Open Access Article

Ann. Acad. Med. Siles. (online) 2025; 1(nr specj.): 12–20
eISSN 1734-025X
DOI: 10.18794/aams/208070
www.annales.sum.edu.pl

PRACA ORYGINALNA
ORIGINAL PAPER

Attitudes towards eating disorders among medical and non-medical students from the Silesian Voivodeship

Postawy studentów kierunków medycznych i niemedycznych z województwa śląskiego wobec problemu zaburzeń odżywiania

Mateusz Olek[1], Mateusz Ordowski[1], Julita Klag[1], Karolina Lau[2]

[1]Students' Scientific Club, Department of Environmental Medicine and Epidemiology, Faculty of Medical Sciences in Zabrze, Medical University of Silesia, Katowice, Poland

[2]Department of Environmental Medicine and Epidemiology, Faculty of Medical Sciences in Zabrze, Medical University of Silesia, Katowice, Poland

ABSTRACT

INTRODUCTION: Eating disorders (EDs) are considered one of the most widespread health issues, characterized by a complex clinical presentation, risk factors, and consequences. The aim of the study was to examine the attitudes and opinions of students from medical versus non-medical fields in the Silesian Voivodeship regarding the issue of EDs.
MATERIAL AND METHODS: The research questions were distributed in the form of an online questionnaire. The study included 217 participants, and the data were analyzed using MS Excel and Statistica.
RESULTS: No statistically significant relationship was found between medical and non-medical students regarding their focus on eating habits, need for dietary changes, or self-assessed EDs knowledge. Students in earlier years showed a significantly higher tendency to observe their eating behavior. Nearly half of the respondents reported having experience of an ED; they were significantly more common among women. A total of 87.6% considered EDs an important social and public health issue. Most knew someone affected by ED, but either could not determine whether these individuals are socially excluded or stigmatized or stated that they are not. Parental awareness and influence were most frequently indicated as the basis for preventing EDs, while school and social media were identified as key channels for information about EDs.
CONCLUSIONS: Despite differences between medical and non-medical fields, views and experiences of EDs appear similar, with factors such as age, gender, or year of study potentially being more important. EDs affect women more often and are more widely recognized by them. Given the respondents' interest in EDs and its importance, more effort should be directed toward prevention and the identification of risk factors, especially regarding social media.

KEYWORDS

eating behavior, students' opinions, health attitudes, risk factors, social media

Received: 25.06.2025 **Revised:** 09.07.2025 **Accepted:** 09.07.2025 **Published online:** 06.10.2025

Address for correspondence: Mateusz Olek, Studenckie Koło Naukowe, Katedra i Zakład Medycyny i Epidemiologii Środowiskowej, Wydział Nauk Medycznych w Zabrzu ŚUM, ul. Jordana 19, 41-800 Zabrze, tel. +48 32 272 28 47, e-mail: s88309@365.sum.edu.pl

Publisher: Medical University of Silesia, Katowice, Poland

STRESZCZENIE

WSTĘP: Zaburzenia odżywiania (*eating disorders* – EDs) uważane są za jeden z najbardziej rozpowszechnionych problemów zdrowotnych, charakteryzujący się zróżnicowanym obrazem klinicznym, złożonymi czynnikami ryzyka i konsekwencjami zdrowotnymi. Celem badania było poznanie postaw i opinii studentów kierunków medycznych i niemedycznych z województwa śląskiego na temat EDs.
MATERIAŁ I METODY: Pytania badawcze zostały zadane w formie kwestionariusza internetowego. W badaniu wzięło udział 217 uczestników, a dane analizowano za pomocą programów MS Excel i Statistica.
WYNIKI: Nie zaobserwowano istotnej statystycznie zależności między studentami kierunków medycznych i niemedycznych w zakresie koncentracji na sposobie odżywiania, konieczności zmian żywieniowych czy samooceny wiedzy na temat EDs. Respondenci z wcześniejszych lat studiów wykazywali istotnie większą skłonność do zwracania uwagi na nawyki i sposób odżywiania. Prawie połowa ankietowanych zgłosiła doświadczenie wystąpienia ED; istotnie częściej problem ten dotyczył kobiet. Spośród respondentów 87,6% uznało EDs za istotny problem społeczny i zdrowotny. Większość ankietowanych znała osoby zmagające się z ED, ale negowała lub nie potrafiła określić, czy osoby takie są wykluczane lub stygmatyzowane. Świadomość i wpływ rodziców były najczęściej wskazywane jako podstawa zapobiegania EDs, natomiast szkoła i media społecznościowe były kluczowymi kanałami informacji o EDs.
WNIOSKI: Pomimo różnic między kierunkami studiów medycznych i niemedycznych poglądy i doświadczenia związane z EDs można uznać za podobne, przy czym czynniki takie jak wiek, płeć czy rok studiów mogą mieć większe znaczenie. Częstość występowania EDs u kobiet jest większa i można przypuszczać, że problem ten jest przez nie szerzej dostrzegany. Biorąc pod uwagę zainteresowanie respondentów EDs oraz ich znaczenie, należy skupić się na profilaktyce i identyfikacji czynników ryzyka, zwłaszcza w kontekście mediów społecznościowych.

