

Y. WANG, H. H. HABOR, A. S. VOLSKA, M. I. MARUSHCHAK

THE IMPACT OF COVID-19 ON MENTAL HEALTH AS PART OF GLOBAL HEALTH

Ivan Horbachevsky Ternopil National Medical University
of the Ministry of Health of Ukraine, Ternopil, Ukraine

Objective. To analyse the impact of COVID-19 on mental health in different countries and globally.

Materials and methods. The study analysed current scientific publications and reports from international organisations, in particular the World Health Organisation, available on the Internet.

Results. The pandemic's effect on mental health was multifaceted, driven by a combination of social, economic, and health-related stressors. Numerous studies from around the world have documented the sharp rise in mental health issues during the pandemic. This lack of social connection disrupted daily routines and support systems, contributing to feelings of loneliness and depression. The economic fallout of the pandemic was a major contributor to anxiety and depression, particularly for vulnerable populations. The immense pressure, long hours, and emotional toll of their work led to high rates of anxiety, depression, and post-traumatic stress disorder among the healthcare workers. The "infodemic" made it difficult for people to make informed decisions and increased feelings of helplessness. The profound mental health toll of the COVID-19 pandemic is expected to have long-lasting effects, extending far beyond the resolution of the physical health crisis. This has made it crucial to not only respond to immediate needs but to also fundamentally re-evaluate and "reimagine" mental healthcare delivery.

Conclusions. The COVID-19 pandemic served as a global stress test for mental health, exposing deep-seated vulnerabilities within societies. The widespread fear, social isolation, and economic instability created a perfect storm for a global mental health crisis. As the world moves into a post-pandemic era, it is critical for public health systems to recognize mental health as a core component of overall health and to invest in resilient, accessible, and integrated mental health services.

KEY WORDS: COVID-19; mental health; global health; stressors.

In light of the enduring presence of SARS-CoV-2, humanity has been profoundly reminded of its global interconnectedness. The health, social, and emotional repercussions of the COVID-19 pandemic have been felt in every nation, with lasting effects for many. It is crucial to reflect on and address the significant toll the pandemic has taken on global mental health. The prevalence of common mental health conditions, including depression, anxiety, and insomnia, surged during the pandemic, a trend compounded by widespread economic disruption [1]. These mental health effects are poised to influence population health for years, and a failure to address them will likely prolong the pandemic's impact.

The global impact of COVID-19 on public health encompasses both physical and mental well-being, with the psychological consequences potentially outlasting the physical ones [2]. Authorities worldwide implemented drastic preventative measures to curb the virus's spread, significantly impacting daily life. These actions included social distancing recommendations, enforced curfews, and the quarantine or isolation of infected individuals. Non-essential businesses and public facilities, such as gyms and theaters, were

closed. These measures disrupted many sectors of the economy, pushing much of daily life, including work and education, online.

While these lockdowns proved partially successful in slowing the pandemic, they came with significant mental health consequences. Economic stress, social isolation, and limited access to medical and community support became major risk factors for various psychological problems. A deeper understanding of how mental health evolves in the wake of this global crisis is essential for developing effective prevention and treatment strategies and ensuring resources are directed to those who need them most [3].

Objective. To analyse the impact of COVID-19 on mental health in different countries and globally.

Materials and methods. The study analysed current scientific publications and reports from international organisations, in particular the World Health Organisation, available on the Internet.

Research results and their discussion. The COVID-19 pandemic has had a profound and widespread impact on global mental health. The crisis exacerbated existing mental health conditions and

led to a surge in new cases of anxiety, depression, and stress-related disorders [4]. The pandemic's effect on mental health was multifaceted, driven by a combination of social, economic, and health-related stressors.

