Archives of Psychiatric Nursing 41 (2022) 348–353

Contents lists available at ScienceDirect

Archives of Psychiatric Nursing

journal homepage: www.elsevier.com/locate/apnu

The relationship between beliefs toward mental illnesses, empathic tendency and social distancing in university students

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ARTICLE INFO

Keywords:
Beliefs toward mental illnesses
Empathic tendency
Psychiatric nursing
Social distance

ABSTRACT

This study was conducted to determine the level of beliefs toward mental illnesses in university students and to examine its relationship with empathic tendency and social distance level. This descriptive and relational study was conducted at the Faculty of Health Sciences and Faculty of Nursing of a state university in Turkey. The sample of the study consisted of 678 students studying in the 4th grade of these faculties. Personal Information Form, the Beliefs Toward Mental Illness Scale (BMI), the Empathic Tendency Scale (ETS), and the Social Distance Scale (SDI) were used to collect data. It was determined that there was a high level of negative relationship between the students' mean BMI score and the age variable and the empathic tendency and social distance mean scores. It was seen that the mean Empathic Tendecy Scale and Social Distance Scale scores accounted for 86.6 % of the change in the mean BMI score (Adjusted R2 = 0.826). The mean BMI score of the students was found to be below the medium level. On the other hand, it was found that empathic tendency and social distance mean scores were above the medium level and had an effect on the mean BMI score. Psychosocial factors that are effective in the emergence of negative beliefs about mental illnesses in students should be investigated and studies should be carried out to increase awareness about negative beliefs.

Introduction

The World Health Organization (WHO) has reported that mental illnesses and substance use disorders account for 10 % of global diseases and 30 % of the non-fatal disease burden (World Health Organization, 2019). In Turkey, mental illnesses accounts for 19 % of the disease burden (Ministry of Health, 2011). Mental health problems are more common in women than in men, and the prevalence increases with age (Ministry of Health, 2013). The fact that mental illnesses occur in every age group negatively affects individuals, families and the society, and the incidence has been increasing (Çakmak and Konca, 2019; Kılıç, 2020). Understanding beliefs about mental illnesses and attitudes toward individuals with mental illnesses is necessary (Malas, 2019), and examining the relationship between these beliefs and different variables is important (Çalık Koyak and Arslantaş, 2020).

The concept of empathic tendency is defined as the ability to empathize (Saygılı et al., 2015). It has been stated that individuals with strong empathic tendencies can easily feel the emotions of another person, use their problem-solving skills effectively, increase their social sensitivity, approach events without prejudice, are willing to help others, and are more moderate in interpersonal relations (Karaca et al., 2013). In addition, the concept of empathic tendency is considered a variable that is related to beliefs about mental illnesses (Eren and Gürhan, 2020).

It has been shown that many people do not want to be in close relationships with individuals with mental illnesses and they avoid establishing close relationships with them (Lanfredi et al., 2019; Lee and Seo, 2018; Toner et al., 2018; Tsai et al., 2020; Yılmaz and Şaşman Kaylı, 2020). This situation has given rise to the consideration of the concept of social distance (Arkar, 1991). The concept of social distance has been defined by Bogardus (1933) as the degree of sympathetic understanding functioning between the individual and the group or groups. It reveals the feeling of discomfort in an individual in situations such as marriage with a member of an “outgroup”, or being close friends with someone in the outgroup.

When the literature is examined, it is seen that there are studies examining the relationship between beliefs about mental illnesses and empathic tendency (Eren and Gürhan, 2020; Pascucci et al., 2017; Vagheei et al., 2018) and social distance (Alpan et al., 2018; Demirören et al., 2015; Durat et al., 2017; Okumuşoğlu, 2017). However, the

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https://doi.org/10.1016/j.apnu.2022.09.009
Received 8 April 2022; Received in revised form 2 September 2022; Accepted 18 September 2022
Available online 25 September 2022
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problem is global and the reasons for negative beliefs about mental illnesses need to be studied in different populations. It may be especially important to understand the beliefs of university students about mental illness because they will shape the future of society. The concerns are about transferring the negative beliefs about mental illnesses to future generations, taking responsibility for fostering positive beliefs instead of negative beliefs, reintegrating individuals with mental illnesses into society, and improving the mental health of the community. Research on this issue may be beneficial in terms of taking measures and adopting educational policies in higher education institutions. It is important to reveal the beliefs and attitudes of future health professionals since it is believed that the positive or negative beliefs of health students studying at undergraduate level about people with mental illnesses may affect the quality of care provided to these people, and even their families and the society. In addition, it is believed that it is necessary to identify whether the experiences senior students have obtained within the scope of the theoretical and practical courses in their departments cause a difference in their beliefs and attitudes toward mental illnesses.

