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# ATTITUDES TOWARD MENTALLY ILL PATIENTS: A COMPARISON BETWEEN ROMANIAN AND INTERNATIONAL MEDICAL STUDENTS

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#### Abstract

**Background.** Stigmatizing attitudes to mental illness, and especially schizophrenia, are not limited to the general population but are also common among health professionals. Health professionals are in a position to model health related attitudes both in the general public and patients. Medical students are an interesting group to focus upon, since they are future health professionals and correcting stigmatizing attitudes is still possible during their educational curriculum.

Methods. This study investigated the attitude toward mental illness in medical students at the Iuliu Hatieganu University of Medicine and Pharmacy. We surveyed first year students, since they have not yet received specific classes or internships in psychiatry; 322 students from the Romanian and English sections participated, representing a response rate of 94.7%. The questionnaire consisted of the Romanian and English versions of Link's Social Distance Scale towards people with mental illness scale.

Results. Overall, medical students had a relatively negative attitude towards people with mental illness, with moderate social distance and stereotypical attitudes. The level of personal contact with people with mental illness was correlated with positive attitudes. International students had scored lower then Romanian students on social distance toward mentally ill patients.

Conclusions. Medical education can play an important role in the attitudes of students toward mental illness. Medical students have stigmatizing attitudes about mentally ill patients. Personal contact with people suffering from mental illness might contribute to a positive attitude from the medical students toward mentally ill patients.

Keywords: stigma, mental illness, medical students, medical education

#### Background

Stigma is "a combination of negative attitudes towards a group (prejudice), lack of knowledge (ignorance), and functional exclusion (discrimination)" [1,2]. Stigmatization is a continuous process that starts with

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the negative effect of labeling [3].

Mental health professionals strived to develop and implement numerous programs that targeted the improvement of mental health system, but many of them failed because of the prevailing stigma [4]. As it has been previously pointed out for Romanian population, once an individual underwent a mental health treatment or intervention, there is a higher probability for that person to

be discriminated than in the other EU countries [5,6].

Out of the many causes that have been cited for stigma and stigmatisation, two have been emphasized: the general population's limited knowledge about psychiatry and the perpetuation of negative attitudes towards individuals who suffer from a mental illness [7,8,9].

There are at least three aspects of this problem: physicians, beneficiaries, and students.

Physicians tend to promote/perpetuate stereotypes regarding mental health beneficiaries [10,11], disregard their physical complaints and even make them wait longer before being admitted to the medical examination compared to other categories of patients [12].

Mental health beneficiaries report that they feel the most stigmatised when presenting to the general practitioner [13] and that they have less access to the primary care facilities [14]. They also report to receive inferior medical care for non-psychiatric illnesses or symptoms [15].

As previous studies stated, students from medical schools share a common system of beliefs with the ordinary people [16,17,18] and the stigma towards mental health, mental health beneficiaries and mental health professionals still strikes us, even in the case of medical specialists [7].

When choosing a medical career, one is influenced by his own system of beliefs, his previous experience with patients and diseases, and builds his expectations according to these facts [19]. If we want to offer a realistic view of the mental health system, we need to improve the medical students' attitudes towards mental health beneficiaries.

## Aims

The purpose of this study is to assess current attitudes of first year medical students about mentally ill patients in order to form a positive environment for overcoming stigma associated with mental illness in medical schools. This study sought to answer the following questions:

Do international students differ from Romanian students in their attitudes towards mental illness?

Do students who had contact with mentally ill patients have a more positive attitude towards mental illness?

# Methods

The study was carried out at the Iuliu Hatieganu University of Medicine and Pharmacy, Cluj-Napoca, Faculty of General Medicine, in 2015. The first year students from the Romanian and English sections were recruited for the present study. Students were informed about the purpose of the study and were assured that their responses would remain confidential. Of the 340 students who were approached, 322 agreed to participate (response rate: 94.7%).