SŁOWA KLUCZOWE

zachowania żywieniowe, opinie studentów, postawy zdrowotne, czynniki ryzyka, media społecznościowe

INTRODUCTION

Eating disorders (EDs) represent a serious global issue. In the course of an ED, a harmful eating pattern develops, associated with the number, manner, and frequency of meals, the quality of food, or the related emotions. The habits linked to EDs negatively affect the physical and mental health and impact the daily lives of the individuals affected by these disorders [1].
The International Classification of Diseases (ICD-10) distinguishes types of EDs, such as anorexia nervosa, bulimia nervosa, and other unspecified EDs [1]. EDs were first included in the ICD in 1977 (ICD-9) and were subsequently updated in 1990 in the 10th edition [2].
The highest percentage of individuals struggling with EDs is observed in the 15–19 age group, often with a significantly higher proportion in females than in males [3]. However, it is worth noting that young adults are a vulnerable population. Of particular concern is the increasing proportion of children under 12 seeking treatment for EDs, especially girls. Anorexia and bulimia nervosa are significantly more common in females than in males. Interestingly, binge eating disorder is more frequently diagnosed in males [1].
Anorexia nervosa is characterized by intentional weight loss, which is consciously induced and maintained by the individual [4]. A distorted body image is also present [1]. Patients maintain a low body weight through various behaviors, such as excessive physical activity, self-induced vomiting, or the use of pharmacological agents [4]. In contrast, bulimia nervosa involves episodes of binge eating, during which individuals consume a large amount of food in a short period and afterward engage in compensatory behavior to reduce the effects. Unlike bulimia, patients with binge eating disorder do not engage in compensatory behavior after binge episodes [1].
The risk of developing an ED is influenced by numerous factors. Most commonly, individual, biological, sociocultural, and familial factors have been identified [4]. The diagnosis of EDs is based on an assessment of the patient's body weight. For individuals under 15 years of age, appropriate percentile charts are used, while for those over 15, the severity of the disorder is assessed according to their body mass index (BMI) [1].
The treatment of EDs is a complex, long-term process that requires consistency. Therapeutic intervention addresses both somatic and psychological symptoms and necessitates an individualized approach for each patient. Failure to undergo treatment leads to a worsening of the condition and is associated with serious health consequences. In extreme cases, it can result in severe physical deterioration or even death [1].
The aim of the study was to examine the attitudes and opinions of medical and non-medical students from the Silesian Voivodeship towards the issue of ED.

MATERIAL AND METHODS

The study was conducted between February and April 2025. Following approval from the Bioethics Committee, an anonymous online survey (Google Forms) was used and distributed among students from universities located in the Silesian Voivodeship,

regardless of the type of institution, field of study, year, or mode of study. A total of 252 complete responses were collected. Finally, 217 responses were included in the analysis following the application of the exclusion criteria: responses from outside the Silesian Voivodeship and those from individuals outside the 18–26 age range (typical for the student population).

The original questionnaire consisted of 38 closed (single- and multiple-choice) and open-ended questions. It was divided into four sections concerning demographic data, general knowledge about EDs, the role of social media in the context of EDs, and the experiences, opinions, and attitudes toward this issue.

The data were analyzed using Microsoft Excel and Statistica v. 13.3 (StatSoft, Poland). Associations were assessed using the chi-square test (Pearson's and maximum likelihood), with a significance level of $p < 0.05$.

RESULTS

A total of 217 individuals participated in the study, of whom 67.3% (n = 146) were students of medical disciplines, while 32.7% (n = 71) were students of non-medical disciplines. The participants' ages ranged from 18 to 26 years (mean age: 21.3 ± 1.8).

The participants were associated with the following universities: Medical University of Silesia in Katowice (61.3% [n = 133]), University of Silesia in Katowice (11.1% [n = 24]), Jan Dlugosz University in Czestochowa (6.5% [n = 14]), Jerzy Kukuczka Academy of Physical Education in Katowice (6.5% [n = 14]), University of Economics in Katowice (4.1% [n = 9]), WSB Merito Universities (3.7% [n = 8]), Wojciech Korfanty Upper Silesian Academy in Katowice (2.8% [n = 6]), Silesian University of Technology (1.8% [n = 4]), University of Bielsko-Biala (1.8% [n = 4]), and Karol Szymanowski Academy of Music in Katowice (0.5% [n = 1]).