In this context, the study was conducted to determine the beliefs of senior health students toward mental illnesses and to investigate the relationship between beliefs about mental illnesses and empathic tendency and social distance. In particular, the present descriptive-correlational study was conducted to address the following questions:

RQ 1. What are the mean beliefs toward mental illnesses, empathic tendencies, and social distance scores of university students?

RQ 2. Does the mean score for beliefs toward mental illnesses differ according to sociodemographic and educational characteristics of university students?

RQ 3. Is the level of empathic tendencies and social distance a determinant of beliefs toward mental illnesses in university students?

Methods

Design

This descriptive and relational study was carried out to reveal the beliefs of university students about mental illnesses and to investigate the relationship between these beliefs and the level of empathic tendencies and social distance.

Participants

The research was carried out at a state university in Turkey. During the 2020–2021 academic year, 209 senior students studying in the Department of Nursing in the Faculty of Nursing and 104 senior students studying in the Department of Midwifery, 83 senior students studying in the Department of Social Work, 149 senior students studying in the Department of Health Management, 177 senior students studying in the Department of Child Development and 95 senior students studying in the Department of Nutrition and Dietetics in the Faculty of Health Sciences, ($n = 817$ students) participated in the study. The G-power 3.1.9.2 program was used to determine the sample size (Şahin Tarım and Yılmaz, 2018); with a 0.05 margin of error, 0.95 power, and 0.14 effect. Taking into account the mean score of the BMI scale and the standard deviation value (54.79 ± 22.52), a minimum of 662 subjects was determined as the target sample size in the current study. Senior students who were studying in the Faculty of Health Sciences and the Faculty of Nursing and who volunteered to participate were included in the study. Students with a diagnosis of mental illness and/or members of in their families were excluded from the study. Ultimately, 678 students who met the inclusion criteria participated using the sampling technique of convenience willingly in the study and formed the research sample.

Instruments

A Personal İnformation Form, the BMI Scale, the Empathic Tendency Scale (ETS), and the Social Distance Scale (SDI) were used to collect data.

Personal information form

A Personal Information Form was designed considering previous reports in the literature (Arslantaş et al., 2019b; Günay et al., 2016; Şahin Tarım and Yılmaz, 2018). It consisted of seven questions aiming to determine the students' sociodemographic characteristics (age, gender, marital status, perception of economic status, and family type) and educational characteristics (department in which they study and courses taken on mental illnesses).

Beliefs toward mental illness scale (BMI)

The BMI Scale was developed by Hirai and Clum (2000) to determine negative beliefs and attitudes toward mental illnesses. The Turkish adaptation of the scale was by Bilge and Çam (2008). The scale consists of 21 items on a six-point Likert-type scale (0 = totally disagree, 5 = totally agree) and three subscales: “Dangerousness”, “Helplessness and Impairment in Interpersonal Relationships”, and “Shame”. The “dangerousness” subscale includes items 1, 2, 3, 4, 5, 6, 7 and 13 and suggests that mental illnesses and people with mental problems are dangerous. The “Helplessness and Impairment in Interpersonal Relationships” subscale expresses the helplessness of the individual in the process of interpersonal relations with individuals with mental illnesses and includes items 8, 9, 10, 11, 14, 16, 17, 18, 19, 20 and 21. The “Shame” subscale, on the other hand, indicates that individuals with mental illnesses experience a sense of embarrassment and includes items 12 and 15. In the validity and reliability study conducted by Bilge and Çam (2008), the total Cronbach's alpha of the scale was found to be 0.82; and the Cronbach's alpha was 0.71 for the Dangerousness subscale, 0.80 for the Helplessness and Impairment in Interpersonal Relations subscale, and 0.69 for the Shame subscale. The scale score was interpreted using both the total score (minimum 0 point and maximum 105 points) and the subscale scores. High scores indicate negative beliefs about mental illnesses. In this study, the Cronbach's alpha coefficient of the scale was calculated as 0.88.