Fear and Uncertainty: The constant fear of contracting the virus, coupled with the uncertainty surrounding its duration and impact, created widespread anxiety and stress. This was a global phenomenon, affecting people of all ages and backgrounds. The virus itself presented an invisible, pervasive, and deadly threat. The lack of complete understanding about SARS-CoV-2 in its early stages – including how it spread, who was most vulnerable, and the potential for long-term health complications – created a fertile ground for anxiety. The fear of getting sick, passing the virus to loved ones, and facing an unknown outcome became a constant source of stress for people of all ages and backgrounds. This fear was amplified by daily updates on rising case numbers and death tolls, serving as a grim reminder of the virus's proximity and danger. Research consistently shows a direct correlation between this perceived threat and elevated levels of anxiety and depression across populations [4; 5]. Beyond the fear of illness, the pandemic was characterized by profound uncertainty about its duration and broader impact. Daily life was unpredictably disrupted by lockdowns, business closures, and travel restrictions. This constant state of flux stripped individuals of their sense of control and stability. The inability to plan for the future – whether for work, education, or social events – contributed to a feeling of helplessness and emotional distress. This is a well-documented phenomenon in psychology, where a lack of control over one's environment is a significant stressor [6]. The fear and uncertainty were not confined to specific regions but were a global phenomenon. The shared experience of this collective threat created a unique sense of vulnerability. Studies from diverse countries, including China, the UK, and the US, all reported significant increases in anxiety and stress levels during the pandemic's peak, driven by these same factors [7]. This underscores that the psychological toll was a universal consequence of the pandemic, transcending geographical and cultural boundaries.

Social Isolation: Lockdowns, quarantines, and social distancing measures, while necessary for public health, led to significant social isolation. This lack of social connection disrupted daily routines and support systems, contributing to feelings of loneliness and depression. Multiple studies have investigated the mental health effects of quarantine and isolation. Brooks et al. found that quarantine can lead to stress related to its duration, fear of infection, boredom, and a lack of adequate supplies or information. These factors can trigger various psychological issues, including acute stress disorders, anxiety, irritability, and

depressive symptoms [8]. During the COVID-19 pandemic, the prevalence of depression in quarantined individuals ranged from 16.5% to 37% [9; 10], while anxiety rates were between 12.9% and 35% [11-13]. Lei et al. reported a significant difference in the prevalence of both depression and anxiety, with quarantined individuals experiencing rates of 22.4% and 12.9%, respectively, compared to 11.9% and 6.7% in the non-quarantined group [11]. Other research similarly concluded that those in COVID-19 quarantine were more susceptible to adverse mental health effects than their non-quarantined counterparts [14; 15].

Economic Instability: Job losses, financial strain, and business closures created significant stress. The economic fallout of the pandemic was a major contributor to anxiety and depression, particularly for vulnerable populations.

Increased Workload and Burnout: Healthcare workers and other frontline professionals experienced unprecedented levels of stress and burnout. The immense pressure, long hours, and emotional toll of their work led to high rates of anxiety, depression, and post-traumatic stress disorder (PTSD) [16].

Misinformation and “Infodemic”: The overwhelming volume of information, much of it false or misleading, created confusion and heightened anxiety. The “infodemic” made it difficult for people to make informed decisions and increased feelings of helplessness.

Numerous studies from around the world have documented the sharp rise in mental health issues during the pandemic. A global study published in *The Lancet* estimated that the pandemic led to an additional 53.2 million cases of major depressive disorder and 76.2 million cases of anxiety disorders worldwide. This increase was most pronounced among young people and women [6]. A systematic review in the *Journal of Affective Disorders* found that frontline healthcare workers experienced high rates of depression (22.8%), anxiety (21.4%), and PTSD (21.5%) during the pandemic [16]. Lockdowns and school closures had a significant impact on the mental health of young people. A study in the *Journal of Adolescent Health* reported increased rates of anxiety, depression, and stress among adolescents due to social isolation and academic pressures [17]. While social isolation was a concern, some studies found that older adults with strong social networks were more resilient. However, those living alone or in care facilities experienced higher rates of loneliness and depression [18].

In response to the crisis, many public health systems initiated measures to address mental health needs. The rapid expansion of telehealth services became a critical tool for providing mental health support. This allowed people to access therapy and counseling from home, overcoming barriers of mobility and social distancing.

Governments and NGOs launched campaigns to destigmatize mental health issues and provide information on coping strategies [19]. The WHO issued guidelines and resources to help countries integrate mental health support into their pandemic response plans [20]. The pandemic highlighted the importance of community-based support systems. Peer support groups, online forums, and volunteer networks played a crucial role in providing emotional support and a sense of connection.

