

KNOWLEDGE AND ATTITUDE OF HEALTH CARE PROFESSIONALS TOWARDS PERSONS WITH DISABILITY

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ABSTRACT

Objective: To assess the knowledge and attitude of health care professionals regarding persons with disabilities.

Study Design: Cross sectional study.

Place and Duration of Study: Children Hospital Complex Lahore, from Jun to Oct 2016.

Patients and Methods: This study was designed to assess outcomes of knowledge and attitude of health care professionals regarding persons with disabilities among 85 health care professionals including doctors, nurses and allied health professionals of different hospitals of Lahore. A SAQ-K questionnaire regarding knowledge and ATDP-O for attitude was administered to all of them in a private and confidential setting. Data was entered and analyzed in SPSS version 21.0. Mean \pm SD was calculated for SAQ-K, ATDP-O and analyzed using independent t-test and ANOVA. A p -value of <0.05 was taken as statistically significant.

Results: Among eighty five subjects 48.2% were males, 62.4% of respondents had 1-10 years of experience, 49.4% were doctors, 32.9% were from allied medical professional. Mean score for ATDP was 62.3176 SD \pm 15.61 with minimum score of 26 and maximum score of 102 ($p=0.000$). Mean score for SAQ-K questionnaire was 19.623 SD \pm 2.56 with minimum score of 14 and maximum score of 27 ($p=0.000$).

Conclusion: Overall knowledge and attitude of health care professionals towards persons with disabilities using ATDP-O and SAQ-K was poor.

Keywords: Attitude, Disabilities, Health care professionals, Knowledge.

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INTRODUCTION

There are a number of reasons that we find defining disability as "debatable". In the past it was attached to a group which was isolated from society. conventionally "inability" was the term used as an alternative of "disability " as an indication to legal obligations and restrictions on constitutional rights of those people. In 2006, Oxford dictionary documented it as two distinct terms¹. Disability does not comprise of medical issues only, to a certain extent is related to issues like environment and community². However those People can manage their own health in a better way, if they are informed and guided precisely³. There is strong evidence that health care professionals often feel discomfort and exhibit risky attitudes towards person with

disabilities and in addition lack of knowledge in dealing with these patients further aggravates the situation. Hence there is a need for training and education of health care professionals regarding problems concerning with disable person for improvement in their health⁴⁻⁶.

It is a lawful obligation for the member countries who have signed the Convention on the "Rights of Persons with Disabilities" (UN 2006), Article 25 (d) that they would provide the same quality of health care to disabled persons as to non-disabled that include informed consent, awareness, self-respect, autonomy. This can only be achieved through appropriate training and the propagation of high standards of health care for disabled persons both in public and private sector^{8,9}.

According to reports by WHO and World bank supported the evidence that people with disabilities had fragile health, poor academic achievements, low financial resources due to

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which there is lack of access to health services. An analysis of survey of global health further revealed that disabled people doubly found the skills and tools of their HCPs as insufficient and unequipped, were triply left without care; and were treated inadequately by health practitioners (World Health Organization and World Bank 2011)¹⁰. Among health care professional (HCP) medical doctors specially had limited time for people with disabilities. More ever in developing

that a group of students were empathetic with disabled people while other felt uncomfortable dealing with them¹³. The study accomplished that those negative attitudes and perception had a negative outcome on rehabilitation services offered to disabled people if attended by these students¹³.

Magallona and Datangel in a study on community-based rehabilitation (CBR) found that skills related to disabled people issues, values

Table-I: Demographic profile of respondents n=85.

Variables	Frequency	Percentage	Statistics
Age of Respondents			Mean = 36.4471 SD = 9.42452 Min = 22.0 Max = 60
22-45 years	70	82.4	
46-60 years	15	17.6	
Gender of Respondent			
Male	41	48.2	
Female	44	51.8	
Experience of Respondents (years)			
1-10 years	53	62.4	
11-20 years	19	22.4	
21-30 years	13	15.3	
Occupation of Respondents			
Doctor	42	49.4	
Allied Medical Professionals	28	32.9	
Nurses	15	17.6	
Designation of Respondents			
Consultant / Associate / Assistant	11	12.9	
Registrar/ APMO / SMO	24	28.2	
Post graduate resident	16	18.8	
House officers	3	3.5	
Physiotherapist	5	5.9	
Cl. Psychologist / SNE / ST / OT	16	18.8	
Nurses	10	11.8	

countries, limited number of doctors had to provide services to large number of patients. Mostly the attitudes shown towards disabled is the result of lack of training when they are later exposed to the practical field¹¹. Further research had focused that low pays, less service providers, poor knowledge and specific education regarding issues on disability lead to poorer and negative attitude towards those population¹².

