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Research Article

The Relationship between University Students' Beliefs toward Mental Illness and Stigmatization

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ABSTRACT

Aim: This study aimed to determine the relationship between the beliefs toward mental illness and stigmatization of health sciences faculty students.

Method: This descriptive study was carried out with the students of health sciences faculty in Istanbul. The sample population was composed of 792 students who agreed to participate in the study. Data were collected using the Information Form, Beliefs toward Mental Illness (BMI) scale, and Stigma scale through e-mail.

Results: The sociodemographic data of the students showed that 82.8% were female, 98.7% were single, and 30.8% were third-grade students. Of the students, 4.7% were diagnosed with psychiatric disorders, and 27% of them were diagnosed with generalized anxiety disorder, and 73.1% had not received any education related to mental illness. The mean scores of all BMI scale subdimensions were statistically significant for students diagnosed with mental illness than those for the ones who were not diagnosed with mental illness. The average stigmatization score was statistically significantly higher for students diagnosed with mental illness than that for the ones who were not diagnosed with mental illness.

Conclusion: As the negative beliefs toward mental illness increase, the stigmatization rates also increase; furthermore, students who are not educated are more likely to stigmatize.

Keywords: Beliefs, mental illness, stigma, university student

INTRODUCTION

A mentally healthy person carries out interpersonal relations in a balanced and harmonious way throughout his life; fulfills his responsibilities in the community with satisfaction; conveys knowledge, feelings, thoughts, beliefs, and attitudes in an appropriate place and time; and shows flexibility and respect for himself and his environment. However, a person diagnosed with mental illness has constant or recurrent deviations in the normal feelings, thoughts, and behaviors accepted by the society. The observation of these deviations causes the society to reject and stigmatize the person (Yüksel, Yılmaz, & Örekici-Temel, 2015).

The World Health Organization (WHO) defined *stigma* as a mark of shame, disgrace, or disapproval that results in an individual being rejected, discriminated against, and excluded from participating in a number of different areas of the society (World Health Organization, 2018). Stigmatization, which was first described by the American sociologist Goffman in 1963, is stated as being outside of the normal limits in the society, being less demanded by other individuals, decreasing the respectability of the individual, and treating the individual as defective and worthless (Bilge & Çam, 2010; Goffman, 2014; Yüksel et al., 2015).

An individual's beliefs and attitudes affect the stigmatization process. According to the definition of the Turkish Language Association, *belief or faith* means believing with the heart (Turkish Language Association, 2018). General beliefs occur with the acceptance of thoughts on a subject, which later becomes the attitudes of the individual. Positive attitudes toward individuals with mental illnesses contribute positively to the individual being more

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compatible with the disease, treatment, and rehabilitation process, whereas negative attitudes restrict individuals in social and economic areas of life (Ahuja, Dhillon, Juneia, & Sharma, 2007; Bilge & Çam, 2010; Ebrahimi, Jafarabadi, Areshtanab, Pourabbas, Dehghan & Vahidi, 2017; Güngörmüş, Ekinci, & Daş, 2014). People who are isolated from the community face many social problems such as being unemployed and homeless (Al-Naggar, 2013). The destructive effect of stigmatization in individuals with mental illness is excluded from society.

The society stigmatizes individuals by the sociodemographic characteristics of the individual, knowledge about the disease, and the mass media and assumes that individuals who have mental illness are dangerous, behave impulsively, harm their surroundings and themselves, and have interpersonal communication problems. The fact is that society exhibits stigmatizing attitudes and keeps themselves away from individuals with mental illness because of their fears against them (Çam, Bilge, Engin, Baykal Akmeşe, Öztürk-Turgut & Çakır, 2014).

Individuals diagnosed with mental illness throughout history have been stigmatized more than those diagnosed with other physical diseases (Al-Naggar, 2013; Yüksel et al., 2015). Besides leprosy, plague, and syphilis in the past, tuberculosis, cancer, obesity, acquired immune deficiency syndrome (AIDS), and epilepsy are among the stigmatized physical diseases. However, the reason for the stigmatization of psychiatric diseases is the long-term effects of many psychiatric diseases such as schizophrenia, bipolar disorder, and alcohol and drug addiction (Bilge & Çam, 2010).

