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# Attitudes towards People with Mental Illness and Low Interest in Psychiatry among Medical Students in Central and Eastern Europe



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## Abstract

This study aimed to examine attitudes towards people with mental illness and psychiatry and interest in career choice in psychiatry among medical students from three medical schools in Czechia and Slovakia. A total of 495 medical students participated in a crosssectional study. Participants completed (1) the Medical students' version of mental illness: clinicians' attitudes (MICA-2) scale, (2) the Reported and intended behaviour scale (RIBS), (3) the Attractiveness of working on a psychiatry-related position scale (P-ATTRACT), and (4) the Status of psychiatry scale (P-STATUS). Descriptive statistics, group comparisons and regression models were calculated. From 23 to 30% of students considered a specialization in psychiatry. However, only about 1% of them had a strong interest in psychiatry as a future career, moreover, students of higher years of study found psychiatry less attractive compared to those who are in the beginning of the study. The consideration of specialization in psychiatry was found to be statistically significantly associated with less stigmatizing attitudes and lower social distance towards people with mental illness. There were statistically significant differences in stigmatizing attitudes among medical schools, with a medical school emphasizing the education in psychiatry the most showing more positive attitudes. It is necessary to increase the interest in psychiatry and minimize stigma among medical students. Psychiatry curriculum in Central and Eastern European region should include more psychiatry-related courses, training in community and out-patient facilities, peer-lectors, and offer counselling after exposure to emotionally challenging clinical situations.

Keywords Stigma · Medical students · Curriculum · Career choice · Central and Eastern Europe

People experiencing mental health problems are exposed to a twofold obstacle. First, they face the impact of the illness itself; second, they have to endure stigmatization [1]. Stigmatization is

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a process of associating particular differences (e.g. mental illnesses) with negative attributes (stereotypes) that leads to the situation when the labelled persons are socially excluded and experience status loss or discrimination [2]. Social distance is one of the factors of stigmatization; it can be defined as a willingness to readily engage in relationships with a labelled person [3]. Stigmatization in health care contributes to physical health disparities [4] and premature mortality of people with mental health problems [5–7] as it discourages people from seeking help and affects the quality of both mental health and general health care provided to these people [8–10]. Moreover, people with mental health problems tend to be excluded from preventive medical care and screenings [11–13].

Medical students are prospective health care professionals and, therefore, they constitute an important target group for mental health stigma research. Medical students hold stigmatizing stereotypes of dangerousness, unpredictability or weakness of people with mental health problems and maintain social distance towards them [14–17]. Attitudes towards people with mental illness may change over the course of study in various ways. In a study conducted by Magliano and colleagues [16] first year students showed lower social distance towards people with schizophrenia than those of final year. Ay and colleagues [14] compared students' attitudes towards schizophrenia and depression between second and final year of study. They have found that students from the last year of study exhibited lower levels of stigmatizing attitudes than those in the beginning of their studies. Similarly, a study from the Czech Republic have shown increased tolerant attitudes in students after the fourth year of study [18]. On the contrary, students in the study conducted in Ireland did not have more positive attitudes towards people with various psychiatric diagnoses after the traditional psychiatric placement in their penultimate year [19].

Above described unfavourable attitudes towards people with mental illness are likely related to the negative picture of the whole field of psychiatry as a medical profession dealing with people with this highly stigmatized condition. Psychiatry is considered by medical students and academic staff as not being scientific and congenial as other specializations, while psychiatric patients as being emotionally draining and less interesting to work with than other patients [20–22]. Consequently, only a low percentage of medical students pursue a career in psychiatry [23] which contributes to the global shortage of mental health workforce.

Mental health care reforms are currently implemented in Central Eastern European region (CEE), however, almost no measures focus on proper training of health care professionals and recruitment of psychiatrists. In this study, we aimed to examine stigmatizing attitudes towards people with mental illness and attitudes towards psychiatry and career choice of psychiatry among medical students from three medical schools in Czechia and Slovakia with the intent to help formulate policy recommendations on how to minimize stigma at medical faculties and how to improve the status and image of psychiatry among medical students.