Inclusion criteria: first year medical students, no prior exposure to formal psychiatric training, voluntary

participation.

An electronic version of the survey (through Google docs) was made available to students in the two groups. The questionnaire collected information on participant gender, country of origin, age, personal experience with mentally ill patients, knowledge, and attitudes toward alcohol dependence, depression and schizophrenia.

Three vignettes, one alcohol dependence, one for depression and one for schizophrenia, were to assess the recognition of mental illnesses, the beliefs about the causes of mental illnesses, the appropriateness of treatment options that the vignette person could choose to alleviate his or her condition, the beliefs about how dangerous people with mental illnesses are, and the amount of social distance desired from people with mental illnesses. Each vignette was constructed by applying the criteria proposed by DSM V. The vignettes were inspired by the ones described by Link [20] and by Kupin and Carpiano [21] and were translated and validated on Romanian population in a previous study [5,6].

Students' perception of stigma associated with mental illness in the general public was measured with the perceived devaluation-discrimination scale developed by Link [22]. This self-administered questionnaire with 12 five-point Likert scaled items has been used in numerous studies [23,24,25].

This study received the approval of the Research Ethics Committee of the Iuliu Hatieganu University of Medicine and Pharmacy (approval number 361/13.10. 2014).

# Statistical analysis

Analyses were performed using SPSS version 20. Student's **t**-test and Chi Square test were calculated to establish any differences between international and Romanian students, males and females, students with and without experience of mental illness.

### Results

The data on 322 participants were analyzed, 133 from the Romanian Section (RS) and 189 from the English section (ES). Among them, in RS 33.1% were men and 66.9% were women and in ES 51.3% were men and 48.7% were women. In RS the mean age was 20.27 years (age range, 18-40 years), 42.1% of the students did not have any kind of previous experience with mental illness and 21.8% of the students had a family member who suffered from mental illness. In ES the mean age was 20.98 years (age range, 17-48 years), 21.7% of the students didn't have any kind of previous experience with mental illness and 33.3% of the students had a family member who suffered from mental illness.

The international students were from 15 countries, the majority (55.6%) came from Germany. Other countries:

France (6.9%), Italy (5.3%), Sweden (5.8%), Israel (8.5%). The students had received no prior education on mental health or psychiatry in the medical school.

# Student recognition of vignettes as representing mental illness

To assess students recognition of a mentally ill patient, we asked how likely it was that the described person in the vignette was experiencing "a mental illness."

As shown in Table I, in ES, the vignette most likely to be identified as representing mentally ill patient was schizophrenia (96.3%), followed by Depression (88.4%) and alcohol dependence (75.7%). In RS, the vignette most likely to be identified as representing mentally ill patient was schizophrenia (78.2%), followed by Depression (53.4%) and alcohol dependence (76.7%). The international students were better than Romanian students at recognizing the mental illness.

We asked the students about 5 possible causes of the conditions described: the person's own bad character, a chemical imbalance in the brain, the way the person was raised, stressful circumstances in the person's life, a genetic or inherited problem.

As shown in Table II, stressful circumstances were the most commonly endorsed cause of each condition followed by chemical imbalance in the brain. For schizophrenia and depression, the second most commonly endorsed cause was a chemical imbalance in the brain and genetic or inherited problems for alcohol dependence, it was the way the person was raised.

The Romanian students are more concerned about violence in alcohol dependence (Table III). There was no effect on gender and the perceived likelihood of violence on other vignette (p>.05). There was no effect on personal experience and the perceived likelihood of violence in any vignette (p>.05).

Social distance questions asked how willing respondents would be to (1 = definitely, 4 = definitely not) (1) move next door to the person depicted in the vignette, (2) spend an evening socializing with the person, (3) make friends with the person, (4) start working closely with the person, and (5) have the person marry into the family. Responses were summed and divided by 5 so that scores could range from 1 (low social distance) to 4 (high social distance).