From past to present, people with mental illnesses have always been stigmatized. It is known that doctors, nurses, teachers, etc. called as leaders of society are more likely to label the individuals with mental illness (Ebrahimi et al., 2017; Yüksel et al., 2015). A research conducted in India in 2014 found that 90% of patients diagnosed with mental illness reported that they were stigmatized regardless of age, gender, diagnosis of mental illness, and educational status (Ahuja et al., 2007; Pawar, Peters, & Rethod, 2014). The beliefs and thoughts of the health care workers who encounter these individuals more frequently affect their attitudes and behaviors toward these patients (Bilge & Çam, 2010).

Many individuals with mental illness try to combat stigma by hiding their diagnoses and avoiding seeking help. To establish self-esteem in individuals with mental disorders and fulfill their functional abilities are related to the positive attitudes of society toward general mental illnesses (Ebrahimi, Jafarabadi, Areshtanab, Pourabbas, Dehghan & Vahidi, 2017).

Stigmatized individuals usually experience social isolation. They prefer not to leave the house and do not want to be involved in the treatment, care, and rehabilitation process. These causes, in the long term, decrease the individual's desire to seek medical help and adversely affects the prognosis of the disease (Oban & Küçük, 2011a; Özer, Varlık, Çeri, İnce, & Arslan-Dicle, 2017). A previous study has shown that 40% of individuals diagnosed with mental illness were found to be unable to reach adequate medical care, and most of them were prone to receive low-quality medical care (Ebrahimi et al., 2017).

When the beliefs and stigmatization rates of psychiatric patients in Turkey and the world, there is a tendency from negative opinions to positive. However, this ratio is not sufficient (Yüksel et al., 2015). It is important to determine the beliefs, values, and attitudes of the leading individuals in the society and to educate these leaders to play a key role in terms of the effectiveness of the struggle against stigma and the raising awareness (Bilge & Çam, 2010; Çam et al., 2014; Yüksel et al., 2015). In a study conducted with the students of the Faculty of Theology who will be leading the society in the future, it was determined that their level of knowledge on mental illnesses would be effective in developing positive attitudes and reducing the stigmatization rate (Güngörmüş et al., 2014). Education has an indispensable place among the intervention of antistigma. In this context, education ensures the understanding of mental illnesses by the society, reduces negative judgments and the destructive effect of stigmatization, and helps to demonstrate positive attitudes toward individuals (Oban & Küçük, 2011).

In order to increase the effectiveness of education programs, it is recommended that these programs should be given to university graduate students, also university and high school students who are close to graduate. It is believed that informing the patient and his/her family on this issue will be effective in fighting against stigma. Individuals who participate in the training programs should spend time with in-

dividuals who are diagnosed with mental illness. It can be one of the important attempts to reduce the struggle against stigma (Bilge & Çam, 2010; Oban & Küçük, 2011b). When looking at the beliefs of nursing students and business students about mental illness, having education in this field and communicating with individuals diagnosed with mental illness create an effect of reducing stigma (Al-Naggar, 2007; Frempong & Spence, 2017; Vijayalakshmi, Reddy, Math, & Thimmaiah, 2013). The awareness training is given in universities and student societies that work voluntarily playing an important role in determining the future professional identity, beliefs, attitudes, and behaviors (Frempong & Spence, 2017; Janoušková, Weissová, Formánek, Pasz, & Motlová, 2017).

The aim of the study was to determine the relationship between the students' beliefs and stigmatization levels about mental illnesses in the health sciences faculty of a private university.

Research Questions

1. What are the belief levels of students about mental illness?
2. What are the students' stigmatization levels?
3. Is there a relationship between the students' beliefs and stigmatization levels?

METHOD

Study Design

This study was a descriptive, cross-sectional design.

Sample

The universe of this study consisted of the students of the Faculty of Health Sciences of a private university in Istanbul in the 2017-2018 academic year (n=2050). No sample selection was made in the study, and the whole universe was tried to be reached. The study was performed with 792 students who volunteered and continued the school in the dates when the study was conducted between May and June 2018.

