https://doi.org/10.32921/2225-9929-2022-3-48-23-30 UDC 61:001.12/.18 IRSTI 76.01.11

Review article

# Global Health Problems in the World under the Conditions of the post-COVID Crisis

Bakhyt Sarymsakova <sup>1</sup>, Ramilya Potapova <sup>2</sup>, Samal Duisekova <sup>3</sup>, Gaukhar Saurbayeva <sup>4</sup>, Assiya Turgambayeva <sup>5</sup>

<sup>1</sup> Professor of the Department of Public Health and Management, Astana Medical University, Astana, Kazakhstan. E-mail: bakhyts@yandex.kz

<sup>2</sup> Teacher of the Department of Public Health and Management, Astana Medical University, Astana, Kazakhstan. E-mail: k.ram28@mail.ru

<sup>3</sup> Teacher of the Department of Public Health and Management, Astana Medical University, Astana, Kazakhstan. E-mail: sammir9088@gmail.com

<sup>4</sup> Teacher of the Department of Public Health and Management, Astana Medical University, Astana, Kazakhstan. E-mail: Saurbayevag@gmail.com

<sup>5</sup> Head of the Department of Public Health and Management, Astana Medical University, Astana, Kazakhstan. E-mail: tak1973@mail.ru

## Abstract

The situation that has developed recently, as a result of the pandemic, has shown the inevitable connection of COVID-19 to global health. Every country has witnessed the medical, social and emotional consequences of COVID-19.

The purpose of this review was to study literary sources on global health problems in the world.

Healthcare systems around the world have felt the impact of the current phenomenon and many of them did not have sufficient readiness, healthcare organizers in all regions are struggling both with COVID-19 and with providing vital assistance. In another blow, the pandemic threatens to set back the hard-won global health progress made over the past two decades - for example, in the fight against infectious diseases and improving the health of mothers and children. At the present time, countries around the world will need to continue the fight against COVID-19 (albeit with the awareness that effective tools are developing). They will need to quickly restore and strengthen their health systems so that they can provide these tools and solve key social and environmental problems, as a result of which some segments of the population suffer much more than others. In such a global struggle, inter-country interactions are required. WHO and other international organizations will work to help countries increase preparedness for pandemics and other emergencies, as it is of high importance to unite countries and involve the entire government, not just the health sector.

Keywords: global health, disease burden, mental health, COVID-19.

Corresponding author: Assiya Turgambayeva, PhD, Associate professor, NJSC «Medical University Astana» Head of the Department of Public health and Management, Astana, Kazakhstan. Postal code: 010002 Address: Kazakhstan, Astana, Tashenov str 17. Phone: +7 701 887 62 73 E-mail: tak1973@mail.ru

> J Health Dev 2022; 3 (48): 23-30 Recieved: 12-08-2022 Accepted: 19-08-2022



This work is licensed under a Creative Commons Attribution 4.0 International License

## Introduction

Global health focuses on the medical needs of people around the world. It has not only a medical, but also a political dimension, while it is an extensive field of study that rests on many disciplines, from economics, ecology, epidemiology, sociology and many others [1].

Current definitions of global health define global health as «an area of study, research and practice that prioritizes improving health and achieving health equity for all people around the world» [2].

Global health is diverse, some programs are related to problems of an obvious medical nature, such as the impact of parasites on farmers in tropical regions, while another part addresses more serious issues, for example, how income inequality affects health [2,3]. Researchers from all over the world are working together to improve the health of people around the world. The World Health Organization (WHO) is one of the most important international agencies of global health. It was founded in 1948 and today unites more than 150 countries to solve global health problems and trends [4]. The authors of different countries are faced with the question of why and how important global health is for the population, for the medical community, for government agencies. Global health is important because our world has become interconnected, and our health as an individual is affected by global health problems. The increase in global trade and travel in recent decades has brought benefits, but there are also related problems. They take the form of infectious diseases and pandemics, such as COVID-19, as well as other trends, such as non-communicable diseases in richer countries associated with obesity [5,6].

There is no single list of global health problems. WHO describes 13 global health problems, but six (table 1) of them cover the most important trends [7].

The purpose of this review was to study literary sources on global health problems in the world.

