

Medical students' attitude to persons with mental disorders and psychiatrists after the study of psychiatry

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ABSTRACT

This study aimed to verify and compare the degree of stigmatization of persons with mental disorders by future doctors, depending on the knowledge in the field of psychiatry, to develop recommendations for destigmatization. A solid sample of 276 medical students (139 4th-year students who have not studied psychiatry and 137 5th-year students after studying psychiatry and passing the exam) was interviewed using medico-sociological method (anonymous questioning). It was found that the study of psychiatry made softer the medical students' attitude toward people with mental disorders. The level of archaic beliefs decreased, and views on the genesis of mental disorders become more realistic. The position regarding work and intimate relations becomes softened. There is no dynamics of notions about the necessity of administrative and legal restrictions, restriction of freedom for the sake of society's safety. In addition, there remains a high level of stigmatizing in terms of treatment of the somatic pathology in persons with mental disorders. The development of destigmatization programs is necessary. They can be implemented within the courses "biomedical ethics" and "introduction to specialty." It will help to make future doctors' attitude toward people with mental disorders softer and decrease the stigmatizing.

KEY WORDS: Destigmatization, Medical students, Mental disorders, Stigma, Study of psychiatry

INTRODUCTION

Stigma is understood as a complex social process of labeling people different from others for the purpose of devaluation and discrimination and is formed with the participation of cognitive, emotional, and behavioral components. At the same time, stigma occurs on several levels simultaneously: Intrapersonal and social, including discriminatory laws and bylaws.^[1] It is known that 30% among those who seek help from general practitioners are diagnosed with mental disorders. Moreover, every fourth person has a mental illness during life.[2] Even physicians and medical students are not an exception: A significant number of students studying medicine are subject to a high level of stress, a state of disadaptation and mental discomfort,^[3] 30% have depression of varying severity, and 50% have anxiety.^[4]

Literature data indicate a significant prevalence of somatic pathology in persons with mental

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disorders.^[5-7] Nevertheless, the needs of this group of patients in specialized and general medical care are often neglected,^[8-11] which are associated with stigmatization of mentally ill people, which leads to their discrimination in all spheres of life.

Stigma associated with mental illness is widespread both among people with a high level of education^[12] and in the health-care system: People with mental disorders often report the devaluation, dismissal, and dehumanization of many health professionals they have to communicate with when seeking medical help.^[13]

Furthermore, the lack of integration of general somatic and psychiatric medical services, the lack of agreement on which specialists should be responsible for the prevention and treatment of comorbid somatic diseases in patients with severe mental disorders, prevents the timely provision of the required medical care.^[14] To reduce the availability of medical care, especially for vulnerable segments of the population, to which persons with mental disorders are involved,^[15] leads to a reduction in hospital beds.^[16] Even in the case of care, often its quality is lower than in patients

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without severe mental illnesses.^[7,10] The reason for this situation, from our point of view, is the stigmatization of people with mental disorders at all levels of the organization and medical care.^[17]

It is known that awareness in the field of psychiatry,^[18] as well as communication with persons with mental disorders in the family, reduced the severity of stigma,^[19] that is, increasing literacy in the field of mental health can be one of the promising ways to reduce stigma.^[20]

Thus, to reduce the level of stigmatization of persons with mental disorders, it is necessary to improve the teaching of psychiatry, increase the number of hours and time of training of medical students. In addition, psychiatrists should work actively with other medical specialists.^[21]

In this regard, the objective of the study was to verify and compare the degree of stigmatization of persons with mental disorders by future physicians, depending on the knowledge in the field of psychiatry, to develop recommendations for destigmatization.

MATERIALS AND METHODS

A total of 276 students of the medical institute were examined: 139 4th-year students (not studied psychiatry), 101 (72.7%) female and 38 (27.3%) male, and 137 5th-year students (studied psychiatry), 96 (70.1%) female and 41 (29.9%) male. The age of 4th-year students was in the range of 19–25 (20.8 ± 1.2) years, and those of the 5th course - 20–25 (21.8 ± 0.9) years.