Table I presents the distribution of the respondents' fields of study into medical and non-medical categories, along with the number and percentage of responses for each major. The highest rate of responses was obtained among medical students, specifically those studying medicine (36.9% [n = 80]). Among non-medical disciplines, the largest group consisted of pedagogy students (6.5% [n = 14]).

Table I. Characteristics of the study group (N = 217) by field of study. Medical fields are marked in red

Field of study	N (%)
Medicine	80 (36.87)
Dentistry	43 (19.82)
Pedagogy	14 (6.45)
Emergency medical services	9 (4.15)
Tourism and recreation	9 (4.15)
Management	8 (3.69)
Psychology	7 (3.23)
Nursing	6 (2.76)
Physical therapy	6 (2.76)
International studies in political science and diplomacy	4 (1.84)
Urban economy and real estate	3 (1.38)
Computer science	3 (1.38)
German philology	3 (1.38)
Art education	2 (0.92)
Business logistics	2 (0.92)
Finance and accounting	2 (0.92)
National security	2 (0.92)
Dietetics	1 (0.46)
Pharmacy	1 (0.46)
Music therapy	1 (0.46)
Graphic design	1 (0.46)
Cognitive technologies and social media	1 (0.46)
Cultural studies	1 (0.46)
Polish studies	1 (0.46)
Applied linguistics	1 (0.46)
English philology	1 (0.46)
Italian philology	1 (0.46)
Chemical technology	1 (0.46)
Mechanical engineering	1 (0.46)
Architecture	1 (0.46)
Mathematics	1 (0.46)
Total	**217 (100)**

The majority of the students were in their second (34.1% [n = 74]) or first (29.5% [n = 64]) year of study. Women accounted for 82.9% (n = 180) of the study group, men for 15.7% (n = 34), while

2 respondents (0.9%) identified as another gender, and 1 person (0.5%) chose not to disclose their gender. The most common place of residence was a city with a population between 150,000 and 500,000 (26.7% [n = 58]), while the least common was a city with over 500,000 inhabitants (8.3% [n = 18]). Figure 1 presents the characteristics of the study group in terms of gender, year of study, and place of residence, with a breakdown by medical and non-medical fields of study.

