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Evaluation of mental health literacy in university students

ID Deniz Deniz Ozturan¹, ID Hanife Kocakaya²¹Ordu University, Faculty of Medicine, Department of Psychiatry, Ordu, Türkiye²Kirikkale University, Faculty of Medicine, Department of Psychiatry, Kirikkale, Türkiye

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Abstract

Mental health literacy (MHL) is defined as information about recognizing, managing, and preventing mental disorders. An increase in MHL in society will allow the behavior of individuals with mental illness to improve, decrease stigma, and allow these individuals to benefit from health services at an optimal level. In line with this information, we intended to investigate the mental health literacy levels of medical faculty students. The study included 179 students aged 18-25 years. The socio-demographic data form, Depression, Anxiety, Stress Scale (DASS-21) and Mental Health Literacy Scale (MHLS) were applied. Mean age of the participants was 23.09±3.09, and 66.4% (n=119) were women. The rate of participants who had applied to a psychiatric clinic in the past was 37.4% (n=67). When those with psychiatric admissions were compared with those without psychiatric admission in terms of MHL and DASS-21, the mean scores of recognizing mental disorders (p=0.021), attitude towards individuals (0.004), MHL total scale (0.006), anxiety (p=0.016) and stress (p=0.045) were significantly higher in those with psychiatric admissions. Of the participants, 15.0% (n=27) had a history of psychiatric disease. Recognition of mental disorders (p=0.023), attitude towards individuals (0.01), MHL total scale (0.028), depression (p=0.008), anxiety (p=0.001) and stress (p=0.001) mean scores of those with a history of psychiatric illness were significantly higher. Our findings showed that those with psychiatric admissions and a history of psychiatric illness had higher scores for recognizing mental disorders, attitudes toward individuals, and total scores. Increasing the number of individuals with MHL will be beneficial for recognizing mental disorders, seeking professional help, and receiving appropriate treatment.

Keywords: Mental health literacy, health literacy, university students

Introduction

Mental health is the state of well-being in which an individual copes with the normal stress of life and realizes a person's potential [1]. Individuals with mental disorders struggle to cope with normal life stressors and it is quite difficult for them to realize their full potential. Psychiatric disorders are subjected to stigmatization and lead to the emergence of emotions such as anxiety, anger, pity, and fear in people. People's attitudes turn into either a help or punishment-oriented behavior depending on the emotion they feel [2,3]. Stigmatization in mental disorders also stems from lack of information or misinformation about the disorders. It is believed that schizophrenia has no cure,

is contagious, is observed in dangerous individuals whose actions cannot be predicted, involves aggression, means a split personality, and stems from weak character and lack of willpower [4].

MHL means information about mental health that helps to recognize, prevent and manage mental health problems and was first defined by Jorm et al. [5]. With the increasing prevalence of mental disorders, Jorm expanded this definition by stating that mental health literacy consists of six components. These are; knowledge and beliefs about professional help, the ability to recognize mental disorders, knowledge about self-help interventions, attitudes that facilitate accurate recognition of

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Corresponding Author: Deniz Deniz Ozturan, Ordu University, Faculty of Medicine, Department of Psychiatry, Ordu, Türkiye
Email: dr.denizdeniz@gmail.com

mental disorders and help-seeking, and knowing how to obtain accurate information about men-tal health, knowledge and beliefs about the risk factors and causes of mental disorders [6].

The number of studies about this subject in our country is very few. Studies have been conducted mostly among mental health professionals [7,8]. A very recent study, similar to our study, investi-gated mental health literacy and its relationship with psychological resilience in university students [9].

Most mental disorders begin in young adulthood [10]. The most important reason for the late appli-cations of individuals with mental disorders to treatment is insufficient recognition of the mental disorder and inadequate help-seeking behaviors [11]. This study aims to evaluate MHL among uni-versity students.

Material and Methods

This is a descriptive and cross-sectional study. The population of the study consisted of 179 stu-dents who were actively studying at Ordu University Faculty of Medicine in the 2022-2023 academic year. The sample selection was not made, and the volunteers who filled out and approved the online questionnaire were included. Participants with chronic diseases requiring medical treatment and those receiving psychiatric treatment with their current condition were excluded from the study. The data of the study were collected in the period of January-March 2023. Sociodemographic data form, Depression, Anxiety, Stress Scale (DASS-21) and Mental Health Literacy Scale (MHLS) were applied to the participants. These questionnaires applied to the participants were brought together by the researchers in the form of consecutive questions using the "Google Forms". The forms were sent to the participants online via e-mail. During the study, the principles of the Decla-ration of Helsinki were followed.

