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How COVID-19 pandemic and Ukrainian crisis shaped mental health services for medical students in Poland?

Mateusz Guźiak^{1,2*} and Maciej Walkiewicz¹

Abstract

The mental health of medical students is a crucial concern in contemporary medical education. This manuscript reports the availability and shape of psychological support for medical students in Poland in the backdrop of the COVID-19 pandemic and the Ukrainian crisis. A survey comprising 10 questions was distributed to 22 medical schools in Poland, with a 59% response rate. The findings reveal that psychological support programs are predominantly managed by internal university units. Funding sources vary, with some universities utilizing internal budgets and others leveraging European funds or external projects. The support modalities are primarily hybrid, catering to student preferences. Limitations exist in the number of consultations, although some universities provide extended support based on student needs. Assistance is offered in multiple languages, with additional programs like stress-reduction workshops and mindfulness training being available in several universities. A notable increase in demand for psychological support post-COVID-19 was reported, with some universities establishing their programs during or after the pandemic. The commentary highlights the rising need for mental health services among medical students and underscores the importance of flexible, inclusive, and well-funded support. The effective functioning of these programs aligns with the broader objective of fostering a resilient and emotionally balanced healthcare workforce.

Keywords Mental health support, Psychological distress, Medical students, Medical education, Health workforce

Background

The pursuit of a medical education is undeniably demanding, and as such, the mental health of medical students is a critical concern in contemporary academia. Recent studies indicate that one out of five medical students has considered or actually taken time off from medical school due to mental health challenges [1]. This population experiences a disproportionately higher prevalence of anxiety, perceived stress, emotional distress, and suicidal ideation compared to their counterparts in other academic disciplines and the general population [2–4]. According to Dyrbye et al. even 55% of medical students experienced emotional exhaustion, depersonalization and symptoms of burnout [5], while the overall

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global prevalence of depression or depressive symptoms among students was 27.2% as Puthran et al. reports [6]. Strikingly, the mental well-being of medical students, alongside their motivation and empathy, is reported to decline as they progress through medical education [7]. The transition to clinical years seems to be of particular significance, with a noticeable increase in the prevalence of depression and anxiety among students during this period [8]. Despite increasing awareness, enhanced resources, and proactive efforts by academic faculties to foster mental health support, medical students continue to grapple with severe psychological distress, and their overall well-being remains a matter of concern [1, 4, 9–13]. Additionally, despite the significant perceived need for mental health support among medical students, the actual utilization rate of these services remains remarkably low [14]. This predicament is not unique to a specific geographical region, as evidenced by the significant prevalence of mental disorders among medical students in Poland [15–17]. Remarkably, this issue has persisted for years, exacerbated by a downplaying of the problem and a notable absence of dedicated psychological services on many medical campuses in the country [15, 16].

At the turn of 2018 and 2019, we analysed the psychological support and stress management initiatives for students supported by medical schools in Poland [16]. However, the ensuing years have witnessed the emergence of two significant phenomena with profound implications for mental health across Europe: the SARS-CoV-2 pandemic and the humanitarian crisis linked to the War in Ukraine [17–26]. The pandemic significantly disrupted undergraduate medical education [27, 28]. The concerns regarding contracting a disease during training and transmitting it to the community have strongly risen [20]. During the lockdown period, there was a notable increase in burnout among sixth-year medical students compared to the pre-COVID-19 era [29]. Simultaneously, majority of students were significantly concerned about the Russian-Ukrainian War [21]. The impediments extended to the practical realm, where students encountered challenges in completing clerkships due to restricted access to bedside teaching and clinical rotations [18, 27, 28], as many medical degree programs had been suspended or postponed [17]. The uncertainty surrounding academic continuity, coupled with concerns about safety, health, and prospects, added to the multifaceted stressors faced by medical students [22, 23, 27]. Beyond the academic sphere, students grappled with unforeseen financial and housing difficulties in the preceding years [17, 25, 30].

