Attitude of medical students towards the disabled – a cross sectional study

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I. Introduction

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 which there are lack of access to health services.¹The attitude of health care professionals has the potential to greatly improve or hinder opportunities for persons with disabilities to be fully included in their communities. Negative attitudes of health care professionals are considered to be an invisible barrier to rehabilitation and integration.² 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.³⁻⁶An 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).¹

Among health care professional (HCP) medical doctors specially had limited time for people with disabilities. More over in developing countries, limited number of doctors had to provide services to large number of patients. Most importantly the attitudes shown towards disabled is the result of lack of training when they are later exposed to the practical field.⁷ 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 population.⁸ And these accomplished negative attitudes and perception have a negative outcome on rehabilitation services offered to disabled people if attended by these students.⁹

The recent change in the CBME curriculum by MCI has included the disability component in the foundation course, but looks very superficial. Hence there is a need for training and education of health care professionals regarding problems concerning with disabled person for improvement in their health. This study was done with anaimof assessing the attitude of medical students who are the potential care givers for disabled in the society

Objective:-To determine the attitude of medical students towards disabled individual.

II. Methodology

This cross-sectional observational study was done among the medical students after taking approval from the institutional ethics committee during February 2020 to April 2020. The demographic data along with astructured questionnaire designed by John Sanborn¹⁰ was used to collect the attitudes of medical students. The first ten questions are in Likert scale and remaining seven are in yes/no option. The sample size estimated was 300 which include students of different batches aged between 17-25 years of both genders. They were included in this study only after taking consent. The completed forms only were utilized for analysis. The data obtained were entered in Microsoft excel and analyzed using statistical software. Descriptive statistics was done to get frequencies and percentage. Student t' test ANOVA and Chi-Square test were used to find the association.

III. Results

The total numbers of participants in this study were 300 with a mean age of males 19.77 ± 1.60 and females 19.70 ± 1.29 . Males contributing to 133 (44.33%) and females 167 (55.66%). The maximum number of participants (n=146, 48.66%) belonged to 1^{st} MBBS batch. (Table 1)

Batch		Total(N=300)	
Batch	Male(N=133)	Female(N=167)	10tal(1 N=500)
1 st MBBS	78 (58.6%)	68 (40.7%)	146
2 nd MBBS	39 (29.3%)	69 (41.3%)	108
3 rd MBBS	16 (12.1%)	30 (18.0%)	46
Mean Age	19.77 ± 1.60	19.70 ± 1.29	19.73 ± 1.43

Table 1: Age and sex distribution of study participants

Among them 94% of them opined that they do not have any disability, 1.3% accepted to have disability and 4.3% were not sure of their disability. The particulars of their disability were not collected for different reasons.

The mean attitude scores among the different batches of students was 3.16 ± 0.43 (F=2.694, P= 0.069) and different genders was 3.16 ± 0.43 (t = 0.0690 and P= 0.928). Table 2 and table 3.

Table 2:	Comparison	of Total Attitude s	scores between Genders
I doit 2.	Comparison	or rotal mituate b	cores between Genuers

Sex	N	Mean	Std. Deviation	t-value	P-value
Male	133	3.16	0.44		0.928
Female	167	3.16	0.42	-0.090	
Total	300	3.16	0.43		

Batch	N	Mean	Std. Deviation	F-value	P-value
1 st MBBS	146	3.12	0.45		0.069
2 nd MBBS	108	3.24	0.41	2.694	
3 rd MBBS	46	3.12	0.40		
Total	300	3.16	0.43		

Table 3. Comp	arison of Total	l attitude scores between	students of different by	atches
Table 5. Compa	in ison or i otal	autual scores between	students of uniterent be	nunus

The attitudes of the students for the specific statements shows similar attitude between the genders except for statements 2 & 6 whereas between the batches, statements 3 &10which are statistically significant. The details are given in Table 4.

Table 4: Attitude of study participants towards different statements about disability