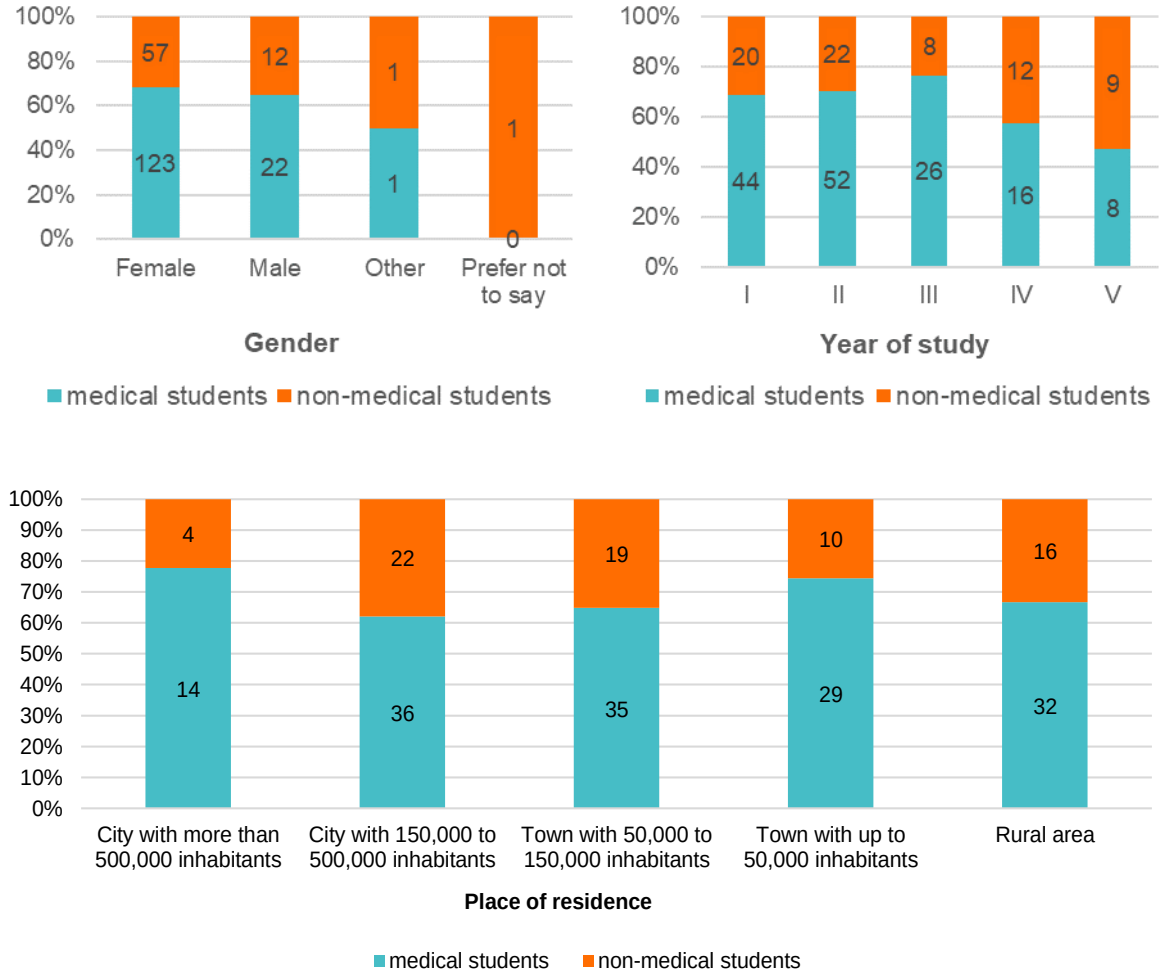

Fig. 1. Characteristics of the study group (N = 217) bygender, year of study, and place of residence.

The majority of respondents (68.2% [n = 148]) indicated the need to introduce changes to their eating habits (Figure 2). Similarly, most students declared that they had knowledge about EDs; the self-assessed levels of knowledge are presented in Figure 2. Only 2.8% (n = 6) of the participants rated their knowledge as low or very low and only 1.4% (n = 3) were unable to assess it. No statistically significant differences were found between medical and non-medical students regarding the need to implement dietary changes ($p > 0.05$) or their self-assessment of knowledge about EDs ($p > 0.05$).

No statistically significant association was observed between medical and non-medical students in terms of their focus on eating habits ($p > 0.05$). A significant relationship was found between the year of study and conscious eating behavior ($p < 0.05$), with respondents in the earlier years (I–II) showing a particular tendency to pay attention to their habits and dietary choices (Figure 3).

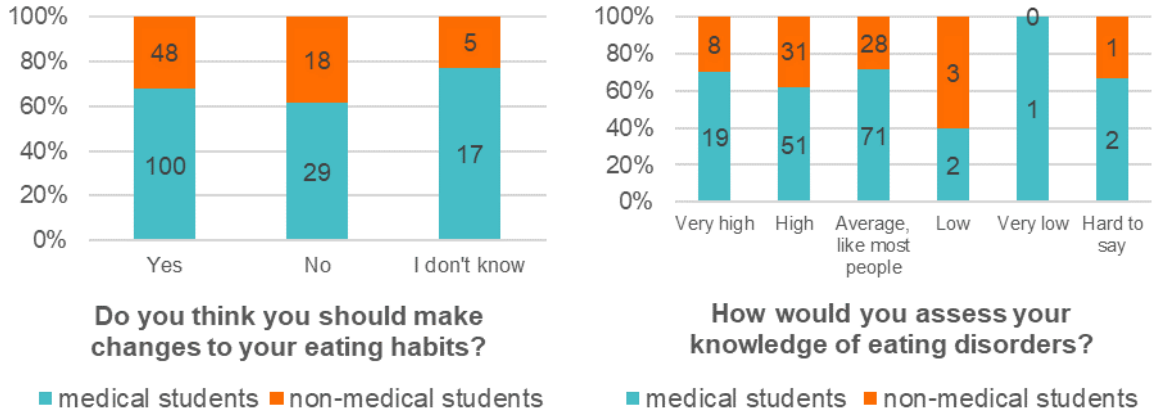

Fig. 2. The need for dietary changes ($p > 0.05$) and self-assessed knowledge of eating disorders among medical (n = 146) and non-medical students (n = 71) ($p > 0.05$).

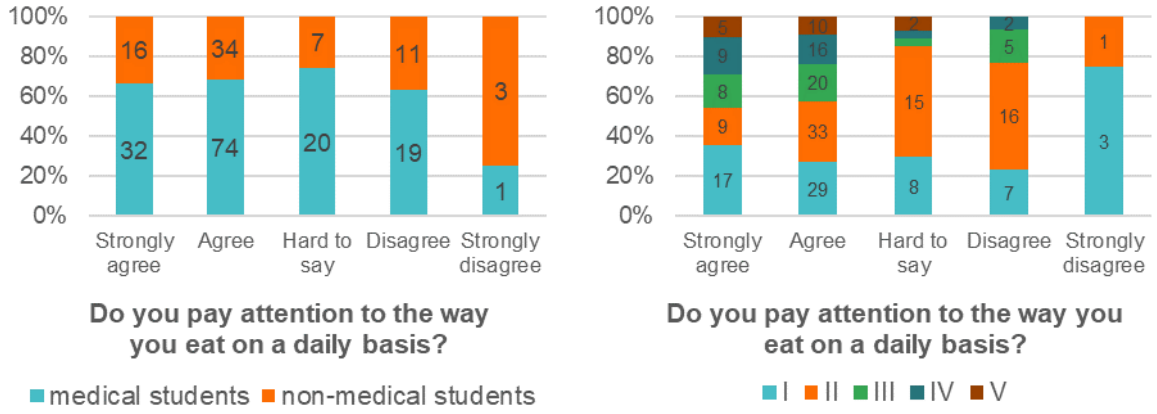

Fig. 3. Perceived attention to eating habits among medical (n = 146) and non-medical students (n = 71) ($p > 0.05$) and year of study ($p = 0.01$).