A study done by Amosun *et al* shed light on the views of undergraduates in Malawi found

and attitudes of the students improved after this rehabilitation programme. Moreover disabled people identified attitudes prevailing in society as lethal and depressing stressor in their lives¹⁴.

The main aim of this study is to find out the existing knowledge of HCPs about chronic diseases, co-morbid conditions and problems faced by disabled people due to lack of communication, and assessing their attitudes and limited system of referrals. Lack of adequate services in Pakistan is worsening the situation

of people with disability (PWDs) manifolds. Improvement and betterment in existing conditions can only be brought by increasing knowledge and skills of health care professionals, which can be done through proper trainings and techniques taught in medical undergraduate curriculum.

METHODOLOGY

This cross sectional study was conducted among health care professional working in public sector health care organization from June 2016 to October 2016. Physiotherapy, psychiatry and pediatrics units in Jinnah Hospital, Services Institute of Medical Sciences (SIMS), Pakistan Institute of Mental Health (PIMH), Children Hospital, developmental paediatrics unit & physical medicine & rehabilitation (PM&R) & Lahore General Hospital (LGH) neurology & physiotherapy units. The strength of doctors, nurses and allied health professionals in all these teaching hospitals is approx. 1000-1500. The health care professionals included consultants, Asst. professors (AP), senior registrars, registrars, senior medical officers both male and female, clinical psychologists, speech therapists, special needs educationists, head-nurses, junior nurses and child care workers. A non-probability, convenient sampling was done and sample size was calculated using software assuming proportion of health care professionals with positive attitude on ATDP-O of 60%¹⁷ to estimate a proportion with confidence level of 95% and acceptable difference of 0.10 with assumed internal consistency of 0.60. The required sample in study was 85.

All health care professionals including consultants, senior registrars, registrars, senior medical officers, medical officers having encounter with PWD's both adults and children and allied health professionals including clinical psychologists, speech therapists, occupational therapists, special needs educationists, child care workers and nurses of either gender and of seniority were included in the study. House officers and non-medical staff were excluded

from the study. A questionnaire regarding knowledge (SAQ-K) was designed using questions used in previous studies and was piloted in 10-20 HCP,s among them and no problem or difficulty was observed. ATDP-O, a validated 21-questionnaire original likert's scale for attitude was administered to all of them in a private and confidential setting. Data was entered in SPSS version 21.0. Mean and standard deviation was calculated for numerical variables

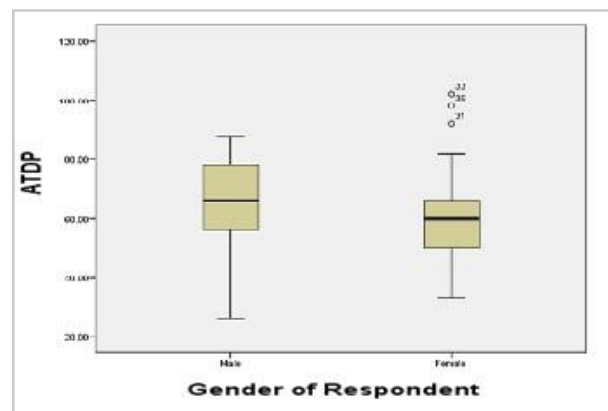


Figure-1: Gender of respondents and ATDP.

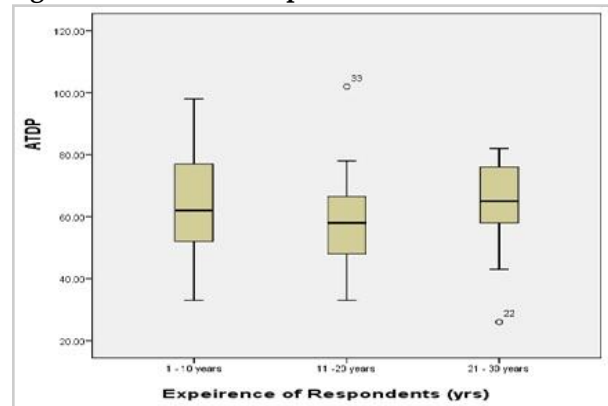


Figure-2: Experience of respondents (years) and ATDP.

like age, SAQ-K, ATDP-O and was analyzed using independent t-test and ANOVA. A p -value <0.05 was taken as statistical significant.