Table 1: Medical students' beliefs about mental disorders

The main methods of research were: Medical and sociological using a modified questionnaire,[17] including sociodemographic information, an idea of the causes of mental disorders, attitudes toward mentally ill people in the household, family, intimate, administrative, and legal and industrial spheres; sociometric (modified scale of social distance of Bogardus) separately studied the attitude towards the treatment of mentally ill patients. Statistical processing of the database (descriptive statistics, χ^2 criterion with Yates correction for conjugation Tables 2 × 2, odds ratio [OR]) was carried out with the help of a package of applied statistical programs Statistica 6.

RESULTS AND DISCUSSION

A study of the respondents' views on mental disorders shows in Table 1.

As can be seen from the presented table, 4^{th} -year students (not studying psychiatry) are somewhat more likely than 5^{th} -year students to believe that "mental illness is the result of a lack of will and a weak character." They are more often convinced that mental illnesses" are phenomena unknown to science," "they can be contagious," and "are the result of divination, curse, and spoilage."In other respects, the points of view of students of 4^{th} and 5^{th} years on psychiatric disorders coincide.

It is peculiar that a significant part - more than 70% of students of both years believe that mental disorders are simulated to avoid criminal punishment. In addition, the

| Beliefs about mental disorders | 4 years | 5 years | χ^2 | <i>P</i> < |
|--|------------|------------|----------|------------|
| | n (%) | n (%) | | |
| Mental illness is easy to feign | 52 (37.4) | 46(33.6) | 0.29 | 0.59 |
| Mental illness is the result of a lack of will and weak character | 23 (16.5) | 10(7.3) | 4.76 | 0.03 |
| Mentally ill people are just people with extraordinary views | 46 (33.1) | 53 (38.7) | 0.71 | 0.4 |
| Mental illness is a sign of a talented person | 15 (10.8) | 19 (13.9) | 0.35 | 0.55 |
| People simulate mental illnesses to avoid criminal punishment | 100 (71.9) | 102 (73.7) | 0.11 | 0.74 |
| Mental illness can be contagious | 19 (13.7) | 4 (2.9) | 9.08 | 0.004 |
| Mental diseases are the result of divination, curses, and spoiling | 25 (18.0) | 11 (8.0) | 5.18 | 0.02 |
| Mental disorders are phenomena which are unknown to science | 50 (36.0) | 33 (24.1) | 4.08 | 0.04 |
| If a person has a mental illness, then he will never recovered | 35 (25.2) | 40 (29.2) | 0.38 | 0.54 |
| Mental diseases, like somatic, have a biological basis | 113 (81.3) | 121 (88.4) | 2.12 | 0.15 |
| Psychics, mages, and healers can help with mental illness | 23 (16.5) | 13 (9.5) | 2.44 | 0.12 |

Table 2: Attitude to persons with mental disorders in the household sphere

| Beliefs | 4 years | 5 years | χ² | <i>P</i> < |
|---|------------|------------|--------|------------|
| | n (%) | n (%) | | |
| Mentally ill people are dangerous in most cases | 89 (64.1) | 66 (48.2) | 6.41 | 0.012 |
| Mentally ill people evoke pity and sympathy | 102 (73.4) | 109 (79.6) | 1.14 | 0.29 |
| Would react with fear to a friend after setting his psychiatric diagnosis | 58 (41.7) | 46 (33.6) | 1.6 | 0.2 |
| Allow a person with a mental disorder to join their friends' company | 60 ((43.2) | 72 (52.6) | 2.08 | 0.15 |
| This is a sin - to hurt mentally ill people | 104 (74.8) | 103 (75.2) | 0.0005 | 1.0 |
| A caring attitude toward mentally ill people is an indicator of public health | 122 (87.8) | 129 (94.1) | 2.7 | 0.1 |
| Mentally ill people in many respects are the same as all other people | 100 (72.0) | 103 (75.2) | 0.22 | 0.64 |

archaic beliefs that "mentalists, magicians, and healers can help with mental illness" are quite widespread: From 16.5% of the 4th year to 9.5% of the 5th year. Although the study of psychiatry has allowed the formation of certain beliefs in the biological nature of pathology, archaic beliefs are difficult to rethink. The results of the study of the attitudes of students to the mentally ill in the household sphere are presented in Table 2.