The profound mental health toll of the COVID-19 pandemic is expected to have long-lasting effects, extending far beyond the resolution of the physical health crisis. This has made it crucial to not only respond to immediate needs but to also fundamentally re-evaluate and "reimagine" mental healthcare delivery [21]. As researchers emphasize, a deep understanding of the long-term mental health trajectory of populations is essential to inform effective prevention and treatment strategies moving forward [22].

This includes ensuring that mental health support is no longer a peripheral concern but is fully integrated into public health planning. The pandemic has highlighted the need for a paradigm shift, where mental health is considered a core component of overall well-being and is given the same level of priority as physical health. This requires a coordinated, sustained effort to allocate resources effectively to the communities and populations most

in need, especially those disproportionately affected by the pandemic's stressors [23; 24]. The pandemic serves as a stark reminder that addressing mental health is not merely a clinical issue but a fundamental component of global public health and requires a collective, long-term commitment.

Conclusions. The COVID-19 pandemic served as a global stress test for mental health, exposing deep-seated vulnerabilities within societies. The widespread fear, social isolation, and economic instability created a perfect storm for a global mental health crisis. As the world moves into a post-pandemic era, it is critical for public health systems to recognize mental health as a core component of overall health and to invest in resilient, accessible, and integrated mental health services.

Prospects for further research lie in establishing the effectiveness of the proposed COVID-19 prevention strategies in the long term.

Conflicts of Interest. The authors declare no conflict of interest.

Funding. This research received no external funding.

Author Contributions:

Prof. Marushchak M. I. – conceptualization;

Habor H. H. – study idea and design;

Wang Y. – literature review and manuscript preparation;

Volska A. S. – analysis and discussion.

Bibliography

1. Omidoyin S. The implications of COVID-19 on mental health: Addressing the global mental health challenges. *Journal of Global Health Neurology and Psychiatry*. 2024. e2024001. DOI: 10.52872/001c.117080.
2. Ngui E. M., Khasakhala L., Ndeti D., Roberts L. W. Mental disorders, health inequalities, and ethics: a global perspective. *International Review of Psychiatry*. 2010. Vol. 22, No. 3. P. 235–244. DOI: 10.3109/09540261.2010.485273.
3. World Health Organization. Global Burden of Mental Disorders and the Need for a Comprehensive, Coordinated Response from Health and Social Sectors at the Country Level. *Executive Board EB 130/9*. 2011. URL: https://apps.who.int/gb/ebwha/pdf_files/EB130/B130_9-en.pdf.
4. Santomauro D. F. et al. Global prevalence and burden of depressive and anxiety disorders in 204 countries and territories in 2020 due to the COVID-19 pandemic. *The Lancet*. 2021. Vol. 398, No. 10312. P. 1700–1712.
5. Xiong J. et al. Impact of COVID-19 pandemic on mental health in the general population of China. *Journal of Affective Disorders*. 2020. Vol. 276. P. 290–295.
6. Wang C. et al. Immediate psychological responses and associated factors during the initial stage of the COVID-19 epidemic among the general population in China. *Journal of Psychiatric Research*. 2020. Vol. 129. P. 175–180.
7. Tanne J. H. et al. COVID-19: How the US fell behind on testing. *BMJ*. 2020. Vol. 369. m1856.
8. Brooks S. K., Webster R. K., Smith L. E. et al. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The Lancet*. 2020. Vol. 395(10227). P. 912–920. DOI: 10.1016/S0140-6736(20)30460-8.
9. Wang C., Pan R., Wan X. et al. Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease epidemic among the general population in China. *International Journal of Environmental Research and Public Health*. 2020. Vol. 17. 1729. DOI: 10.3390/ijerph17051729.
10. Ahmed M. Z., Ahmed O., Aibao Z. et al. Epidemic of COVID-19 in China and associated psychological problems. *Asian Journal of Psychiatry*. 2020. Vol. 51. 102092. DOI: 10.1016/j.ajp.2020.102092.
11. Lei L., Huang X., Zhang S., Yang J. et al. Comparison of prevalence and associated factors of anxiety and depression among people affected by versus people unaffected by quarantine during the COVID-19 epidemic in Southwestern China. *Medical Science Monitor*. 2020. Vol. 26. e924609. DOI: 10.12659/MSM.924609.
12. Huang Y., Zhao N. Generalized anxiety disorder, depressive symptoms and sleep quality during COVID-19 outbreak in China: A web-based cross-sectional survey. *Psychiatry Research*. 2020. Vol. 288. 112954. DOI: 10.1016/j.psychres.2020.112954.
13. Gualano M. R., Lo Moro G., Voglino G. et al. Effects of COVID-19 lockdown on mental health and sleep disturbances in Italy. *International Journal of Environmental Research and Public Health*. 2020. Vol. 17(13). 4779. DOI: 10.3390/ijerph17134779.

