Mental well-being among students of selected medical universities in Poland. The role of a family physician

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Summary

Background. Based on available literature and the practices of primary care physicians, it has been observed that young adults have increasing levels of stress and mental health disorders, which worsens their quality of life. Medical students are a special group due to their stressful studies.

Objectives. An assessment of the well-being of students at selected medical universities in Poland. Determining the role of a family physician in this respect. Increasing awareness of mental health among both students as well as family physicians.

Material and methods. Students of medical faculties (medicine, nursing, pharmacy, emergency medicine) at selected universities in Poland. Form of the survey – an anonymous online questionnaire. The data collected was statistically analysed using STATISTICA v. 13 (StatSoft Inc, USA).

Results. 20% of the respondents described their mental condition as good. Anxiety disorders were reported by 52%, sleep disorders by 75%, eating disorders by 46%, and 15% of the participants have been diagnosed with depression. 86% of the students consumed alcohol, and 73% did not use medical help.

Conclusions. Students at selected Polish medical universities report high levels of stress. Many of them have developed anxiety disorders, sleep disorders and depression during the course of their studies. Measures should be taken to raise awareness of the prevalence of mental disorders among students by both students and family physicians. Family physicians should pay particular attention to the mental health of medical students.

Key words: depression, students, family physicians, mental health.

Background

Mental well-being is an assessment of satisfaction with one’s life, i.e. a balance between the ability to cope with the problems and daily challenges one faces. Nowadays, the pace and intensity of life increases the development of mental disorders. Anxious behaviours, poor sleep quality, eating disorders, abuse of alcohol and other stimulants, as well as depression, have been increasingly common in society [1–4]. Numerous world reports and observations of the practices of family doctors prove that mental health disorders have occurred more frequently among young people [1–4]. It is likely that the figures are underestimated, as indicated by data from literature. Medical students constitute a special group due to their stressful studies and high levels of stress. The main problem is the fact that studying at a medical school promotes the development of anxiety, eating and sleep disorders, exhaustion and burnout. Many students do not want to seek appropriate help because of lack of time or money. A family physician, having a wide range of patients, has a chance to notice this disturbing phenomenon, diagnose it and provide patients with relevant help. The main aim of this article is to draw family physicians’ attention to these problems and, on the other hand, to improve students’ awareness that they should seek help from their family physicians. According to some literature data, to help with this the problem, prevention in the form of promoting a healthy lifestyle and sleep regime should be undertaken.

Objectives

The aim of the study is to assess the mental well-being of students of medical faculties (faculties of medicine, pharmacy, nursing and emergency medicine) at selected medical universities in Poland, raise awareness among both the academic community and general practitioners, as well as to determine the role of primary care physicians in this respect.
Material and methods

Our study was carried out in 2021. An anonymous original online survey was conducted via a Google form. The survey was distributed via Internet. Our survey was conducted in Polish language. The study group included medical, pharmacy, nursing and emergency medicine (students studying to become medical rescuers) students from 16 medical universities in Poland. Further research extended to other medical occupations should be carried out in the future. In total, 613 participants (498 women and 115 men) took part in the survey, with medical students accounting for 52%, pharmacy students 31%, nursing students 8% and emergency medicine students 8% of all the respondents (Table 1).

The inclusion criteria were: age > 18 years, studying at a medical university in Poland (faculties: medical, pharmacy, nursing, emergency medicine) and those who approved of participation in the research. The exclusion criteria were: age < 18 years, not being a student of a medical university in Poland and disapproval of participation in the research.

Statistics

Statistical analysis of the data is based on a comparison of the prevalence of phenomena disadvantageous for mental health with a division by gender, area and year of study. Microsoft Excel from Microsoft Office 2010 and Statistica v. 13 were used for the statistical analysis of the results.

Elements of descriptive statistics were applied to determine the arithmetic mean, median, minimum, maximum and standard deviation. The Shapiro-Wilk normality test was used to check the distribution.