Acknowledging the escalating recognition of mental health challenges encountered by medical students, our objective is to delve into the availability of psychological support for them. Looking back to 2018, when the general availability of such programs was developing [16],

this article seeks to reassess the landscape of psychological support programs for medical students in Poland and reassess their availability.

Methods

Survey design

A structured survey consisting of 10 questions was designed to assess the psychological support services offered to medical students across medical universities in Poland. The questions focused on key aspects such as the availability of services, coordination entities, funding sources, modalities of support, and changes in demand due to the COVID-19 pandemic. The specific questions included in the survey were as follows:

Survey questions

1. Does the university offer any psychological support services for students in the medical faculty?
2. Which entity is responsible for coordinating this support—whether it is an internal university unit or an external organization?
3. What is the financial basis for the psychological support services, and what annual budget does the university allocate for this purpose?
4. What modalities of support are available, including remote, on-site, or a combination of both?
5. Are there limitations on the number of consultations, and if so, what are the constraints?
6. Does the university provide psychological support services in languages other than English?
7. In addition to core support services, does the university offer supplementary programs to enhance students' mental well-being, such as stress-reduction classes, mindfulness training, yoga, etc.?
8. Where can students access information regarding the availability of psychological support? (e.g., official university website, internal network, social media, or external entity's website)
9. Does the university gather and analyse data on student demographics, as well as the volume, nature, and frequency of requests for psychological support? If so, is this information accessible?
10. Has the demand for psychological support witnessed changes during and post the COVID-19 pandemic, and if so, in what ways?

Data collection

The survey was distributed via email to the deans of 22 medical faculties in Poland and their administrative offices in June 2022. Follow-up emails and physical letters were sent in January 2023 to improve response rates. Out of the 22 universities contacted, 13 responded, resulting

in a response rate of 59%. Contact details for all institutions were obtained from official university websites.

Results

First and foremost, it is noteworthy that all universities that responded to our inquiries offer psychological support for medical students. Most support programs are managed by internal units, while in several institutions, these responsibilities have been delegated to offices for persons with disabilities (BON; Biuro ds. Osób z Niepełnosprawnościami). In four cases (PUM, MUB, MUS, JKU), external entities are responsible for the support, with JKU emphasizing its close collaboration with the designated entity. Six universities allocate resources from their own internal budgets. Additionally, four institutions (UO, UWM, UMP, UZ) operate support programs within the framework of projects co-financed by European funds. Examples include “Uniwersytet Opolski uczelnia (bardzo!) dostępna” at UO, “Empatia” at UWM, “POWER” at UMP, “UZ dostępny dla wszystkich” at UZ. Support at UR is financed by a subsidy from the Ministry of Education and Science, while at MUB, it is granted through an external project. MUS did not provide information on funding. The most detailed funding data were obtained from MUL (approximately PLN 40,000 per year), MUB (about PLN 40,000 per year), and UZ (about PLN 340,000 for all university students). At 11 universities, support is available in a hybrid form, emphasizing flexible assistance and a willingness to adapt to student preferences. At MUS, support is exclusively available in a stationary form, while at PUM, it is exclusively accessible remotely. MSCMSW did not indicate formal limitations on the number of consultations. On the other 12 universities, the number of available consultations and the total consultation time are limited, but 4 of them state that the support may be extended adequately to the needs of a student. All universities offer assistance in Polish and English, with 10 of them providing support in at least three languages. In addition to core support services, six universities offer additional forms of psychological support, including thematic workshops for students (UO), soft skills/personal development workshops, career coaching, life coaching for personal support, career counselling, personality tests, and vocational predisposition (MUL), stress management workshops, mindfulness, yoga (MUG), mindfulness workshops (UR), group support workshops, assertiveness training, dance and movement therapy group meetings (UWM), workshops on stress management, early psychological intervention, and individual and group communication (JKU), and promotional films, mental health promotion campaigns, and disability training (UMP). Information about support is available on the university/program/responsible unit's website for each university, with six additionally

