

Awareness of Physiotherapy among the High-School Students in Various Government and Private Schools of New Delhi: A Survey

Prerna Mehndiratta and Ruchika Kalra

Abstract

Aim: To assess the awareness of physiotherapy of class 11 and 12 and a scope of following physiotherapy as future profession, and sources of their information obtained for physiotherapy. **Method:** Total 640 students were in the study including government and private schools where the questionnaire was used by the permission from the Thusharika D. Dissanayaka and Shayama Banneheka. The questionnaire was used in the google forms for data extraction from different schools. The data extraction was having details in 3 parts, Part A which is having personal information, Part B having the responses of various questions related to physiotherapy and its profession and part C was having closed ended questions. The inclusion criteria were students of 11 and 12 class and of New Delhi and remaining were in exclusion criteria. **Results:** The results were satisfactory analyzed with chi square tests, breakout into small deviation of responses represented through graphic representation and pie charts, where near 75% students consider the physiotherapy as the medical profession, followed by more than 50% considering physiotherapy in improving quality of life and the part of awareness was maximally raised by mass media followed by the other contact sources. **Conclusion:** The study concluded with the requirement of the physiotherapy awareness in India at the secondary level as a consideration of the profession for themselves and a medical profession to improve quality of life.

Prerna Mehndiratta

Physiotherapist

MAX Super Specialty Hospital

Shalimar Bagh, New Delhi, India

E-mail: prernastar2501@gmail.com

Ruchika Kalra

BPT Intern

Amity Institute of Physiotherapy

Amity University, Noida, (Uttar Pradesh) India

Email: kalraruchika123@gmail.com

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Introduction

World Confederation for Physical Therapy (WCPT) defines physical therapy as “providing services to people and populations to develop, maintain and restore maximum movement and functional ability throughout the life-span. Physiotherapy includes the provision of services in circumstances where movement and function are threatened by the process of ageing or that of injury or disease. Full and functional movements are at the heart of what it means to be healthy. Physiotherapy is concerned with identifying and maximizing movement potential within the spheres of promotion, prevention, treatment and rehabilitation. Physiotherapy involves the interaction between the physiotherapist, the patient/client, the family members and the care-givers in a process of assessing movement potential and in establishing agreed upon goals and objectives using knowledge and skills unique to the physiotherapists (Senthil and Anand 2010). Chartered Society of Physiotherapy defines physiotherapy as a dynamic profession which uses a range of treatment techniques to restore movement and function within the body. It is an essential part of the health-care delivery