The hypotheses were verified using non-parametric tests. The Mann-Whitney test was used for the analysis of two ordinal variables and quantitative variables of non-normal distribution, and for more than two groups, the Kruskal-Wallis test was used.

A significance level of alpha = 0.05 was assumed.

Reliability of the instrument was satisfactory, with Cronbach’s alpha being 0.79.

Ethical approval

The study was approved by the Bioethics Committee (KB: RNN/42/21/KE).

Results

Mental condition

Only 5% of all the respondents described their mental state as very good, 22% as good, 39% as average, 29% as bad and 5% as very bad. Higher levels of stress were reported by women. The level of stress in everyday life is described as very low by 0% of women and 2% of men, low by 4% of women and 9% of men, average by 29% and 43%, high by 51% and 37% and very high by 15% and 10%, respectively (Table 2). Among the respondents, 92% declared an increase in the level of stress after entering medical school. Based on the Mann-Whitney test, it was shown that there was a statistically significant difference in stress levels between men and women – $p = 0.0003$.

The students at most of the universities surveyed rated their stress level as 4 on a scale ranging from 1 to 5 (with 1 being very low and 5 being very high). Among all the study participants, the most common cause of stress was examinations, and this did not differ between years or faculties. Based on the Spearman correlation test, a statistically significant ($p = 0.03$, weak ($R_s = 0.1$), positive correlation between stress level and mental state was demonstrated. As the stress level increases, the mental state in the study population deteriorates (Table 3).

Sleep disorders

Sleep disorders occurred in 75% of the respondents, more frequently in women (77% to 71%) (Figure 1). They more often affected nursing (83%) and emergency medicine (83%) students than medical (74%) and pharmacy (76%) students (Figure 2).

Most sleep problems occurred during the second and third year of study (Figure 3). In relation to the year of study, this was in 73% of 1st year, 81% of 2nd year, 80% of 3rd year, 70% of 4th year, 73% of 5th year and 77% of 6th year students.

Problems with falling asleep accounted for 24%, 30% experienced problems with waking up, and in 46% of the study participants, a combination of both was observed.

Alcohol consumption

Women consume alcohol less frequently than men. On average, alcohol consumption is declared as: once a month by 48% of women and 33% of men, once a week by 34% of women and 50% of men, everyday by 1% of women and 3% of men. Alcohol is not consumed at all by 17% of women and 14% of men. The most frequent consumption occurs among students of emergency medicine (89%), pharmacy (86%), nursing (85%), and medicine (lowest, however, still high) at 82%. The highest alcohol consumption occurs in the 2nd year of study (93%) and the lowest in the 5th year (75%). Based on the Spearman correlation test, no statistically significant correlation was found between alcohol consumption and stress ($p = 0.795$) and no statistically significant correlation was observed between alcohol consumption and sleep disorders either ($p$-value = 0.835).
Depression

Participants were asked about being diagnosed with depression by a medical doctor. 15% (95 people) of students confirmed this.

Depression was diagnosed in 16% of the female students and 10% of the male students (Table 4); thus, it is more common among women. Depression was diagnosed in 17% of the students of medicine, 17% of the students of emergency medicine and 13% of the students of both pharmacy and nursing. Among the surveyed students, 31% suspected depression in themselves, although none of them had consulted a specialist about the problem.

Antidepressants

Among the respondents, 18% used antidepressants during their university studies. SSRls (selective serotonin reuptake inhibitors) and short-acting benzodiazepines (which works by enhancing a neurotransmitter (GABA) at the GABA A receptor) were the most commonly used substances. In the study population, 91 individuals with sleep disorders were found to be taking antidepressants (19%), while 373 (81%) were not taking any medications. Sleep disorders occurred more frequently in those not using antidepressants.

Anxiety disorders

Anxiety disorders were more common in women (56% of women and 32% of men). Those most vulnerable to anxiety disorders were medical and nursing students (Figure 2). The problem affects 58% of medical students, 46% of pharmacy students, 58% of nursing students and 28% of emergency medicine students (Table 4). This can be observed most frequently in 3rd year students (60%), and least frequently, still often though, in 1st and 6th year students (45% and 49%) (Table 5).

