ORIGINAL ARTICLE

GENDER DIFFERENCES REGARDING STIGMA TOWARDS MENTAL ILLNESS AMONG MEDICAL STUDENTS OF PESHAWAR

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Background: Stigma towards mental illness is among the main reasons of higher mental health burden in Pakistan, especially in women. Therefore, this study was planned to explore gender differences regarding stigma towards mental illness among medical students of Peshawar. **Methods:** A Cross-sectional study was conducted among the students of medical and dental institutions of Peshawar from December 2018 to March 2019. Students were asked to respond to the Community Attitude towards Mental Illness (CAMI) scale consisting of 40 questions with four subscales that assess different attitudes towards mental illness. We also asked two additional questions regarding health-seeking behaviour of the general public. **Results:** The mean age of the sample (n=1003) was 20.75±1.66 years and majority of the respondents were females (n=581, 57.9%). Female, as compared to male students, exhibited positive attitude on overall CAMI scale and its subscales of benevolence and community mental health ideology; while male students showed positive attitude on authoritarian and social restrictiveness subscales, as compared to female students (p<0.05). Both female and male students recognized lack of awareness (combined 34.5%), and stigma attached to mental illness (combined 24.3%) as the main barriers to health seeking behaviour of general public; and suggested that the people struggling with mental health issues should first approach their parents (combined 37.9%) and a psychiatrist/ psychologist (combined 35.0%). **Conclusion:** Significantly more female medical students showed less stigma towards mental illnesses. Lack of awareness and stigma associated to mental illnesses are considered as the main barriers to help seeking behaviour of general public.

Keywords: Stigma; Mental illness; Medical Students

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INTRODUCTION

Mental health disorders are among the major causes of ill-health, and affect over 450 million people worldwide, according to the World Health Organization.[1] Undiagnosed or untreated mental illness can have terrible consequences including deliberate self-harm and suicide.[2] One of the most significant reasons for people with mental illness avoiding treatment is the stigma attached to mental illness.[3–5]

Stigma is a mark of disgrace or label associated with a particular circumstance, quality, or person.[6] Stigma of mental illness is a negative evaluation of a person as tainted on the basis of their mental illness or disorder which may lead to discriminatory behaviour against people suffering from these illnesses.[6] This may in turn make such patients more reluctant to speak about their issues and seek treatment, further making their recovery more difficult.[7,8]

According to World Health Organization, mental disorders account for more than 4% of the total disease burden in Pakistan, with the mental health burden higher among women. It is estimated that 24 million people in Pakistan are in need of psychiatric assistance.[9] Pakistan has only 0.19 psychiatrists per 100,000 inhabitants, one of the lowest numbers in WHO Eastern Mediterranean Region, and in the whole world.[9] In Pakistan only 0.4% of health care expenditures by the government health department are devoted to mental health. Of all the expenditures spent on mental health, only 11% are devoted to mental hospitals.[10]

Percentages of people suffering from mental illness who have access to treatment vary from 5 to 40%.[11] Therefore, it is not possible for the existing number of psychiatrists to cater to the mental health need of a country like Pakistan. In a study conducted in Pakistan, it was reflected that the knowledge of the general Practitioners regarding a very common mental health condition, depression, was inadequate and the overall availability of psychiatric services is also far below the requirement.[12] However, limited mental health facilities are not the only barrier in seeking mental healthcare; in fact many patients refuse to get the treatment they need even when options are available, because of the massive stigmatization of mental illness in Pakistan. While many studies conducted worldwide have identified stigma as a cause of not seeking treatment for mental illnesses[13–18], very few have been conducted in Pakistan, and even fewer studies concerning the measurement of stigma on the basis of

gender using validated scales. This study is an attempt to fill in this gap and will allow us to understand the attitudes of medical and dental students towards mental illness and the extent to which stigma of mental illness persists among them. It will also allow us to explore different perceived reasons for not seeking help in mental health service users.

MATERIAL AND METHODS

A Cross sectional study was conducted in the medical and dental institutions of Peshawar, Pakistan using convenience sampling technique. The duration of the study was from December 2018 to March 2019. The study was carried out after ethical approval from ethical review committee of Peshawar Medical College. The participation was entirely voluntary and all participants were enrolled after their implied consent and provision of information about the instruments. The information was kept confidential. A questionnaire was administered including demographic questions, Community Attitude towards Mental Illness (CAMI) scale, and two additional questions (regarding associated barriers and first approaching options for people struggling with mental health issues) associated with health seeking behaviour regarding mental health, were also asked.