Almost half of the respondents (47.5% [n = 103]) reported experiences of struggling with an ED. Among the female participants, 51.1% (n = 92) confirmed having such experiences, whereas the majority of the male respondents (61.8% [n = 21]) denied having any EDs. This issue was significantly more common among women ($p < 0.05$). The results regarding experiences with EDs are shown in Figure 4.

The majority of respondents (72.4% [n = 157]) knew of others who had struggled with EDs; another 15.7% (n = 34) indicated that they did not know anyone, and 12.0% (n = 26) answered "I don't know." Overall, 41.9% (n = 91) of the participants denied or strongly denied that such individuals are socially excluded or stigmatized, while 35.0% (n = 76) were unable to say. Additionally, 87.6% (n = 190) of respondents recognized EDs as a significant social and health issue (Figure 5). No statistically significant differences were observed between medical and non-medical students in the assessment of the importance of this problem ($p > 0.05$).

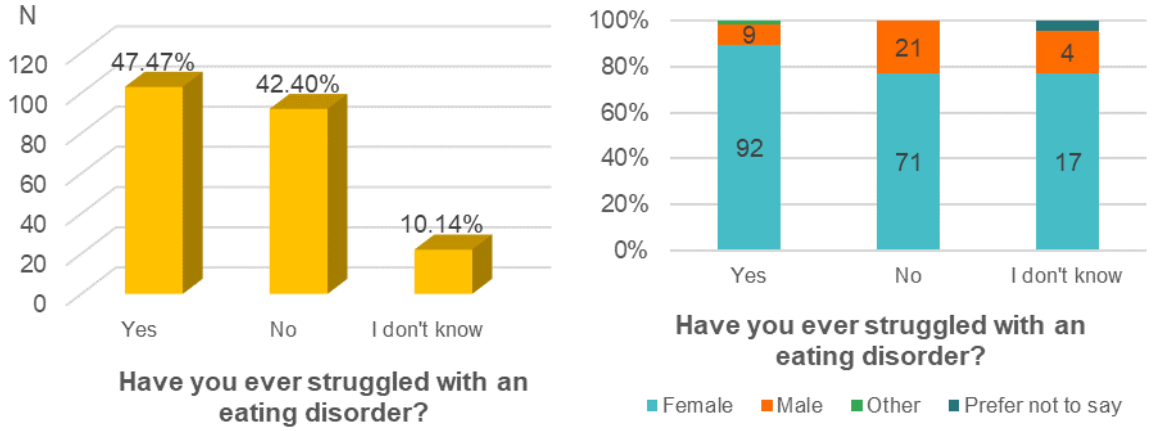

Fig. 4. Prevalence of eating disorders among the respondents (N = 217) and its association with gender (p = 0.006).

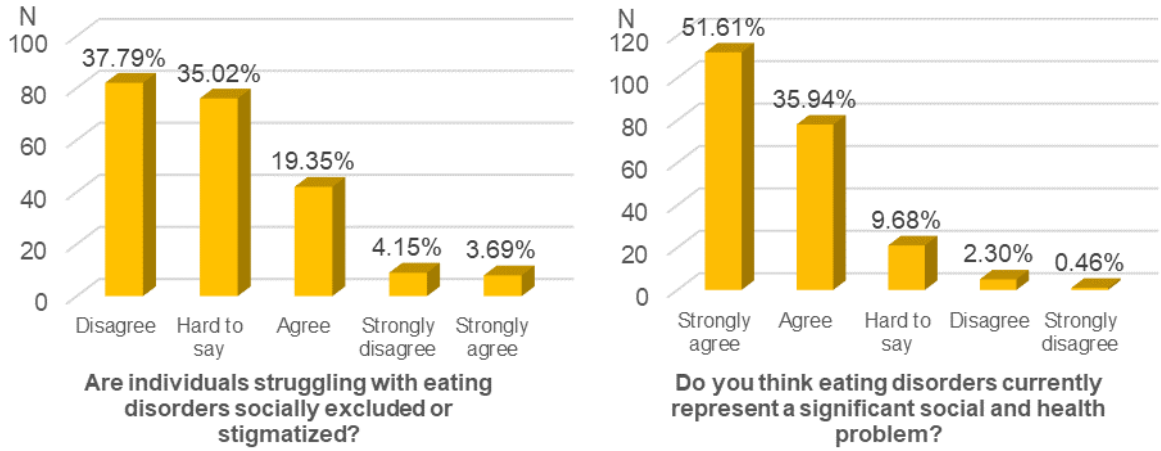

Fig. 5. Respondents' perceptions of the stigmatization of eating disorders in society and of the importance of eating disorders (N = 217).