Eating disorders

Eating disorders (such as anorexia nervosa, bulimia nervosa, compulsive eating) are more common in women (51% vs 22%). Based on the Spearman correlation test, a statistically significant ($p = 0.00000$, weak $R_S = 0.2$), positive correlation was found between stress level and eating disorders. As stress levels elevated, the number of eating disorders in the study population increased. The most common form was compulsive eating, reported by 21% of the subjects.

Table 4. Prevalence of mental health disorders among female and male medical, pharmacy, nursing and emergency medicine students at selected medical universities in Poland

| Mental health disorders | Women | Men | Total | Medicine | Pharmacy | Nursing | Emergency medicine |
|-------------------------|-------|-----|-------|----------|----------|---------|-------------------|
| Anxiety                 | 56%   | 32% | 52%   | 58%      | 46%      | 58%     | 28%               |
| Sleep disorders         | 77%   | 71% | 75%   | 74%      | 76%      | 83%     | 83%               |
| Eating disorders        | 51%   | 22% | 46%   | 54%      | 53%      | 50%     | 66%               |
| Alcohol consumption     | 83%   | 86% | 84%   | 82%      | 86%      | 85%     | 89%               |
| Depression              | 16%   | 10% | 15%   | 17%      | 13%      | 13%     | 17%               |

Figure 1. Mental health problems among students at selected medical universities in Poland by gender

Figure 2. Mental health problems among students at selected medical universities in Poland by field of study
Seeking support

During the studies, 28% of women and 18% of men were provided with support by mental health professionals (psychologist, psychiatrist).

Among the study population, 163 individuals (26.5% of all the respondents) sought the assistance of a psychiatrist and psychologist during their studies, including:

- 35 persons were provided with support by a psychiatrist, which accounted for 5.7% of the group surveyed;
- 59 persons were provided with support by a psychologist (9.6%);
- 69 persons were provided with support by both a psychiatrist and a psychologist (11.2%).

The majority of the group (80%) received specialist help because of sleep disorders (131 people), 120 people due to anxiety (73%), 85 people (52%) on account of diagnosed depression and 82 people (50%) due to eating disorders.

The most common causes of stress among students seeking psychiatric or psychological help were the need to learn a large amount of material in a short time and examinations (Table 6).

Among the study group, 21% of women and 20% of men would have a problem with seeking mental health support (Table 7). Based on the Mann-Whitney test, there were no statistically significant differences between genders ($p$-value = 0.291).

The financial aspect (31%), fear of stigma and feeling of shame (26%), as well as lack of time for therapy (16%), were indicated as the main obstacles.

### Table 5. Prevalence of mental health problems among medical students by year of study

| Problem             | 1st Year | 2nd Year | 3rd Year | 4th Year | 5th Year | 6th Year |
|---------------------|----------|----------|----------|----------|----------|----------|
| Depression          | 16%      | 11%      | 19%      | 24%      | 12%      | 11%      |
| Anxiety disorders   | 45%      | 51%      | 60%      | 56%      | 56%      | 49%      |
| High stress level   | 46%      | 56%      | 58%      | 50%      | 39%      | 43%      |
| Sleep disorders     | 73%      | 81%      | 80%      | 70%      | 73%      | 77%      |
| Alcohol consumption | 82%      | 93%      | 82%      | 80%      | 75%      | 86%      |

