'Attitudes of Allied Health Sciences' students towards people with Disability

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Abstract— The objective of this study was to see the attitudes of Allied health Sciences, students towards peope with Disability. It was a cross sectional study and sample size of 240 medical students were selected for the study. On-probability convenience sampling technique was used. Data was collected through Performa. SPSS version 21 was used for data analysis. The findings of the study revealed that the Total Sample size N=245 was taken including 219 (89.0%) students of Doctor of physical therapy, 19 (7.7%) student occupational therapy and 7 (2.8%) prosthetics/orthotis students when asked "Parents of disabled persons should be less strict than other parents, it was found that out of 100% students including Doctor of physical therapy, occupational therapy, and prothetics/orthotics, 15.9% agreed a little, 29.8% agreed pretty much, 45.7%agreed very much and 2.9% disagreed a little, 1.2% disagreed pretty much and 4.5% disagreed very much.The students when asked "Most people with disabilities feel sorry for themselves" it was found that out of 100% students including Doctor of physical therapy, occupational therapy, and prothetics/orthotics, 22.0% agreed a little, 31.4% agreed pretty much, 19.6%agreed very much and 11.8%disagreed a little, 8.6% disagreed pretty much and 6.5% disagreed very much. The students when asked "There should not be special schools for children with disabilities", it was found that out of 100% students including Doctor of physical therapy, occupational therapy, and prothetics/orthotics, 6.1% agreed a little, 12.2% agreed pretty much, 17.6%agreed very much and 5.7%disagreed a little, 9.8% disagreed pretty much and 48.6% disagreed very much The students when asked "It is upto the government to take care of persons with disabilities", it was found that out of 100% students including Doctor of physical therapy, occupational therapy, and prothetics/orthotics, 14.3% agreed a little, 24.5% agreed pretty much, 41.6% agreed very much and 6.9% disagreed a little, 3.7% disagreed pretty much and 9.0% disagreed very much. The students when asked "People with disabilities are as happy as people without disabilities", it was found that out of 100% students including Doctor of physical therapy, occupational therapy, and prothetics/orthotics, 15.1% agreed a little, 21.2% agreed pretty much, 11.0%agreed very much and 25.7% disagreed a little, 13.9% disagreed pretty much and 13.119% disagreed very much.The study concluded that the lower limb muscular weakness was found to be common among medical students of Karachi. The study further concluded that the comparison of attitudes among allied health students in terms of positive or negative attitudes. The demographic variables included in this study were found to have no association with these attitudes. Hence, the factors which affect these attitudes could not be addressed specifically. Further studies will be needed to address those factors so that the students could show a more positive attitude towards disabled persons in future.

1 INTRODUCTION

The term disability has been debated worldwide for over years but the specific defintion for the term that could be agreed upon is still elusive. As defined by World Health Organization in 1980, Disability is loss of function in everyday activities. (1) In 2001, WHO revised this definition and emphasized on health components rather than consequences of disease (2). Further International Classification of Functioning promoted the bio- psycho-social model, which says that disability is an umbrella term for impairements, activity limitations and participation restrictions (3). It emphasized that disability is a dynamic interaction between health conditions and contextual factors that are both environmental and personal (4). Indeed, disability encompasses the middle-aged woman with severe arthritis, a soldier who lost his leg to landmine, a child born with congenital condition, among many others.