Figure 6 presents the respondents' opinions on channels for preventing and communicating about EDs. The most frequently indicated means of prevention were parents' awareness and positive influence on their child (95.9% [n = 208]) as well as nutritional education (88.0% [n = 191]). As for channels of communication for ED-related content, the majority selected school (94.9% [n = 206]) and social media (89.4% [n = 194]).

As many as 92.2% (n = 200) of the respondents had encountered content related to EDs on social media. Furthermore, 63.6% (n = 138) strongly agreed and 28.6% (n = 62) agreed that social media can increase the risk of developing EDs (Figure 7).

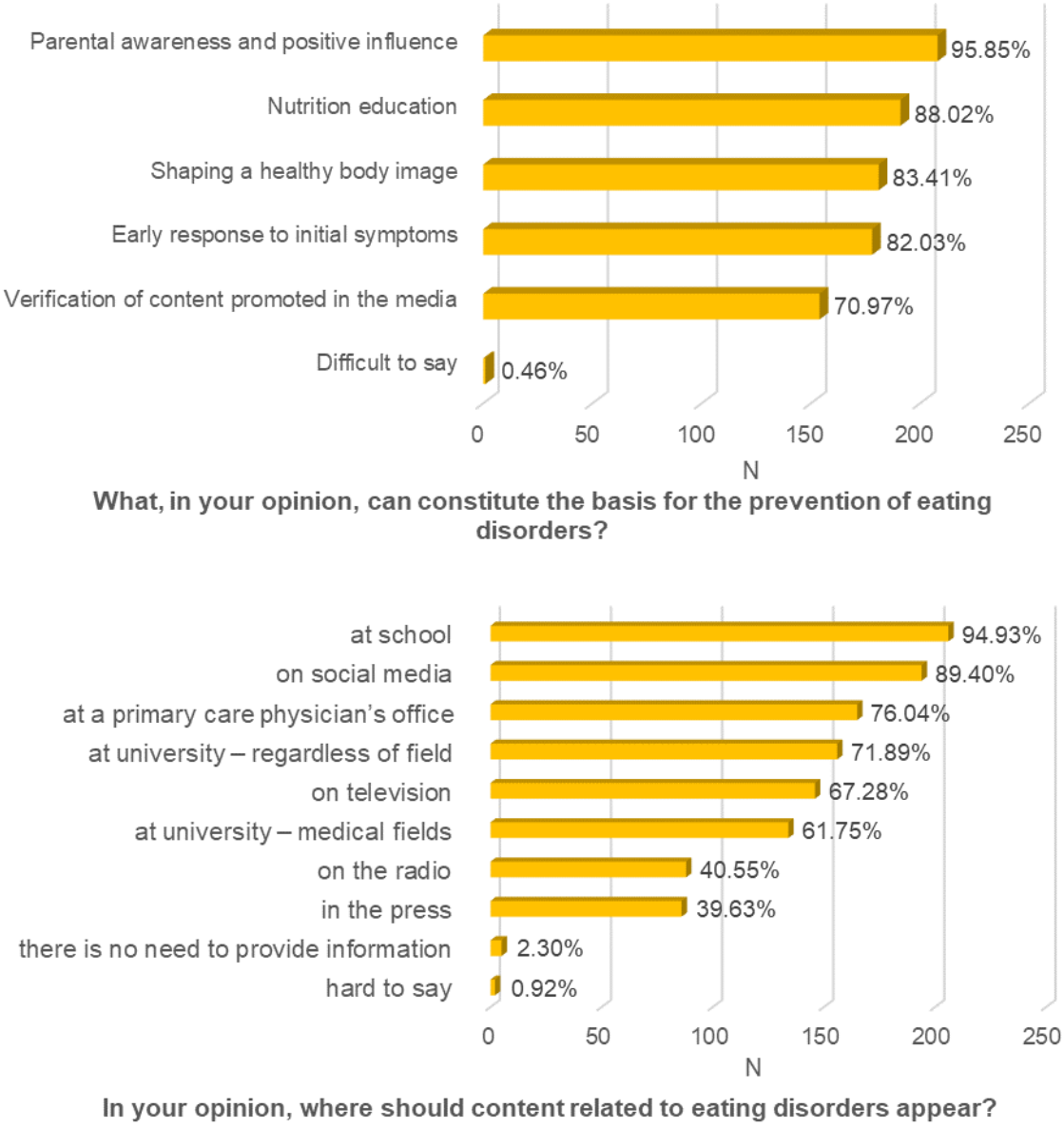

Fig. 6. Means of preventing and communicating information about eating disorders according to the respondents (N = 217).