Empathic tendency scale (ETS)

The ETS was developed by Dökmen (1988) to measure the ability to empathize and the emotional component of the phenomenon of empathy. The scale consists of 20 items on a five-point Likert-type scale (1 = totally disagree, 5 = totally agree). Dökmen (1988) administered the ETS to a group of 70 university students twice, with an interval of three weeks, and calculated the correlation between the scores obtained from these two applications, as 0.82. Tanrıdağ (1992) tested the reliability of the ETS with 30 people, including psychologists, psychiatrists, and social workers, and the resulting Cronbach's alpha values were 0.80, 0.70, and 0.79, respectively. Items 3, 6, 7, 8, 11, 12, 13, and 15 on the scale are reverse scored. The minimum and maximum points that could be obtained from the scale are 20 and 100. A high score on the scale indicates that the level of empathic tendency is high. In this study, the Cronbach's alpha coefficient of the scale was calculated as 0.75.

Social Distance Scale (SDI).

The SDI was developed by Arkar (1991) to measure the preferred social distance between a person and an individual with a mental illness. The scale consists of 14 items on a seven-point Likert-type scale (1 = not disturbing at all, 7 = definitely disturbing). There are cases with paranoid schizophrenia and anxiety disorder in the scale, and there are questions about cases that do not have a clear psychiatric diagnosis. Only the questions about paranoid schizophrenia were given to the students. In the study conducted by Arkar (1991), the Cronbach's alpha was calculated as 0.88. A minimum of 14 points, and a maximum of 98 points can be obtained from the scale. A high score indicates extensive

social distance. In this study, the Cronbach's alpha coefficient of the scale was calculated as 0.94.

Online survey

Due to the COVID-19 pandemic, there was no face-to-face education at universities in Turkey in the 2020–2021 academic year. The data collection tools were modified to have an online questionnaire design and the data were collected between January and March in the 2020–2021 academic year. The online survey was conducted using the Google Forms. A pilot study was initially performed with 10 participants. The pilot study results suggested that no correction was required in the online questionnaire. It took approximately 20 to 25 min for the participants to respond to the questions in the scales. After receiving approval from the Ethics Committee of the university, the list of students was obtained from the Student Affairs Office. Before the data collection process started, the students were informed about the purpose of the study and their informed consent was obtained. Data were collected online for three months. Due to the risk of using the same data more than once, the copies of the completed questionnaires were deleted after data entry.

Data analysis

The IBM SPSS 22 was used to analyze the data, including descriptive statistics. The conformity of the data to normal distribution was evaluated using the Kolmogorov Smirnov test and Q-Q plots. With the reliability analysis, the Cronbach's alpha coefficient values for the total and subdimensions of the BMI, the ETS and the SDI were calculated. In the analysis of the data, *t*-test, one-way ANOVA, Pearson's correlation analysis, and the backward method were chosen for independent groups and multiple regression analysis was also used. The results were evaluated at a 95 % confidence interval and $p < 0.05$ significance level.

Ethical approval

Institutional permissions from the relevant institutions and ethical approval from the local ethics committee were obtained for the study. Consent was obtained from the students who participated in the study at the beginning of the study through the Informed Voluntary Consent Form. The principle of "Respect for Human Dignity" was adhered to by informing the participants about the purpose of the study and how the data will be used; the principle of "Respect for Autonomy" was followed by ensuring that the participants are free to participate in the study; and the principle of "Confidentiality and Protection of Confidentiality" has been fulfilled by ensuring that the responses given throughout the study will remain confidential. In addition, in order to use the Beliefs Toward Mental Illness Scale, the Empathic Tendency Scale and the Social Distance Scale, the necessary permissions were obtained from the authors, who adapted the scales into Turkish, via e-mail.

Results

The mean BMI Scale score of the students was found to be 51.01 ± 16.17. The mean score of the dangerousness subdimension was 40.0 ± 22.98, while the mean score of helplessness and impairment in interpersonal relationships and shame subdimensions were 26.57 ± 10.03 and 1.45 ± 2.00, respectively. The ETS mean score of the students was 70.89 ± 9.51, and the mean SDI score was found to be 68.78 ± 19.86 (Table 1).