### Methods

### Source of Data

The present study was designed as a cross-sectional and multinational. We have been able to secure participation from, overall, three medical schools from the former Czechoslovakia: two from Czechia (Faculty of Medicine at Charles University in Hradec Králové (FM Hradec Králové) and Third Faculty of Medicine at Charles University in Prague (3FM Prague)) and

one from Slovakia (Faculty of Medicine at Comenius University in Bratislava (FM Bratislava). An anonymous online questionnaire translated according the standard methodology [24] was developed and then sent to all medical students of the medical schools via the schools' internal communication systems. Thus, all medical students studying in 6-year full-time program General medicine during the time of the study implementation were eligible for participation. Data collection started in the first week after the last lecture/classes period (academic year 2017/2018) at a given school. One reminder was sent to eligible participants via the schools' internal communication systems. Students were asked to read Information for study participants and indicate their informed consent first. Return of questionnaires implied consent to participate. The data collection was finalized at the end of July 2018. Valid data was obtained from 495 students: 203 (response rate (RR) = 19.4%) from 3FM Prague, 160 (RR = 17.4%) from FM Hradec Králové and 132 (RR = 6.5%) from FM Bratislava. The study was approved by the ethics committees of all participating schools.

### Psychiatry Curriculum in Participating Schools

All participating medical schools offer a General medicine program in the form of 6-year fulltime study. When considering psychiatric curriculum and methods of instruction, all three medical schools share many similarities probably caused by the common history of Czechoslovakia. Psychiatry is taught in psychiatric clinics of university hospitals, in the 4th and 5th year of study with total 104 h of instructions. Syllabus covers neurobiological and clinical aspects of all major mental disorders. Students participate in grand-rounds, patientinterviewing tutorials and seminars. The clerkship usually takes place in in-patient departments with almost no exposure to outpatients. The Medical psychology and communication module with total 46 h of instruction is implemented in 2nd year at the FM Hradec Králové and the FM Bratislava and in 4th and 5th year at 3FM Prague. Curriculum in the form of both lectures and interactive seminars covers the basic psychological, behavioural and social aspects of health and illness, e.g. non-adherence to treatment, motivational interviewing, palliative care and psychotherapy. All curricula offer elective courses, there are 3 elective courses in the FM Hradec Králové and FM Bratislava and 7 at 3FM Prague, e.g. Assessment of psychopathology, Biological psychiatry, Psychiatry in movie pictures or Palliative care. Besides more choices of elective courses there are two more notable differences: the 3FM Prague is the only medical school from our selection that offers integrated problem-oriented curriculum and requires the students to pass the final State exam in Neurobehavioural sciences, consisting of an oral exam in psychiatry and neurology.

#### Measures

Attitudes towards people with mental illness were examined by the means of two instruments: (1) the medical students' version of Mental illness: clinicians' attitudes (MICA-2) scale [25] and (2) the Reported and intended behaviour scale (RIBS) [26]. MICA-2 is a 16-item scale designed to assess attitudes of mental health professionals towards people with mental illness. It uses a 6-point Likert-like scale, with the lowest value representing a strong agreement, while the highest value a strong disagreement. Items 1, 2, 4, 5, 6, 7, 8 13, 14 and 15 require a reverse coding before the computation of the composite score. The composite MICA-2 score, created as a sum of individual items, then, ranges from 16 to 96, with lowest values representing less stigmatizing attitudes towards people with mental illness. RIBS is an 8-item instrument that

assesses reported and intended behaviour in four different contexts: (1) living with, (2) working with, (3) living nearby and (4) continuing a relationship with someone with a mental health problem. For the calculation of composite score, only items 5–8 on intended behaviour are used because they measure social distance in four domains. These items are scored on a 5-point Likert-like scale, ranging from strong agreement to strong disagreement. The composite score is, then, computed by summing the individual items, with the option "Don't know" being coded as a neutral response with value 3. Higher scores indicate higher social distance towards people with mental illness.

Attitudes towards psychiatry as a profession were assessed by two instruments: the Attractiveness of working on a psychiatry-related position scale (P-ATTRACT) and the Status of psychiatry scale (P-STATUS). Both scales have been developed for this study with the purpose to measure attitudes towards psychiatry in the context of this region. P-ATTRACT scale measures the attractiveness of working on four psychiatry-related positions: (1) psychiatric hospital/psychiatric ward in a general hospital, (2) community based care; (3) out-patient psychiatric care and (4) out-patient psychiatric care with psychotherapeutic specialization. The items are scored on a 4-point Likert scale, with answers ranging from "very attractive" to "very unattractive". The composite score is calculated as a sum of the four items, with lower scores indicating higher attractiveness. P-STATUS consists of four items that assess perceived status of psychiatry as a profession. The items are scored on a 4-point Likert scale, with highest value indicating strong agreement and the highest value indicating strong disagreement. Items 3–4 require reverse coding before the computation of composite score. The composite score, then, is a sum of the four items, with lower scores indicating higher perceived status of psychiatry.