using social media. Moreover, MUL sends emails to all students with information about available assistance. Eight universities reported an increase in demand for psychological support, and four universities established their support programs during or after the COVID-19 pandemic. MUG was the only university surveyed that indicated no increase in interest in psychological support during the COVID-19 pandemic. UR indicated a 1300% increase in psychological consultations between the academic years 2018/2019 and 2021/2022, and JKU emphasizes the impact of the war in Ukraine, leading to a significant increase in the demand for psychological support among their students. Detailed responses obtained from the universities are presented in the supplementary materials, while a summary of the results is provided in Table 1.

Discussion

The mental health of Polish medical students has been significantly impacted by both the COVID-19 pandemic and the ongoing war in Ukraine. The pandemic has been shown to exacerbate mental health issues among medical students globally, with studies indicating increased levels of anxiety, depression, and feelings of loneliness during this period [31–34]. This is consistent with the increase in demand for psychological support recorded by most medical universities in Poland. In our view, the COVID-19 pandemic had a particularly profound impact on medical students. In Poland, as in many other countries, they constituted a significant cohort of volunteers who provided essential support in hospitals during the early months of the crisis. Despite their medical knowledge, their limited professional and life experience made them especially vulnerable to intense mental stress. The war in Ukraine has further compounded these mental health challenges for Polish medical students, particularly those with ties to Ukraine or who are directly affected by the conflict. Research indicates that exposure to war-related stressors can lead to increased anxiety and depression, not only among those in conflict zones but also among individuals in neighboring countries who are indirectly affected [35]. For instance, Polish students have reported feelings of distress and anxiety related to the ongoing conflict, which has been linked to their exposure to graphic media and news about the war [35, 36]. The psychological impact of the war has been profound, with reports of increased mental health issues such as PTSD and anxiety among populations in both Ukraine and Poland. Moreover, the war has disrupted mental health services in Ukraine, which has implications for Polish medical students who may be involved in providing care or support to Ukrainian refugees [35–37]. At the time of our initial study, it would have been inconceivable to predict the profound changes our world

Table 1 Psychological support for medical students in Poland based on responses obtained from medical schools

Medical school	Availability of support services for the medical students	Entity responsible for coordinating the support	Source of funding and the annual budget	Modalities of the support	Limitations on the number of consultations	Availability of the support in foreign languages	Supplementary programs	Source of information about the support	Institutional evaluation of the support	The demand for psychological support during and post the COVID-19 pandemic
Marie Skłodowska-Curie Medical School in Warsaw (MSCMSW)	Yes	University unit	No cost	Hybrid	No	English	No	Website, social media	No	Increased demand
The Collegium Medicum of the University of Opole (UO)	Yes	University unit	The European Social Fund and the State Budget Subsidy Fund	Hybrid	Yes, 10 consultations per student	English and French	Thematic workshops for students, including those on stress.	Website, social media	Yes, the data is not publicly available.	No data
Wrocław Medical University (UMW)	Yes	Clinical unit	Deans' Resources	Hybrid	Yes	English and German	No	Website, social media	Yes, a recorded number of consultations provided	Increased demand
Pomeranian Medical University in Szczecin (PUM)	Yes	External entity	Externally funded project.	Online	Yes, 20 consultations per student (students with disabilities do not have a limit of meetings)	English	No	Website	No data	No data
Medical University of Lodz (MUL)	Yes	University unit	The university's resources. In the academic year 2021/2022: 61,000 PLN for Polish-speaking students, including 32,000 PLN for consultations for medical students, and was 10,000 PLN for English-speaking students, including 8,000 PLN for medical students.	Hybrid	Yes, 5 h of consultations per academic year.	English	Workshops (motivation, self-motivation, interpersonal communication, relationship building, stress management) and individual counseling (career coaching, life coaching for personal support, career counseling, personality tests, and vocational predisposition)	Website, mailing, internal network	No	Increased demand
Medical University of Gdańsk (MUG)	Yes	University unit	University resources	Hybrid	Yes	Yes, English	Stress management workshops, mindfulness, yoga.	Website, social media, internal network	Yes	No