The average age of the students was 21.90 ± 1.59, and 90.1 % of the participants were female. It was determined that 94.8 % of the students were single, 75.7 % perceived their economic status as medium, and 86.4 % lived with a nuclear family. It was revealed that 23.7 % of the students had their education in nursing, 12.8 % in midwifery, 10.9 % in social work, 18 % in health management, 21.8 % in child development and 12.7 % in nutrition and dietetics. In addition, it was found that 81.9 % of the students took courses on mental illnesses. No statistically significant difference was found between gender and family type variables and the beliefs toward mental illness total mean score ($p > 0.05$). It was further observed that married students had higher beliefs toward mental illness total mean score than the single students, and the difference was found to be statistically significant ($p < 0.05$). It was found that those who perceived their economic status as bad had higher beliefs toward mental illness total mean score than those who perceived their economic status as moderate or good, and the difference was statistically significant ($p < 0.05$). There was a statistically significant difference between the department where the students studied and the beliefs toward mental illness total mean score ($p < 0.05$), and the difference was attributed to those who studied in the child development department. It was found that the total mean score for the students who did not take courses on mental illnesses was higher than those who took courses on mental illnesses, and the difference was statistically significant ($p < 0.05$) (Table 2).

Table 1
The mean scores of the students' on the Beliefs Toward Mental Illness Scale (BMI) and its sub-dimensions, the Empathic Tendency Scale (ETS), and the Social Distance Scale (SDI).

Scales and Sub-Dimensions	n	Matter Number	Mean (SD)	Min-Max
Belief toward mental illness scale total score	678	21	51.01 ± 16.17	8–99
Dangerous sub-dimension	678	8	40.0 ± 22.98	0–40
Helplessness and interpersonal relationship deterioration sub-dimension	678	11	26.57 ± 10.03	2–55
Shame sub-dimension	678	2	1.45 ± 2.00	0–10
Empathic tendency scale total points	678	20	70.89 ± 9.51	32–94
Social distance scale total point	678	14	68.78 ± 19.86	14–98

When the ages of the students and the scores for the beliefs toward mental illness were compared, a negative correlation was found between age and the level of beliefs toward mental illnesses. As the age of the students increased, the BMI score decreased ($p < 0.05$) (Table 3).

Multiple regression analysis was performed with the backward method in order to analyze the effect of the mean empathic tendencies and social distance score on the total BMI mean score. It was found that the empathic tendency and social distance mean scores had a highly significant effect on the total BMI mean score ($p < 0.001$). The regression analysis revealed that empathic tendency and social distance mean scores had a negative effect on the total BMI mean score. It was further observed that the mean empathic tendency ($\beta = -0.746$) and social distance ($\beta = -0.628$) scores explained 86.6 % (Adjusted $R2 = 0.826$) of the change in the total BMI mean score (Table 4).

Discussion

When the beliefs of university students studying in health fields were examined, it was seen that negative beliefs toward mental illnesses were at a low/moderate level. Cremonini et al. (2018) examined the attitudes of healthcare professionals toward mental illnesses, and they reported that negative beliefs about mental illnesses were at a low/moderate level. Similarly, Dal et al. (2018) investigated the attitudes of university students studying in the Faculty of Nursing and revealed that the students had positive beliefs about mental illnesses. The findings obtained in the current study are relatively positive and compatible with the findings of previous studies. However, it can be deduced from the literatüre that beliefs about mental illnesses can change depending on factors such as cultural characteristics, upbringing, and lack of

Table 2
The distribution of the total mean score of the beliefs toward mental illness according to the sociodemographic and educational characteristics of the students.

Variable	n	%	Level of belief toward mental illness Mean (SD)	Test value P
Gender				
Male	67	9.9	50.67 ± 18.23	t: 3.29
Female	611	90.1	51.05 ± 15.94	p: 0.072
Marital status				
Married	35	5.2	**55.48 ± 18.59**	t: 1.239
Single	643	94.8	50.77 ± 16.01	p: 0.02*
Perception of economic situation				
Good	119	17.6	52.23 ± 15.64	F: 1.095
Medium	513	75.7	50.53 ± 16.04	p: 0.013*
Bad	46	6.8	**53.23 ± 18.80**	
Family type				
Wider family	586	86.4	50.97 ± 16.15	t: 0.296
Extended family	92	13.6	51.28 ± 16.40	p: 0.587
Department of education				
Nursing	161	23.7	46.36 ± 15.25	
Midwifery	87	12.8	50.22 ± 14.44	
Social service	74	10.9	49.89 ± 16.56	F: 1.162
Healthcare management	122	18.0	52.08 ± 17.27	p: 0.021*
Child development	148	21.8	**56.16 ± 16.61**	
Nutrition and dietetics	86	12.7	49.86 ± 15.61	
Status of taking courses for mental illnesses				
Yes	555	81.9	50.44 ± 15.98	t: 1.930
No	123	18.1	**53.60 ± 16.83**	p: 0.04*

t: t-test in independent groups F: ANOVA test, * < 0.05.