system; it is practiced independently of other health-care providers and within inter-disciplinary rehabilitation programs for the restoration of optimal function and quality of life in individuals with loss and disorders of movement (Riju 2015). Physiotherapy is a science-based profession and takes a 'whole person approach' to health and well-being. It helps restore movement and function when someone is affected by an injury, an illness or a disability. It is a holistic approach to the health-care lead by the dedicated practitioners for maximizing the ability to move and function throughout life. At the core is the patient's involvement in their own care through education, awareness, empowerment and participation in the treatment. The benefits of physiotherapy at any point of the life are many – it helps with back pain and sudden injury, managing long-term medical conditions and preparations for the childbirth and any sporting event (Acharay et al. 2011). Physiotherapy is defined as a dynamic health-care profession with well-established theoretical and widespread clinical application in the preservation, development and restoration of optimal physical function. Physiotherapists are the health-care professionals concerned with the assessment, treatment and prevention of the dysfunctions and impairments of movement in people of all ages and within a wide range of contexts. In rehabilitation, it's the physiotherapists that aim to help the disabled people to maximise their potential capabilities of achieving function and independence for the activities of daily living (ADLs). The more accessibility the physiotherapist must a patient, the better is the survival of the profession (Sundar et al 2014). Physiotherapy concentrates on the psychological, physical, emotional and social well-being of the person. Apart from curing various ailments related to bones and joints, the treatment aims to develop, restore and maintain maximum movement and functional ability. A person undergoing physiotherapy is guaranteed to find relief over time. In the health-care sector, professions like those of the doctors and the nurses are well-known than the other paramedical professions like the physiotherapy. However, the physiotherapist plays a key role in providing health-care and it is a highly-recognized profession world-wide. Physiotherapy is a health-care profession engaged with human function and movement and maximizing the potential. Also, the physiotherapists work in a wide range of health settings (Sheik and Nikhil 2015). Physiotherapy is one of the oldest components of the closely integrated group of allied health professionals. It is a health profession that is responsible for the management of the patients' movement system disorders (Odebiyi et al 2008). Physiotherapists are the primary health-care professionals concerned with the assessment, diagnosis, treatment and prevention of dysfunction and impairment of movement in people of all ages (Odebiyi et al 2008). The physiotherapist facilitates optimal functional independence, health and well-being of the community. This is achieved by specialized manual techniques, electrotherapeutic modalities, exercises, advice and counselling to patients and care-givers, provision of adaptive devices and mobility aids, education and training (Johnsey et al., 2013). Physiotherapists offer comprehensive care for the patients with diverse medical and surgical conditions (arthritis, burns, pain disorders, pediatric disorders, pulmonary disorders, neurological disorders, cardiac disorders, trauma and sports injuries) (Riju 2015). Physiotherapy has been recognized as a mode of treatment over the years and is rapidly growing as a profession, especially in the developing countries. According to the US Department of Labor, physical therapists are the primary health-care professionals who diagnose and treat patients of all ages. They treat a variety of patients to decrease disability and dependency. This is the basis for emphasis on the need for the development and recognition of physiotherapy in multi-disciplinary health-care structures (Einass et al., 2016). Although physiotherapy has a significant role to play in the society, it seems to lack a clear identity with the public who demonstrate limited awareness and understanding of the scope of the profession's role and have difficulty differentiating it from alternate practitioners. Physiotherapy practice and profession throughout the world depends upon the variations in culture, health systems and population of a country (Olajide and Magdaline 2014). Any of the health service is usually

influenced by the factors such as cost constraints, ageing populations, advancement in technology, improved health outcome desires and consumer knowledge & expectations. Accordingly, physiotherapy has learned to work in the competitive market and with the changing local contexts by working in collaboration with other professionals in the health care team and showed their ability to interact with broad range of clients and colleagues in various set up within the changing context in political and institutional environment (Karthikeyan 2012). Over the years, physiotherapists have evolved as the autonomous health-care professionals. In developed countries, physiotherapy is widely practiced. However, in the health-care systems of the developing countries like India, physiotherapy profession is still in the budding stage of development as compared to the other health-care streams. With the gradual increase in health-care awareness in India, physiotherapy is a rapidly growing profession. However, the physiotherapy community faces a lot of challenges in the Indian scenario. It includes the denial of first contact practice, lack of a regulatory body, lack of awareness, non-regulated educational institutions, knowledge deficit and low pay scale among the host of other challenges. With the exponential surge in demand as well as the challenges, the Indian physiotherapists face a tricky situation on various professional issues (Anila and Rajani 2015). The profession is developed well over the years in the developed nations and got its identity mainly from the world wars and polio epidemic. In developing nations, the profession was introduced through western funded and western-run organizations for the reason of rehabilitation for people with disability and patients with pain in developing nation. Physiotherapy education was shaped according to health-care needs, war and catastrophe in the developing countries by external physiotherapists rather than the profession shaped by historical events and culture in developed nations. But now physiotherapy education and development is influenced by the country's contexts and is suggested more valuable than promoting mobility and giving pain relief. The recognition of physiotherapy service is good in few developing nations as physiotherapy councils were established to monitor physiotherapist and provide professional development but challenges also prevail in the developing nations and it is different for different developing nations (Karthikeyan 2012). In recent days, though the awareness about the physiotherapy profession is increasing, the complete awareness is still not achieved. The common myths prevailing among the people underestimate the scope of the profession and the practice. The availability of the factual information is an influential factor in making career decisions. It is mandatory for the policy makers to give appropriate information about the profession to higher secondary students so that it would be helpful in choosing their career pathway (Harikrishnan and Kamalambal 2017).

Materials and Method

The design used for the study was a survey questionnaire through google forms. The questionnaire was used with permission from Thusharika D. Dissanayaka and Shayama Banneheka. The sample size was 640 students in various government and private schools of New-Delhi.