Table 1 (continued)

Medical school	Availability of support services for the medical students	Entity responsible for coordinating the support	Source of funding and the annual budget	Modalities of the support	Limitations on the number of consultations	Availability of the support in foreign languages	Supplementary programs	Source of information about the support	Institutional evaluation of the support	The demand for psychological support during and post the COVID-19 pandemic
Medical University of Białystok (MUB)	Yes	External entity	The university's resources, PLN 40,000 per year.	Hybrid	Yes	English	No	Website	No	Increased demand
University of Rzeszów, Faculty of Medicine (UR)	Yes	University unit	A subsidy from the Ministry of Education and Science .	Hybrid	Yes	Yes, English and Ukrainian	Mindfulness, awareness campaigns and workshops promoting mental health	Website, social media	Yes, the data is not publicly available.	Increased demand
Medical University of Silesia (MUS)	Yes	External entity	No data	On-site	Yes	Yes, English	No	Website, social media	No data	Increased demand
School of Medicine University of Warmia and Mazury in Olsztyn (UWM)	Yes	University unit	The European Social Fund and the government grant	Hybrid	Yes, 5 consultations per student	Yes, English	Workshops, thematic meetings, and support groups (Assertiveness Training, Blue Circles – a support group for people with experience of violence, workshops on stress management, dance and movement therapy, and a support group for LGBT + people)	Website	Yes, the data is not publicly available.	Increased demand
School of Medicine at the Collegium Medicum of Jan Kochanowski University (JKU) in Kielce	Yes	External entity	Volunteering, the university's resources.	Hybrid	No	Yes, English and Italian.	Workshops (stress management, early psychological intervention, and individual and group communication)	Website	Yes, the data is not publicly available.	Increased demand
Poznan University of Medical Sciences (UMP)	Yes	University and clinical unit	National Health Fund, European Social Fund	Hybrid	Yes	Yes	Promotional films, mental health promotion campaign, disability training.	Website, social media	No	Increased demand

Table 1 (continued)

Medical school	Availability of support services for the medical students	Entity responsible for coordinating the support	Source of funding and the annual budget	Modalities of the support	Limitations on the number of consultations	Availability of the support in foreign languages	Supplementary programs	Source of information about the support	Institutional evaluation of the support	The demand for psychological support during and post the COVID-19 pandemic
University of Zielona Góra, Faculty of Medicine and Health Science (UZ)	Yes	University unit	The total value for the entire project (2020–2023) is PLN 343,360 (unable to distinguish medical students)	Hybrid	Yes, 20 h per student	Yes, English and Ukrainian	No,	Website, mailing, poster	Yes	No data