The results of the study were analysed using SPSS v.25. Analysis of the basic variables was carried out using descriptive statistics. Inter-scale Correlation was calculated between CAMI and its subscales by applying Pearson Correlation. Chi-square test was applied to find out the gender differences between students of private and public sector medical and dental colleges and between students of pre-clinical and clinical years. Independent sample t-test was applied to find out the gender difference on CAMI and its subscales. The results of all the test of significance were considered significant at $p<0.05$ level. Community Attitude towards Mental Illness (CAMI) scale was developed in the late 1970s.[19] The scale consists of 40 items/questions, each to be answered on a 5-point Likert scale, and is divided into four subscales of 10 items each namely Authoritarianism, Benevolence, Social restrictiveness, and Community mental health ideology. A high mean value in the subscale of "Authoritarianism" indicates an understanding of how people become mentally ill and a humane sense of how people being ill best should be taken care of; in "Benevolence" indicates a good will towards people with mental illnesses; in "Social restrictiveness" indicates a social openness towards people with mental illness; and in "Community mental health ideology" indicates community inclusiveness and thereby a more positive attitude towards people with mental illness. The inter-scale correlation between overall CAMI with all its subscales, in our study, is shown in table-1.

Table-1: Inter-scale correlation between CAMI and its subscales (n=1003)

Measures	I ρ (*p*-value)	II ρ (*p*-value)	III ρ (*p*-value)	IV ρ (*p*-value)	V ρ (*p*-value)
Community Attitude towards Mental Health (CAMI)	1				
Authoritarianism	.331* (.000)	1			
Benevolence	.577*(.000)	-.282* (.000)	1		
Social Restrictiveness	.091* (.004)	.321* (.000)	-.545* (.000)	1	
Community Mental Health Ideology	.500* (.000)	-.379* (.000)	.559* (.000)	-.530* (.000)	1

*Correlation is significant at the 0.05 level (2-tailed).

RESULTS

The mean age of the overall sample (n=1003) was 20.75±1.66 years, while the mean age of the male students (n=422) was 20.98±1.73 years and that of female students (n=581) was 20.59±1.59 years. Majority of the sample was from private sector (n=912, 90.9%) and from pre-clinical years (n=593, 59.1%) and in both, females outnumbered males with a *p*-value of 0.000 and 0.059, respectively.

Table-2 shows gender wise mean differences on CAMI and its subscales, where as compared to male students, female showed positive attitude on overall CAMI scale (p=0.001), benevolence subscale (p=0.000) and community mental health ideology subscale (p=0.000); while male students showed positive attitude on authoritarian subscale (p=0.000) and social restrictiveness subscale (p=0.000) as compared to female students. Figure-1 shows gender wise distribution of barriers associated with health seeking behaviour. Both female and male students recognized lack of awareness (32.4% & 37.4%, respectively), and stigma attached to mental illness (28.7% & 18.0%, respectively) as the main barriers to help seeking behaviour of general public. Figure-2 shows gender wise distribution of first approaching options for people struggling with mental health issues. Both female and male students suggested that the patients who is struggling with mental health issues should first approach his/her parents (44.4% & 36.0%, respectively), followed by students who suggested that these people should first approach a psychologist or a psychiatrist (34.6% & 35.5%, respectively).

Table-2: Gender wise mean differences on CAMI and its sub-types (n=1003).

Groups	Gender	n	M	SD	t	Sig
Community Attitude towards Mental Illness (CAMI)	Male	422	125.1	8.004	-3.317	.001
	Female	581	126.7	7.425		
Authoritarianism	Male	422	30.35	4.35	4.753	.000
	Female	581	29.01	4.44		
Benevolence	Male	422	35.06	5.36	-7.436	.000
	Female	581	37.76	5.54		
Social Restrictiveness	Male	422	27.26	4.62	4.897	.000
	Female	581	25.70	5.22		
Community Mental Health Ideology	Male	422	32.44	4.96	-6.030	.000
	Female	581	34.36	5.00		

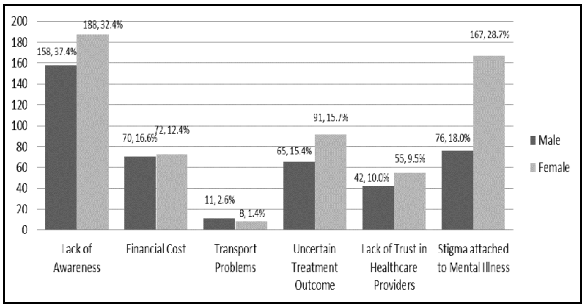

Figure-1: Gender wise distribution of barriers associated with health seeking behaviour

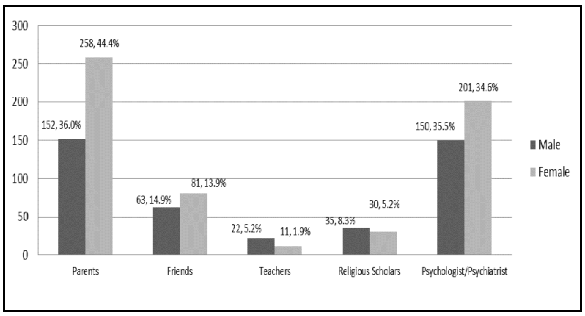

Figure-2: Gender wise distribution of first approaching options for people struggling with mental health issues