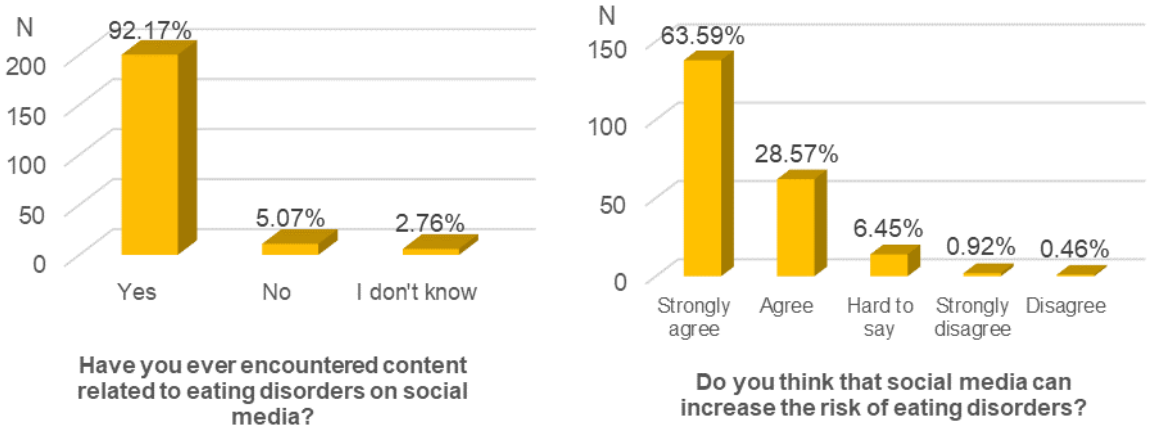

Fig. 7. Perceived presence of eating disorder-related content and the impact of social media on the risk of developing eating disorders, according to the respondents (N = 217).

DISCUSSION

EDs are recognized as a significant health challenge, both in Poland and worldwide. Over the past decade, the global prevalence of EDs has more than doubled, increasing from an estimated 3.5% to 7.8%. Approximately 40% of cases involve adolescents aged 15–19 years [1,3].

The study, based on the opinions of students from both medical and non-medical fields, demonstrated that awareness of the issue exists, regardless of whether the individual is studying a field directly related to health and medicine. Moreover, when asked to assess their level of knowledge about EDs, only 2.8% of the respondents considered it low, and just 1.4% were unable to assess it. No significant difference was found between medical and non--medical students in this regard. This lack of association is noteworthy, given the greater exposure of medical students to topics related to EDs, their contact with patients, and potentially greater knowledge and experience in these areas compared to non-medical students. Another study conducted on minor patients reported no refusals to participate due to a lack of knowledge about EDs [5]. It was noted that patients admitted for an ED be more knowledgeable on the subject than those without similar experiences. Comparing the two studies, it is important to highlight that in the group of university students examined here, 47.5% declared that they had struggled with an ED in the past.

Only 23.0% of respondents stated that individuals with EDs are socially excluded or stigmatized. Other studies have examined the stigma toward people suffering from EDs in greater depth [6,7]. These studies found that the overall stigmatization is low to moderate, though certain areas require particular attention, such as stigma related to personal responsibility. The authors emphasize the need for continued efforts to combat stigma.

Social media were identified by respondents as one of the factors promoting EDs. However, when asked where content about EDs should be disseminated, it was indicated as the second most important channel after school. This suggests an awareness of both the dangers posed by social media and their potential benefits in preventing EDs. Moreover, 71.0% of the respondents believed that one form of ED prevention could be verifying the content promoted on social media. A study of Norwegian adolescents described the impact of social media on EDs as negative, although the researchers highlighted the high proportion of responses that social media have a positive influence on body image perception [8]. Given the ever-increasing role and influence of social media in daily life, further evaluation of their impact on society is necessary [7,8]. Particular attention should be paid to short-form videos, such as TikTok, YouTube Shorts, and Instagram Reels, which are currently widely viewed by younger audiences and older viewers. Additionally, it is worth emphasizing the declining importance of traditional media such as radio and print press, which were least frequently indicated by the respondents as channels for preventing and raising awareness of EDs.