Prevalence of disability: According to a recent report of WHO, globally over one billion people have some kind of disability which constitutes about 15% of world's population, The recent estimate is higher than previous WHO report in 1960 in which 10% population was disabled.3.About a quarter of which consists of population younger than 18 years (5). In the Asian and pacific region 400 million people live with disabilities which comprises 70% of the world's disabled population 6. The number of disabled persons in Pakistan is 5.035 million which is increasing at the rate of 2.65% per annum 7. The number of disabled persons is increasing due to population growth, aging emergence of chronic diseases and medical advances that preserve and prolong life. According to World Health Survey, across 59 countries, the average prevalence rate in adult population aged 18 and over was 15.6%, encompassing 650 million of estimated 4.2 billion adults aged 18 and older in 2004. This value ranged from 11.8 in higher income countries to 18.0 in lower income countries. Major types and causes of disability: On global level, Disability can be divided into different subclasses, which include mobility & physical impairments or disabilities caused by trauma to spinal cord, head /brain, Vision, Hearing, cognition / learning & many kinds of psychological disorders & Invisible disabilities8. Major causes of disability includes, congenital factors, malnutrition, diseases, accidents and violence, conflicts and landmine explosions, inadequate hygiene, lack of access to healthcare system, exposure to chemical substances, stresses, drugs and alcohol abuse. Above all this poliomyelitis is a leading cause of physical disabilities. Non communicable diseases (NCDs) have a major part in overall burden of disease in Pakistan. These diseases contribute to an average of 40.3% for all disability-adjusted life years (DALYs) in 2012. Then come injuries, which contribute for 11% of Disability adjusted life years. There are also other non- communicable diseases among which disability adjusted life years attributed to cardiovascular diseases (CVDs) is highest i.e, 7.3%, then follows behavioural conditions which accounts for 5.1%, then cancer accounts for 4.5% & then any neu-

rological condition contributes 3.6% .9 Most of the disabled persons need rehabilitation services and they often face the opinions and judgments of service providers in order to get the needed services. Hence, the attitudes of allied health professionals and other rehabilitation professionals are significant in shaping the life-style opportunities generated for persons with disabilities and the roles they are encouraged to adopt in society (Benham, 1988).10 Role of Allied Health Science students' attitudes towards disabled persons: Majority of health care practitioners including physiotherapists, occupational therapist and orthotics/prosthetics students enrolled in their respective undergraduate educational programme, have a frequent exposure to people with disabilities & their behaviour and attitudes towards disabled persons significantly affects the physical, social and psychological wellbeing of disabled persons, either affecting positively by encouraging them to accept their self and encouraging them to overcome their disability (if reversible) or negatively by providing a deficient interventions & avoidance which not only develop a sense of inferiority in those people but also degrade them to overcome their physical limitations they are facing. Operational definitions: Allied health sciences: This field includes the therapists, technologists, and scientists etc who are the backbone of our health care system. The role that they play in providing patient care and satisfaction is critical and different from medical, dental, and nursing professions

Mobility& physical impairments: It includes people with different kinds of disabilities either in-born or acquired like disabilities of upper & lower limbs, Disability which are caused when different organs of the body are unable to co-ordinate.(8) Spinal cord disabilities: Spinal cord injury (SCI) in some cases can be a birth defect or may be due to accidents and sometimes leads to lifelong disabilities. It can either be complete or incomplete.(8) Head/ Brain disability: Any kind of injury to the head/brain can lead it to disability. Injuries to the head/brain can be either Acquired or Traumatic.(8) Vision disability: Any problem or disease like trauma or blindness. Commonly seen impairments in vision includes Dry eyes, Eye conditions related to Diabetes, and Corneal grafts.(8) Hearing disabilities: It includes either partial or complete deafness. It can either be by birth or can occur later on in life.(8) Cognitive or learning disabilities: It includes speech disorders. Most of the people suffering from dyslexia comes under this category.(8) Psychological disorders: It includes disorders of feelings or mood states either long or short term and impairments related to mental health which includes people with psychiatric disorders or illnesses such as schizophrenia & personality disorders.(8)

Invisible disabilities: This category includes those diseases which are not immediately evident/ apparent to other people in surrounding. (8)

MATERIAL AND METHOD

Study Design: This was a cross sectional study.

Setting: Data was gathered from Dow Institute of Physical Medicine & Rehabilitation. (Main campus & Ojha campus)

Sample size: 150 medical Students participated in the study.

Sample Technique: Convenient non-probability sampling Technique was used.

Duration: The duration of the study was six months.

Sample Selection

Inclusion Criteria: Undergraduate students enrolled in physical therapy, occupational therapy and orthotics/prosthetics. DPT students that have some exposure to OPD or rehab care.