### Table 6. Most common causes of stress among students provided with support by a psychiatrist and psychologist

| Causes                                | Psychiatric support | Psychological support | Psychiatric and psychological support | Total number of students |
|---------------------------------------|---------------------|-----------------------|--------------------------------------|--------------------------|
| Exams                                 | 32                  | 51                    | 53                                   | 136                      |
| Contact with academic teachers        | 21                  | 38                    | 42                                   | 101                      |
| Contact with patients                 | 4                   | 6                     | 6                                    | 16                       |
| Contact with university administration staff | 8                  | 2                     | 0                                    | 23                       |
| Theoretical classes                   | 6                   | 9                     | 14                                   | 29                       |
| Practical classes                     | 13                  | 16                    | 28                                   | 57                       |
| Necessity to acquire a large amount of material within a short time | 35                  | 48                    | 59                                   | 142                      |
| Fear of professional work             | 16                  | 28                    | 32                                   | 76                       |
| Other                                 | 0                   | 4                     | 1                                    | 5                        |

### Table 7. Seeking the support of a psychologist or psychiatrist by male and female students at selected medical universities in Poland

| Support provided by | Women | Men | Total |
|---------------------|-------|-----|-------|
| Psychologist        | 10%   | 8%  | 10%   |
| Psychiatrist        | 6%    | 4%  | 6%    |
| Psychologist and psychiatrist | 12% | 6% | 11% |
| None                | 72%   | 82% | 73%   |
Discussion

Stress as a factor impairing mental well-being

According to the results of our study, as many as 63% of students at selected Polish medical universities experience high levels of stress. Students were asked to determine their level of stress on a scale of 1 to 5 (whereas 1 means very low and 5 means very high). Among the respondents, 92% of individuals declared that stress increased with the beginning of their studies. This phenomenon has a significant impact on their mental well-being. Mental condition was assessed as bad or very bad by 36% of the respondents, including 30% of women and 25% of men. When observing the students pursuing studies in specific fields, it was found that the level of stress was described as high or very high by 65% of the surveyed pharmacy students, 63% of medical students, 67% of nursing students and 38% of emergency medicine students.

Exposure to constant stress may have an impact on mental health. A study by Szemik et al. on the mental health condition and quality of life of physicians and medical students worldwide, covering the years 1983–2019, showed that the mental health problems, such as anxiety, sleep disorders and alcohol abuse, occurring in these populations resulted from chronic exposure to stress [1]. It was found that medical students and physicians with at least one parent also involved in the profession were found to be less susceptible to stress. The study found that women were more likely to suffer from high levels of anxiety concerning balancing their private and professional life and the resultant professional exhaustion. Another American study on the mental health of medical students showed that the stress that occurs while studying at medical schools persists throughout their career, leading to the development of professional burnout [2]. “Professional burnout” or a state of physical, mental and emotional exhaustion caused by prolonged exposure to difficult work situations, is the result of cumulative stress. In this study, the prevalence of all mental disorders among medical students was estimated to be 21%.

Our survey demonstrates that the level of stress after commencing studies increased in 92% of the respondents, and the level of stress is described as being high in 46% of first-year medical school students. When asked for reasons for this phenomenon, the respondents most frequently indicated examinations, the need to acquire a lot of knowledge in a short time, contact with academic teachers or patients and fear of future professional work. According to the above-mentioned American study, the reason for increased stress during the first year is the need to change from the previous way of learning to a more rigorous form. Furthermore, despite getting used to the new mode of studying, high levels of stress persist because, in the later years, from the third year upwards, there is contact with terminally ill patients, the need to develop interpersonal skills, the beginning of teamwork and the prospect of making decisions about their professional career in the near future [2]. The results of our study indicate that among Polish students of all years of study and medical faculties, the most common cause of stress is examinations.

The current pandemic situation may have an additional impact on broadly understood mental well-being. According to a study by Agiananda et al. on the mental well-being of medical students and health professionals during the COVID-19 pandemic, medical students represented a highly educated population living under constant pressure [3]. Their stressors included time pressure, the financial aspect, the need to learn a lot of information in relatively short time, and the awareness that once you enter the profession, you are responsible for the lives and health of people. In the study, obsessive-compulsive behaviour, concentration problems, anxiety disorders and depression were reported as stress-related disorders. The results are therefore consistent with our study, which may suggest that the stress-based disorders that develop are independent of the pandemic. The impact which the pandemic exerts on mental condition requires further research. Agiananda et al. investigated the effect of the COVID-19 pandemic on mental distress among medical students and healthcare professionals and showed that a shift to distance learning and a sense of lack of personal growth opportunities influenced the development of depression and anxiety disorders in 30% of the students participating in the study [3]. Additionally, healthcare professionals were exposed to the stress of high risk of infection. Other factors agitating mental health at the time of the pandemic were: isolation, feelings of alienation, lack of clear regulations regarding procedures and shortage of personal protective equipment.