would undergo within just a few years [16]. The events that followed were entirely unforeseeable, leaving little opportunity for adequate preparation. In summary, the combined pressures of the COVID-19 pandemic and the war in Ukraine have created an exceptionally challenging environment for Polish medical students, resulting in a significant increase in mental health issues. It is important to emphasize that the consequences of these issues are profound. They impact not only students’ academic performance but also their future professional competencies, contributing to burnout and a decline in the quality of patient care they provide [38]. These challenges underscore the critical need for effective mental health support systems within under- and postgraduate medical education to ensure both well-being of students and the long-term sustainability and resilience of health workforce. Our research indicates that psychological support for medical students in Poland has improved in recent years, yet it still might be insufficient. The current cohort—Generation Z—exhibits a heightened need for and receptiveness to such support. In this context, we see a particular need for further evaluation of current psychological support programs and the development of new forms of support for students. This issue is particularly relevant to administrative decision-makers responsible for resource allocation, as there is an urgent need to invest in comprehensive, accessible, and tailored mental health services. A significant challenge, however, lies in the absence of overarching guidelines, such as those from ministerial bodies. Despite our study providing a general overview of the psychological support landscape, it is clear that organized, state-led evaluations are lacking. In particular, there is a scarcity of research examining the psychological functioning of medical students in Poland, which should guide how to provide targeted and effective support. While it seems intuitive to assume that events like the pandemic and the war in Ukraine would heighten emotional distress, there has been little systematic study of these effects, leaving institutions to respond in an ad hoc, improvised manner. We are concerned by the fact that only a portion of the institutions responded to our repeated inquiries. The reasons for this remain unclear, and we can only speculate as to whether they do not provide such psychological support or if they do not deem it necessary to share such data with us. We cautiously hypothesize that in some cases, institutions may not have felt confident about their programs, which could explain their lack of response. However, it is important to approach this matter with caution, avoiding any subjective judgments. We suggest that the diversity of responses—or the lack thereof—could stem from various factors, which should not be interpreted uniformly or negatively. On the other hand, several institutions were highly engaged in discussions with us highlighting their

interest in this issue. It would be valuable to investigate this topic further by examining how similar challenges are handled in other countries in our region, as well as by studying how leading universities globally have structured their psychological support systems for students.

Conclusions

In medical education, the importance of acknowledging mental health concerns is crucial. In consonance with the sentiments expressed by Haykal et al., addressing mental health is a strategic, long-term investment fostering the growth of emotionally balanced physicians for the healthcare. This becomes particularly pronounced in uncertain times, where a multitude of events exert significantly negative impacts on medical students' mental health. All medical schools should have easily accessible mental health services; thus, it is particularly gratifying that all the universities from which we received responses provide such support. The effective functioning of these programs should be underpinned by inclusive approaches, flexible strategies, compatibility with accessible telehealth options, and a careful allocation of funds. The implementation of these measures not only ensures the well-being of medical students but also aligns with the broader objective of educating a resilient and balanced healthcare workforce.

Limitations

The main limitation of the article is the response rate from the medical universities. Findings may not fully represent the entire landscape of psychological support services in Poland. Additionally, the survey data were self-reported by the institutions, potentially introducing bias in how they presented the availability and effectiveness of their services. Another limitation is the lack of detailed longitudinal data, making it difficult to assess the long-term impact of the COVID-19 pandemic and the Ukrainian crisis on the mental health of medical students. Furthermore, the differences in how institutions measure and report demand for psychological services create challenges in making direct comparisons across universities. Finally, the study did not explore the students' perspectives, which could have provided valuable insights into the effectiveness and accessibility of the support programs from the users' viewpoint.

Abbreviations

MSCMSW	Marie Skłodowska-Curie Medical School in Warsaw
UO	The Collegium Medicum of the University of Opole
UMW	Wrocław Medical University
PUM	Pomeranian Medical University in Szczecin
MUL	Medical University of Lodz
MUG	Medical University of Gdańsk
MUB	Medical University of Białystok
UR	University of Rzeszów, Faculty of Medicine
MUS	Medical University of Silesia
UWM	School of Medicine University of Warmia and Mazury in Olsztyn

JKU	School of Medicine at the Collegium Medicum of Jan Kochanowski University in Kielce
UMP	Poznan University of Medical Sciences
UZ	University of Zielona Góra, Faculty of Medicine and Health Science

Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1186/s12909-024-06224-1>.

Supplementary Material 1

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Author contributions

MG and MW conceptualized and designed the manuscript, wrote the manuscript, and created the tables. All authors read and approved the final manuscript.

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Data availability

All data generated and analyzed during this study are included in this published article (Table 1).

Declarations

Ethics approval and consent to participate

All data collected in this study was based on descriptive information regarding the functioning of responding institutions. The information obtained from the institutions did not contain any human or sensitive data.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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