	Batch	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Chi square P-value
1. My h	neart goes out to peo	ople in wheelchairs					
	1 st MBBS	(0.0%)	4 (2.7%)	24 (16.4%)	66 (45.2%)	52 (35.6%)	
	2 nd MBBS	(0.0%)	0 (0.0%)	17 (15.7%)	56 (51.9%)	35 (32.4%)	3.979, 0.680
	3rd MBBS	(0.0%)	1 (2.2%)	7 (15.2%)	24 (52.2%)	14 (30.4%)	
2. I feel	sympathetic towar	d people who are visua	ally disabled				
	1 st MBBS	(0.0%)	6 (4.1%)	13 (8.9%)	62 (42.5%)	65 (44.5%)	
	2 nd MBBS	(0.0%)	0 (0.0%)	6 (5.6%)	42 (38.9%)	60 (55.6%)	11.763, 0.067
	3 rd MBBS	(0.0%)	0 (0.0%)	2 (4.3%)	25 (54.3%)	19 (41.3%)	
3. I assu	ume that people wit	th disabilities deserve s	pecial considera	tion			
	1 st MBBS	(0.0%)	0 (0.0%)	6 (4.1%)	85 (58.2%)	55 (37.7%)	
	2 nd MBBS	(0.0%)	3 (2.8%)	10 (9.3%)	40 (37.0%)	55 (50.9%)	17.182, 0.009(Sign)
	3 rd MBBS	(0.0%)	1 (2.2%)	3 (6.5%)	28 (60.9%)	14 (30.4%)	
4. I am	more understandin	g of physical or sensor	y disabilities that	n emotional ones			
	1 st MBBS	12 (8.2%)	29 (19.9%)	39 (26.7%)	51 (34.9%)	15 (10.3%)	14.860,

	2 nd MBBS	1 (0.9%)	15 (13.9%)	29 (26.9%)	47 (43.5%)	16 (14.8%)	0.062
	3 rd MBBS	2 (4.3%)	8 (17.4%)	18 (39.1%)	11 (23.9%)	7 (15.2%)	
5. People	who look or act di	fferently scare me					
	1 st MBBS	30 (20.5%)	66 (45.2%)	35 (24.0%)	11 (7.5%)	4 (2.7%)	12.146, 0.145
	2 nd MBBS	24 (22.2%)	35 (32.4%)	36 (33.3%)	13 (12.0%)	0 (0.0%)	
	3 rd MBBS	7 (15.2%)	20 (43.5%)	12 (26.1%)	7 (15.2%)	0 (0.0%)	
6. I some	times think that pe	ople who claim to ha	ve emotional pro	blems are faking i	t		
	1 st MBBS	17 (11.6%)	55 (37.7%)	45 (30.8%)	24 (16.4%)	5 (3.4%)	
	2 nd MBBS	10 (9.3%)	39 (36.1%)	39 (36.1%)	19 (17.6%)	1 (0.9%)	6.054, 0.641
	3 rd MBBS	7 (15.2%)	21 (45.7%)	13 (28.3%)	4 (8.7%)	1 (2.2%)	
7. I some	times feel that peo	ple with disabilities a	are being punishe	d somehow for som	nething they did		
	1 st MBBS	54 (37.0%)	39 (26.7%)	30 (20.5%)	18 (12.3%)	5 (3.4%)	
	2 nd MBBS	38 (35.2%)	24 (22.2%)	21 (19.4%)	19 (17.6%)	6 (5.6%)	5.154, 0.741
	3 rd MBBS	17 (37.0%)	10 (21.7%)	11 (23.9%)	8 (17.4%)	0 (0.0%)	
8. I tend t	to talk with people	with disabilities in a	different tone of	voice			
	1 st MBBS	25 (17.1%)	42 (28.8%)	44 (30.1%)	24 (16.4%)	11 (7.5%)	
	2 nd MBBS	21 (19.4%)	28 (25.9%)	23 (21.3%)	31 (28.7%)	5 (4.6%)	11.936, 0.154
	3 rd MBBS	8 (17.4%)	19 (41.3%)	11 (23.9%)	6 (13.0%)	2 (4.3%)	
9. I tend t	to be more patient	with people with disa	abilities				
	1 st MBBS	3 (2.1%)	8 (5.5%)	15 (10.3%)	70 (47.9%)	50 (34.2%)	
	2 nd MBBS	0 (0.0%)	2 (1.9%)	15 (13.9%)	55 (50.9%)	36 (33.3%)	9.325, 0.316
	3 rd MBBS	0 (0.0%)	3 (6.5%)	5 (10.9%)	28 (60.9%)	10 (21.7%)	0.510
10. I get a	angry more quickly	at people with disal	oilities				
	1 st MBBS	94 (64.4%)	47 (32.2%)	5 (3.4%)	0 (0.0%)	0 (0.0%)	
	2 nd MBBS	70 (64.8%)	25 (23.1%)	10 (9.3%)	2 (1.9%)	1 (0.9%)	27.569, 0.001(Sign
	3 rd MBBS	15 (32.6%)	25 (54.3%)	6 (13.0%)	0 (0.0%)	0 (0.0%)	0.001(31g)

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The responses for specific attitude questions in the yes or no options were also similar between the different genders except for statement number 12 whereas statements 13&15 were statistically significant for the different batches. The details are given in Table 5.