A Canadian study (2019) comparing the mental health assessment of medical and non-medical graduates even before the COVID-19 pandemic showed that physicians had significantly higher rates of mental illness, suicidal behaviours, mood disorders and anxiety disorders [4].

Anxiety disorders

Our study showed that 52% of students had anxiety disorders during their studies. These occurred less than once a month in 21% of those studied. When comparing the results of both genders, these traits were observed significantly more often in women (56% vs 32% in men). In terms of the field of study, the occurrence of these disorders was reported most frequently by medical students, i.e. 58%. High percentage rates were also observed among pharmacy (46%), nursing (56%) and emergency medicine (28%) students.

By contrast, a US study comparing the psychological well-being of pharmacy and medical students (2019) (482 subjects) found that anxiety disorders were common among both groups of students; however, they were more frequently observed in pharmacy students (21% vs 11%) [5]. Similar observations to those presented above were obtained in a meta-analysis (involving 30,000 subjects) conducted in China in 2019 [6]. This study found that among medical students of Chinese medical schools, the prevalence of anxiety disorders was estimated at 21%. The lower percentage rates reported in China and the United States as compared to the results obtained in our study are probably due to the different culture, mentality, lifestyle and education.

In contrast, a result similar to that found in our study was obtained in a meta-analysis conducted in Brazil. An analysis of the results of 59 Brazilian studies indicates a very high rate of anxiety disorders (60%) in this population [7].

The impact of impaired mental well-being on the lives of medical students

Among the mental health problems indicated by the surveyed students participating in our study, there were: sleep disorders (75%), eating disorders (55%) and anxiety (52%).

The most commonly indicated methods of stress relief were: talking to relatives and friends (63%), sports and exercise (40%), listening to music, watching movies/series and playing computer games (35%). A disturbing phenomenon was observed with regard to stress relief using stimulants – as many as 22% of the students drank alcohol and 19% used tobacco products. In studies conducted in Australia and New Zealand, medical students were found to be at higher risk of alcoholism, relationship problems, depression and car accidents [8].

The results of the previously mentioned study by Szemik et al., conducted in 2019, indicate that the most serious problems of the mental sphere include alcohol dependence and risky alcohol use, depression and potential suicidal behaviours [1]. In our study, alcohol consumption was declared by almost 70% of the respondents, while almost 50% of them consume alcohol once a month or less frequently. Alcohol use, as the aforementioned way of coping with stress, was reported by 22% of the respon-
A problem with daily alcohol use was reported by 1.5% of the subjects. A study on negative behavioural patterns conducted in 2011 among students of the Medical University of Lodz showed that the most common psychoactive substances were tobacco and alcoholic beverages [9]. Among the subjects, 31.6% of women and 44.3% of men declared themselves as smokers at the time of the survey. A higher proportion of daily smokers was reported by men, of whom 34.4% smoked between 16 and 20 cigarettes per day. Beer was the most frequently consumed alcohol by students of both sexes, followed by wine. The amount of alcohol drunk at one time was statistically significantly higher among men. One-third of the students had tried stimulants, and more than 80% of women and more than 50% of men had contact with hallucinogens. Hallucinogens were used regularly by 7.5% of men, while stimulants, sedatives and sleeping pills were used without medical prescription by 3% of men. The patterns of health risk behaviours varied depending on gender. By comparing these results with those obtained in our study, we can conclude that although ten years have passed, alcohol and tobacco consumption is still a problem among students (more often men), and, in fact, an increase in consumption has even been noticed. A survey involving students of the Medical University of Poznan showed that the most common reasons for alcoholic beverage consumption were “making toasts” (60.7%), “social aspect” (43.2%), “to take it easy” (43.2%) and “to have more fun” (38.9%) [10].