Ethics committee approval was received for the study from Ordu University Faculty of Medicine Clinical Research Ethics Committee (2022/228).

Data Collection Tools

Sociodemographic data form: A sociodemographic data form developed by the researchers and including information such as age, gender, past history of psychiatric treatment, and psychiatric hospitalization for any reason was used.

Mental Health Literacy Scale (MHLS): The MHLS was developed by O'Connor et al. [12]. The scale originally consisted of 6 dimensions and 35 items. As a result of the Turkish validity and reliability study, it was seen that 22 items were validated in Turkish culture and that these 22 items accumu-lated in four sub-dimensions (F1, F2, F3 and F4). These sub-dimensions that emerged after expert opinions were named Attitude towards Individuals with Mental Illness (6 items), Attitude towards Mental Illnesses (7 items), Recognition of Mental Disorders (6 items) and Access to Mental Health Information (3 items) sub-dimensions. In the MHLS Turkish version, the MHLS total score ranges between 34 and 96, and there is no cut-off point

for the scale. As the score obtained from the scale increases the MHL level increases, and as the score decreases the MHL level decreases [13].

Depression, Anxiety, Stress Scale (DASS-21): The scale was developed by Lovibonda [14]. The Turkish validity and reliability study was performed by Sarıçam et al. There are 21 questions in total, 7 for each dimensions, to measure the dimensions of depression, stress and anxiety in the scale. DASS-21 is a 4-point Likert type scale; 0 "not suitable for me", 1 "somewhat suitable for me", 2 "usually suitable for me", and 3 "completely suitable for me" are scored. Getting a high score from DASS-21 indicates that the symptoms of depression, anxiety and stress increase in people [15].

Statistical Analysis

The variables with the normal distribution was analyzed with the Shapiro-Wilk test. Continuous variables were expressed as mean±standard deviation. The Independent Sample t-test was used for comparisons between two groups with normal distribution, and the Mann Whitney U test was used for comparisons between two groups that were not normally distributed. Spearman Correla-tion Coefficient was given for the association between scale scores. Multiple Linear Regression Analysis was used to determine the predictive effect of students' gender, mental illness and psy-chiatry referral values on MHLS and DASS-21. SPSS Version 21 program was used for analysis of the data and $p < 0.05$ was considered statistically significant.

Results

Mean age of the participants was 23.09 ± 3.09 , and 66.4% ($n=119$) of them were women. When the participants were compared with MHL and DASS-21 in terms of gender, women's recognition of mental disorders ($p=0.005$), attitudes towards individuals (0.022), MHL total scale (0.006), depres-sion ($p=0.003$), anxiety ($p=0.002$) and stress ($p<0.001$) mean score was found to be significantly higher. The rate of participants who had previous psychiatric illness was 37.4% ($n=67$). Participants with a history of psychiatric illness had significantly higher mean scores for recognition of mental disorders ($p=0.023$), attitude towards individuals ($p=0.01$), MHL total scale ($p=0.028$), depression ($p=0.008$), anxiety ($p=0.001$), and stress ($p=0.001$). The mean score of the participants with psychi-atric admission was 20.84 ± 3.19 for recognizing mental disorders, 28.69 ± 3.83 for attitudes towards the disease, 16.90 ± 4.85 for attitudes towards the individual, 11.79 ± 2.42 for accessing health infor-mation and 77.21 ± 9.01 for a total score. (Table 1) When those who had a psychiatric admission were com-pared with those without a psychiatric admission in terms of MHL and DASS-21, those who had an admission had significantly higher mean scores of recognizing mental disorders ($p=0.021$), attitude towards individuals (0.004), MHL total scale (0.006), anxiety ($p=0.016$), and stress ($p=0.045$). The rate of participants with a family history of mental illness was 24.0% ($n=43$). When the participants with a family history of mental illness and those

without a family history were compared with MHL and DASS-21, the mean score of recognizing mental disorders was found to be significantly higher ($p=0.005$). Accordingly, there was a positive and significant association between the sub-dimension of recognizing mental disorders and anxiety scores ($r=0.219$, $p=0.003$) and stress scores ($r=0.190$, $p=0.011$) (Table 2). Factors thought to affect the mental health literacy levels of the participants (gender, mental illness treatment history, psychiatry admission) were evaluated with multiple linear regression analysis. Accordingly, while the presence of mental illness was not found to be significant ($p=0.363$), gender ($p=0.012$) and the presence of psychiatric admissions ($p=0.049$) were found to have a predictive effect on the mental health literacy score. MHL score was found to be 3.14 units higher in women. Similarly, the mental health literacy score of students who have applied to psychiatry before was 2.66 times higher (Table 3).