It is established that 4th-year students more often than the 5th-year believe that mentally ill in most cases are dangerous (OR = 1.9, 95% confidence interval [CI] = 1.15–3.19). Thus, it can be said that the study of psychiatry almost 2 times reduces the probability of an opinion about the mentally ill as a constant danger. This point of view is more characteristic of female subjects: 69.3% of the 4th-year and 45.8% of the 5th-year (χ^2 = 10.18 p = 0.002; OR = 2.7, 95% CI = 1.4–5.0). On the other parameters, the points of view coincide (no statistically significant differences revealed).

Despite the fact that 2/3 students of both years believe that it is a sin to offend a mentally ill person, there are gender differences among the students of the 4th year: This point of view was more common to females (80.2%) than for males (60.5%) ($\chi^2 = 4.67 P = 0.03$; OR = 2.6, 95% CI = 1.1–6.4). In addition, 98% of female students of the 5th year and 85.4% of the male students ($\chi^2 = 6.1 P = 0.01$; OR = 8.05, 95% CI = 1.4– 60.8) believe that a humane and caring attitude toward the mentally ill is an indicator of health society. Thus, in the domestic sphere, a more humane attitude to persons with mental disorders at the verbal level was demonstrated by females.

The results of the study of the attitude toward the mentally ill in the administrative-legal sphere are presented in Table 3.

As can be seen from Table 3, the students of both courses are unanimous in the aspect of limiting persons with mental disorders to rights. At the same time, there is a certain ambivalence - two-thirds of the students of both years argued about the fullness of the civil rights of the mentally ill people.

The study of the attitude toward persons with mental disorders in the employment sphere is shown in Table 4.

The study showed that most students of both courses believe that a mentally ill person should not work as a teacher at a higher educational institution (OR = 1.96, 95% CI = 1.1–3.46). This point of view is more inherent in females of 4th year - 82.2% compared with the 5th year - 66.6% (χ^2 = 5.46 p = 0.02, OR = 2.3, 95% CI = 1.1–4.7). In addition, 4th-year students often (χ^2 = 5.7 p = 0.017; OR = 2.09 95% CI = 1.14–3.87) than the 5th-year believe that mentally ill people cannot perform well: 53.4% and 35.4%, respectively.

At the same time, the 5th year male students (29.3%) are more likely than female students (9.4%) to believe that a mentally ill person can be trusted in management at work ($\chi^2 = 7.29 P = 0.008$; OR = 4.0, 95% CI = 1.39–11.65).

The results of the study of the attitude to persons with mental disorders in the family sphere are presented in Table 5.

It is established that students of both years have the equally negative attitude to the friendship of their children with mentally ill children. At the same time, they do not allow the thought that their relatives and friends can become mentally ill. Students are unanimous in the aspect of prohibiting mentally ill people from giving birth and raising their children, as well as to marry.

| Beliefs | 4 years | 5 years | χ² | <i>P</i> < |
|---|--|---|-----------------------------|-----------------------------|
| | n (%) | n (%) | | |
| Mentally ill patients must be isolated to avoid committing crimes You can sacrifice the freedom of a mentally ill person for the safety of society A mentally ill person may have the same civil rights as a normal A mentally ill person should not have electoral rights | 82 (59.0) 89 (64.0) 94 (77.6) 41 (29.5) | 73 (53.3) 98 (61.5) 104 (75.9) 46 (33.6) | 0.7 1.45 1.94 0.36 | 0.4 0.23 0.16 0.55 |

Table 4: Attitude toward persons with mental disorders in work and employment sphere

| Beliefs | 4 years | 5 years | χ ^² | P < |
|---|------------|------------|----------------|------------|
| | n (%) | n (%) | | |
| Mentally ill people cannot work in a competent manner | 69 (49.6) | 54 (39.4) | 2.5 | 0.11 |
| A mentally ill person should not work as a teacher in a higher educational | 109 (78.4) | 89 (65.0) | 5.5 | 0.019 |
| institution | | | | |
| A mentally ill person cannot be trusted as a manager | 108 (77.7) | 106 (77.4) | 0.0005 | 1.0 |
| Mentally ill person can fail at any time that is why it is undesirable to hire them | 80 (57.5) | 78 (58.4) | 0.0005 | 1.0 |
| Most people do not want their employees to be mentally ill | 121 (87.0) | 129 (94.2) | 0.0005 | 1.0 |
| A mentally ill person cannot be trusted with management in the workplace | 125 (89.9) | 116 (84.7) | 1.28 | 0.26 |