The results of our study indicate the presence of disorders of the mental sphere in the form of eating disorders in a total of 46% of the respondents. This problem was declared by 51% of women and 22% of men; therefore, women were more likely to develop eating disorders. The most common form of eating disorders is compulsive eating, reported by 21% of the respondents.

A 2019 study conducted among Lodz students found eating disorders in 9.5% of women and 2.5% of men, with the difference being statistically significant [11]. In our study, eating disorders were diagnosed only based on the interview, i.e. without medical diagnosis, unlike in the case of the 2019 study. This phenomenon indicates how few students report the problem to doctors. The aforementioned 2019 study further showed that 55% of students had experienced an eating disorder episode in their lives, and 60% of them believed that the problem was associated with social stigma [11]. A study found that in 6%, stress contributed to the development of eating disorders. Whereas, in a Brazilian study, the prevalence of eating disorders and compulsive eating was reported to be approximately 11% [7]. The prevalence varied by gender, with 17% of women and 1.2% of men being affected. In contrast, in a study of the Chinese student population, the prevalence of eating disorders was estimated at 2% [6]. The differences resulting from the distinct cultures have a common denominator – eating disorders more frequently occur in women. In 2012, a survey on awareness of eating disorders was conducted among 200 students of the Medical University of Lodz [12]. Women showed greater knowledge of the subject of eating disorders [12]. The common belief among the respondents was that mass media has an influence on the appearance of eating disorders.

Sleep disorders also appeared to be a frequent problem. According to the results of our survey, 51% of students sleep from six to seven hours per day, 25% less than six hours, and 46% take naps during the day. Sleep disorders occurred in up to 75% of the students. The problems are related to difficulties falling asleep (24.5%), waking up (30%) and a combination of both (45.5%). In 47% of the respondents, these difficulties occurred daily, and in 35%, once a week. This resulted in the occurrence of daytime sleepiness in 83% of the students surveyed. A study conducted in Saudi Arabia on sleep problems among medical students found that 79% of students slept between four and seven hours per day [13]. In the study group, 49% of the respondents took naps after they returned home from university. Additionally, sleep disturbances occurred in 63% of students. A 2017 American study showed that pathological insomnia and sleeping less than seven hours per day are factors leading to burnout among medical students [14]. A study on the quality of sleep conducted in Rzeszow among Polish students showed that in Poland, in the last ten years, the problem of sleep disorders and insomnia in young adults has significantly increased and affects up to 60% of individuals under 25 years of age [15]. In the studied cohort of young adults, sleep disorders occurred in both women and men; however, as in world literature, the quality of sleep in the group of women was assessed to be lower than in that of men. Sleep disorders were mainly influenced by factors related to the lifestyle of the subjects. The treatment of diagnosed mental problems is also important. Our study showed that people taking antidepressants were less likely to suffer from sleep disorders. These observations suggest that the problem is widespread and requires further research.