After approval from the ethics committee and institution, research data were collected from the students through e-mail. Data were collected using the Information Form, Beliefs toward Mental Illness (BMI) scale, and Stigma scale.

Data Collection

Data were collected using the Information Form, BMI scale, and the Stigma scale.

Information Form: This form was developed by researchers in accordance with the literature and includes 13 questions, which are related to the sociodemographic characteristics, state of mental illness diagnosis, and knowledge level about mental illnesses of individuals and their families (Akgün-Çıtak et al., 2010; Avcil, 2014; Aydöner, 2009; Çay, 2017; Elçi, 2013; Ünal, Hisar, Çelik & Özgüven, 2010).

Beliefs toward Mental Illness Scale (BMI): The BMI scale was developed by Hirai and Clum in the USA in 2000 and measures the positive and negative beliefs of individuals with different cultural characteristics toward mental illness. It is a six-point Likert scale and consists of 21 items. In the validity and reliability study, the Cronbach's alpha coefficient for the American society was 0.89, and that for the Asian society was 0.91.

The validity and reliability analysis of Turkey's scale was made in 2008 by Bilge and Çam. BMI scale is rated as follows: "totally disagree" (0), "mostly disagree" (1), "moderately disagree" (2), "moderately agree" (3), "mostly agree" (4), and "totally agree" (5). There are three dimensions: dangerousness, poor social and interpersonal skills, and incurability. The dangerousness dimension expresses that mental illnesses and patients are dangerous. This dimension includes items 1, 2, 3, 6, and 13. The poor social and interpersonal skills dimension consists of items 4, 5, 8, 11, 12, 14, 15, 17, 18, and 21 and mentions the effects of mental illnesses on interpersonal relationships. It refers to the fact that the interpersonal relationships with an individual who has mentally ill. The incurability dimension is about the difficulties of treatment and care of mental illness. This dimension states that individuals with mental illness have an incurable life. These dimension items are 7, 9, 10, 16, 19, and 20. The scale is interpreted on both the total score and dimension scores, and a high score of the scale indicates negative beliefs. The Cronbach's alpha coefficient was found to be 0.82 (Bilge & Çam, 2008). In the present study, the reliability of the Cronbach's alpha coefficient of the scale was 0.878.

Stigma Scale: This scale was developed by Yaman and Güngör (2013) and measures the overall tendency of psychological stigma. The scale is composed of four subdimensions: discrimination and exclusion, labeling, psychological health, and prejudice. In developing the scale, the item-factor structure was

obtained by exploratory factor analysis. As a result of confirmatory factor analysis, it has been found that the models of the scale are both theoretically and statistically appropriate. The Cronbach's alpha internal consistency coefficient, Spearman–Brown correlation coefficient, and Guttman split-half coefficient were calculated for scale and factors in reliability analysis and were found to be 0.84, 0.85, and 0.85, respectively (Yaman & Güngör, 2013).

The five-point Likert scale consists of 22 items. The scale's lowest score is 22 and the highest score is 110, and individuals who scored <55 points in the Stigma scale have a lower tendency to be stigmatized. The reliability of the Cronbach's alpha coefficient was found to be 0.869.

Statistical Analysis

Data were analyzed using Statistical Package for Social Sciences 24.0 (IBM SPSS Corp.; Armonk, NY, USA) package program by appropriate statistical analysis methods according to parametric and nonparametric distribution. For descriptive statistical analyses, frequency distribution, percentage, mean, and standard deviation were used. The Kolmogorov–Smirnov test was used to evaluate the normal distribution. t-Test was used to compare the difference between two groups, and the Mann–Whitney U test was used to compare the difference between three and more groups. Categorical variables were evaluated by using the chi-square test. The results were evaluated at a 95% confidence interval and at a significance level of $p<0.05$.

Ethical Considerations

An ethical approval dated April 30, 2018 and numbered 2018/15-38 was received from Biruni University Non-Interventional Studies Board of Ethics in order to conduct the study. The study was conducted in accordance with the principles of the Declaration of Helsinki. The students who agreed to participate were informed about the study and their written and verbal consents were received.