Inclusion Criteria

- i) Students of class 11 and class 12.
- ii) Students able to read and understand English.
- iii) Students willing to participate in the research.

Exclusion Criteria

- i) Students not of class 11 and class 12.
- ii) All the responses not correctly answered in the correct manner.
- iii) Students not able to read and understand English.
- iv) Students not willing to participate in the research.

Procedure-The research was conducted as a descriptive study using a survey methodology. School students of class 11 and 12 were distributed the questionnaires through electronic database. A

survey was implemented in this study. The questionnaire contains three parts- A, B and C. Part A consists of subjective information of the students (their personal data) and what do they want to pursue in future after finishing high-school. Part B consists of questions to evaluate the knowledge and awareness of the students about physiotherapy as a profession. Each sub question contains three responses (yes, no and don't know). The questions are of general knowledge relating to physiotherapy. Part C consists of close-ended questions with multiple responses to identify the source of information regarding the physiotherapy profession. Students were assured that all information will remain confidential. After completion of the questionnaires. The students were asked to fill up the questionnaire. The data was then obtained based on the responses of the students. After obtaining the data, the results were analyzed.

Results

Part A

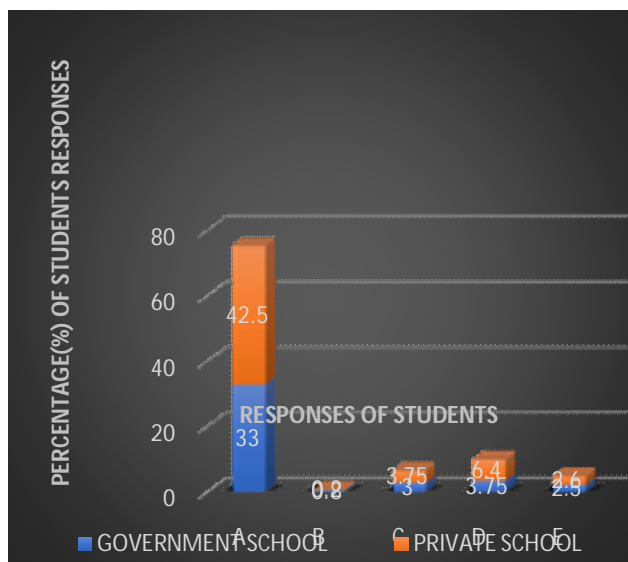


Figure 1. Comparison of responses to the question “upon graduation, what are your plans?” of students in government schools and private schools

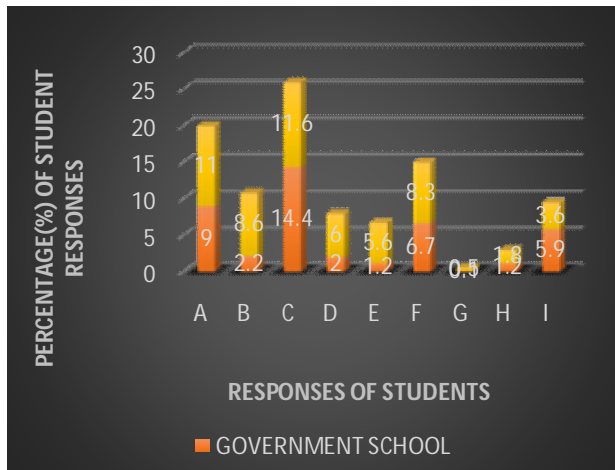


Figure 2. Comparison of responses to the question “What type of career do you want in the future?” of students in government schools and private schools