Gender, year of study, the dummy coded attendance of psychiatry related course (participants not attending any such course being the reference category), the dummy coded consideration of specialization in psychiatry (participants not considering such a specialization being the reference category) and the dummy coded consideration of a specialization involving a direct contact with patients (participants not considering such a specialization being the reference category) were used as covariates. Moreover, the Level of contact (LOC) report was used as a covariate [27]. LOC is a list of 12 situations in which intimacy of contact with people with severe mental illness varies; ranging from "I have never observed a person that I was aware had a severe mental illness" to "I have a severe mental illness". The rank of the most intimate situation is used as the LOC score.

### Analysis

First, descriptive statistics (counts and percentages) were used to assess the characteristics of participants and their interest in psychiatry, separately for all participating medical schools. Second, a comparison of participating medical schools in terms of MICA, RIBS and P-ATTRACT composite scores was performed via pairwise t-tests. As the scores on P-STATUS were non-normally distributed, the non-parametric pairwise Wilcoxon rank sum test was used to compare the participating school on this scale. For both the t-tests and the Wilcoxon rank sum test, the Bonferroni correction was applied to address the problems stemming from multiple testing. Then, linear regressions models with MICA, RIBS, P-STATUS and P-ATTRACT composite scores as dependent variables were constructed with pooling the participants from all participating medical schools together. All models were controlled for gender and used a common set of covariates: the year of study, the dummy

coded attendance of a psychiatry-related course, the dummy coded consideration of specialization in psychiatry, the dummy coded consideration of a specialization with direct contact with patients and the LOC score. Finally, we expanded the aforementioned regression models by adding dummy coded variables denoting the belonging to a given medical school. In all cases the reference school was 3FM Prague as this school is known for its focus on psychiatry. This way we assessed the differences between the examined schools on the scales of interest, when controlling for gender and adjusting for a set of covariates. The results for linear regression models are presented as unstandardized beta coefficients (B) with 95% confidence intervals (95% CI). Associations with p < 0.05 were considered as statistically significant. All the statistical analysis was performed in R statistical programming language (version 3.4.4).

# Results

The detailed description of the sample is provided in Table 1. Between 69 and 75% of the participants in all participating schools were women (which corresponds with the current situation when more women than men study medicine) and around 50% of the participants were 21 to 23 years old. Considering the year of study, the participants were distributed almost evenly, except for the overrepresentation of 3rd year participants and underrepresentation of

		Sample							
		3FM Prague		FM Hradec Králové		FM Bratislava		Total	
		n	%	n	%	n	%	n	%
Gender	Women	139	68.5	106	66.2	99	75.0	344	69.5
Age	Men	64	31.5	54	33.8	33	25.0	151	30.5
	18–20	37	18.2	22	13.8	28	21.2	87	17.6
	21–23	94	46.3	77	48.1	64	48.5	235	47.5
	24–26	60	29.6	56	35.0	37	28.0	153	30.9
Nationality	26+	12	5.9	5	3.1	3	2.3	20	4
	Czech	173	85.2	146	91.2	0	0	319	64.4
	Slovak	20	9.9	13	8.1	130	98.5	163	32.9
	Other	10	4.9	1	0.6	2	1.5	13	2.6
Year of study	1st year	36	17.7	18	11.2	16	12.1	70	14.1
	2nd year	34	16.7	40	25.0	41	31.1	115	23.2
	3rd year	34	16.7	29	18.1	19	14.4	82	16.2
	4th year	39	19.2	22	13.8	24	18.2	85	17.2
	5th year	37	18.2	31	19.4	29	22.0	97	19.6
	6th year or more	23	11.3	20	12.5	3	2.3	46	9.6
Psychiatric course(s) attended	Yes	103	50.7	82	51.2	51	38.6	236	47.7
	No	100	49.3	78	48.8	81	61.4	259	52.3
Considering a specialization in psychiatry	Yes	60	29.6	37	23.1	31	23.5	128	25.9
	No	143	70.4	123	76.9	101	76.5	367	74.1
Considering a specialization only in psychiatry	Yes	2	0.99	1	0.62	2	1.52	5	1
	No	201	99	159	99.4	130	98.5	490	99
Considering specialization involving direct contact with patients	Yes	193	95.1	153	95.6	121	91.7	467	94.3
	No	10	4.93	7	4.38	11	8.33	28	5.7

 Table 1
 Description of the sample

6th year students at the FM Bratislava. In all participating schools, from 39% to 51% of participants attended at least one psychiatry related course. On the one hand, 23% participants from FM Hradec Králové and FM Bratislava and 30% from 3FM Prague considered a specialization in psychiatry. On the other hand, only about 1% at all participant schools had a strong interest in psychiatry (i. e. they selected only psychiatry as a future specialization).