RESULTS

A total of 792 students participated in the study. The sociodemographic characteristics of the participants are given in Table 1. 82.8% of the participants were female, 98.7% were single, 19.6% were in the nursing department, and 30.8% were third-grade students. 56.3% stated that their status is middle class. The mothers of 49.4% of the participants, and the fathers of 38.5% of the participants graduated from a primary school, and the mothers of 75.7% of the participants were housewives and the fathers of 38% of the participants were working.

Table 2 shows the distribution of students according to mental illness knowledge. Of the students, 4.7% were diagnosed with psychiatric disorders, 27% were diagnosed with generalized anxiety disorder, 52.5% were encountered with psychiatric patients, and 73.1% were not taking any education or training about mental illness.

It was determined that 18.3% of one family members of the students were diagnosed with mental illness, and 58.6% of them were third-degree relatives of the participants and 19.3% of them were diagnosed with schizophrenia.

The mean total score of the BMI scale was 47.58±15.9, and the mean total score of the Stigma scale was 46.82±12.7.

Table 3 provides a comparison of the mean scores of the students' beliefs toward mental illness according to the demographic characteristics of the students and their answers to the questions about mental illnesses.

A significant relationship was found between the incurability subdimension and dangerousness subdimension of BMI scale and the grade of the students ($p<0.05$). The mean score of incurability subdimension ($X^2=10.086$) in fourth-grade students and that of dangerousness subdimension ($X^2=9.446$) in second-grade students were higher than those in other grades.

The mean scores of all subdimensions of BMI in participants who were not diagnosed with mental illness were statistically significant compared with those who were diagnosed with mental illness ($p<0.05$).

The mean scores of the dangerousness and the poor social and interpersonal skills subdimensions were significantly higher in the students who did not have a family member or relative diagnosed with a mental illness ($p<0.05$; U=41.86, U=39.34).

It was found that the mean scores of the dangerousness and the poor social and interpersonal skills subdimensions for students who did not have any

Table 1. Distribution of students' sociodemographic characteristics (n=792)

Variable		n	%
Gender	Female	656	82.8
	Male	136	17.2
Department	Emergency relief and disaster management	14	1.8
	Nutrition and dietetics	124	15.7
	Child development	86	10.9
	Language and speech therapy	46	5.8
	Midwifery	38	4.8
	Occupational therapy	39	4.9
	Physical rehabilitation	102	12.9
	Nursing	155	19.6
	Audiology	65	8.2
	Health management	62	7.8
	Social services	61	7.7
Grade	1st Grade	172	21.7
	2nd Grade	205	25.9
	3rd Grade	244	30.8
	4th Grade	171	21.6
Marital status	Married	10	1.3
	Single	782	98.7
Income status	Less income than expense	100	12.6
	Equal income and expense	446	56.3
	More income than expense	246	31.1
Mother's education level	Illiterate	33	4.2
	Literate	391	49.4
	High school	266	33.6
	University and higher	102	12.9
Mother's profession	Housewife	598	75.5
	Officer	85	10.7
	Worker	74	9.3
	Self-employed	8	1.0
	Retired	27	3.4
Father's education level	Illiterate	4	0.5
	Literate	305	38.5
	High school	291	36.7
	University and higher	192	24.2
Father's profession	Officer	145	18.3
	Worker	301	38.0
	Self-employed	239	30.2
	Retired	107	13.5
Total		792	100

training/education about mental illnesses were significantly higher than for those who had training ($p<0.05$).

Although there was no significant difference between all subdimensions mean scores and total scores and gender, there was a statistically significant