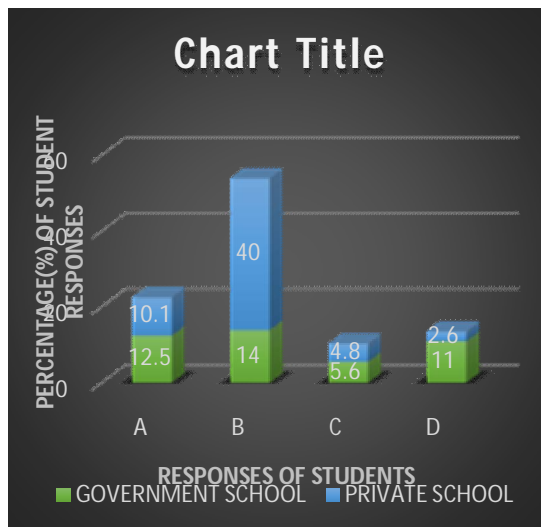
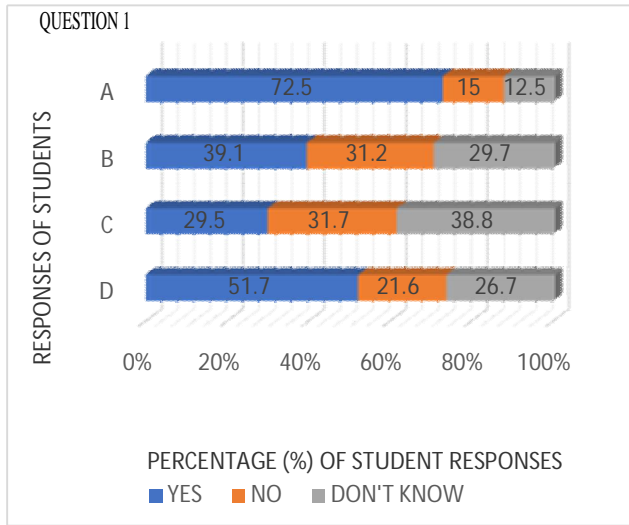
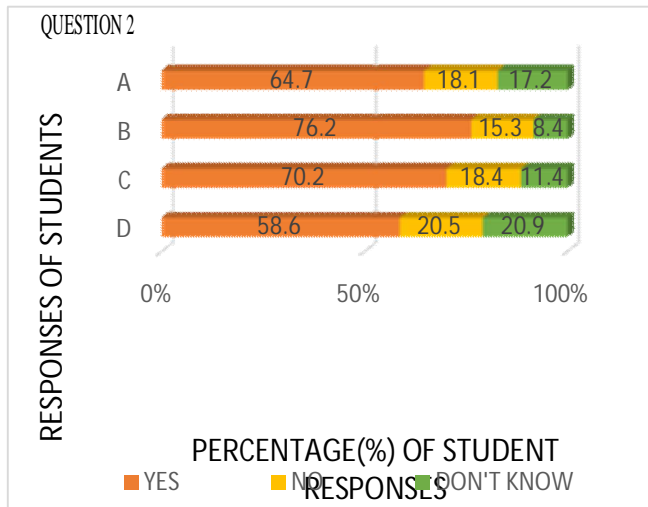


Figure 3. Comparison of responses to the question “How familiar are you with the allied health professions?” of students in government schools and private schools