Depression among medical students

Depression is one of the most common mental disorders in the world. It is estimated that there are currently 350 million people suffering from the disease. According to the data published by the Ministry of Health in the “Scheme for the prevention of depression in Poland for the years 2016–2020”, 3% of the Polish population of reproductive age had at least one depressive episode during their lifetime [16]. A study conducted among Polish high school graduates (45 women, 23 men) showed that depression occurred in 25.7% of the respondents [17]. Antidepressants were taken by 17.6%. In 94.4% of this group, other health problems also co-occurred – sleep disorders (94.1%), suicidal thoughts (47.1%), anxiety syndrome with anxiety attacks (17.6%), other anxiety disorders (17.6%), alcohol abuse (17.6%) and eating disorders (11.8%). Symptoms of alcohol abuse were present in 25.7% of the students surveyed. According to the results of our study, the percentage rate may be higher, as 30% of the students suspected they could suffer from depression; however, they did not consult a doctor about the problem. Nevertheless, 15% of the respondents suffered from officially diagnosed depression in the course of studies. According to our results, gender-related differences were found – the prevalence is higher in women, and the disease affects 16% of females and 10% of males. As far as the undertaken field of studies is concerned, 17% of medical students, 13% of pharmacy students, 13% of nursing students and 17% of emergency medicine students are affected by the problem. Among the respondents, 17% were taking antidepressants during their studies, mainly selective serotonin reuptake inhibitors (SSRIs) and short-acting benzodiazepines. An American study comparing the behaviour of pharmacy and medical students showed that the level of depression was similar among students of both faculties and remained at the level of around 18% [5]. In contrast, a Chinese study found that the prevalence of depression among students was 29% [6]. The data obtained in China did not differ significantly in terms of gender – the prevalence of depression affected 15% of the male and 14% of the female respondents. The prevalence of depression among medical students in Brazil was also high, estimated to be 28% [7]. The dissimilarities found in the aforementioned studies probably result from the different customs, culture and lifestyle.

Seeking the support of a psychologist or a psychiatrist

In our study, we found that 10% of the students sought the assistance of a psychologist, 6% of a psychiatrist, and 11% consulted both a psychologist and a psychiatrist. In this group, 32% were medical students and 21% were pharmacy students. An American study comparing the two groups found that 49% of medical students and 11% of pharmacy students were provid-
ed with support by a psychologist and/or psychiatrist [5]. Both studies showed that medical students were more likely to seek specialist help for mental health conditions than students of other medical faculties (pharmacy, nursing, emergency medicine). This may be due to a greater awareness of the symptoms of the disorders they acquire compared to other students in various faculties of the university.

In our survey, 21% of the respondents reported that visiting mental health professionals would be a problem for them. The financial aspect (31%), fear of stigma and feeling ashamed (26%), as well as lack of time for therapy (16%), were indicated as the main obstacles.

Another recent study conducted among students in Lodz found that 28% of men and 20% of women with eating disorders would seek help from a family doctor [11]. Among the survey participants, 76% of women and 68% of men would go to a psychologist. It has been shown that there remains a group of people who would not use any form of help, which is consistent with our study and requires careful analysis.

The results of a British study on mental health challenges indicated a similar result to that obtained in our study – stigma and stigmatisation were found to be clear barriers preventing 30% of the surveyed medical students experiencing depression from using support provided by mental health professionals [18].

Another study conducted among British students suggests that although medical students experience higher levels of stress than non-medical students, they are less likely to access psychological care than non-medical students [19]. This is due to the feeling of stigma and concerns about future career development.

Role of the family physician

Stress affects many aspects of medical students’ lives, such as sleep, development of eating disorders, anxiety disorders and depression. High consumption of alcohol and tobacco products has been demonstrated among students. A family doctor is a person who has a wide range of patients and adequate knowledge to promote a healthy lifestyle. They can diagnose and treat both somatic and mental illnesses. Based on a 2018 study on the factors contributing to the diagnosis of anxiety disorders and depression, it was established that increasing patients’ trust in terms of family physicians’ abilities to identify stress, anxiety and depression would improve diagnosis of these conditions [20].

According to a study on eating disorders conducted at the Medical University of Lodz, 49% of the students surveyed declared confidence in the competence of their family physicians to diagnose eating disorders, and 20.5% of women and 28.3% of men would seek help from them [11].

Conclusions

Students of selected Polish medical universities are exposed to high levels of stress, anxiety disorders, sleep disorders and depression, and the risk of alcohol addiction is increased; therefore, prevention in the form of promoting a healthy lifestyle and sleep regime should be undertaken. Eating disorders are a common problem among Polish medical students, more often affecting women. Asking for the support of a psychologist and a psychiatrist can be a problem for students. A family physician, having a wide range of patients, has a chance to identify patients at risk and provide them with relevant help, as well as the possibility to encourage them to report to a mental health clinic if needed. A family physician, having a wide range of patients, has a chance to identify patients at risk, diagnose the problem and provide patients with relevant help.