14. Daly Z., Slemon A., Richardson C. G. et al. Associations between periods of COVID-19 quarantine and mental health in Canada. *Psychiatry Research*. 2021. Vol. 295. 113631. DOI: 10.1016/j.psychres.2020.113631.
15. Hossain M. M., Sultana A., Purohit N. Mental health outcomes of quarantine and isolation for infection prevention: A systematic umbrella review of the global evidence. *Epidemiology and Health*. 2020. Vol. 42. e2020038. DOI: 10.4178/epih.e2020038.
16. Pappa S. et al. The mental health of healthcare workers during the COVID-19 pandemic: A systematic review and meta-analysis. *Journal of Affective Disorders*. 2020. Vol. 275. P. 223–231.
17. Juan, Y., Yuanyuan, C., Qiuxiang, Y. et al. Psychological distress surveillance and related impact analysis of hospital staff during the COVID-19 epidemic in Chongqing, China. *Comprehensive psychiatry*. 2020. Vol. 103. P. 152198. <https://doi.org/10.1016/j.comppsych.2020.152198>.
18. Armitage R., Nellums L. B. COVID-19 and the elderly: Mental health and social implications. *Journal of the American Geriatrics Society*. 2020. Vol. 68(5). P. E34–E36.
19. Gostin L. O., Wiley L. F. Public health law in the time of COVID-19. *JAMA*. 2020. Vol. 324(13). P. 1297–1298.
20. World Health Organization (WHO). Mental health and psychosocial considerations during the COVID-19 outbreak. 2020.
21. Patel V., Fancourt D., Furukawa T. A., Kola L. Reimagining the journey to recovery: The COVID-19 pandemic and global mental health. *PLoS Medicine*. 2023. Vol. 20(4). e1004224. DOI: 10.1371/journal.pmed.1004224.
22. Aranda Z. et al. COVID-19 and global mental health. *The Lancet Psychiatry*. 2021. Vol. 8(6). P. 457.
23. Vishwakarma D., Gaidhane A. M., Choudhari S. G. The global impact of COVID-19 on mental health of general population: A narrative review. *Cureus*. 2022. Vol. 14(10). e30627. DOI: 10.7759/cureus.30627.
24. Stylianou T., Ntelas K. Impact of COVID-19 pandemic on mental health and socioeconomic aspects in Greece. *International Journal of Environmental Research and Public Health*. 2023. Vol. 20. 1843. DOI: 10.3390/ijerph20031843.