As Table IV shows, the students desired the most social distance from the person described as having alcohol dependence, followed in order by the schizophrenia and depression. The social distance toward alcoholics and schizophrenic patients is higher in Romanian students.

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Mental illness	Alcohol dependence			D	epression		Schizophrenia		
	RS	ES	p¹	RS	ES	p <sup>1</sup>	RS	ES	p <sup>1</sup>
	%	%		%	%		%	%	
Yes	76.7	75.7	>.05	53.4	88.4%	>.05	78.2%	96.3%	>.05
No	23.3	24.3		46.6	11.6%		21.8%	3.7%	

 $<sup>^{1}\</sup>chi^{2}$  tests

Table II. Perceived caused of vignette condition.

Mental illness		Alco	hol depend	ol dependence		Depression			Schizophrenia		
		RS	ES	p¹	RS	ES	p¹	RS	ES	p <sup>1</sup>	
		%	%		%	%		%	%		
Chemical imbalance in the brain	Yes	65.4	53.4	<.05	73.7	68.8	>.05	84.2	85.7	>.05	
	No	34.6	46.6		26.3	31.2		15.8	14.3		
genetic or inherited problems	Yes	47.4	8.5	<.00	51.1	54.5	<.05	74.4	74.1	>.05	
	No	52.6	91.5		48.9	45.5		25.6	25.9		
own bad character	Yes	12.8	41.8	<.00	12.0	22.8	>.05	88.7	82.5	>.05	
	No	87.2	58.2		88.0	77.2		11.3	17.5		
way person was raised	Yes	54.9	69.8	<.05	25.6	56.6	>.05	21.8	47.1	<.00	
	No	45.1	30.2		74.4	43.4		78.2	52.9		
stressful circumstance in the	Yes	95.5	42.9	<.00	98.5	97.9		80.5	87.3	>.05	
person life	No	4.5	57.1		1.5	2.1		19.5	12.7		

<sup>1</sup> γ<sup>2</sup> tests

Table V shows the proportion of students who were very and somewhat likely to engage in the forms of interaction included in the social distance scale.

The variables that appeared to play a role in the opinions and attitudes about mentally ill patients were those of gender and personal experience.

Students who personally knew a mentally ill

patient scored lower in social distance score than students without such experience (for alcohol dependence and schizophrenia).

A higher percentage of women than men perceived the likelihood of Schizophrenia vignette as very and somewhat very likely to be violent (81.2% vs 72.3.6%,  $\chi^2$ =3.56, p<.05).

Table III. Vignette condition and perceived likelihood of violence.

Vignette condition		RS	ES	1	
		%	%	p¹	
Alaskal danandanaa	Unlikely	9.8	29.6	< 000	
Alcohol dependence	Very likely	90.2	70.4	<.000	
Damasaian	Unlikely	86.5	81.5	> 05	
Depression	Very likely	13.5	18.5	>.05	
Cabinanhuania	Unlikely	25.6	20.6	> 05	
Schizophrenia	Very likely	74.4	79.4	>.05	

 $<sup>^{1}\</sup>chi^{2}$  tests

Table IV. Vignette condition and attitudinal social distance (mean).

Social Distance		Mean	p <sup>1</sup>	
Alcohol dependence	RS	3.1594	<.05	
	ES	2.7683	<.05	
Depression	RS	2.3113	. 05	
	ES	2.3704	>.05	
Schizophrenia	RS	3.1128	< 05	
	ES	2.9577	<.05	
Attitudinal social distance	RS	3.0821	> 05	
	ES	3.0979	>.05	

<sup>&</sup>lt;sup>1</sup>Student t-tests

Table V. Vignette condition and attitudinal social distance.

