidence of study on the awareness of physiotherapy among higher secondary science students (biology students) in Mehsana District. So, this study was conducted to evaluate the awareness of physiotherapy among higher secondary science students (biology students) in Mehsana District.

In this study awareness of physiotherapy among higher secondary science students (biology students) in Mehsana District was reported to be 57%.

Shimpachiro Ogiwara, et all, conducted a study among ishikawa high school students in Japan and concluded that 58% of students have had some knowledge about the Physiotherapy course.⁸

The source of information about physiotherapy are most commonly relatives (19%), media (13%), family (9%), hospital (6%), school (1%), and other (9%) whereas 43% of students are not aware of physiotherapy.

The aim of the study is to aware the students about physiotherapy to pursue the course but only 56% of students know the eligibility to take physiotherapy course and 39% of students know the course duration of bachelor of physiotherapy which is 4.5 years including internship.

This study shows that majority of students are aware of physiotherapy in neurological (19%), pediatric (18%), and musculoskeletal (15%) conditions but knowledge of other specializations like community-based rehabilitation (3%), cardiorespiratory physiotherapy (1%), and sports physiotherapy (1%) are not satisfactory. Not even a single student was aware about the role of physiotherapy in all the above specializations.

According to Anushka Sunil Rathi et all. almost half of the participants (47%) thought physiotherapists can prescribe medicines.¹⁰

This study shows that 27% of students thought that physiotherapists prescribe medicines. There are still some of the students who are not sure whether physiotherapists prescribe drugs.

Physiotherapists can work as clinicians in private clinics or multi-specialty hospitals, government and non-governmental organizations, lecturers or researchers, fitness trainers, sports therapists, etc. There are very good career options in many countries such as the USA, UK, Australia, Canada, New Zealand, etc. According to this study, only 37% of students know the future career chances after completion of physiotherapy which includes private clinics, hospitals, home visits, and gymnasium only.

The results of this study suggest that students are aware about Physiotherapy but there is a lack of complete awareness about the physiotherapy profession.

The awareness about the physiotherapy occupation and the scope of physiotherapy among biology students is required to be enhanced. This can be improved by arranging awareness programs, seminars and lectures to different schools and also by using posters, social media and Television, newspaper.

This study helped the students to understand the awareness of various aspects of physiotherapy and its awareness as a career option among the higher secondary science students (biology students) in Mehsana district.

6. CONCLUSION

The study concluded that 57% of the students are aware about physiotherapy, but there is still a lack of complete awareness and knowledge of physiotherapy among higher secondary science students (biology students) in Mehsana District.

Limitations of the study:

- The study included a small sample size.
- Selected samples were from Mehsana District only.
- The study involved biology students only.

Future recommendations of the study:

- Study can be revised including larger sample size.
- Study can be revised among health care professionals and the general population.
- Sample can be revised from other districts or states.

Acknowledgment

Firstly, I would like to thank my parents Mrs. Jaytaben Chaudhari & Mr. Kaushikkumar Chaudhari and my sister Nidhi Chaudhari for their valuable support and confidence throughout my study.

I would like to thank my mentor and guide Dr. Shivani Patel (PT) for the valuable guidance whenever I needed it.

I would also like to thank all participants who took out time for their participation in my study and helped to make my study worthy.

7. REFERENCES

1. Greathouse, D.G., Sweeney, J.K. & Hartwick. (1989). Textbook of Military Medicine (1st ed.).
2. Shete Dhiraj, Thipse Jayant, Kolase Reshma. (2015). Awareness of physiotherapy in medical and non-medical practitioners at rural area.
3. Doshi, D., Jiandani, M., Gadgil, R. and Shetty, N., 2017. PHYSIOTHERAPY AWARENESS IN MEDICAL AND NON MEDICAL POPULATION: A SOCIAL MEDIA SURVEY. International Journal of Physiotherapy and Research, 5(2), pp.1971-1975.
4. American Board of Physical Therapy Specialties; 2016.
5. Capo-Chichi, S., Muller, L., & Rau, B. (2015). Status and challenges of five African French-speaking national physiotherapy associations to join World Confederation for Physical Therapy (WCPT).
6. Agni, P., & Battin, S. (2017). Awareness of Physiotherapy among General Practitioners: a Pilot Study. International Journal Of Physiotherapy, 4(4). <https://doi.org/10.15621/ijphy/2017/v4i4/154724>
7. AWARENESS|meaning in the Cambridge English Dictionary. (2019).
8. Ogiwara, S., & Nozoe, M. (2005). Knowledge of Physiotherapy: A Study of Ishikawa High School Students. Journal Of Physical Therapy Science, 17(1), 9-16. <https://doi.org/10.1589/jpts.17.9>
9. R, H., & H, K. (2017). AWARENESS AND ATTITUDE TOWARDS PHYSIOTHERAPY AMONG HIGHER SECONDARY STUDENTS: A PILOT SURVEY STUDY. International Journal Of Physiotherapy And Research, 5(1), 1846-1851. <https://doi.org/10.16965/ijpr.2016.203>
10. Rathi AS, Chandra R. (2020). Awareness of physiotherapy as career option among higher secondary students of Nagpur city: a cross sectional study (pp. 13-20).