Table 3
The relationship between the age of the students and the total mean score of the beliefs toward mental illness.

Variable	Level of belief toward mental illness
Age	r: −0.73 p: 0.039*

r: Pearson correlation analysis.
* $p < 0.05$.

Table 4
The effect of students' empathic tendency and social distance mean scores on the total mean scores of the beliefs toward mental illness.

Collinearity					
Determinants	ß	T	P	Tolerance	VIF
Empathic tendency score mean	−0.746	−5.367	0.000*	0.321	2.067
Social distance score mean	−0.628	−4.729	0.000*	0.376	1.629
	R = 0.819	R^2 = 0.792	Adjusted R^2 = 0.826	F = 3271.327	$p <$ 0.000*

* $p < 0.001$.

knowledge (Eksteen et al., 2017; Shehata and Abdeldaim, 2020) beliefs are shaped by the individual's view of the world and reactions, and these beliefs are subjective and changeable. (Çam and Bilge, 2013).

In the current study, the mean score for the dangerousness subdimension of the BMI was found to be high. The mean score for the helplessness and impairment in interpersonal relations subdimension mean score was below the medium level; and the mean score for the shame subdimension was low. In the study of Kara (2015), which included social work students, the mean score for the dangerousness subdimension was found to be higher than the mean scores for the other subdimensions. This finding is similar to the finding of the current study. In the study conducted by Behera and Ku (2021), it was observed that approximately 50 % of the students defined individuals with mental illnesses as patients who could harm others. It was suggested that this reflects society's perspective on individuals with mental illnesses and is related to the stigmatization of being “dangerous” and “an individual who is uncertain about what to do”.

In this study, no statistically significant difference was found between gender and the total mean BMI score. There have been many studies which reported that gender does not have an effect on beliefs about mental illnesses (Chauhan and Parmar, 2017; Dal et al., 2018; Javed et al., 2006); however, it has been shown in other studies that gender has an effect on beliefs about mental illnesses and women have more positive beliefs than men (Angermeyer and Matschinger, 2003; Şahin Tarım and Yılmaz, 2018; Savrun et al., 2007). The differences in the studies may stem from cultural characteristics, social norms, upbringing, knowledge levels of the participants, and stereotypes about mental illnesses. In addition, 90.1 % of the participants in the current study was female. Examining beliefs about mental illnesses in groups with a homogeneous gender distribution should be considered in the future.

The current study revealed that the difference between the students' marital status and the total BMI mean score was statistically significant, and the total BMI mean score was found to be higher in married people than in single people. Previous studies reported that single students have more positive beliefs about mental illnesses than married students (Riana et al., 2008; Şahin Tarım and Yılmaz, 2018; Ünal et al., 2010), which is in agreement with the current study. Married students have a family, and may change their roles and responsibilities, which may affect their perspectives on individuals with mental illnesses.

This study showed that the difference between students' perceptions of their economic situation and the total BMI mean score was statistically significant, and the BMI mean score was higher in students who perceived their economic situation as bad. Many studies have shown no significant difference between income levels and belief levels about mental illnesses (Akgün Çıtak et al., 2010; Oban and Küçük, 2011; Özmen et al., 2003). There are, however, studies that pointed to a relationship between beliefs about mental illnesses and perceived economic status (Dessoki and Hifnawy, 2009; Tümer et al., 2019; Ünal et al., 2010). Ersoy and Varan (2007) stated that individuals with high socioeconomic status had more knowledge about mental illnesses and lack of knowledge influences beliefs. Additionally, it can be said that students who perceive their economic situation as bad may perceive an individual with a mental illness as a financial burden, and in this context, their beliefs about mental illnesses may be more negative than the beliefs of students who perceive their economic situation as moderate or good.

No statistically significant difference was found between the family types of the students and the total BMI mean score. Şahin Tarım and Yılmaz (2018) stated that students with large families had negative beliefs about mental illnesses, whereas Arslantaş et al. (2019b), who conducted a study with high school students, showed there was no relationship between family type and beliefs about mental illnesses. This result is similar to results the current study. In this context, it is suggested that factors such as the cultural characteristics of the family, educational status, economic status, upbringing, and knowledge level about mental illnesses are more effective in procuding changes in beliefs about mental illnesses, rather than the number of individuals in the family.