	Alcohol dependence (% of Very and Somewhat likely)			Depression (% of Very and Somewhat likely)			Schizophrenia (% of Very and Somewhat likely)		
	0/0 0/0		1	%	%	1	%	%	1
	RS	ES	p¹	RS	ES	p¹	RS	ES	p¹
move next door to the person	14.3	36.8	<.000	64.7	65.5	>.05	18	22.2	>.05
spend an evening socializing with the person	54.9	60.8	<.000	72.0	86.5	<.000	45.1	45.6	>.05
make friends with the person	30.1	43.1	<.000	38.3	63.5	<.000	25.6	46.6	<.000
start working closely with the person,	14.3	39.7	<.000	75.2	56.6	<.000	20.3	31.7	<.05
have the person marry into the family	2.3	11.6	<.000	56.4	30.2	<.000	9	10.6	>.05

 $<sup>^{1}\</sup>chi^{2}$  tests

#### Discussion

Medical students and their attitudes towards psychiatry and psychotherapy as well as towards the mentally ill have direct relevance to patient management at the level of primary care. The current study assesses the current attitudes of first year medical students about mentally ill patients.

In Romania, people are thought to be less tolerant to the mentally ill than those in Western Europe [5]. If Romanian students have less tolerant attitudes towards mental illness at the beginning of their medical education, attitudes might be likely to change following education.

Our findings suggest that the stigma attached to schizophrenia varies among different cultures. The data from the current study reveal substantial differences between male and female students regarding the perception of violence associated with mental illness.

Prior experience with mental illness was associated with more positive attitudes towards psychiatry, as found in other studies [26,27,28].

It is interesting that there was no statistical difference between the capacity of both RS and ES to recognize alcohol dependence as a mental illness. What it is important to note is the fact that approximately a quarter of both RS and ES did not recognize alcohol dependence as a mental illness. This is in according to the general populations' view and attitude that alcohol dependence is not an illness, but only "a lack of power, a lack of will", which shows a lack of knowledge concerning the mental illnesses. The same thing happens when questioning the patients, an important percentage of them do not recognize that they suffer from a mental illness, nor that they have a "problem" regarding alcohol consumption.

Regarding the recognition of depression as a mental illness, ES scores much better than RS, with only 1 out of 10 ES not recognizing depression. However, when we look at the RS, approximately half of the students interviewed/questioned did not consider that depression is a mental illness. This is in accordance with the findings in the general population, who tend to consider depression as only "mimicking a disease", or the patient "does not suffer from a real illness". This also shows a lack of knowledge in mental illness.

Schizophrenia has been the most well recognized as a mental illness by most, both RS and ES. However, RS scored statistically significant lower that ES. While in the ES, almost all students recognized schizophrenia to be a mental illness (96.3%), in RS, only 4 out 5 students recognize schizophrenia and consider it a mental illness. This has a severe impact on the diagnosis, treatment, and outcome of this mental illness. Once again, the data suggest a lack of knowledge and/or a lack of mental health education for the RS.

When attributing the causes for the mental illness, there is a notable difference between RS and ES, which consists of the following: for alcohol dependence, RS attributed the cause of the disease to a chemical imbalance in a higher percentage than ES, ES considered that the way the person was raised as more significant that RS, and almost all RS (95.5%) attribute the illness to stressful circumstance in the person's life; in ES only 42.9% consider this as a cause for alcohol dependence. Probably these differences are explained by the general population's view toward alcohol consumption.

As an interesting fact, depression is considered as a response/reaction to stressful circumstance in the person's life by almost all of RS (98.5%) and ES (97.9%). The only statistical difference between the two groups has been noted for the "genetic or inherited problems" as attributable cause of depression, with ES having a higher percentage (54.5%) compared to RS (51.1%). This could also explain the social distance towards people suffering from depression, and could explain the "they are only weak, they are not ill" argument.

#### **Conclusions**

According to the results of the current study, medical students have stigmatizing attitudes about mentally ill patients. Because the curriculum of undergraduate psychiatric training in Romania did not entail any specific anti-stigma training modules, one could argue that the present findings advocate for incorporation of such an orientation in undergraduate psychiatric training. Future work in this direction might shed light on the significance of such an education.

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