

When asked how often they have been prescribed with antibiotics 62 (44%) were prescribed once a year, 64 (45%) at least 2 to 3 times a year. 12 people used antibiotics 5 or more times a year, which corresponds to 8% of respondents. 2 (1%) participants self-prescribed and used at least 10 times per a year which is alarming.

When analyzing the results, it is clear that majority of the participants have used antibiotics for self-limiting diseases such as common cold and sore throat as some time those symptoms are caused by viral infections, antibiotics play no role in subduing those symptoms. An taking antibiotics for fever and headache instead of NSAIDS are baffling and alarming. Inadequate continuation of antibiotic therapy is another major reason for antibiotic resistance as we can see many students discontinue antibiotic therapy after symptoms subdue. Early initiation and inadequate continuation of antibacterial therapy is one of the main causes of antibiotic resistance, as we see that many students stop antibiotic therapy after symptoms have subsided, without completing a full course of treatment. The second of the main causes of resistance is the frequent prescription of an antibiotic. Therefore, repeated use of the same antibiotic should be avoided in order to avoid the formation of resistance to it. As we can see, many students (54%) used it repeatedly, which also increases resistance.

Conclusions

The conducted study is of great importance to assess the involvement of future physicians in the problem of antibiotic therapy. Senior students were more knowledgeable and less likely to give a general definition of the «antibiotics» group, then junior students (6 and 12%, respectively) students. More than 50% students admitted that they self-prescribed antibiotics. Amoxicillin and Azithromycin is the most prescribed antibiotics. These antibiotics were used in 39 and 29% of cases, respectively. Unfortunately, students were often in a hurry to start taking antibiotics (55%) and did not always keep the required duration of intake (39%). Also, previous antibacterial therapy during the year was not always taken into account. Therefore, as part of training at medical schools, competencies in the field of antibiotic selection algorithms, timing and safety of treatment should be further developed.

LITERATURE

1. WHO, Control antibiotic misuse or the drugs won't work, warn WHO experts? [Electronic resource]. – Mode of access: <https://www.who.int/europe/news/item/23-11-2023-control-antibiotic-misuse-or-the-drugs-won-t-work--warn-who-experts>. – Data of access: 07.02.2024.
2. Formulary Watch, The 5 most over prescribed antibiotics [Electronic resource]. – Mode of access: <https://www.formularywatch.com/view/5-most-over-prescribed-antibiotics>. – Data of access: 07.02.2024.

УДК 616.89: [378.6-057.875:615.214.3]

Sundarraj Madhushalini, Prathapan Kumaresan, M. N. Mirge

Scientific supervisor: Candidate of Medical Sciences, Associate Professor N. V. Trofimova

*Educational Establishment
“Gomel State Medical University”
Gomel, Republic of Belarus*

MENTAL HEALTH ASSESSMENT AND ANTIDEPRESSANT USE AMONG MEDICAL STUDENTS

Introduction

Two of the most widespread mental disorders seen among today's school and college students are depression and anxiety. Anxiety and depressive disorders are among the most common psychiatric illnesses; they are highly comorbid with each other, and together they are

considered to belong to the broader category of internalizing disorders. Depression and anxiety often first appear in adolescence and significantly affect students' studies, relationships, and lives [1, 2, 3].

A lack of understanding of the connections between mental disease and other health conditions has probably led to an underestimation of the burden of mental disorders. Globally, mental health among undergraduate students represents an important public health entity. University students face heavy workloads in their studies, which can lead to increased psychological stress, which can subsequently lead to serious disorders and mental health problems such as depression and anxiety. As a result, university students' academic performance, physical well-being and mental health may substantially worsen over the academic career and could only be detected at an advanced stage [1, 4].

Antidepressants are a class of medications used to treat major depressive disorder, anxiety disorders, chronic pain, and addiction [5]. Non-adherence to antidepressants has a high cost for the individual and society since it is associated with an increased risk of progression in severity, relapse, and recurrence and higher rates of emergency visits and hospitalizations [6]. The growth of scientific production regarding the mental health of medical students reveals a necessary concern concerning their illness, that the incidence of mental suffering among medical students is higher than in the general population. Therefore, studies about the use of antidepressants in medical students are necessary and pertinent [7].

Goal

To study the mental health assessment and antidepressant use among medical students.

Material and methods of research

An anonymous online questionnaire survey was conducted with 142 Russian-speaking 3rd year students of Gomel State Medical University. The questionnaire consisted of the following questions: age, gender, state of mind (depression, anxiety) during studies, sessions and vacations, improvement of mental state after study or session, taking antidepressants to improve mental health during medical university, duration of taking antidepressants, who recommended taking antidepressants, effectiveness from taking the antidepressants, reason for prescribing antidepressants, whether students pay attention to their mental health.

The results of the research and their discussion

There were 113 (79.57%) females and 29 (20.43%) males among the surveyed students. In age distribution, there were 129 (90.8%) students aged 19–20 years and 13 (9.2%) students aged 21–25 years.

The result of the survey found that 75 (52.8%) students started to experience depression (depressed mood, joylessness, loss of interests, decreased motivation, decline in energy, uncertainty) or anxiety (periodic manifestation of restlessness, strong agitation) more in 3rd year than in 1st or 2nd year, 42 (29.6%) students believe that they may have this condition, 22 (15.5%) students believe that they do not have this condition, and 3 (2.1%) students do not know. Figure 1 presents a pie chart showing the frequency of occurrence of depression and anxiety in students more in the third year.

The state of depression or anxiety increases in 121 (85.2%) students during the session period, and increases in 10 (7.1%) students during study and session periods, 5 (3.5%) experience more state of anxiety or depression during vacations and 6 (4.2%) do not know.