#### Table 1 - Global problems with the most important trends according to WHO

Non-communicable diseases	As mortality from infectious diseases declined, noncommunicable diseases became the leading causes of death. Cancer, heart disease, and obesity-related conditions have proven to be major challenges for even the best healthcare systems. Meanwhile, cancer has become the leading cause of death in countries with high levels of pollution and relatively long life expectancy.
Infectious diseases and pandemics	Infectious diseases do not recognize national boundaries, as demonstrated during the COVID-19 pandemic. However, politics, development policies and environmental damage also play a role. Pandemics can also indicate gaps in preparation and containment. Many other infectious diseases have been killers for decades, including HIV / AIDS, malaria, Ebola, and the flu.
Foodstuffs	Hunger and hunger remain a global health problem despite significant improvements in food security over recent decades. Even in wealthier countries, natural disasters can expose political and economic inequalities, and infrastructure is stressed by economic growth and environmental change. Humans only rely on a handful of animals and plants for the majority of their calories, and these food supplies face many threats. Threats to food stocks include diseases affecting livestock, invasive pests, loss of genetic diversity and climate change
Environmental factors	The environment influences the definition of global health in different ways. Some scientists believe the virus that causes COVID-19 originally passed from a wild animal, in part due to human encroachment on what was once wildlife. Ebola and HIV also originated from animal cross-infection. As humans increasingly spread to previously wild areas and come into contact with previously isolated animals, new infectious diseases may arise. Thus, protecting wildlife from development can also protect humans.
Inequality	Some countries have advanced healthcare systems that are affordable and affordable for all patients. In other parts of the world, especially in less wealthy countries, health systems are less developed and millions of people struggle to access health care. Lack of access to health care for financial or other reasons leads to millions of premature deaths every year.
Health care in war zones	The number of attacks on healthcare workers is on the rise. International law prohibits attacks on healthcare workers or institutions, but in a recent report, WHO recorded more than 300 such attacks. Medical workers are sometimes deliberately attacked and even hospitals are bombed. Prolonged conflicts often result in the displacement of thousands or even millions of people, who can be flocked to refugee camps, where infectious diseases can spread rapidly. International organizations such as Médecins Sans Frontières, WHO and the United Nations (UN) are working to provide medical assistance to refugees and others affected by the conflict.

The concept of «Global Health» is interpreted in different ways. Coplan et al. Define the term as an area of study, research and practice that prioritizes improving health and achieving health equity for all people around the world. It is a useful definition with a broad focus on health improvement and health equity. However, he is verbose and boring [8].

Kickbush defines global health as «those health problems that transcend national borders and governments and require action against the global forces that determine human health». This definition also has a broad focus but lacks a clear purpose, is passive in its call to action, and excludes the need for collaboration and research. Elsewhere, the Center for European Foundations calls for a European approach that makes global health a policy priority across all sectors through a global public goods fund [9].

In an important policy document, the United Kingdom government calls global health «health problems whose determinants bypass, undermine or ignore the territorial

boundaries of states, and thus go beyond the ability of individual countries to tackle through national institutions. This definition contains important ideas, but is confusing and not focused on results. It is appropriate to characterize global health as improving health throughout the world, reducing inequalities and protecting against global threats that are not considered national boundaries» [10].

In the coming years, global health problems will become more important as countries and economies around the world become more intertwined. Growing wealth and trade can significantly improve human health, but there are also new threats. Emerging infectious diseases and persistent chronic conditions will pose challenges for years, but doctors and scientists are also working together around the world. Working together, they devote their lives to improving health around the world [11,12,13].

Environmental pollution also affects human health, and pollution from one country can spread across national borders. Air pollution causes illness and millions of premature deaths every year, especially in urban areas of Asia. Contaminated water can poison both humans and animals [14].

Cross-sectional studies of the health effects of climate change are also being carried out. As temperatures rise, tropical diseases spread to new areas, affecting the health of patients in areas not previously infected [15].

Today, Global Health is reaching maturity, at least in the growing number of academic centers. Alliances are created, international scientific grants are allocated to support global health programs. Most global health centers are located in high-income countries, although some have strong links to low- and middle-income countries. The Task Force creates a mechanism to coordinate European academic global health initiatives through ASPER [16], which raises important questions about the meaning and scope of global health and re-emphasizes the need for a common definition of global health that is concise, clear and widely accepted, in including the public.

Analysis of PubMed publications, The Lancet publishes additional articles annually that explore global trends in health outcomes, in-depth analyzes of disease, injury or risk factors, or country-specific health status analyzes [17].