At the same time, after studying psychiatry (OR = 2.69, 95% CI = 1.58-4.59), in particular, the role of hereditary factors in the development of mental disorders, students note that mentally ill people are often give birth to mentally ill children.

The results of the study of the attitude to persons with mental disorders in the intimate sphere are presented in Table 6.

mAs for the intimate sphere, it is somewhat more likely (OR = $1.86\ 95\%\ CI = 1.0-3.5$) for 5th-year students than for the 4th-year to believe that a person who has been treated by a psychiatrist can be a full-fledged sexual partner. Significantly less often students of both courses stigmatize persons with mental disorders in the aspect of attributing to the sexual promiscuity and perversions, as well as the inability to love.

The results of the study of the attitude to the treatment of somatic diseases in people with mental disorders are presented in Table 7.

It was found that 4th-year students with a greater probability (OR = 2.39 95% CI = 1.38–4.15) than the 5th-year believe that mentally ill people are undesirable to treat somatic diseases along with mentally healthy ones. The majority of students (most of whom have not studied psychiatry) said that the place of treatment for people with mental disorders from physical illness should be a psychiatric hospital. Furthermore, more than half of the 4th-year students and 43.8% of the 5thyear think that it is necessary to create separate clinics for the treatment of somatic diseases in mentally ill people so that they were separated from the mentally healthy (OR = 2.14, 95% CI = 1.29–3.58). Some ambivalent attitude of students regarding the treatment of mentally ill people from physical illness is revealed: 79.9% of students of the 4th year and the most part (89.8%) of the 5th-year believe that when treating a physical illness a mentally ill person should have the same rights as a mentally healthy person ($\chi^2 = 4.53 P = 0.037$; OR = 2.2 95% CI = 1.05–4.69). 4th-year students more often than the 5th-year refused to persons with mental disorders inexpensive high-tech care, accordingly (OR = 2.7, 95% CI = 1.08–6.98).

More than a quarter (26.6%) of the 4th-year students and 11.0% of the 5th-year think that the therapist can independently diagnose mental disorders and prescribe a wide range of psychotropic medications ($\chi^2 = 10.07$ p = 0.002, OR = 2.95, 95% CI = 1.46–5.99). There is a similar point of view also in the aspect of diagnosis and therapy of depressive disorders (OR = 1.9, 95% CI = 1.07–3.38).

CONCLUSION

Thus, the research showed that the study of psychiatry to some extent softens the attitude of medical students to persons with mental disorders. Thus, the level of archaic beliefs decreases and the ideas about the genesis of mental disorders become more realistic. The number of those who are convinced of the social danger of mentally ill patients is decreasing, although it remains at a high level, especially among the females. The attitude in the intimate sphere is somewhat relaxed. Along with this, there is no dynamics of ideas about the need for administrative and legal restrictions on persons with mental disorders: Isolation to prevent

| Table 5: Attitude to persons with menta | l disorders in the family sphere |
|---|----------------------------------|
|---|----------------------------------|

| Beliefs | 4 years | 5 years | χ ^² | P < |
|---|-----------|-----------|----------------|------------|
| | n (%) | n (%) | | |
| Do not want their children to be friends with the mentally ill child | 89(64.0) | 78 (57.0) | 1.17 | 0.28 |
| Do not assume the thought that their family and friends can develop a mental | 75 (54.0) | 79 (58.1) | 0.25 | 0.62 |
| disorder | | | | |
| Want to prohibit mentally ill people from giving birth to children | 36 (25.9) | 46 (33.6) | 1.6 | 0.21 |
| Mentally ill people cannot be trusted in the upbringing of their own children | 70 (50.4) | 72 (52.6) | 0.06 | 0.81 |
| It is not good idea to marry a mentally ill person | 36 (26.0) | 39 (28.4) | 0.12 | 0.73 |
| Cannot be good spouses | 35 (25.2) | 30(21.9) | 0.32 | 0.57 |
| Want to prohibit mentally ill people to marriage | 23 (16.5) | 16 (11.6) | 0.98 | 0.32 |
| Mentally ill people are often born mentally ill children | 38 (27.3) | 69 (50.4) | 14.4 | 0.0008 |