The detailed results of the group comparison are provided in Table 2. On the MICA scale, we have found a statistically significant difference between the FM Hradec Králové and the FM Bratislava and between the 3FM Prague and the FM Bratislava, with the results in both cases indicating more stigmatizing attitudes at the FM Bratislava (40.2 vs 43.1; 38.1 vs 43.1). Considering the RIBS scale, we have detected statistically significant differences only between the 3FM Prague and the FM Bratislava (8.2 vs 9.6), with the students from the latter displaying more social distance towards people with mental illness.

When comparing the participating schools in terms of P-ATTRACT, statistically significant differences were found in the case of 3FM Prague and FM Hradec Králové (10.3 vs 11.4) and in the case of FM Hradec Králové and FM Bratislava (11.4 vs 10.1), with the FM Hradec Králové showcasing lower level of attractiveness of psychiatry as a profession in both instances. On the P-STATUS scale, no statistically significant differences were found between the participating schools.

When pooling all of the participating medical schools together, the consideration of specialization in psychiatry and the consideration of a specialization that involves a direct contact with patients, were found to be statistically significantly associated (see Table 3) with the scores on MICA scale, with both of them being associated with lower scores (B = -2.53, 95% CI = -4.06; -0.99, B = -5.31, 95% CI = -8.20; -2.41), meaning less stigmatizing attitudes towards people with mental illness. Higher scores on LOC were found to be associated with lower scores on MICA scale (B = -0.67, 95% CI = -0.89; -0.45). No other variables were found to be associated with scores on MICA scale. Exactly the same results were found for the scores on RIBS scale, i. e. considering a specialization in psychiatry, considering direct contact with patients and higher LOC scores were associated with lower distance towards people with mental illness (B = -1.45, 95%) CI = -2.04; -0.86, B = 1.48, 95% CI = -2.60; -0.37, B = -0.26, 95% CI = -0.34; -0.18). Considering a specialization in psychiatry and scores on LOC were found to be statistically significantly associated with scores on the P-ATTRACT scale (B = -2.87, 95% CI = -3.43; -2.30, B = -0.16, 95% CI = -0.24; -0.08), meaning a higher perceived attractiveness of psychiatry in those who consider a specialization in psychiatry and those with higher LOC scores. On the other hand, participants in higher years of study were found to be associated with lower attractiveness towards psychiatry (B = 0.33, 95% CI = 0.10; 0.56). No other variables were found to be associated with scores on P-ATTRACT scale. Only considering a specialization involving a direct contact with

	MICA		RIBS		P_STATUS		P-ATTRACT	
	M	р	М	р	Median	р	М	р
3FM Prague vs FM Hradec Králové	38.1 vs 40.2	0.03	8.2 vs 9	0.05	5 vs 5	1	10.3 vs 11.4	< 0.01
FM Hradec Králové vs FM Bratislava	40.2 vs 43.1	< 0.01	9 vs 9.6	0.21	5 vs 6	0.35	11.4 vs 10.1	< 0.01
3FM Prague UK vs FM Bratislava	38.1 vs 43.1	< 0.01	8.2 vs 9.6	< 0.01	5 vs 5	0.30	10.3 vs 10.1	1