The main limitation of the study was the low representation of men. This is most likely due to women showing a greater interest in the topic of EDs, which may indicate their higher sensitivity caused by the higher overall occurrence of EDs among women, especially at ages similar to those of the participants. The majority of the participants (72.4%) indicated that they knew someone who had struggled with an ED. Moreover, 51.1% of the female respondents declared having a personal experience with EDs, in contrast to 38.2% of the male respondents. In other studies, considerably fewer individuals admitted to having experienced EDs in the past, with 8.32% [6] and 11.56% [7] reporting a history of EDs and only 2.51% [6] and 3.85% [7] currently struggling with an ED. The issue of men being underrepresented in study groups also appeared in study by Lupo et al. [6], conducted among Italian nursing students, which reported a gender distribution of 74.47% women versus 25.53% men. A similar problem was noted in study by Caslini et al. [7], with 80.93% women versus 19.07% men. Difficulties in recognizing EDs in boys and young men should also be considered. In adolescent girls or young women, a common early warning sign for parents may be the cessation of menstruation due to inadequate nutrition. For males, a suspected ED is often indicated by less specific observations, such as BMI or triceps skinfold thickness measurements [9]. Cultural factors should not be neglected, as they may discourage men from seeking help or lead to EDs being associated primarily with women. The limited number of men in such studies suggests that EDs in boys and men remains insufficiently researched, highlighting the need for further investigation in this area.

An additional limitation of the study is the imbalance in the number of students from medical and non--medical fields. Gathering opinions from a larger number of students, especially those outside the medical sciences, could provide further insights. The higher level of engagement among medical students can be explained by the study's subject matter aligning with their field of education and interests related to health and medicine.

CONCLUSIONS

Despite differences between medical and non-medical fields of study, the opinions, attitudes, and experiences related to EDs were similar. Other factors, such as age, gender, or year of study, may have had a greater significance. Considering the high level of interest in the subject and the frequency of EDs among women, it can be assumed that this issue is more widely recognized by them and may be regarded as a significant aspect of their health. Given the respondents' interest in ED-related content on social media, the role of these platforms should be considered both a risk factor and a potential tool for education or support. EDs currently represent a significant social and health challenge, as confirmed by the respondents' opinions. Therefore, further research in this area is necessary, particularly regarding the identification of risk factors and preventive measures.

Author's contribution

Study design – M. Olek, K. Lau
Data collection – M. Ordowski, J. Klag
Data interpretation – M. Olek, M. Ordowski, K. Lau
Statistical analysis – M. Olek, M. Ordowski
Manuscript preparation – M. Olek, M. Ordowski, J. Klag, K. Lau
Literature research – M. Olek, M. Ordowski, J. Klag

REFERENCES

1. Kochman D., Jaszczak M. Eating disorders – a common problem of modern youth. [Article in Polish]. IWPNZ 2021; 6(4): 110–128, doi: 10.21784/IwP.2021.024.
2. Galmiche M., Déchelotte P., Lambert G., Tavolacci M.P. Prevalence of eating disorders over the 2000–2018 period: a systematic literature review. Am. J. Clin. Nutr. 2019; 109(5): 1402–1413, doi: 10.1093/ajcn/nqy342.
3. Nawaz F.A., Riaz M.M.A., Banday N.U.A., Singh A., Arshad Z., Derby H. et al. Social media use among adolescents with eating disorders: a double-edged sword. Front. Psychiatry 2024; 15: 1300182, doi: 10.3389/fpsyt.2024.1300182.
4. Wojnarska A. Media and proanorexic behavior. [Article in Polish]. J. Educ. Technol. Comput. Sci. 2019; 27(1): 216–223, doi: 10.15584/eti.2019.1.28.
5. Pruccoli J., De Rosa M., Chiasso L., Perrone A., Parmeggiani A. The use of TikTok among children and adolescents with Eating Disorders: experience in a third-level public Italian center during the SARS-CoV-2 pandemic. Ital. J. Pediatr. 2022; 48(1): 138, doi: 10.1186/s13052-022-01308-4.
6. Lupo R., Zaminga M., Carriero M.C., Santoro P., Artioli G., Calabrò A. et al. Eating disorders and related stigma: analysis among a population of Italian nursing students. Acta Biomed. 2020; 91(Suppl 12): e2020011, doi: 10.23750/abm.v91i12-S.10797.
7. Caslini M., Crocamo C., Dakanalis A., Tremolada M., Clerici M., Carrà G. Stigmatizing attitudes and beliefs about anorexia and bulimia nervosa among Italian undergraduates. J. Nerv. Ment. Dis. 2016; 204(12): 916–924, doi: 10.1097/NMD.0000000000000606.
8. Dahlgren C.L., Sundgot-Borgen C., Kvalem I.L., Wennersberg A.L., Wisting L. Further evidence of the association between social media use, eating disorder pathology and appearance ideals and pressure: a cross-sectional study in Norwegian adolescents. J. Eat. Disord. 2024; 12(1): 34, doi: 10.1186/s40337-024-00992-3.
9. Bąk D. Eating disorders in men. [Article in Polish]. Psychiatr. Pol. 2008; 42(2): 167–178.