Exclusion Criteria: Students who haven't started practice in clinical rotations. Students of post-graduation courses.

Data Collection Method: Data was collected from the participants on the basis of inclusion & exclusion criteria. Data was Collected through questionnaire

Data Collection Instrument: A self-administered questionnaire was distributed amongst the participants who met the inclusion criterion of study; consent was taken from all participants after explaining the purpose of the study.

Data Analysis Procedure: Statistical Package for Social Science (SPSS v 21) used for the data collection. Descriptive statistics calculate frequency and percentage.

Ethical Consideration

All the participants of this study were provided with a written informed consent before their enrolment in the study. The purpose of this research, data collection processes and potential benefits and risks of the research were also explained to all the participants in the study. Confidentiality and anonymity of the participant was maintained throughout the study. Any unauthorised person will not have a direct access to the data except the investigator

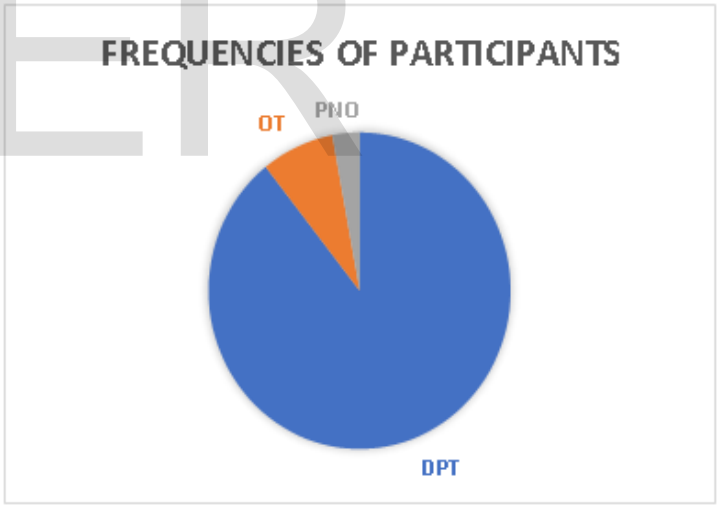
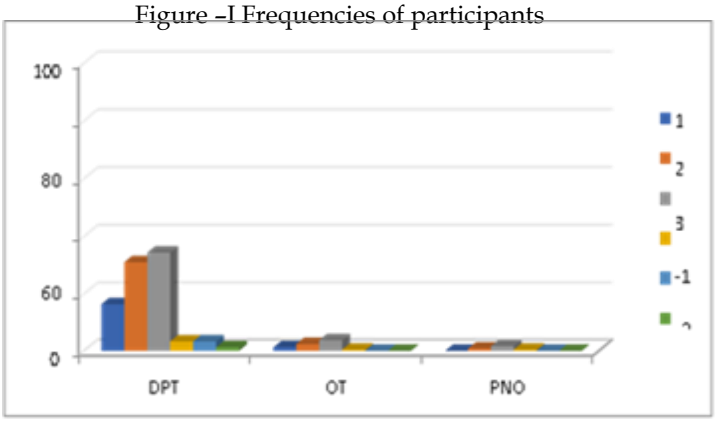


Figure –I Frequencies of participants



	Frequency	Percent	Valid percent	Cumula-tive per-cent
DPT	219	89.0	89.4	89.4
OT	19	7.7	7.8	97.1
PNO	7	2.8	2.9	100
Total	245	99.6	100	

Figure –II -you have to be careful what you say when you are with people with disabilities

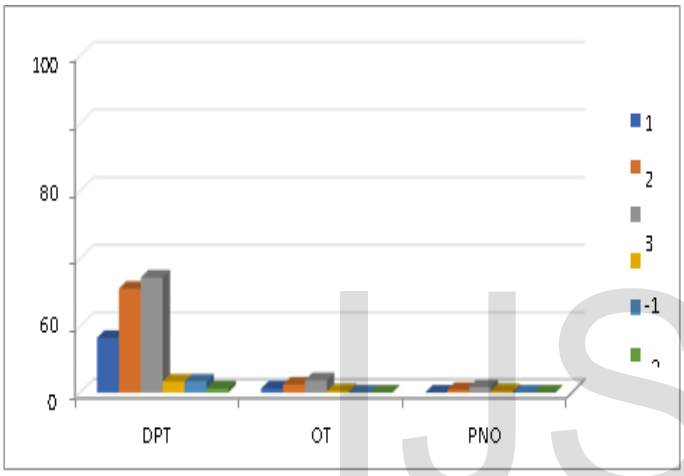


Figure –III you have to be careful what you say when you are with people with disabilities