Table 2. Distribution of students' mental illness knowledge

Variable		n	%
Do you have any mental illness?	Yes	37	4.7
	No	755	95.3
	Total	792	100
Diagnosis of the participants (n=37)	Schizophrenia	2	5.4
	Depression	8	21.6
	Generalized anxiety disorder	10	27.0
	Panic disorder	4	10.8
	Bipolar disorder	3	8.1
	Obsessive compulsive disorder	10	27.0
	Total	**37**	**100**
Have you ever been an encounter with a psychiatric patient?	Yes	416	52.5
	No	376	47.5
	Total	792	100
Have you got any training about mental illness?	Yes	213	26.9
	No	579	73.1
	Total	**792**	**100**
Are there any individuals in your family or relatives diagnosed with mental illness?	Yes	145	18.3
	No	647	81.7
	Total	792	100
The degree of intimacy in your family or relatives with individuals diagnosed with mental illness	1st Degree	42	29.0
	2nd Degree	18	12.4
	3rd Degree	85	58.6
	Total	**145**	**100**
Diagnosis of your family members or relatives diagnosed with mental illness	Schizophrenia	28	19.3
	Depression	24	16.6
	Generalized anxiety disorder	13	9.0
	Panic disorder	21	14.5
	Bipolar disorder	16	11.0
	Obsessive compulsive disorder	7	4.8
	Intellectual disability	4	2.8
	Other (behavioral disorders, sleep disorders, Tourette's syndrome, autism spectrum disorder)	6	4.1
	Unknown	26	17.9
	Total	**145**	**100**

difference between the total score and the grade, state of having a mental illness of the students and/or family members, encounter with the psychiatric patient, and getting a training about mental illness (p=0.326, p=0.032, p=0.000, p=0.036, p=0.002, and p=0.001, respectively).

Table 4 shows the comparison of the stigma mean scores with the students' demographic characteristics and their answers to the questions about mental illnesses. There was no statistically significant relationship between the grade and the state of having a mental illness of a family member (p>0.05).

When looking at the relationship between stigmatization and gender, it was found that the mean score of the Stigma scale was higher in men than in women, and there was a statistically significant relationship between them (U=30.06, p<0.05).

Table 3. Comparison of Beliefs toward Mental Illness scale's mean scores with the students' demographic characteristics and their answers to the questions about mental illnesses

Beliefs toward Mental Illness (BMI) scale												
	Incurability dimension			Dangerousness dimension			Poor social and interpersonal skills dimension			Total		
Variable	Mean	SD	U p	Mean	SD	U p	Mean	SD	U p	Mean	SD	U p
Gender												
Female	13.4	5.7	43.17 0.554	13.67	4.2	44.24 0.882	20.16	8.0	40.15 0.067	47.32	15.4	42.225
Male	13.7	5.9		13.51	4.9		21.57	9.1		48.80	18.1	0.326
Grade												
1st Grade	12.4	5.5		12.8	4.5		19.3	7.8		44.56	15.5	
2nd Grade	13.5	5.7	10.08* 0.018	13.8	4.1	9.446* 0.024	20.5	8.1	5.746* 0.125	48.02	15.2	8.839* 0.032
3rd Grade	13.8	5.9		14.0	4.4		21.2	8.7		49.10	16.9	
4th Grade	14.1	5.5		13.6	4.2		20.1	7.9		47.91	15.3	
Do you have any mental illness?												
Yes	11.4	6.3	10.90 0.024	11.8	4.5	10.72 0.017	13.3	6.6	6.738 0.000	36.6	15.1	8.179 0.000
No	13.6	5.6		13.7	4.3		20.7	8.1		48.11	15.7	
Have you ever been an encounter with a psychiatric patient?												
Yes	13.6	5.9	76.16 0.525	12.9	4.1	63.21 0.000	19.3	7.9	65.31 0.000	45.92	15.5	68.166 0.002
No	13.4	5.4		14.3	4.4		21.6	8.3		49.41	16.1	
Are there any individuals in your family or relatives diagnosed with mental illness?												
Yes	13.7	5.6	45.64 0.611	12.9	4.2	41.86 0.042	18.4	7.5	39.34 0.002	45.13	14.6	41.684 0.036
No	13.4	5.7		13.7	4.3		20.8	8.3		48.12	16.1	
Have you ever got any training about mental illness?												
Yes	13.1	5.6	59.41 0.430	12.6	6.1	49.98 0.000	18.4	8.2	50.60 0.000	44.23	15.7	52.194 0.001
No	13.6	5.7		14.0	6.3		21.1	8.1		48.81	15.8	

SD: Standard deviation
*Kruskal Wallis

It was found that the mean score of Stigma scale was statistically significantly higher for participants who were not diagnosed with mental illness than that for the ones who were diagnosed with mental illness (U=10.28 p<0.05).