Table 1. Comparison of MHLS and DASS-21 sub-dimensions with socio-demographic information

Variables	n	Recognizing Mental Disorders	Attitude Towards Disease	Attitude Towards Individuals	Access to Health Information	MHLS	Depression	Anxiety	Stress
Gender									
Female	119	20.01±2.79	28.50±3.28	16.14±4.69	11.59±2.19	76.24±7.88	6.42±3.67	4.87±3.85	5.77±3.18
Male	60	18.68±3.29	28.03±3.97	14.47±4.31	11.62±2.14	72.80±7.99	8.35±4.16	6.46±3.54	7.80±3.52
p		0.005^a	0.767 ^a	0.022^b	0.911 ^a	0.007^b	0.003	0.002	<0.001
Mental Disorder									
Present	27	20.70±2.11	28.41±4.21	17.41±5.40	11.70±2.61	78.22±8.59	10.07±5.25	8.41±4.26	9.52±4.57
Absent	152	19.36±3.12	28.33±3.40	15.26±4.41	11.58±2.09	74.53±7.86	7.28±3.73	5.49±3.38	6.69±3.15
p		0.023^a	0.884 ^a	0.010^a	0.514 ^a	0.028^b	0.008	0.001	0.001
Psychiatric Admission									
Present	67	20.84±3.19	28.69±3.83	16.90±4.85	11.79±2.42	77.21±9.01	8.39±5.04	6.90±4.21	7.87±4.24
Absent	112	19.40±2.93	28.13±3.33	14.79±4.32	11.48±2.01	73.81±7.18	7.29±3.37	5.35±3.26	6.67±2.96
p		0.021^a	0.313 ^a	0.004^a	0.213 ^a	0.006^b	0.277 ^a	0.016^a	0.045^b
Mental Disorder in the Family									
Present	43	20.33±3.59	28.02±4.10	16.60±5.74	11.53±2.50	76.49±9.35	9.09±4.63	8.14±3.73	9.05±3.72
Absent	136	19.32±2.79	28.44±3.33	15.26±4.18	11.62±2.07	74.64±7.59	7.26±3.83	5.23±3.43	6.51±3.25
p ^a		0.005^a	0.577 ^a	0.052 ^a	0.889 ^a	0.191 ^b	0.035	<0.001	<0.001

The mean±standard deviation was used to define the variables.
a: Mann Whitney U test, b: Independent Sample t test

Table 2. Analysis of the association between DASS-21 and MHLS

Variables		Depression	Anxiety	Stress
Recognizing Mental Disorders	r _s	0.142	0.219**	0.190*
	p	0.059	0.003	0.011
Attitude Towards Disease	r _s	-0.033	-0.054	-0.117
	p	0.659	0.471	0.118
Attitude Towards Individuals	r _s	-0.016	0.048	-0.012
	p	0.834	0.523	0.874
Access to Health Information	r _s	-0.139	-0.018	-0.165*
	p	0.063	0.811	0.028
MHLS	r _s	-0.023	0.050	-0.062
	p	0.763	0.504	0.409

**p<0.001 *p<0.05 significance level, rs: Spearman correlation coefficient

Table 3. Regression analysis table of the predictive effect of gender, mental disorder and psychiatry admission values of university students on MHLS

	β	Std. Dev.	t	p value	%95 Confidence Interval	
					Upper limit	Lower limit
Gender	3.144	1.240	2.536	0.012	0.698	5.590
Mental Disorder	1.666	1.826	0.912	0.363	-1.937	5.269
Psychiatric Admission	2.660	1.346	1.977	0.049	0.004	5.316
Constant	71.747	1.083	66.263	<0.001	69.610	73.884
Model R ² =0.287						
Model Significance=0.002; F=5.225						

Enter method was used in regression analysis

Discussion

In this study, medical faculty students were evaluated in terms of mental health literacy, and it was found that gender and psychiatric admission status were predictors of MHL. In addition, it was observed that the dimensions of recognizing mental disorders, the dimension of attitude towards individuals and MHL total scale scores of those who applied for mental health and those who had a mental illness were significantly higher.