The total BMI mean score of the students studying in the nursing department was found to be lower than that of the students studying in other departments. Studies have suggested that nursing students' beliefs about mental illnesses are positive (Akgün Çıtak et al., 2010; Kayahan, 2009; Özbaş and Buzlu, 2011), which is similar to the results of the current study. It is possible that interactions with individuals with

mental illnesses within the scope of vocational theoretical and practical courses in the nursing curriculum and having the opportunity to care for and observe these individuals are effective in reducing negative beliefs about mental illnesses (Öz and İnci, 2009).

A statistically significant difference was found between the students who took courses on mental illnesses and the total BMI mean score. Similar to the findings of the current study, studies in the literature have reported that receiving an education on mental illnesses has a positive effect on beliefs (Arslantaş et al., 2019b; Dal et al., 2018; Li and Reavley, 2020; Yıldırım and Balcı, 2021). Çam and Baysan Arabacı (2010) reported that negative perceptions, attitudes, and beliefs about mental illnesses can be reduced through education, and educational methods can be effective in reducing negative beliefs. Similarly, Şahin et al. (2019) showed that a mental health and psychiatric nursing course positively affected attitudes toward individuals with mental disorders.

A negative correlation was found between the ages of the students and the total BMI mean score. Yadav et al. (2012) conducted a study with students studying in the Faculty of Medicine and reported that senior students had more positive attitudes toward individuals with mental illnesses. Günay et al. (2016), however, did not find a relationship between the age of the students and their beliefs about mental illnesses. The differences in the studies could be due to different cultural characteristics and social norms of the study groups.

According to the regression model, students' empathic tendency and social distance mean scores explained the negative mental illness belief scores. When the studies that were carried out using similar measurement tools were examined, it was seen that the level of social distance affected beliefs about mental illnesses (Arslantaş et al., 2019a; Arslantaş et al., 2019b; Oban and Küçük, 2012). There are also limited number of studies reporting that the level of empathic tendency did not affect beliefs about mental illnesses (Eren and Gürhan, 2020). The difference may be due to the fact that the data were collected based on self-reports of the students. Additionally, considering that the individual lives in a society, many individual and psychosocial factors such as the environment in which each student grows up, the cultural characteristics of the society, the education level of the family members, the level of knowledge about mental illnesses, the stereotypes of the environment, the ease of access to mental health services, and the ability to empathize may affect study results.

Conclusion

This study revealed that university students studying in the field of health had a low/moderate level of negative beliefs about mental illnesses and a high mean score for the dangerousness sub-dimension of BMI Scale. It has been observed that the students who are single, who perceive their economic situation as good/moderate, who study in the nursing department, who take courses on mental health and diseases, and who receive education in the field of health have positive beliefs about mental illnesses. A high level of negative relationship was found between age and relationship was found between age and beliefs toward mental illnesses. In addition, the study revealed that empathic tendency and social distance explained beliefs toward mental illnesses at a high level. In line with these results, similar studies should be conducted with larger samples including university students studying in health-related fields and the general population, and due to its subjective nature, intermittent evaluation of the concept of belief should be made. It is also recommended to conduct quantitative studies aiming to reveal the relationship of beliefs toward mental illnesses with different psychosocial variables, to prepare a training program on mental health and diseases for university students, and to conduct studies with an experimental design.

Implications for psychiatric nursing practice

This study contributed to understanding the beliefs of university students studying in the field of health about mental illnesses and the relationship between these beliefs and the level of empathic tendency and social distance. Community mental health nurses should plan and conduct education programs on mental illnesses for university students and their families within the scope of their roles and responsibilities and should apply nursing interventions to increase the awareness of the society by using the media organs. In addition, mental health nurses should be aware of the stereotypes and beliefs of the society toward individuals with mental illnesses and provide in-service trainings for health professionals working in other fields. Inter-institutional and intra-institutional coordination should be ensured in order to change negative beliefs toward mental illnesses.

Limitations

This study can be generalized to the students of the Faculty of Health Sciences and Faculty of Nursing at a state university in Turkey. The target population and sample of the study are limited to the students of the Faculty of Health Sciences and Faculty of Nursing in the 2020–2021 academic year. In addition, the data was collected online due to the pandemic, which can also be considered as a limitation.

CRediT authorship contribution statement

Study design or data acquisition, analysis and interpretation of data: Arzu Koçak Uyaroğlu, Esra Ünal.

Drafting or critical review of the article for important intellectual content: Arzu Koçak Uyaroğlu.

Confirmation of the final version to be sent: Arzu Koçak Uyaroğlu, Esra Ünal.

Acknowledgment

We would like to thank to all the university students who participated in the study.

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