Table 5: Attitude of study participants towards different actions towards d	isabiled
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	Batch	Yes	No	Chi-Square, P-value	
11. I think employers should try to b	e extra helpful to any	employees with a disabilit	У	·	
	1 st MBBS	134 (91.8%)	12 (8.2%)		
	2 nd MBBS	104 (96.3%)	4 (3.7%)	2.507, 0.285	
	3 rd MBBS	44 (95.7%)	2 (4.3%)		
12. I have at some point in my life to	eased or otherwise dor	ne something to hurt a pers	on with a disability		
	1 st MBBS	17 (11.6%)	129 (88.4%)		
	2 nd MBBS	16 (14.8%)	92 (85.2%)	0.552, 0.759	
	3 rd MBBS	6 (13.0%)	40 (87.0%)		
13. People with disabilities should w	vork in jobs that don't	make their condition worse	9		
	1 st MBBS	133 (91.1%)	13 (8.9%)	8.564,	
	2 nd MBBS	98 (90.7%)	10 (9.3%)	0.014 (Sign)	

	3 rd MBBS	35 (76.1%)	11 (23.9%)	
14. I have been employed in a	position which involves he	lping people with disabiliti		
	1 st MBBS	58 (39.7%)	88 (60.3%)	
	2 nd MBBS	52 (48.1%)	56 (51.9%)	2.110, 0.348
	3 rd MBBS	22 (47.8%)	24 (52.2%)	
15. I work with people with di	sabilities			
	1 st MBBS	62 (42.5%)	84 (57.5%)	
	2 nd MBBS	30 (27.8%)	78 (72.2%)	6.177, 0.046 (Sign)
	3 rd MBBS	19 (41.3%)	27 (58.7%)	
16. I have a good understandir	ng of workplace disability d	iscrimination issues		
	1 st MBBS	95 (65.1%)	51 (34.9%)	
	2 nd MBBS	73 (67.6%)	35 (32.4%)	0.731, 0.694
	3 rd MBBS	33 (71.7%)	13 (28.3%)	
17. Disability discrimination a	t work is not a big issue			
	1 st MBBS	20 (13.7%)	126 (86.3%)	0.384, 0.825
	2 nd MBBS	16 (14.8%)	92 (85.2%)	
	3 rd MBBS	8 (17.4%)	38 (82.6%)	

IV. Discussion

This study was conducted by 2nd year MBBS students of Sri Siddhartha medical college, Tumkur to assess the attitude towards the disabled individuals. Sowing a right attitude and research behavior at the earliest stage of their career was the main intention of this study. As we are aware that doctors are next to patients relatives in coming contact with them. A major health concern is providing adequate care for individuals with disabilities whether it is physical, mental, intellectual, developmental or acquired. There are complications for individuals with special needs to access with care.¹¹There are no studies conducted elsewhere in the recent past especially with the medical students. Although the standard questionnaire to be adopted is ATD (Attitude towards disability), we utilized the one which is logistically more simple and acceptable.

As per the census of 2011 Disabled population by type of disability in India are visual (19%), hearing (19%), speech (7%), movement (20%), Mental retardation (6%), Mental illness (3%), others (18%) and multiple disability (8%). Consumer believe Stroke, Cancer, Heart disease are commonest causes of disability.¹²We all know that almost everyone will be temporary or permanently impaired at some point in life. Person with disability can often experience problems arising from their health condition. A balanced approach is needed giving appropriate weight to different aspect of disability.¹³In our study few participants (4.3%) were not aware of their disability indicating someawareness is required. Majority of them were not suffering from any disability yet they have positive attitude towards such individuals.

The needs of disabled individuals may fluctuate throughout their life span and may involve emotional, social, and financial issues.¹¹ Depending on the mental or physical limitations experienced by a person, seemingly simple tasks such as eating a meal or reading a magazine can become difficult or even impossible.¹² Participants were able to analyze and respond with a stronger positive attitude which shows they are more empathetic and considerate. This attitude should become part of their approach to the disabled individuals and patients. Most of the respondents also agreed for their employability and job specifications irrespective of their incapacities. And also ready to get adjusted in the job place of disabled without discrimination.

National and international initiatives- such as the United Nations standard rules on the equalization of opportunities of person with disabilities have incorporated the human rights of people with disabilities, culminating in 2006 with the adoption of the United Nations convention on the rights of person with disability (CRPD).¹³

The curriculum which was followed throughout the nation till now had no component of this disability. The present revised curriculum has implemented disability as a component, should head towards the betterment of the society. But in our study we couldn't find any difference between the old and revised curriculum students towards the attitude. So there is a much need for the vigorous approach in the future days.

V. Conclusion

The results showed an overall positive attitude towards Disabled individuals but not much difference between different batches of students. Vigorous measures should be taken in training the students and by large even the faculty on a regular basis to bring about a good change. By training present medical students can bring in a big leap of change in the health care delivery.

Conflict of interest: None declared

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