Examples of questions for a research agenda include how to close a gap in basic service delivery to the poor, which noncommunicable disease interventions in populations are most applicable in different contexts, and how to involve non-state actors in equitable service delivery.

One of the most significant questions is the study of the global burden of disease (GBD). The study, led by the Institute for Health Metrics and Evaluation (IHME) at the University of Washington in Seattle, USA, offers a powerful resource for

understanding the changing health challenges faced by people around the world in the 21st century.

The latest GBD study on trends from 1990 to the present includes data on mortality and morbidity in 204 countries and territories, 369 diseases and injuries, and 87 risk factors. By tracking progress within and across countries, it provides an important tool to inform clinicians, researchers and policymakers, promote accountability and improve lives around the world.

In collaboration with IHME, The Lancet has been publishing global health assessments based on GBD research since 2010. The 2010 Global Burden of Disease Survey not only confirmed the 1990 findings of the significant burden of mental illness and substance use disorders, but also found that the burden of these disorders had increased. Mental disorders (including substance use disorders, dementia and self-harm) are the leading cause of years with disabilities worldwide (19%). Lack of human resources, poor funding or lack of funding, poor governance, illiteracy and mental illness stigma all contribute to the global gap in mental health care. which compared to high-income countries is worse in low- and middle-income countries [18]. Although more than three guarters of people with mental disorders live in low- and middle-income countries (LMIC) and effective, low-cost interventions are available, resource commitments are extremely limited, with less than 10% receiving treatment. Investment in mental health care in LMIC is extremely limited: only 1,6% of government health budgets for LMIC and 0,4% of aid to health development (i.e. philanthropy). As government budgets for LMICs are often overwhelmed, mobilizing additional external resources is a top priority. The UN Sustainable Development Goals recommend external resources for development from a wide variety of sources, including philanthropy.

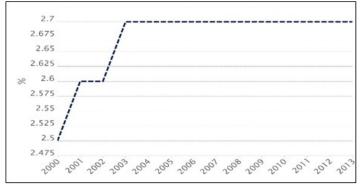


Figure 1 - Prevalence of mental disorders in the WHO European Region (%). According to the European Health Information Portal <u>https://gateway.euro.who.int</u>

Schizophrenia, depression, epilepsy, dementia, alcohol dependence and other mental, neurological diseases and disorders associated with psychoactive substance use (MNS), within the global burden of disease, outweigh cardiovascular diseases and cancer, and there is also an increase in the total number of mental diseases (for the example of the WHO European Region - Figure 1).

Depression is the third leading cause of the global burden of disease, with alcohol and illicit drug use accounting for more than 5% [19].

Depression is the leading cause of disability worldwide and is estimated to affect 264 million people worldwide. Every day, 129 Americans die by suicide and 130 die from opioid overdoses. To address the global public health challenge, we must address mental health. Among the people who receive help, few can receive effective treatment. For example, only 16,5% of people with depressive disorder receive minmally adequate treatment worldwide. While the reasons for this treatment gap are multifactorial, it is partly due to the acute shortage of mental health professionals. By 2025, the United States is projected to experience a shortage of almost all types of mental health services, such as psychiatrists, psychologists, social workers. Mental health workforce shortages are even more acute in lowand middle-income countries. The average number of support for digital adoption of psychiatrists per 100.000 people for high-income countries is 172 times higher than in low-income countries, where there are about 0.05 psychiatrists per 100,000 people and most of them are private individuals [20].

The unequal distribution of human resources - between and within countries - further weakens access: There are 200 times more psychiatrists in the European Region of the World Health Organization than in Africa. In all countries, investment in basic research for the prevention and treatment of MNS disorders is disproportionately low relative to the burden of disease. To address this issue, the Global Mental Health Challenges Initiative has identified research priorities over the next 10 years that will impact the lives of people with MNS disorders [20].

The global inequality in access to basic mental health services is widely recognized. The mental health care gap is approximately 50% in all countries, with up to 90% of people in the lowest income countries without access to essential mental health services. Increased investment in Global Mental Health (GMH) has led to increased innovation in mental health service delivery in LMIC. Situational analysis in areas where mental health services and systems are underdeveloped and underresourced is important in research planning and implementation, but little guidance is available to justify methodological approaches to conducting this type of research.