RESULTS

Mean age of respondents was 36.0 ± 9.424 , 82.4%, were between 22-45 years. 48.2% were male and 51.8% were females. 49.4% were doctors, from among doctors 12.9% were consultants, 28.2% registrars, 18.8% PG trainees

32.9% from paraprofessionals and 18.8% were allied health professionals including physiotherapists and 17.6% were from nurses. 62.4% of respondents had an experience of 1-10 years, 22.4% had 11-20 years of experience (table-I).

Total mean score for ATDP was 62.3176 ± 15.61 with minimum of 26 and maximum of 102 ($p=0.000$). Mean score for SAQ-K was $19.623 \pm$

for SAQ-K questionnaire for doctors was 19.028 ± 2.53 . Mean score for SAQ-K for Allied medical professionals was 20.107 ± 2.806 . Mean score for questionnaire for nurses was 20.40 ± 1.80 ($p=0.096$) (table-II).

Mean score for ATDP among respondent with experience between 1-10 years was 63.26 ± 15.53 . Mean score for ATDP for ex between 11-20

Table-II: ATDP and Questionnaire score mean statistics among age and gender distribution (n=85).

Variables	Statistics	ATDP	Score Questionnaire	Independent t-test p-value
Total Score	N	85	85	ATDP t = 7.271 p=0.000 Score Questionnaire t = -19.337 p = 0.000
	Mean	62.3176	19.6235	
	Std. Deviation	15.61761	2.56337	
	Minimum	26.00	14.00	
	Maximum	102.00	27.00	
Age				
22-45 years	N	70	70	ATDP t = 0.942 p = 0.349 Score Questionnaire t = -0.071 p = 0.943
	Mean	63.0571	19.6143	
	Std. Deviation	15.74331	2.53836	
	Minimum	33.00	14.00	
	Maximum	102.00	27.00	
46-60 years	N	15	15	ATDP t = 0.942 p = 0.349 Score Questionnaire t = -0.071 p = 0.943
	Mean	58.8667	19.6667	
	Std. Deviation	15.04691	2.76887	
	Minimum	26.00	15.00	
	Maximum	79.00	23.00	
Gender				
Male	N	41	41	ATDP t = 0.623 p = 0.535 Score Questionnaire t = -1.411 p = 0.162
	Mean	63.4146	19.2195	
	Std. Deviation	16.52873	2.51508	
	Minimum	26.00	14.00	
	Maximum	88.00	24.00	
Female	N	44	44	ATDP t = 0.623 p = 0.535 Score Questionnaire t = -1.411 p = 0.162
	Mean	61.2955	20.0000	
	Std. Deviation	14.83644	2.57898	
	Minimum	33.00	14.00	
	Maximum	102.00	27.00	

2.56 with minimum of 14 and maximum score of 27 ($p=0.000$) (table-II). Mean ATDP score for male was 63.4146 ± 16.52873 and for females was 61.2955 ± 20.0000 (fig-1).

Mean score for ATDP for doctors was 66.21 ± 15.08 and for allied medical professionals was 58.107 ± 15.149 . Mean score for ATDP for nurses was 59.266 ± 16.23 ($p=0.072$). Mean score

years was 58.842 ± 16.09 . Mean score for ATDP between 21-30 years was 63.538 ± 15.73 ($p=0.550$). Mean score for SAQ-K questionnaire for experience between 1-10 years was 19.32 ± 2.59 . Mean score for SAQ-K for experience between 11-20 years was 20.73 ± 2.20 . Mean score for SAQ-K for experience between 21-30 years was 19.23 ± 2.65 ($p=0.098$) (table-III).

DISCUSSION

The study concluded about the knowledge and attitudes of Pakistani health care professionals towards persons with disability. It was an effort to measure base line knowledge and attitude both quantitatively, as previously in

professionals regarding PWD, comprised of only four questions which were also regarding rights and terms regarding disabled children and the results showed no significant differences between age age, gender and experience¹⁵.

The results in our study are although very

Table-III: ATDP and Questionnaire Score mean statistics among occupation and years of experience (n=85).