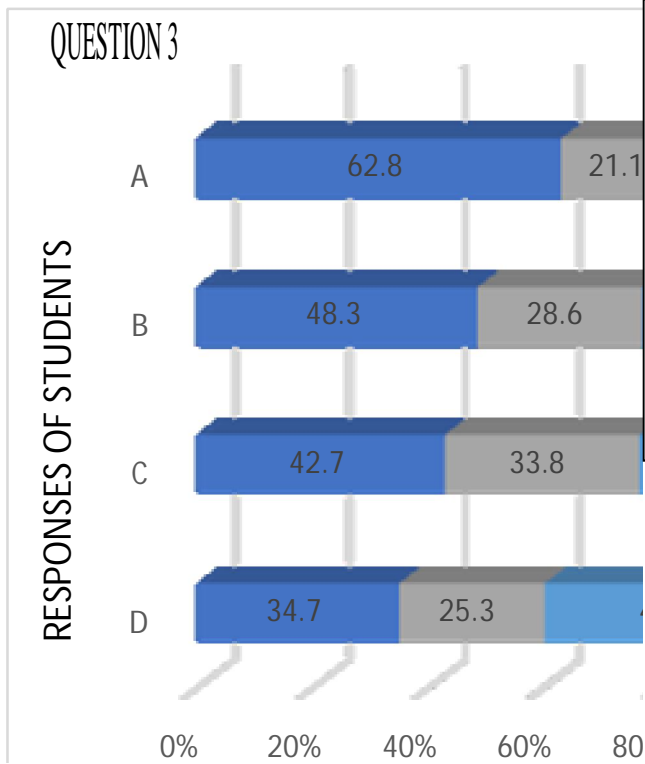
Part B



Graph: Total Representation For Question 1
 Key
 A – physiotherapy is practiced by doctors.
 B – acupuncture is a branch of physiotherapy.
 C – masseurs are physiotherapists.
 D – physiotherapy is an indigenous treatment method.



Graph: Total Representation For Question 2
 Key
 A = physiotherapy is involved in rehabilitation of injuries.
 B = physiotherapy helps in improving the quality of life of an injured person.
 C = physiotherapy helps in improving the fitness levels of sportsmen.
 D = physiotherapy helps in regaining the activities of daily living.



Graph: Total Representation For Question 3

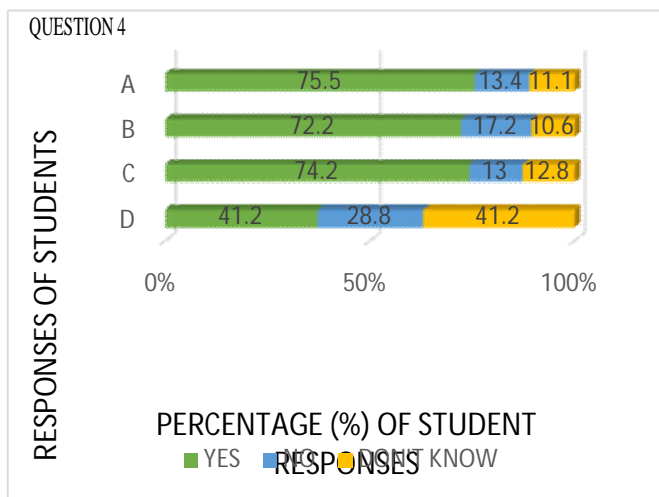
Key

A = a physiotherapy unit includes a gymnasium with exercising machines, gym balls and other equipments.

B = a physiotherapy unit includes electrical modalities.

C = a physiotherapy unit includes a section for manual treatments using bandages, tapes and splints.

D = a physiotherapy unit includes a therapeutic pool.



Graph: Total Representation For Question 4

Total For

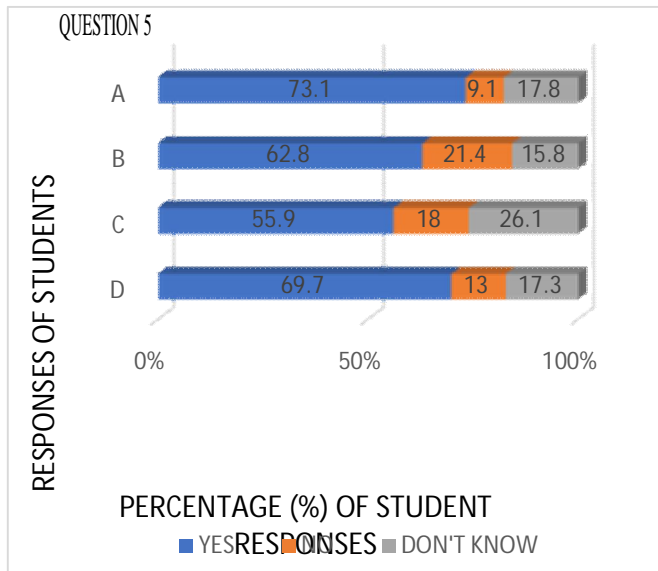
Key

A = places to get physiotherapy services are private clinics.

B = places to get physiotherapy services are government hospitals.

C = places to get physiotherapy services are private hospitals.

D = places to get physiotherapy services are NGOs.