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References

1. Szemik S, Gajda M, Kowalska M. Przegląd badań prospektywnych na temat stanu zdrowia psychicznego oraz jakości życia lekarzy i studentów medycyny. Med Pracy 2020; 71(4): 483–491 (in Polish).
2. Gentile SJJ, Roman B. Medical Student Mental Health Services: Psychiatrists Treating Medical Students. Psychiatry (Edgemont) 2009; 6(5): 38–45.
3. Agiananda F, Lukman P. Psychological Well-being of medical students and health-care workers in COVID-19 pandemic [cited 03.11.2021]. Available from URL: https://meri.fk.ui.ac.id/wp-content/uploads/2019/03/PSychological-Wellbeing-of-Med-Students-HCWs-in-Covid19-Pandemic_FA-PR-2.pdf.
4. Maser B, Danilewitz M, Guerin E, et al. Medical Student Psychological Distress and Mental Illness Relative to the General Population: A Canadian Cross-Sectional Survey. Acad Med 2019; 94: 1781–1791.
5. Fischbein R, Bonfite N. Pharmacy and Medical Students’ Mental Health Symptoms, Experiences, Attitudes and Help-Seeking Behaviors. Am J Pharm Educ 2019; 83(10): 7558.
6. Zeng W, Chen R, Wang X, et al. Prevalence of mental health problems among medical students in China. A meta-analysis. Medicine (Baltimore) 2019; 98(18): e15337.
7. Pacheco JP, Giacomini HT, Tam WW, et al. Mental health problems among medical students in Brazil: a systematic review and meta-analysis. Revista Brasileira de Psiquiatria 2017; 39: 369–378.
8. Kemp S, Hu W, Bishop J, et al. Medical student wellbeing – a consensus statement from Australia and New Zealand. BMC Medical Education 2019; 19–69, doi: 10.1186/s12909-019-1505-2.
9. Łaszek M, Nowacka E, Szatko F. Negatywne wzorce zachowań studentów. Część I. Konsumpcja alkoholu i stosowanie substancji psychoaktywnych. Probl Hig Epidemiol 2011; 92(1): 114–119 (in Polish).
10. Klimberg A, Marcinkowski JT, Przybyski J. Konsumpcja alkoholu i innych środków psychoaktywnych wśród studentów poszczególnych kierunków uniwersyteckich studiów medycznych. Część III. Przyczyny i okoliczności konsumpcji napojów alkoholowych oraz ich następstwa. Probl Hig Epidemiol 2009; 89(10): 47–54 (in Polish).
11. Kozierska-Rościszewska M, Dobielka M, Ocepek M, et al. Eating disorders in university students in Łódź, the role of a family physician. Fam Med Prim Care Rev 2022; 24(3): 243.
16. Program zapobiegania depresji w Polsce na lata 2016–2020 [cited 3.11.2021]. Available from URL: https://www.gov.pl/web/zdrowie/program-zapobiegania-depresji-w-polsce-na-lata-2016-2020 (in Polish).
17. Dymowska A, Nowicka-Sauer K. Depresja wśród młodzieży – problem wciąż aktualny. Forum Med Rodz 2015; 9(2): 124–126 (in Polish).
18. Hankir AK, Northall A, Zaman R. Stigma and mental health challenges in medical students. BMJ Case Rep 2014, doi: 10.1136/bcr-2014-205226.
19. Jacob R, Li T, Martin Z, et al. Taking care of our future doctors: a service evaluation of a medical student mental health service. BMC Med Educ 2020; 20: 172.
20. Sinnema H, Terluin B, Volker D, et al. Factors contributing to the recognition of anxiety and depression in general practice. BMC Fam Pract 2018; 19: 99, doi: 10.1186/s12875-018-0784-8.

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