The mean score of the Stigma scale the students who were not trained/educated about mental illnesses was significantly higher than that of those who had training/education (U=54.22, p<0.05).

Table 4. Comparison of Stigma scale's mean scores with the students' demographic characteristics and their answers to the questions about mental illnesses

Stigma scale			
Variable	**Mean**	**SD**	**U p**
Gender			
Female	45.52	11.9	30.061
Male	53.11	14.4	0.000
Grade			
1st Grade	44.85	11.7	6.355*
2nd Grade	46.38	11.5	0.096
3rd Grade	47.78	13.8	
4th Grade	47.98	13.1	
Do you have any mental illness?			
Yes	41.45	10.4	10.285
No	47.09	12.7	0.007
Have you ever been an encounter with a psychiatric patient?			
Yes	45.60	11.6	71.111
No	48.17	13.6	0.027
Are there any individuals in your family or relatives diagnosed with mental illness?			
Yes	44.94	11.2	43.094
No	47.25	12.9	0.126
Have you ever got any training about mental illness?			
Yes	44.42	11.0	54.228
No	47.71	13.18	0.009

SD: Standard deviation
*Kruskal Wallis

There was a positive relationship between beliefs and stigmatization toward mental illness and this relationship was statistically significant (r=0.057, p<0.05). A positive linear relationship was found between the BMI's subdimensions and stigmatization. Those who believe that patients with mental illness are dangerous (r=0.391, p<0.001) express that mental illnesses affect interpersonal relationships (r=0.496, p<0.001), and experience feelings of incurability (r=0.556, p<0.001) stigmatize more. According to this finding, the higher the negative beliefs toward mental illness, the higher the stigma rates (Table 5).

Table 5. Correlation between beliefs and stigmatization toward mental illness

	n	r	p
Stigma Scale			
Beliefs toward Mental Illness Scale	792	0.577	0.000
Stigma and Dimensions of Beliefs toward Mental Illness			
Stigma			
Dangerousness dimension	792	0.391	0.000
Stigma			
Incurability dimension	792	0.496	0.000
Stigma			
Poor social and interpersonal skills dimension	792	0.556	0.000

DISCUSSION

The university education helps the students to develop positive attitudes and behaviors. This process also contributes to the development of positive attitudes and behaviors toward individuals with mental illness. The future health professionals, who will work with healthy and sick individuals in their professional lives, will be a role model for the society with their behaviors. For this reason, it is important to determine university students' beliefs about individuals with mental illness and their opinions on stigmatization.

In the literature, it is observed that men have more negative thoughts than women. Some of the men thinks that mental illnesses are treatable, but they are more likely to show more social distance behavior than women (Demirören, Şenol, Aytuğ Koşan, & Saka, 2015; Ünal et al., 2010). Günay et al. (2016) found that female nursing students were more positive than male nursing students (Günay, Betikol, Beycan, Ekitli, & Yıldırım, 2016). According to the findings of our study, men were more likely to stigmatize than women. The results of this study are similar to those in the literature.

Furthermore, Sönmez, Tosun and Köşger (2018) did not find a significant relationship between gender and beliefs toward mental illness in their study.

The age and level of education of an individual are also effective in stigmatizing individuals with mental illness. In a study, it was found that the higher the age of university students, the higher the belief that individuals with mental illness are dangerous. Although it is thought that it will be more positive in terms of understanding the status of advanced age, the opposite result is obtained (Al-Naggar, 2013; Şahin-Tarım & Yılmaz, 2018). Güngörmüş et al. (2014), in his study with students, determined that there

was no relationship between the age and the grade levels of the students' beliefs about mental illness (Güngörmüş et al., 2014). However, in our study, fourth-year students' mean scores of incurability subdimension and those of second-year students' dangerousness subdimension were found to be high. This may be due to the increase in age and students' grade.