Graph: Total Representation For Question 5

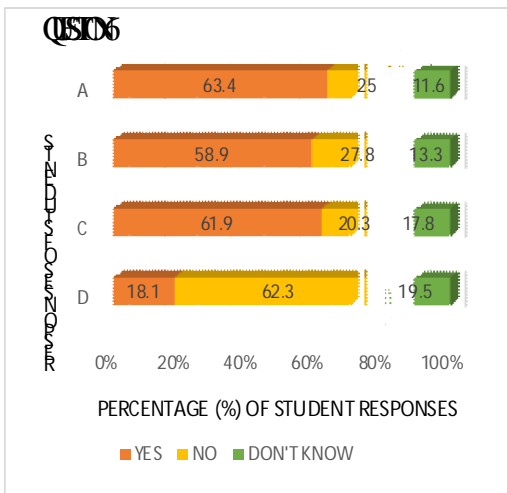
Key:

A = physiotherapy includes manual therapy.

B = physiotherapy includes ice/heat therapy.

C = physiotherapy includes hydrotherapy.

D = physiotherapy includes electrotherapy and exercise therapy.



Graph: Total Representation For Question 6

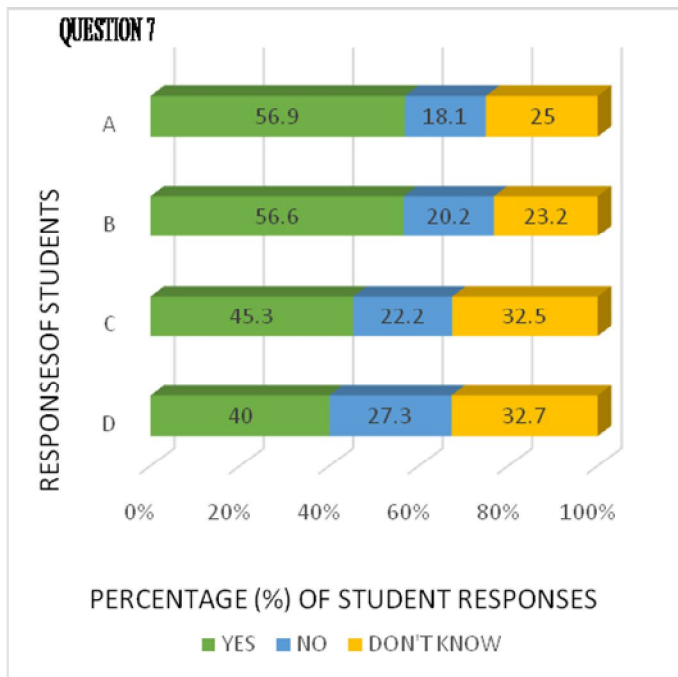
Key

A = meet the physiotherapist when you have an injury.

B = meet the physiotherapist when you pain arising in any part with/without a known cause.

C = meet the physiotherapist when you feel pain/discomfort in a sporting technique.

D = meet the physiotherapist when you have fever/flu.



Graph: Total Representation For Question 7

Key

A = uses of physiotherapy in neurological conditions (stroke/PD).

B = uses of physiotherapy in musculoskeletal conditions (OA).

C = uses of physiotherapy in pediatric conditions (CP).

D = uses of physiotherapy in chest conditions (bronchitis).

Part C

Sources of Physiotherapy Information

Response	Number of Students
1	193
2	99
3	71
4	284
5	134
6	59
7	75
8	274
9	107
10	354
11	197
12	119
13	118
14	109
15	436
16	95
17	149
18	75
19	88
TOTAL	3036

A. PERSONAL CONTACTS
 1 = family member was a client.
 2 = friend was a client.
 3 = I was a client.
 4 = friend told me.
 5 = family physician told me.
 6 = family member is a physiotherapist.
 7 = friend is a therapist.

B. MASS MEDIA
 8 = TV.
 9 = films.
 10 = internet.
 11 = newspapers/magazines.
 12 = books.
 13 = advertisements.
 14 = radio.

Key For Responses:

Career Information Sources:

15 = teacher/counsellor coach.

16 = career literature.