Occupation	Statistics	ATDP	Score Questionnaire	Anova p-value
Doctor	N	42	42	ATDP F = 2.718 p = 0.072 Score Questionnaire F = 2.415 p = 0.096
	Mean	66.2143	19.0238	
	Std. Deviation	15.08437	2.53260	
	Minimum	26.00	14.00	
	Maximum	102.00	24.00	
Allied Medical Professionals	N	28	28	
	Mean	58.1071	20.1071	
	Std. Deviation	15.14948	2.80660	
	Minimum	33.00	14.00	
	Maximum	88.00	27.00	
Nurses	N	15	15	
	Mean	59.2667	20.4000	
	Std. Deviation	16.23254	1.80476	
	Minimum	40.00	18.00	
	Maximum	98.00	24.00	
Years of Experience				
1-10 years	N	53	53	ATDP F = 0.602 p = 0.550 Score Questionnaire F = 2.391 p = 0.098
	Mean	63.2642	19.3208	
	Std. Deviation	15.53922	2.59269	
	Minimum	33.00	14.00	
	Maximum	98.00	27.00	
11-20 years	N	19	19	
	Mean	58.8421	20.7368	
	Std. Deviation	16.09784	2.20711	
	Minimum	33.00	16.00	
	Maximum	102.00	24.00	
21-30 years	N	13	13	
	Mean	63.5385	19.2308	
	Std. Deviation	15.73539	2.65059	
	Minimum	26.00	15.00	
	Maximum	82.00	22.00	

Pakistan there is no such study which assessed these domains together.

Disabled persons in Pakistan are still a stigma for society. Majority of them are under privileged and are not included to be a part of main stream society. A study done by Rathore *et al* to measure knowledge of health care

similar but we used a 21-items structured form and scale of ATDP-O was also used. Most of the allied health care respondents (>45%) answered in negative from questionnaire form. Overall ATD-O with mean score for ATDP for allied medical professionals was 58.107 SD + 15.149 and mean score for ATDP for nurses was 59.266 SD +

16.23 ($p=0.072$). This score showed average results which are far below the norms of developed world. Among other HCPs doctors performed better and among them young doctors performed well then senior doctors, nurses and other allied health professionals performed fairly equal with not much difference in gender and experience.

In contrast in another study in Bhutan the results were different among groups of students on both the scales of attitude and related factors. All professionals participating in study showed a negative attitude SADP scale among them nurses had more negative attitude on scale. Either gender showed no differences in attitude. The professionals having an experience with disabled people had more positive attitudes. More positive attitude was shown in more years of education. SADP was selected as a measure of attitude for this study. The SADP had 24 items, can be easily administered to individuals or groups, can be mailed directly or indirectly. Its utility was applicable in Asian culture and so could be replicated in Bhutanese study¹⁶.

In another study by Arooj *et al* among final year physiotherapy students regarding their attitudes toward disabled persons using ATDP-A showed a mean score on personal domain differed significantly from mean professional. The study demonstrated that the personal attitude was more positive but it was alarming that professional attitude was less positive depicting a clear cut shortcomings in curriculum for the professionals¹⁷. In my study mean score for ATDP for doctors was 66.21 SD + 15.08 with minimum score of 26 and maximum score of 102 more on positive side.

Zheng *et al* study on persons with physical disability, the information was summed up from 1,853 persons using Quality of life scale (QOL), Quality of care and support scale (QOCS), and personal attitude towards physically disabled persons. There was comparatively low score on QoL and QOCS and poor scores on personal attitude towards physically disabled persons,

even when the disability is mild and there was poor wellbeing found among PWD in China^{19,20}.

Literature about disability had been very limited in researches in our setting. We examined attitude among different health care profession and personal attitude towards physically disabled persons. The study recommended that future research should focus on already existing state of health care of PWD in Pakistan and then adopting a better policy for people with disability by improving knowledge, attitude and perception of health care professionals.

CONCLUSION

The results of this study showed that Pakistani doctors, nurses and allied health professionals had not much knowledge about specific health or community needs regarding PWD. Their attitudes are also not favourable towards disabled persons and issues regarding their rehabilitation. They are not aware of the modern definition of disability according to WHO like activity participation, Convention on the Rights of Persons with Disabilities (CRPD), interdisciplinary referrals, transport and assistive devices. There was no significant difference between age, gender, years of experience but mean score of doctors is slightly better than other allied health professionals and among them young professionals scored better as compared to old and have significant difference towards attitude toward disabled person. Health care providers from different specialties had different attitudes toward disabled person as measured on ATDP scale.

RECOMMENDATIONS

It is recommended that problems regarding disability should be added in curriculum right from medical school. Workshops and short training courses should be initiated for young doctors/allied health professionals for assessment and training of health care needs of PWD. There should be exceptional teaching and training at hospitals and clinics for dealing with people with disability. Health professionals should be trained from abroad to have sound,

technical training regarding all the issues and then pilot trainers should be trained to train others.

LIMITATION OF STUDY

The limitation in this research was a small sample size and due to lack of finances and logistics it was not possible to include primary and secondary care health professionals who are also an important part of health care system.

CONFLICT OF INTEREST

This study has no conflict of interest to be declared by any author.

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