References

1. Omidoyin, S. (2024). The implications of COVID-19 on mental health: Addressing the global mental health challenges. *Journal of Global Health Neurology and Psychiatry*, e2024001. <https://doi.org/10.52872/001c.117080>
2. Gui, E. M., Khasakhala, L., Ndetei, D., & Roberts, L. W. (2010). Mental disorders, health inequalities, and ethics: A global perspective. *International Review of Psychiatry*, 22(3), 235–244. <https://doi.org/10.3109/09540261.2010.485273>
3. World Health Organization. (2011). Global burden of mental disorders and the need for a comprehensive, coordinated response from health and social sectors at the country level (Executive Board EB 130/9). Retrieved from: https://apps.who.int/gb/ebwha/pdf_files/EB130/B130_9-en.pdf
4. Santomauro, D. F., et al. (2021). Global prevalence and burden of depressive and anxiety disorders in 204 countries and territories in 2020 due to the COVID-19 pandemic. *The Lancet*, 398(10312), 1700–1712.
5. Xiong, J., et al. (2020). Impact of COVID-19 pandemic on mental health in the general population of China. *Journal of Affective Disorders*, 276, 290–295.
6. Wang, C., et al. (2020). Immediate psychological responses and associated factors during the initial stage of the COVID-19 epidemic among the general population in China. *Journal of Psychiatric Research*, 129, 175–180.
7. Tanne, J. H., et al. (2020). COVID-19: How the US fell behind on testing. *BMJ*, 369, m1856.
8. Brooks, S. K., Webster, R. K., Smith, L. E., et al. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet*, 395(10227), 912–920. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8)
9. Wang, C., Pan, R., Wan, X., et al. (2020). Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease epidemic among the general population in China. *International Journal of Environmental Research and Public Health*, 17, 1729. <https://doi.org/10.3390/ijerph17051729>
10. Ahmed, M. Z., Ahmed, O., Aibao, Z., et al. (2020). Epidemic of COVID-19 in China and associated psychological problems. *Asian Journal of Psychiatry*, 51, 102092. <https://doi.org/10.1016/j.ajp.2020.102092>
11. Lei, L., Huang, X., Zhang, S., Yang, J., et al. (2020). Comparison of prevalence and associated factors of anxiety and depression among people affected by versus people unaffected by quarantine during the COVID-19 epidemic in Southwestern China. *Medical Science Monitor*, 26, e924609. <https://doi.org/10.12659/MSM.924609>
12. Huang, Y., & Zhao, N. (2020). Generalized anxiety disorder, depressive symptoms and sleep quality during COVID-19 outbreak in China: A web-based cross-sectional survey. *Psychiatry Research*, 288, 112954. <https://doi.org/10.1016/j.psychres.2020.112954>
13. Gualano, M. R., Lo Moro, G., Voglino, G., et al. (2020). Effects of COVID-19 lockdown on mental health and sleep disturbances in Italy. *International Journal of Environmental Research and Public Health*, 17(13), 4779. <https://doi.org/10.3390/ijerph17134779>
14. Daly, Z., Slemon, A., Richardson, C. G., et al. (2021). Associations between periods of COVID-19 quarantine and mental health in Canada. *Psychiatry Research*, 295, 113631. <https://doi.org/10.1016/j.psychres.2020.113631>
15. Hossain, M. M., Sultana, A., & Purohit, N. (2020). Mental health outcomes of quarantine and isolation for infection prevention: A systematic umbrella review of the global evidence. *Epidemiology and Health*, 42, e2020038. <https://doi.org/10.4178/epih.e2020038>
16. Pappa, S., et al. (2020). The mental health of healthcare workers during the COVID-19 pandemic: A systematic review and meta-analysis. *Journal of Affective Disorders*, 275, 223–231.
17. Juan, Y., Yuanyuan, C., Qiuxiang, Y., Cong, L., Xiaofeng, L., Yundong, Z., Jing, C., Peifeng, Q., Yan, L., Xiaojiao, X., & Yujie, L. (2020). Psychological distress surveillance and related impact analysis of hospital staff during the COVID-19 epidemic in Chongqing, China. *Comprehensive psychiatry*, 103, 152198. <https://doi.org/10.1016/j.comppsych.2020.152198>.

18. Armitage, R., & Nellums, L. B. (2020). COVID-19 and the elderly: Mental health and social implications. *Journal of the American Geriatrics Society*, 68(5), E34–E36.
19. Gostin, L. O., & Wiley, L. F. (2020). Public health law in the time of COVID-19. *JAMA*, 324(13), 1297–1298.
20. World Health Organization. (2020). Mental health and psychosocial considerations during the COVID-19 outbreak.
21. Patel, V., Fancourt, D., Furukawa, T. A., & Kola, L. (2023). Reimagining the journey to recovery: The COVID-19 pandemic and global mental health. *PLoS Medicine*, 20(4), e1004224. <https://doi.org/10.1371/journal.pmed.1004224>
22. Aranda, Z., et al. (2021). COVID-19 and global mental health. *The Lancet Psychiatry*, 8(6), 457.
23. Vishwakarma, D., Gaidhane, A. M., & Choudhari, S. G. (2022). The global impact of COVID-19 on mental health of general population: A narrative review. *Cureus*, 14(10), e30627. <https://doi.org/10.7759/cureus.30627>
24. Stylianou, T., & Ntelas, K. (2023). Impact of COVID-19 pandemic on mental health and socioeconomic aspects in Greece. *International Journal of Environmental Research and Public Health*, 20, 1843. <https://doi.org/10.3390/ijerph20031843>