Table 6: Attitude to persons with mental disorders in the intimate sphere

| Beliefs | 4 years | 5 years | χ ^² | P < |
|--|------------|------------|----------------|------------|
| | n (%) | n (%) | | |
| Mentally ill people are not able to love | 4(2.8) | 4 (2.9) | 0.0005 | 1.0 |
| Mentally ill people - sexual perverts | 22 (15.9) | 17 (12.4) | 0.41 | 0.52 |
| Mentally ill people are sexually dissolute often | 24 (17.3) | 30 (21.9) | 0.67 | 0.41 |
| A person who has been treated by a psychiatrist can be a full-fledged sexual partner | 101 (72.7) | 114 (83.2) | 3.87 | 0.049 |

| Beliefs | 4 years | 5 years | χ ² | <i>P</i> < |
|---|------------|------------|----------------|------------|
| | n (%) | n (%) | | |
| Treat separately from the mentally healthy | 60 (43.2) | 33 (24.1) | 10.4 | 0.002 |
| Treat by psychiatrist | 39 (28.1) | 29 (21.1) | 1.41 | 0.23 |
| Treat in a psychiatric hospital | 82 (59.0) | 63 (46.0) | 4.17 | 0.041 |
| Most people would not want to be treated in the same room with a | 115 (82.7) | 125 (91.2) | 3.68 | 0.055 |
| mentally ill person | | | | |
| Do not provide high-tech assistance | 20 (14.4) | 8 (5.9) | 4.63 | 0.032 |
| Create special clinics so that mentally ill people would not be together | 87 (62.6) | 60 (43.8) | 9.05 | 0.003 |
| with mentally healthy | | | | |
| Consultation of somatic patients (in the presence of neurotic disorders) by | 111 (79.9) | 108 (78.9) | 0.004 | 0.95 |
| a psychiatrist is reasonable | | 100 (70.5) | 0.000 | 0.50 |
| A doctor therapist can independently diagnose mental disorders and | 37 (26.6) | 15 (11.0) | 10.07 | 0.002 |
| prescribe psychotropic drugs | 57 (20.0) | 15 (11.0) | 10.07 | 0.002 |
| Depressive disorders in somatic patients can easily be treated by a | 47 (37.8) | 29 (21.2) | 4.91 | 0.027 |
| | 47 (37.8) | 29 (21.2) | 4.91 | 0.027 |
| therapist (neurologist and surgeon) | | | | |

the commission of offenses and restrict freedom for the sake of society's safety. In the production sphere, more than two-thirds of the students of both courses would refuse to persons with mental disorders a managerial position, and more than half - a job in general; the vast majority of students (87% and 94.2% of 4th and 5th year, respectively) "do not want their employees to be mentally ill." In the family sphere, students of both courses equally negatively treat persons with mental disorders, both in the aspect of friendly relations and in the possibility of allowing the birth and upbringing of children. A high level of stigmatizing attitude toward the organization of treatment of the existing somatic pathology in persons with mental disorders has been identified and maintained. In fact, half of those surveyed believe that people with mental pathology must be treated in a psychiatric clinic, or one must create special institutions. The vast majority of students of both years believe that most people would not be willing to be treated in the same room with a mentally ill person. In this regard, the development of destigmatization programs that can be implemented within the courses "Biomedical Ethics" and "Introduction to Specialty" is required, which will help to soften the stigmatizing attitude of future doctors to people with mental disorders.