The global inequality in access to and affordability of basic mental health services is widely recognized and defined as a «serious problem». Inequality also occurs within countries; vulnerable groups, including people of low socioeconomic status (SES), women and sexual minorities, youth and people living in rural areas, often suffer the most from mental health problems and are less likely to receive help. The Global Mental Health Treatment (GMH) gap reveals a historical disparity in prioritizing and responding to mental health when compared to other health conditions. The lack of adequate treatment for many people with mental illness in low- and middle- income countries (LMICs) has been described as a moral failure. However, in the last decade, GMZ has emerged as a response to gaps in the treatment of mental illness. Increased investment in GMH has led to the development and testing of innovative approaches to mental health service delivery in LMIC. In turn, as the evidence for effective interventions grows, so does the need for a deeper understanding of how to implement and scale up mental health services so that they effectively reach those who need them [21].

Migrants are at a higher risk of common mental health problems than ordinary people, but they are less likely to seek help. To improve access, the WHO recommends integrating mental health services into primary health care.

Common mental disorders, including major depressive disorder, generalized anxiety disorder, post-traumatic stress disorder (PTSD), and substance use disorders, can affect one in five adults worldwide and are becoming more common. By 2030, depression could become the world's second-largest burden of disease and the first cause of the disease burden in high-income countries, with serious implications for global mental health. Refugees represent a global priority population with unique mental health needs [22].

General mental disorders account for the majority of the global burden of disease; however, there is strong evidence that these disorders, as well as severe mental disorders, can be successfully treated with evidence-based interventions conducted by trained lay health workers in resource-limited communities or in primary health care settings.

Mental and substance use disorders are currently the leading cause of disability worldwide. This documented global burden of illness associated with mental disorders is compounded by the growing mental illness treatment gap, with more than 70% of people in need of mental health services globally without access to health care. Paradoxically, this gap exists at a time when evidence-based mental health interventions are failing [23].

Three years ago, the UN launched the Sustainable Development Goals (SDGs) program to advance world leaders in addressing issues such as poverty, hunger and climate change (UN, 2015). The SDGs have replaced the earlier Millennium Development Goals (MDGs). This did not include mental health (UN, 2000), although mental health is critical to most of the MDGs, especially those related to physical health, education and economic development (Gureje & Jenkins, 2007). The importance of mental health as an integral part of health in general has long been recognized (WHO, 1946). This was confirmed by the Declaration of Alma-Ata (WHO, 1978), which for the first time confirmed the decisive role of primary health care for all. The early creation by the World Health Organization (WHO) of the Department of Mental Health and the Federation for Mental Health in 1948 was a way to draw attention to global mental health through research, policy, education and advocacy in the decades that followed. Since then, there have been calls for stronger mental health measures, most notably in connection with the establishment of World Mental Health Day (October 10), initiated by Mrs. Roslyn Carter (wife of former US President Jimmy Carter), which is celebrated in most countries every year since 1992. Unlike earlier MDGs, the recently published SDGs specifically include mental health. They provide a useful

framework for stimulating, monitoring and analyzing global development. was a way to bring attention to global mental health through research, policy, education and advocacy in the decades that followed. Since then, there have been calls for stronger mental health measures, most notably in connection with the establishment of World Mental Health Day (October 10), initiated by Mrs. Roslyn Carter (wife of former US President Jimmy Carter), which is celebrated in most countries every year since 1992. Unlike earlier MDGs, the recently published SDGs specifically include mental health. They provide a useful framework for stimulating, monitoring and analyzing global development. was a way to bring attention to global mental health through research, policy, education and advocacy in the decades that followed. Since then, there have been calls for stronger mental health measures, most notably in connection with the establishment of World Mental Health Day (October 10), initiated by Mrs. Roslyn Carter (wife of former US President Jimmy Carter), which is celebrated in most countries every year since 1992. Unlike earlier MDGs, the recently published SDGs specifically include mental health. They provide a useful framework for stimulating, monitoring and analyzing global development. Since then, there have been calls for stronger mental health measures, most notably in connection with the establishment of World Mental Health Day (October 10), initiated by Mrs. Roslyn Carter (wife of former US President Jimmy Carter), which is celebrated in most countries every year since 1992. Unlike earlier MDGs, the recently published SDGs specifically include mental health. They provide a useful framework for stimulating, monitoring and analyzing global development. Since then, there have been calls for stronger mental health measures, most notably in connection with the establishment of World Mental Health Day (October 10), initiated by Mrs. Roslyn Carter (wife of former US President Jimmy Carter), which is celebrated in most countries every year since 1992. Unlike earlier MDGs. the recently published SDGs specifically include mental health. They provide a useful framework for stimulating, monitoring and analyzing global development. The recently published SDGs specifically include mental health. They provide a useful framework for stimulating, monitoring and analyzing global development. The recently published SDGs specifically include mental health. They provide a useful framework for stimulating, monitoring and analyzing global development.