Table I: Frequencies of participants

	Frequency	Per-cent	Valid per-cent	Cumulative percent
DPT	219	89.0	89.4	89.4
OT	19	7.7	7.8	97.1
PNO	7	2.8	2.9	100
Total	245	99.6	100	

Table II: you have to be careful what you say when you are with people with disabilities

Table III -you have to be careful what you say when you are with people with disabilities

Course of study	Agree little (+1)	Agreed aly (+2)	Agree prettd much(+3)	Disagr veryeed little (-1)	Disagr aeed ty (-2)	Disagr pret-eed veryal muchmuch (-3)	Tot
DPT	23.3 %	31.8 %	20.0%	6.5%	4.9%	2.9%	89.4 %
OT	1.6%	3.3%	1.2%	0.0%	0.8%	0.8%	7.8 %
PNO	0.8%	0.8%	1.2%	0.0%	0.0%	0.0%	2.9 %

Discussion

This study aimed to find out the attitude of Allied health science students towards people with disability. In this study the students of three different courses of Allied health sciences i.e. Doctor of physical therapy, Occupational therapy and prosthetics/orthotics, participated with the respective frequencies of 89%, 7.7% and 2.8%.

Most of the age groups that participated in the study were between 20 to 27 years but the age of the students didn't seem to have any association with their attitude towards the persons with disability as their was no change in attitude with the change in age.

The majority of participants in the study were females with the response rate of 87.6% as compared to male who participated with the frequency of 12.4% but the results showed no association between the gender difference and their attitude towards persons with disability.

The students of second year to final year of their respective degree courses participated in the study with the frequencies of 1.0%, 24.4%, 36.3% and 38.3% respectively. The students enrolled in first year of their study course were excluded because they didn't meet the inclusion criteria of this study.According to the results it was noticed that attitudes of students towards disabled persons didn't change linearly with the change in year of study hence, year of study doesn't affect the behaviour of students towards disabled persons.

The highest number of participants were from Karachi with a educated and highly stable background while a few students were from rural and urban areas of Sindh whose parents were either illiterate or had only passed primary and secondary school with normal financial backgrounds. But according to our study the longest place of their living, educational back-

ground and income status of their families didn't have any association with their attitude towards disabled persons.

Major differences were noted between the students following different degree courses. The results showed that Doctor of physical therapy students had the majority positive relation because high number of variables included in it as compared to Occupational Therapy and Prosthetics/Orthotics. The highest numbers of responses were gathered from Doctor Physical Therapy and majority respondents 'agreed pretty much' as it shows the highest number of representation. PNO had a false negative relation with almost all the attitudes because of non-equal variables between Doctor of Physical Therapy and Occupational Therapy. Occupational Therapy also had the negative relation with most of the attitudes. The course curriculum followed during the course of their study can be significant factor affecting the attitudes as seen in one of the previous studies i.e, Kay stachura, Frances graven in 2003, through a cross sectional study, compared the attitudes of undergraduate occupational therapy & physical therapy students from the beginning of their respective courses till the end & found that physical therapy students hold a negative attitude at the beginning and then showed a more positive attitude at the end of their course as compared to the students enrolled in occupational therapy.(15)

CONCLUSION

This study emphasized on comparison of attitudes among allied health students in terms of positive or negative attitudes. The demographic variables included in this study were found to have no association with these attitudes. Hence, the factors which affect these attitudes could not be addressed specifically. Further studies will be needed to address those factors so that the students could show a more positive attitude towards disabled persons in future.

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