DISCUSSION

This study included undergraduate medical and dental students from various private and public institutes of Peshawar and found that they had an overall positive attitude towards people with mental illness. This sample may reflect the general attitude of an educated section of society towards people with mental health issues as medical students would be expected to have higher exposure and greater awareness to subjects such as mental health and illness. However, it is a very likely possibility that results in the case of the general public which also includes uneducated people may have been different. In one study, the inter-scale correlation of -.63 to -.77 has been reported where the lowest between authoritarianism and benevolence, and the highest is between social restrictiveness and CMHI.[19] Our study has shown inter-scale correlation of -.55 to .58, where the lowest is between benevolence and social restrictiveness and the highest is between benevolence and the overall CAMI scale. Another study has reported an inter-scale correlation of .49 to .70.[20] In our study participants showed an overall positive attitude towards people with mental health issues and females, as compared to males showed positive attitude on the overall CAMI scale (p=0.001), which is similar to a study conducted in the twin cities of Rawalpindi and Islamabad [(p=0.000); females (M=103.70, SD=9.40) and males (M=88.69, SD=8.21)].[21] Another study conducted in Czech Republic to assess the stigma of mental illness showed similar results stating it in another way that men possessed more stigmatizing attitudes towards people with mental illness.[22] Similarly, a study conducted on Italian medical students, using CAMI, in order to analyse gender differences, showed that female students have obtained less stigmatizing results in the total CAMI score; and on Benevolence and Social Restrictiveness subscales[23] while in our study, in addition to overall CAMI scale, female showed positive results in benevolence and community mental health ideology subscales. This can be attributed to the cultural differences. However, another study conducted in Ethiopia using CAMI, failed to show a significant difference between the males and females[24] while a study conducted in South India showed a high prevalence of stigma among females, which is in contrast to the results of our study[25]. Another study with contrast findings, conducted in Lahore, reported that majority of the university students and teachers held negative attitudes towards people with mental health issues.[26] This may be attributed to the fact of lack of awareness of students and teachers who do not have a background of medicine like those who participated in our study.

Increasing evidence suggests that significantly greater barriers exist to receipt of mental health care in comparison with physical health care. Our study showed that lack of awareness and stigma attached to mental illness were taken as the main

barriers, apart from many others, to health seeking behaviour of general public. A study conducted at University of Bedfordshire, UK using CAMI showed that awareness (knowledge) and stigma are interlinked and higher stigma was significantly associated with having low level of knowledge.[27] In a survey conducted among young adults in UK showed that the difficulties in accessing help were also associated with a lack of awareness and a multifaceted stigma especially "feeling of embarassment".[28] The same study showed that on the overall Barriers to Access to Care Evaluation (BACE) scale (stigma being a major subscale), females scored significantly higher (mean 36.5±14.3) than males (mean 30.5±16.7) (t=–2.46 and p=0.015).[28] In a systematic review, looking at the impact of mental health-related stigma on help seeking, disclosure concerns were reported to be the most commonly reported stigma barrier.[29] Considering this, a study has indicated the need to provide culturally appropriate mental health education to promote awareness and reduce stigma.[30]

Our study reported that most of the respondents were of the opinion that people with mental health issues should first approach their parents followed by respondents that suggested that they should first approach a specialist. Given these results, it is important to note that most of participants would most likely prefer to confide in their parents in case of facing any mental health issues. This highlights the significance of awareness regarding mental health and mental illness, not just for the younger generation, but also for parents, so that they know how to recognize a mental illness, provide support and get their children the professional treatment they may need. Also, more females in our study as compared to males, were of the opinion that people with mental health issues should first approach the concerned professional/ specialist (psychologist or a psychiatrist) which is favoured by another study where it was reported that men approach less health professionals (physicians) than women in their lifespan.[31]

It is safe to assume that due to exposure and greater awareness to subjects such as mental health and illness, medical students as expected had lower stigma. However, this may not be the case in the attitude of general public and a study to assess their attitude should be planned in our setup, in order to understand the magnitude of the problem and eventually devise strategies to be implemented to overcome these issues.

CONCLUSION

Sympathetic attitudes were reported by medical and dental students of Peshawar towards people with mental illness, significantly more by female students. The main barriers in seeking healthcare were lack of awareness and stigma attached to mental illness. There is undoubtedly need for improvement of mental health care facilities in Pakistan alongside de-stigmatization of mental illness through education and awareness.

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AUTHORS' CONTRIBUTION

MA, MI: Conceived and conceptualization the idea and wrote the manuscript. MA: Lead data collection and data entry and helped in the write-up of the study. MRS: Statistical analysis, write-up. MI: Critically revised and supervised the study. All authors contributed significantly to the submitted manuscript.

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