 Table 2
 Group comparison of schools

	MICA B (95% CI)	RIBS B (95% CI)	P-ATTRACT B (95% CI)	P-STATUS B (95% CI)
Year of study Psychiatric course(s) attended Considering specialization in psychiatry Considering specialization involving direct contact with patients LOC Adjusted R <sup>2</sup>	$\begin{array}{c} -0.03 \ (-0.64; \ 0.59) \\ -1.18 \ (-3.11; \ 0.76) \\ -2.53** \ (-4.06; \ -0.99) \\ -5.31^{***} \ (-8.20; \ -2.41) \\ -0.67^{***} \ (-0.89; \ -0.45) \\ 0.12 \end{array}$	$\begin{array}{c} -0.05 \ (-0.28; \ 0.18) \\ -0.09 \ (-0.81; \ 0.63) \\ -1.30^{***} \ (-1.87; \ -0.73) \\ -1.59^{***} \ (-2.67; \ -0.52) \\ -0.26^{****} \ (-0.34; \ -0.18) \\ 0.13 \end{array}$	$\begin{array}{c} 0.33^{**} \left( 0.10;  0.56 \right) \\ -0.25 \left( -0.97;  0.47 \right) \\ -2.87^{***} \left( -3.43;  -2.30 \right) \\ -1.10^{*} \left( -2.17;  -0.03 \right) \\ -0.16^{***} \left( -0.24;  -0.08 \right) \\ 0.24 \end{array}$	$\begin{array}{c} 0.01 & (-0.14;  0.15) \\ -0.01 & (-0.46;  0.45) \\ 0.11 & (-0.25;  0.48) \\ -1.09^{**} & (-1.78; -0.41) \\ -0.03 & (-0.08;  0.03) \\ 0.05 \end{array}$
All models are linear regression models. All models are controlled for gender. The number of participants in all models is 495	for gender. The number of p	articipants in all models is 49	5	

Table 3 Associations of respondents' characteristics with study variables

p < 0.05p < 0.01p < 0.01p < 0.001

patients was found to be associated with scores on P-STATUS (B = -0.16, 95% CI = -0.24; -0.08); i.e. those considering a specialization involving a direct contact with patients display a higher level of perceived status of psychiatry.

When controlling for gender and adjusting for a set of covariates, the results of comparison of the participating schools indicate (see Table 4) that students from both the FM Hradec Králové and the FM Bratislava display more stigmatizing attitudes (measured by MICA) than students from the 3FM Prague (B = 1.58, 95% CI = 0.06; 3.11, B = 3.95, 95% CI = 2.31; 5.59). In terms of scores on RIBS scale, statistically significant differences were detected only between the FM Bratislava and the 3FM Prague; the former was associated with higher social distance towards people with mental illness. Regarding the scores on P-ATTRACT scale, differences between the FM Hradec Králové and the 3FM Prague were found; students from the former exhibited lower perceived attractiveness of psychiatry (B = 0.79, 95% CI = 0.22; 1.36). No statistically significant differences were found between the participating schools on the P-STATUS scale.

### Discussion

Comparative research of medical students' attitudes towards people with mental illness and psychiatry has been scarce in CEE so far. Results of this study of 495 students from three medical schools in Czechia and Slovakia indicate that more positive attitudes and lower social distance towards people with mental illness are associated with higher level of familiarity with mental illness and consideration of a specialization in psychiatry. Such findings are not surprising, however, medical schools should prepare all future physicians to be able to work with people with mental illness in various fields of medicine. Further, we have detected differences between the participating schools. The results of school comparison suggest that students from both FM Hradec Králové and FM Bratislava displayed more stigmatizing attitudes towards people with mental illness than students from the 3FM Prague. Also, the highest proportion (approximately 30%) of students considering psychiatry as one of career possibilities was at this school. We hypothesize that it could be due to the curriculum at 3FM Prague since this school offers integrated curriculum, more elective courses with mental health topics and incorporates final state exam in psychiatry into its compulsory educational

	MICA	RIBS	P-ATTRACT	P-STATUS
	B (95% CI)	B (95% CI)	B (95% CI)	B (95% CI)
3FM Prague	Ref.	Ref.	Ref.	Ref.
FM Hradec Králové	1.58* (0.06; 3.11)	0.53 (-0.05; 1.10)	0.79** (0.22; 1.36)	-0.07 (-0.44, 0.30)
FM Bratislava	3.95**** (2.31; 5.59)	0.93** (0.32; 1.55)	-0.46 (-1.07; 0.15)	0.28 (-0.12, 0.67)
Adjusted R <sup>2</sup>	0.16	0.14	0.26	0.04

Table 4	Associations	between	schools	and	study	variables
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All models are linear regression models. All models are controlled for gender and adjusted for the year of study, the dummy coded attending of psychiatric course(s), the dummy coded consideration of specialization in psychiatry, the dummy coded consideration of a specialization with direct contact with patients and the LOC score

The number of participants in all models is 495

\**p* < 0.05

\*\*p < 0.01

\*\*\*p<0.001

requirements. Several studies worldwide came to similar results. Students who experienced refreshed integrated curriculum showed more positive attitudes towards psychiatry and more often expressed an interest in psychiatry as a career choice in comparison with those who attended traditional program [28, 29]. On the other hand, it could be also a case of reverse causality as 3FM Prague is renowned for its focus on psychiatry, therefore people with more positive attitudes towards people with mental illness may specifically choose this medical school. Future research should examine the influences of curricula and students' motivations more in depth, potentially with the use of qualitative methodologies.