Today, it is reported that mental disorders have reached serious levels due to increasing stress and life difficulties, and mental disorders occur at a rate of 70-75% in adolescents and young adult populations. Considering that our country is a developing country and has a young population, it can be said that we are a risky country in terms of mental disorders [16]. Therefore, evaluating and increasing MHL in the young population may be beneficial in terms of early recognition and prevention of mental disorders. In our study, which was planned in this context, it was seen that having a female gender was a predictor for MHL. In the literature, it has been reported that women seek help more often than men, and in addition to having adequate MHL levels in general, they are more successful in recognizing mental health disorders accurately [17, 18, 19]. In a study conducted with caregivers of individuals with mental illness, it was concluded that women's mental health literacy levels were higher than men's [20]. This may be explained by the fact that women are more prone to certain mental disorders. Studies show that women experience more mental health disorders than men (63.8% vs. 45.7%) [21]. Another explanation may be the way the symptoms of mental health disorders are described and perceived differently in both genders. For example, men tend to use more general terms, such as mental illness, rather than specific terminologies in describing mental disorders; this can lead to misidentification of certain mental health disorders. Studies reported that young men think that symptoms of mental health disorders as a reaction to an external cause, for example family problems rather than as a symptom of an illness [19, 22].

Another important finding of our study is that the presence of psychiatric admission is a predictor for mental health literacy. This may be explained by the fact that students with psychiatric admissions obtain information about mental illnesses through media or education. Studies have shown that mass media is an effective approach to improve mental health literacy and that such strategies improve individuals' knowledge levels, beliefs [23]. Confirming this view, it was observed in our study that those who had psychiatric admissions had higher scores for recognizing mental disorders, attitudes towards individuals, total MHL, anxiety and stress. It is stated in the literature that MHL can be improved with mental health education programs [24]. When the international literature is examined, it is seen that especially child-adolescent and young adult groups are focused on to increase mental health literacy and educational interventions are made to these groups [25].

In addition to the individual's attitude, belief and knowledge level, the negative attitude and stigmatization level of the society towards people with mental problems is also very important in seeking spiritual help. In a systematic review, it is reported that the biggest barriers to help seeking behavior for mental health services are shame and stigma [26]. In this context the concept of mental health literacy has a key role in recognizing mental disorders and seeking help. Confirming this view, it has been reported that there is a positive association between seeking treatment in case of a psychiatric problem and mental health literacy [5]. In a study in England, it was reported that MHL was statistically positively correlated with help-seeking behavior. [27]. In our study, it was observed that the dimension of recognizing mental disorders, the dimension of attitude towards individuals and MHL total scale scores of those with mental illness were significantly higher. This may be explained by the fact that these individuals are informed about mental illnesses by health professionals during their illness and/or obtain information through the media.

In our study, it was reported that the participants with a family history of mental illness had higher scores for recognizing mental disorders, anxiety, depression and stress. This can be explained by the fact that these individuals tend to investigate for mental disorders better and seek help due to the presence of an individual with a mental illness in the family. In another study, it was reported that mental health literacy rates were higher in people with a family history of mental disorders [28]. The high levels of anxiety, depression and stress can be explained by the high risk of developing mental disorders due to the hereditary nature of some mental disorders.

The relationship between the recognition of mental disorders and anxiety and stress scores can be explained by the fact that as the anxiety and stress levels of individuals increase, they gain information to understand the possible mental disorders that may develop in themselves. However, further studies are needed in this regard.

There are some limitations of our study. The most important limitation is the cross-sectional methodology. Due to the lack of follow-up studies, there may be many intervening variables that cannot be controlled and may affect the outcome. Another limitation is that psychological factors such as personality traits that may affect mental health literacy were not taken into consideration and the online questionnaire method was used.

Conclusion

In this study, the MHL levels of the students of the Faculty of Medicine who would work in the field of health were evaluated. Our study is important in terms of evaluating mental health literacy in the young population where mental disorders are frequently encountered. Therefore, increasing the MHL of individuals plays a key role in early recognition of mental disorders, seeking professional help and getting appropriate treatment [29]. In this context, it can be recommended to carry out educational studies

in Community Mental Health Centers (CMHCs), clinics and polyclinics to increase mental health literacy.

Conflict of interests

The authors declare that there is no conflict of interest in the study.

Financial Disclosure

The authors declare that they have received no financial support for the study.

Ethical approval

Ethics committee approval was received for the study from Ordu University Faculty of Medicine Clinical Research Ethics Committee (2022/228).

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