The Lancet took the opportunity to create a Commission on Global Mental Health and Sustainable Development to assess the agenda and progress in the context of the SDGs. The Commission's report is of great interest to a wide audience. It provides some perspectives on the history of mental health concepts, on recent advances in scientific understanding, and on mental health programs; it assesses threats to progress, including human rights violations, limited resources, major demographic changes and social risk factors; and it stresses the importance of addressing the challenges of mental health promotion and prevention, as well as treatment, rehabilitation and care. Key approaches to improving global mental health include:

(a) expanding mental health services as an essential component of universal health coverage;

- (b) removing barriers and threats to mental health;
- (c) the protection of mental health by public policy;
- (d) mastering new technologies;
- (e) additional financial investments:
- (f) more research and innovation [24].

WHO released the Mental Health Atlas in 2017, which consisted of updated information from nearly 180 countries. Data from the Atlas are used to monitor mental health policies, laws, programs and services in WHO Member States and to track progress in implementing the WHO Mental Health Action Plan 2013-2020. In addition, Atlas 2017 is particularly relevant as WHO embarks on a major transformation to leverage its influence at the country level and live up to its mission in the era of the Sustainable Development Goals [25].

To help narrow the global mental health care gap, WHO has developed the Mental Health Gap Action Program. Guidance (mhGAP-IG) based on a systematic review of evidence followed by international collaborative application. MhGAP-IG includes

simple, easy-to-use, clinical guidelines for specific diagnoses to provide evidence-based practice. Non-specialized health care providers intend the guidelines for use after adaptation to national and local needs.

Until recently, in most low-income and low-resource countries in high-income countries, mental disorders were routinely diagnosed and treated in centralized mental hospitals or clinics. Diagnostic, treatment and referral services for mental health professionals based in primary health care or community health centers are generally not available. In an effort to expand coverage of mental health services, countries around the world are moving towards community-based mental health care. Many countries have made significant strides in mental health legislative reform and deinstitutionalization. However, as a rule, community mental health services were not prepared to meet emerging mental health needs. Challenges for integrating mental health care into primary health care in low-income countries include limited infrastructure; lack of human resources; limited public awareness of mental health; poverty and social deprivation; high levels of discrimination against people living with mental disorders. Despite these complex and interrelated challenges, research is progressing on how best to integrate mental health into primary health care in low-income countries. Challenges for integrating mental health care into primary health care in low-income countries include limited infrastructure; lack of human resources; limited public awareness of mental health; poverty and social deprivation; high levels of discrimination against people living with mental disorders. Despite these complex and interrelated challenges, research is progressing on how best to integrate mental health into primary health care in low-income countries. Challenges for integrating mental health care into primary health care in low-income countries include limited infrastructure; lack of human resources; limited public awareness of mental health; poverty and social deprivation; high levels of discrimination against people living with mental disorders. Despite these complex and interrelated challenges, research is progressing on how best to integrate mental health into primary health care in low-income countries. living with mental health problems. Despite these complex and interrelated challenges, research is progressing on how best to integrate mental health into primary health care in low-income countries. living with mental health problems. Despite these complex and interrelated challenges, research is progressing on how best to integrate mental health into primary health care in low-income countries.

In 2013, the World Health Assembly adopted the Comprehensive Mental Health Action Plan 2013–2020, under which United Nations (UN) Member States are committed to providing mental health care that is integrated into primary health care and includes both general and severe mental disorders.

Thus, UN Member States have committed themselves to transforming their community-based primary health care systems, including the diagnosis and treatment of severe mental illness and general mental disorders, as well as mental health promotion and prevention.

Given the magnitude of mental disorders, treatment alone will not be enough, so filling the mental health gap needs to be done through mental health promotion and prevention. One promising prevention area includes attention to the mental health of children. Studies show that the average age of onset of mental disorders is in childhood and adolescence, with an estimated 14% of children worldwide suffering from a mental disorder. Undiscovered mental disorders that start early in life lead to lifelong disability and preventable premature death. Thus, attention to the mental health of children should be seen as a way to prevent mental disorders in adults [23,26].