The analysis has shown that this state (depression and anxiety) independently passes after the study or session in 102 (71.8%) students, it stays consistent in 17 (12%) students, 13 (9.2%) students require medical correction and 10 (7%) students have other options.

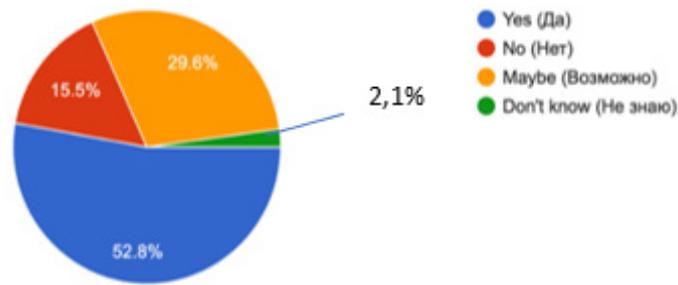


Figure 1 – Frequency of occurrence of depression and anxiety in students to a greater extent in the third year

23 (16.2%) of the surveyed students occasionally used antidepressants to reduce depression or anxiety in medical university and 2 (1.4%) students are currently using, the remaining 117 (82.4%) students are not using antidepressants. The pie chart in figure 2 shows the number of cases using antidepressants.

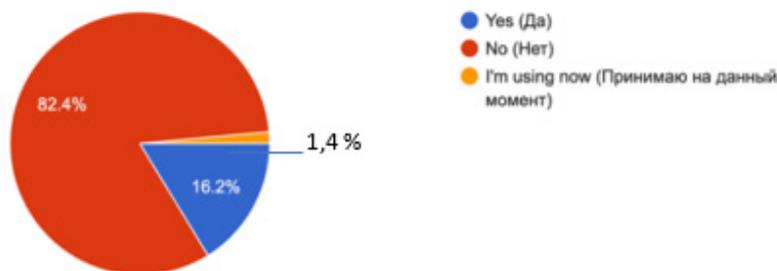


Figure 2 – Number of students using antidepressants

The duration of antidepressant use was less than 2 months in 18 (77.5%) students, 2–4 months in 2 (8.5%) students, 4–6 months in 2 (8.5%) students, and more than 1 year in 1 (5.5%) student. Figure 3 presents a pie chart showing the duration of antidepressant use by students.

In response to the question, “Who recommended your use of antidepressants?” students cited various sources, 4 (17.4%) a physician, 1 (4.4%) a psychiatrist, 3 (13.1%) a psychotherapist, 2 (8.6%) sought advice from friends, and 13 (56.5%) of the responses was “Other”.

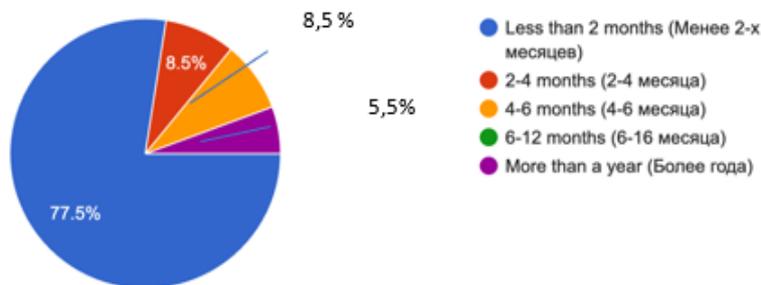


Figure 3 – Duration of antidepressant usage by students

Out of the 23 students using antidepressants, 7 (33.8%) students have told that the reason for using antidepressants in their case is due to increased workload at university (academic pressure) and the remaining students 16 (66.2%) answered other as “Other”.

The effectiveness of antidepressants (reduction in depression and anxiety) was noted by 18 (78.26%) students, 4 (17.4%) students showed no improvement, and 1 (4.34%) student answered “Possibly”.

When asked whether mental health issues are given enough attention in medical university, 124 (87.3%) answered “No”.

Thus, it is necessary to pay attention to the growth of mental health problems among students by the third year of study. This issue requires more detailed study to develop effective preventive measures to reduce depression and anxiety among students.

Conclusion

1. The study found that a large number of students experience problems by the third year and do not take care of their mental health.

2. The prevalence of mental health challenges among students at medical universities underscores the pressing need for proactive support.

3. The use of antidepressants can be a valuable tool in the management of mental disorders, but not the primary treatment.

LITERATURE

1. Prevalence of Depression and Anxiety Among School and College Students / H. T. Rakshith [et al.] // International Journal of Pharmaceutical Sciences Review and Research. – 2023. – Vol. 81(1). – P. 177–122.
2. Kalin, N. H. The Critical Relationship Between Anxiety and Depression / N. H. Kalin // The American journal of psychiatry. – 2020. – Vol. 177, № 5 – P. 365–367.
3. School-based depression and anxiety prevention programs for young people: A systematic review and meta-analysis. / A. Werner-Seidler [et al.] // Clinical psychology review. – 2017. – Vol. 51. – P. 30–47.
4. Depression and Anxiety Among Medical Students: A Brief Overview / A. A. Mirza [et al.] // Advances in medical education and practice. – 2021. – Vol. 12. – P. 393–399.
5. Jennings L, Antidepressants. Clinical Psychopharmacology for Neurologists. Springer / L. Jennings // Wikipedia. – 2018. – P. 45–71.
6. Barriers and Facilitating Factors of Adherence to Antidepressant Treatments: An Exploratory Qualitative Study with Patients and Psychiatrists / G. D. L. Beatriz [et al.] // National Library of Medicine. – 2022. – Vol. 193 – P. 1–10.
7. Evaluation of the incidence of antidepressant use among medical students in the state of Alagoas. / F. M. O. Santos [et al.] // Health education themes. – 2023. – P. 1825–1833.