REFERENCES

- Goffman E. Stigma: Notes on the Management of Spoiled Identity. Englewood Cliffs, NJ: Prentice Hall; 1963. p. 147.
- Hardcastle M, Hardcastle B. Stigma from mental illness in primary care. Pract Nurse 2003;26:14-9.
- Gorelik SG, Kovaleva OL, Gavrilova AA, Milyutina EV, Filinichenko TS. Evaluation of efficiency of the method of correction of the psychoemotical state of students of the medical institute. Res Result: Med Pharm Ser 2017;3:65-73.
- Ruzhenkova VV. Educational stress as a factor of the risk of formation of additive behavior, alert and depressive disorders in foreign medical students. Res Result: Med Pharm Ser 2018;4:62-8.

- Neznanov NG, Martynihin IA, Sokoljan NA, Tanjanskij DA. Risk factors of metabolic syndrome in patients with schizophrenia. Ment Disord Gen Med 2009;3:13-7.
- De Hert MA, van Winkel R, Van Eyck D, Hanssens L, Wampers M, Scheen A, *et al.* Prevalence of the metabolic syndrome in patients with schizophrenia treated with antipsychotic medication. Schizophr Res 2006;83:87-93.
- Hennekens CH. Increasing global burden of cardiovascular disease in general populations and patients with schizophrenia. J Clin Psychiatry 2007;68 Suppl 4:4-7.
- Druss BG, Bradford WD, Rosenheck RA, Radford MJ, Krumholz HM. Quality of medical care and excess mortality in older patients with mental disorders. Arch Gen Psychiatry 2001;58:565-72.
- Cradock-O'Leary J, Young AS, Yano EM, Wang M, Lee ML. Use of general medical services by VA patients with psychiatric disorders. Psychiatr Serv 2002;53:874-8.
- Frayne SM, Halanych JH, Miller DR, Wang F, Lin H, Pogach L, et al. Disparities in diabetes care: Impact of mental illness. Arch Intern Med 2005;165:2631-8.
- Knaak S, Mantler E, Szeto A. Mental illness-related stigma in healthcare: Barriers to access and care and evidence-based solutions. Healthc Manage Forum 2017;30:111-6.
- Ukpong DI, Abasiubong F. Stigmatising attitudes towards the mentally ill: A survey in a Nigerian university teaching hospital. S Afr J Psychiatry 2010;16:56-60.
- Hamilton S, Pinfold V, Cotney J, Couperthwaite L, Matthews J, Barret K, *et al.* Qualitative analysis of mental health service users' reported experiences of discrimination. Acta Psychiatr Scand 2016;134 Suppl 446:14-22.
- Parks J, Svendsen D, Singer P, Foti M. Morbidity and Mortality in People with Serious Mental Illness. National Association of State Mental Health Program Directors Medical Directors Council; 2006. Available from: http://www.nasmhpd.org/ publications.ctm#rechpap. [Last accessed on 2017 Aug 20].
- Ruzhenkova VV, Ruzhenkov VA. The stigma problem in psychiatry and suicidology. Belgorod state university. Sci Bull: Med Pharm 2012;4:5-13.
- Hodosh EM, Efremova OA. Effect of reducing beds on the accessibility and quality of care. Res Result: Med Pharm Ser 2015;1:49-61.
- Ruzhenkova VV. Stigmatization of Suicides: Clinical-Social and Rehabilitation-Preventive Aspects. PhD Thesis. Moscow; 2016. p. 23.
- Angermeyer MC, Matschinger H, Corrigan PW. Familiarity with mental illness and social distance from people with schizophrenia and major depression: Testing a model using data from a representative population survey. Schizophr Res 2004;69:175-82.
- 19. Eksteen HC, Becker PJ, Lippi G. Stigmatization towards the mentally ill: Perceptions of psychiatrists, pre-clinical and

post-clinical rotation medical students. Int J Soc Psychiatry 2017;63:782-91.

- Wang J, Fick G, Adair C, Lai D. Gender specific correlates of stigma toward depression in a Canadian general population sample. J Affect Disord 2007;103:91-7.
- 21. Schlozman S, Beresin EV, Balon R, Coverdale JH, Brenner AM,

Louie AK, et al. Stigma and mental health: A proposal for next steps. Acad Psychiatry 2016;40:735-9.

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