Digital mental health interventions are often touted as a solution to the global mental health crisis. However, the shift in healthcare from the hands of professionals to digital applications could further isolate the people who need a human society. Thus, we argue that research focused on the use of technology to support all people in providing mental health prevention and intervention deserves more attention in the coming decade [20,27,28].

The Lancet Commission on Global Mental Health and Sustainable Development considers it necessary and important to see the role of legislation in promoting global mental health recognized. Historically, mental health has been the most strictly enforced branch of medicine, although mental health legislation has often perpetuated, rather than discouraged, human rights violations. However, mental health should not be distanced from legislation, but interactions need to be rethought to protect people's freedoms. WHO highlights this in its report Promoting the Right to Health: The Vital Role of the Law.

India is a great example of a country that is undergoing potentially positive change. India's Mental Health Act 2017 not only decriminalizes suicide, but also provides a fully enforceable right to mental health and care, despite the lack of an equivalent right to access to general health care.

Indian lawmakers drafted their new law in line with the UN Convention on Human Rights with Disabilities (CRPD) and tried to align national mental health legislation with the Convention. While Indian psychiatrists have expressed reasonable concerns about some elements of the law, especially its implementation, they are also optimistic about the initiative [29].

Two successful global mental health strategies:

The first is task shifting - using trained lay health workers to deliver health care in non-specialized settings. In terms of data on global mental health treatment gaps, the situation is least favorable in low-income countries.

The second strategy is using digital technologies to strengthen health systems. While there is little evidence to support widespread adoption of virtual mental health interventions in low-income countries, digital innovation is now dominating in high-income countries (HICs), and the COVID-19 pandemic has boosted global adoption. Virtual care to reduce the risk of infection among healthcare workers. Despite several questions surrounding digital innovation, even in HICs, their potential to expand access and coverage of hard-to-reach places requires more research on their effectiveness in LMICs. Mobile phones can help deliver quality service by facilitating access to training [30].

Global Mental Health (GMH) seems to be increasingly prominent in the global discourse on health and development. We see an amazing and growing academic interest, which is multiplied by summer courses, master's programs, diplomas and, of course, grant applications. The mere presence of the words «mental health» in a few lines of a large UN document on the Sustainable Development Goals caused a huge stir. WHO has consistently followed a cycle that began in 2001 with the World Health Report (WHO, 2001) on mental health, with several useful documents and guidelines, culminating in 2013 with the important Mental Health Action Plan 2013–2020 years approved by all WHO Member States [31,32].

In December 2018, the World Health Organization and IHME announced a formal partnership to collaborate to produce a single set of global health assessments to improve the validity of GBD and improve its policy relevance and use. These summary articles are published annually in a special issue of The Lancet.

Publication of the main articles of GBD research in an academic journal is part of a concerted effort to create a scientific discipline of assessment that is subject to independent peer review and public scrutiny. This scientific rigor has fueled technological development over the years and makes GBD an important foundation for quantifying progress in global health. Recent innovations include the socio-demographic index and the integration of sex-disaggregated data [33].

The 2019 Global Burden of Disease, Injury and Risk Factors (GBD) Study provides a synthesis of available data on health levels and trends, a diverse set of risk factors, and a rule-based health system response. The GBD 2019 survey covered 204 countries and territories, and disaggregated the first administrative level for 22 countries from 1990 to 2019. Because GBD research is highly standardized and comprehensive, it covers both fatal and non-fatal outcomes, and uses a mutually exclusive and exhaustive list. By examining the hierarchical causes of illness and injury, research provides a powerful foundation for a detailed and broad understanding of global health trends and emerging issues. All GBD study assessments are publicly available and comply with the Guidelines for Accurate and Transparent Reporting of Health Assessments. From this vast amount of information, five key findings have been drawn that are important for health, social and economic development strategies. These ideas are subject to numerous limitations set forth in each of the constituent documents of GBD research [34].