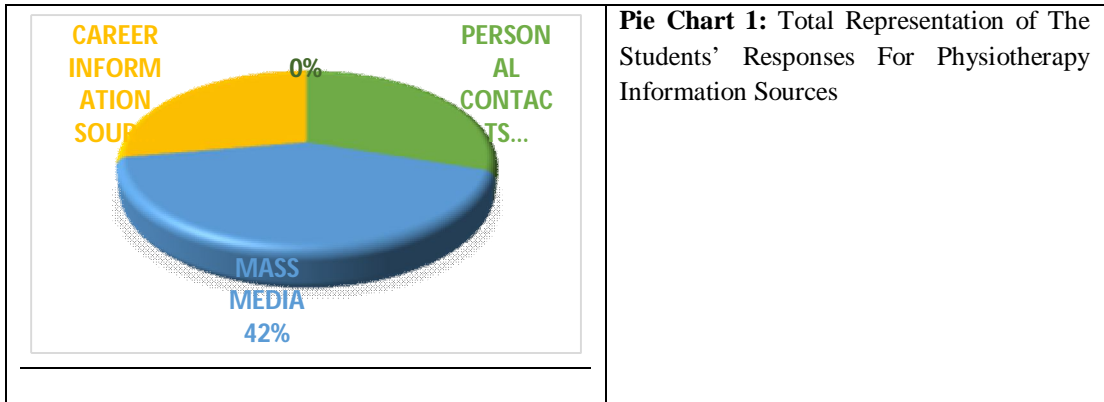
17= visit to a PT school/hospital/university.

18 = career day/health fair.

19 = volunteer/work experience.

Break-Up of Responses

Part	Total Students	Percentage (%)
A (responses 1 to 7)	915	30.1
B (responses 7 to 14)	1278	42.1
C (responses 15 to 19)	843	27.8
TOTAL	3036	100



PART A: Personal Contact

Response	Students	Percentage (%)
1	193	21.1
2	99	10.8
3	71	7.8
4	284	31.1
5	134	14.6
6	59	6.4
7	75	8.2
Total	915	100

PART B: Mass Media

Response	Students	Percentage (%)
8	274	21.5
9	107	8.4
10	354	27.7
11	197	15.4
12	119	9.3
13	118	9.2
14	109	8.5
Total	1278	100

PART C: Career Information Sources

Response	Students	Percentage (%)
15	436	51.7
16	95	11.3
17	149	17.7
18	75	8.9
19	88	10.4
Total	843	100

Suggestions For Future Research

Further research about high-school student's knowledge of physiotherapy is indicated. The results of this study showed a moderate level of knowledge among the high-school students. What needs to be addressed is that why isn't there an adequate and sufficient knowledge of physiotherapy among the high-school students. Further research may include choosing the widespread locations in New-Delhi to obtain a more comprehensive result. Although this may not have any notable influence on the results, it may be interesting to compare different places in the state. Thus, the recruiters would know specifically where to target their efforts. Another suggestion would be to give a modified form of this survey to the high-school students to determine if the teachers and the counsellors have accurate information about the allied health careers. People interested in health-care careers need to

have an updated information concerning the qualification required to enter the physiotherapy field. By giving the students specific and pertinent information will give them a better idea of what will be expected of them. If the prospective health-care students understand these expectations, then there is a greater chance of the successful completion of the allied health-care programs.

Conclusion

According to Ginzberg (1972) theory, between early to late adolescent is the period in which career choice is made. According to Super's developmental theory (Super et al., 1996), individuals between the ages 15 and 24 years are at the exploration stage of their development. This phase is characterized by the making of tentative choices and skill development. In India, the students will be in higher secondary level at the age of 16-18 and that is the period to select their future career. Hence, we must provide adequate information about the profession so that the student may take up physiotherapy as a choice of career. Despite the limitations, this study showed that the high-school students do have a fair to moderate amount of knowledge and awareness of the physiotherapy field. Measures should be taken to increase the awareness about physiotherapy – both as a career option and as a treatment method. A brief introductory session can be conducted to higher secondary students to develop better awareness about the profession which would be helpful in considering the physiotherapy as a field of study (Harikrishnan and Kamalambal 2017) implicates the existing higher secondary curriculum in Malaysia should be revised by introducing Physiotherapy. Riju (2015) emphasized that there is a need for a program for school children in Anand city of India to educate them about physiotherapy.

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