In a study conducted with nurses, nurses who work with individuals with mental illnesses have more positive attitudes than other nurses, and they associate this positive attitude with their education (Akgün-Çıtak et al., 2010; Bilge & Çam, 2010). In a randomized controlled study, a movie about antistigma awareness was shown to the medical faculty students, which helped to decrease their dangerousness perception and social distances (Kerby, Calton, Dimambro, Flood, & Glazebrook, 2008; Şahin Tarım & Yılmaz, 2018). Schafer, Wood and Williams (2011) reported in a study with psychiatric nurses that nurses had a more positive attitude toward individuals with mental illness because they knew better about mental illness and care process (Schafer, Wood, & Williams, 2011).

In the literature, it is emphasized in many studies that the knowledge and skills learned for mental illnesses are effective in preventing prejudices and misconceptions (Bilge & Çam, 2010; Çam & Bilge, 2013). However, there are studies that contradict these findings. These studies suggest the addition of innovative and healing revisions to curricula in nursing and medical education such as having mental illness and antistigma topics to classes (Oban & Küçük, 2011; Paksoy-Erbaydar & Çilingiroğlu, 2010). When the attitudes of nursing students toward individuals diagnosed with schizophrenia were examined, it was found that education does not make a positive change except increasing knowledge of mental illness and help-seeking behavior (Kayahan, 2009). It has been determined that nursing and medical faculty students practicing in psychiatric services have increased knowledge and a more positive attitude compared with students who do not have such practices (Demirören et al., 2015; Günay et al., 2016). In a study conducted by Markström et al. (2009), nursing students who completed their clinical hours in psychiatric wards stated that individuals with mental illness are less dangerous. The literature is consistent with the findings of this study.

It is not only the experience in psychiatric services but also having a mental illness or having a family member/relative who has a mental illness effect to develop positive attitudes and behaviors (Aromaa, Tolvanen, Tuulari, & Wahlbeck, 2011; Yüksel et al., 2015). When students experiencing the diagnosis and treatment process of mental illness were analyzed, a significant decrease was found in the dangerousness subdimension of BMI (Oban & Küçük, 2011). Granados-Gámez, López Rodríguez, Corral Granados, & Márquez-Hernández (2016) found that having a friend or person who is diagnosed with mental illness in the neighborhood decreases the stigmatizing attitude. The educational status of the family members and their experiences were found to affect the knowledge and attitude of the students against stigma (Savrun et al., 2007). This result of our research is consistent with the literature.

When other conflicting studies in the literature were analyzed, university students state that having a friend/family member or relative diagnosed with a mental illness is shameful and that these people are defined as dangerous (Ünal et al., 2010).

It is very important to reduce these attitudes and behaviors that constitute a major obstacle to the help-seeking the process of mentally ill individuals and to encourage their participation in society. These studies, which mostly are descriptive, emphasize the importance of the subject and the necessity of future qualitative studies.

Study Limitations

The study results are limited to the data obtained from the students of the Faculty of Health Sciences of a private university in Istanbul. The beliefs toward the mental illness level measured in the study are limited to the measurements obtained using the BMI scale developed by Bilge and Çam (2008), and the level of stigmatization toward the mental illness is limited to the measurements obtained using the Stigma scale developed by Yaman and Güngör (2013).

CONCLUSION AND RECOMMENDATIONS

In line with the results of the study, university students' beliefs about mental illness were effective in stigmatizing these individuals. Age, gender, grade/class, diagnosed with a mental illness, an encounter with mentally diagnosed individuals, and knowledge about mental illnesses affect students' beliefs.

Training can be an effective way to change negative thoughts and attitudes of the students who will be a role model for the society and serve as healthcare professionals. It is suggested that the education curricula should be reviewed in a way to raise awareness about stigmatization because students studying in the health departments will meet with individuals with mental illness in the future. Defining the level of beliefs and stigmatization of university students before planned training is effective in determining the content of education and will help to increase the number of scientific studies in the literature.

Ethics Committee Approval: Ethics committee approval was received for this study from the ethics committee of Biruni University Non-Interventional Studies Board of Ethics. (approval no 2018/15-38).

Informed Consent: Written and verbal informed consent was obtained from participants who participated in this study.

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