No communicable diseases (NCDs) now account for more than half of the global burden of disease. Cardiovascular disease accounts for about half of NCD deaths, and most deaths from cardiovascular disease occur in low- and middle-income countries. The GBD (Global Burden of Disease) study measures and assesses health loss due to death or disability from over 300 diseases in over 100 countries. According to the analysis of the GBD study, the rise in NCDs is partly related to the increase in life expectancy due to the decrease in premature mortality from infectious, childhood and maternal diseases, but preventable risk factors also contribute and represent targets for efforts to tackle NCDs. In addition to traditional risk factors for NCDs such as tobacco smoking, high blood pressure and unhealthy diets also play a role in unconventional risk factors such as air pollution and unhealthy alcohol use. GBD research continues to expand by collecting more data from partner countries than ever before and measuring health status at national and subnational levels at shorter time intervals. The GBD study will continue to provide data to prioritize and assess progress in global efforts to tackle the growing burden of NCDs [35,36]. And measuring health status at the national and subnational levels at shorter time intervals. The GBD study will continue to provide data to prioritize and assess progress in global efforts to tackle the growing burden of NCDs [35,36]. And measuring health status at the national and subnational levels at shorter time intervals. The GBD study will continue to provide data to prioritize and assess progress in global efforts to tackle the growing burden of NCDs [35-38].

For the first time, the modern world is faced with a global threat to all mankind and unprecedented challenges associated with the spread of COVID-19. Death rates from COVID-19 vary significantly between countries with higher death rates in developed countries. Mortality rates per million population for selected countries are shown in Figure 1 (data for February 10, 2021). For example, by February 10, 2021, Belgium had a total of 1.856 deaths per million of the population, in the UK - 1.695 people, in the USA - 1.424, in Russia - 526, in China – 3.35 and in Vietnam – 0,36. The number of deaths in the UK was 115,000, in the USA - 471.567, in Russia - 76.873, in China - 4824, in Australia - 909 and in Vietnam - 35; a total of 2.34 million worldwide [37] (Figure 2).

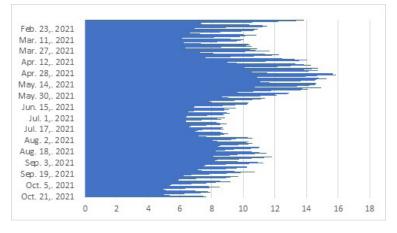


Figure 2 - Daily increase in deaths from COVID-19. (According to https://www.worldometers.info on 21 October 2021)

Investing in improving and protecting public health is a vital investment in building a more productive, sustainable and stable economy and society. Every year, humanity spends \$7,5 trillion on healthcare, that is, almost 10% of world GDP. But there is a huge cost gap across countries, and there is a clear imbalance between, on the one hand, treatment costs and, on the other hand, the costs of prevention and health promotion and pandemic preparedness.

In 2015, countries around the world came together and adopted the Sustainable Development Goals (SDGs) -

## Conclusion

Each crisis situation also brings new opportunities. The covid pandemic will not be the last in human history. But there is an opportunity to use it as a chance to build a healthier, safer, more equitable and sustainable future.

**Conflicts of interest**. None of the authors declare any relevant conflicts of interest.

an ambitious agenda for action for people, planet, prosperity, peace and partnership. The main feature of the SDGs is their comprehensive and indivisible nature. The goal of the program is to find new approaches to working together in a more coordinated and coordinated manner, so as to comprehensively address the challenges in the areas of poverty, inequality and climate change, and to develop health.

**Authors' contribution.** All authors contributed substantially to the conception, acquisition, analysis, and interpretation of the data for the work and approved the final approval of the version to be published.

## References

1. Addo-Atuah J., Senhaji-Tomza B., Ray D., Basu P. et al. Global health research partnerships in the context of the Sustainable Development Goals (SDGs). Res Social Adm Pharm. 2020; 16(11): 1614-1618. [Crossref].

- 2. Nkengasong J.N. COVID-19: unprecedented but expected. Nat Med. 2021; 27(3): 364. [Crossref].
- 3. Irwin R. Sweden's engagement in global health: a historical review. Global Health. 2019; 15(79): 1-15. [Crossref].
- 4. Schwalbe N., Wahl B. Artificial intelligence and the future of global health. Lancet. 2020; 395(10236): 1579-1586. [Crossref].
- 5. Beaglehole R., Bonita R. What is global health? Glob Health Action. 2010; 3: 10.3402/gha.v3i0.5142. [Crossref].
- 6. Coria A.L., Rabin T.L., Rule A.R.L., Haq H. et al. Global Health Crisis, Global Health Response: How Global Health Experiences Prepared North American Physicians for the COVID-19 Pandemic. J Gen Intern Med. 2022; 37(1): 217-221. [Crossref].