Just a marginal proportion (around 1%) of students had a strong interest in pursuing a career in psychiatry in all of the participating schools. Our results are mostly in line with the results of a review that included medical students from 20 countries, in which 19% of students would choose psychiatry "quite likely" as a career option, while just 4.5% of them considered it "definitely" [23]. Nevertheless, it is almost impossible to compare various outcomes since the methodologies of career choice assessments differ substantially. Some studies from the review measured just one choice of specialty, other measured multiple choice and some studies included only interest in psychiatry. We cannot be sure whether students decide about their career before, during, or after medical school [20]. The decision could be influenced by intrinsic factors, like personal characteristics, values and preferences, and extrinsic factors, such as work environment or public opinion [30]. Important role is played by teachers at medical schools since they may influence students' opinions. A recent study from Czechia showed that academic staff holds more stigmatizing attitudes than medical students [18]. Also, students are influenced in their career choice by recruitment campaigns [31] that are mostly non-existing in the field of psychiatry.

As expected, those who considered psychiatry as a potential career choice and had higher familiarity with people with mental illness, perceived psychiatry as more attractive. Farooq and colleagues have found similar results in their review [20]. Participants in higher years of study were found to be associated with lower attractiveness of psychiatry in our research. We assume that this result could be explained by the quality of psychiatric placement at medical faculties in Czechia and Slovakia. Psychiatric training usually takes place in university hospitals where students meet patients in acute phase of the illness with no chance for their follow up until recovery. Although medical students often positively commented the theoretical part of psychiatric module, clinical training was too stressful and frustrating for them; they described interactions with psychiatric patients as "disturbing" [32]. Such affective responses during clinical clerkship contribute to low popularity of psychiatry [33, 34]. Pessar and colleagues [33] focused on troubling encounters during the clerkship and observed that experiences described by students as frightening and intimidating declined from the first half to the second half of the rotation. Unacknowledged affective responses such as feelings of anxiety, threat of having no control over emotions and fears of experiencing mental illness after being exposed to emotionally challenging clinical situations during psychiatry rotation may be one of the reasons why psychiatry remains an unpopular career choice among medical students [34]. We suggest to implement case discussions, reflective practice groups and Balint groups into curriculum. Also, it is very important that medical students experience during their rotation all forms of mental health care including inpatient, out-patient and community care facilities in order to see patients in recovery phase of severe mental illnesses. People with personal experience with mental illness (peer-lectors) should participate during the courses wherever possible. Teachers themselves should promote destigmatizing attitudes and adequate communication between patients and medical students. In order to highlight the importance of psychiatry enrichment activities and interdisciplinary

elective courses, e.g. on eating disorders, should be implemented. Finally, in order to promote the interest in psychiatry as a career option for medical students, we suggest to arrange recruitment campaigns in medical schools and to distribute professional filmed materials to highlight the importance of psychiatric profession.

It is necessary to mention limitations of this study. First, a relatively low response rate was achieved in all of the participating schools, meaning that the results may not represent the students from the examined schools well. There is also a possibility that the non-responding students non-trivially differ from the responding ones. Second, the study was cross-sectional, therefore, we cannot determine how the students' attitudes changes and what are the factors associated with the change. Third, a self-selection bias could have been introduced as the participants themselves decided whether they want to or do not want to participate. Finally, the selection of schools was not random.

Stigmatizing attitudes and social distance are prevalent among medical students in Czechia and Slovakia and psychiatry is not a popular choice of future career although one quarter of them consider it during the study. The results of this study provide some clues for medical curriculum changes in order to prepare students to function as fully competent physicians of various specialities respecting people with mental health disabilities.

#### Availability of Data and Material Not applicable.

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#### Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval Approvals were obtained from the ethics committees of 3FM Prague, FM Hradec Králové and FM Bratislava.

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