ВПЛИВ COVID-19 НА ПСИХІЧНЕ ЗДОРОВ'Я ЯК НА ЧАСТИНУ ГЛОБАЛЬНОГО ЗДОРОВ'Я

Ю. ВАН, Г. Г. ГАБОР, А. С. ВОЛЬСЬКА, М. І. МАРУЩАК

Тернопільський національний медичний університет імені І. Я. Горбачевського МОЗ України, м. Тернопіль, Україна

Мета: проаналізувати вплив COVID-19 на психічне здоров'я в різних країнах та в глобальному масштабі.

Матеріали і методи. У дослідженні проаналізовано сучасні наукові публікації та звіти міжнародних організацій, зокрема Всесвітньої організації охорони здоров'я, доступні в інтернеті.

Результати. Вплив пандемії на психічне здоров'я багатогранний і зумовлений поєднанням соціальних, економічних та пов'язаних зі здоров'ям стресових факторів. Численні дослідження з усього світу засвідчили різке зростання проблем із психічним здоров'ям під час пандемії. Відсутність соціальних зв'язків порушила звичний розпорядок дня та системи підтримки, що сприяло виникненню почуття самотності та депресії. Економічні наслідки пандемії стали основною причиною тривоги та депресії, особливо серед вразливих верств населення. Величезний тиск, тривалий робочий день та емоційне виснаження привели до високого рівня тривоги, депресії і посттравматичного стресового розладу серед працівників сфери охорони здоров'я. «Інфодемія» ускладнила людям ухвалення обґрунтованих рішень та посилила почуття безпорадності. Очікується, що глибокий вплив пандемії COVID-19 на психічне здоров'я матиме довготривалі наслідки, що виходять далеко за межі вирішення кризи фізичного здоров'я. Це зробило надзвичайно важливим не тільки реагування на нагальні потреби, а й фундаментальну переоцінку та «переосмислення» надання психіатричної допомоги.

Висновки. Пандемія COVID-19 стала глобальним стрес-тестом для психічного здоров'я, показавши глибоко вкорінені вразливості в суспільстві. Поширеній страх, соціальна ізоляція та економічна нестабільність створили ідеальні умови для глобальної кризи психічного здоров'я. У міру переходу світу в постпандемічну еру системам охорони здоров'я вкрай важливо визнати психічне здоров'я основним компонентом загального здоров'я та інвестувати в стійкі, доступні та інтегровані послуги з охорони психічного здоров'я.

КЛЮЧОВІ СЛОВА: COVID-19; психічне здоров'я; глобальне здоров'я; стресові фактори.

Рукопис надійшов до редакції 27.10.2025

Рукопис прийнято до публікації 06.11.2025

Рукопис опубліковано 31.12.2025

Відомості про авторів:

Ван Юаньчжен – здобувач вищої освіти спеціальності 229 «Медицина», Тернопільський національний медичний університет імені І. Я. Горбачевського; ORCID <https://orcid.org/0009-0005-2590-2320>.

Габор Галина Григорівна – кандидатка медичних наук, доцентка кафедри функціональної та лабораторної діагностики, Тернопільський національний медичний університет імені І. Я. Горбачевського; ORCID <https://orcid.org/0000-0003-4704-4273>.

Вольська Аліна Станіславівна – кандидатка біологічних наук, доцентка кафедри фармакології з клінічною фармакологією, Тернопільський національний медичний університет імені І. Я. Горбачевського; ORCID <https://orcid.org/0000-0002-4985-9559>.

Марущак Марія Іванівна – докторка медичних наук, професорка, декан факультету іноземних здобувачів вищої освіти, Тернопільський національний медичний університет імені І. Я. Горбачевського; ORCID <https://orcid.org/0000-0001-6754-0026>.

Електронна адреса для листування: marushchak@tdmu.edu.ua