7. Ten threats to global health in 2019. World Health Organization. Website. [Cited 25 Feb 2022]. Available from URL: <u>https://</u>www.who.int/ru/news-room/spotlight/ten-threats-to-global-health-in-2019.

8. Koplan J.P., Bond T.C., Merson M.H., Reddy K.S. et al. Towards a common definition of global health. Lancet. 2009; 373: 1993-5. [Crossref].

9. Cueto M., Rodogno D., Bourbonnais N. The meaning(s) of global public health history. Hist Cienc Saude Manguinhos. 2020; 27(suppl 1): 7-10. [Crossref].

10. Kruk M.E., Yamey G., Angell S.Y., Beith A. et al. Transforming Global Health by Improving the Science of Scale-Up. PLoS Biol. 2016; 14(3): e1002360. [Crossref].

11. Bréchot C. The Institut Pasteur International Network: a century-old global public health powerhouse. Lancet. 2016; 387(10034): 2181-3. [Crossref].

12. Krettek A., Karlsson L.E., Toan T.K., Chuc N.T. Nordic School of Public Health NHV and its legacy in global health. Scand J Public Health. 2015; 43(16 Suppl): 36-45. [Crossref].

13. Duisekova S., Turgambayeva A., Zhanaliyeva M., Sarsenbayeva G. et al. Youth unemployment as a factor affecting the health. Iranian Journal of Public Health. 2020; 49(6): 1195–1197. [Crossref].

14. Salm M., Ali M., Minihane M., Conrad P. Defining global health: findings from a systematic review and thematic analysis of the literature. BMJ Glob Health. 2021; 6(6): e005292. [Crossref].

15. Drain P.K., Mock C., Toole D., Rosenwald A. et al. The emergence of undergraduate majors in global health: systematic review of programs and recommendations for future directions. Am J Trop Med Hyg. 2017; 96(1): 16-23. [Crossref].

16. Abimbola S. The information problem in global health. BMJ Glob Health. 2016; 1(1): e900001. [Crossref].

17. Boyle C.F., Levin C., Hatefi A., Solange M. et al. Achieving a "Grand Convergence" in Global Health: modeling the technical inputs, costs, and impacts from 2016 to 2030. PLoS One. 2015; 10(10): e0140092. [Crossref].

18. Saraceno B. Rethinking global mental health and its priorities. Epidemiol Psychiatr Sci. 2019; 29: e64. [Crossref].

19. Rudd B.N., Beidas R.S. Digital Mental Health: The Answer to the Global Mental Health Crisis? JMIR Ment Health. 2020; 7(6): e18472. [Crossref].

20. Murphy J.K., Michalak E.E., Colquhoun H., Woo C. et al. Methodological approaches to situational analysis in global mental health: a scoping review. Glob Ment Health (Camb). 2019; 6: e11. [Crossref].

21. lemmi V. Philanthropy for global mental health 2000-2015. Glob Ment Health (Camb). 2020; 7: e9. [Crossref]

22. Hanna F., Barbui C., Dua T., Lora A. et al. Global mental health: how are we doing? World Psychiatry. 2018; 17(3): 367-368. [Crossref].

23. Lu J., Jamani S., Benjamen J., Agbata E. et al. Global Mental Health and Services for Migrants in Primary Care Settings in High-Income Countries: A Scoping Review. Int J Environ Res Public Health. 2020; 17(22): 8627. [Crossref].

24. Jakovljevic M., Bjedov S., Jaksic N., Jakovljevic I. COVID-19 Pandemia and Public and Global Mental Health from the Perspective of Global Health Securit. Psychiatr Danub. 2020; 32(1): 6-14. [Crossref].

Kola L. Global mental health and COVID-19. Lancet Psychiatry. 2020; 7(8): 655-657. [Crossref].

26. Jenkins R. Global mental health and sustainable development 2018. BJPsych Int. 2019; 16(2): 34-37. [Crossref].

27. Wainberg M.L., Lu F.G., Riba M.B. Global Mental Health. Acad Psychiatry. 2016; 40(4): 647-9. [Crossref].

28. Collins P.Y., Patel V., Joestl S.S., March D. et al. Grand challenges in global mental health. Nature. 2011; 475(7354): 27-30. [Crossref].

29. Collins P.Y. What is global mental health? World Psychiatry. 2020; 19(3): 265-266. [Crossref].

30. Misra S., Stevenson A., Haroz E.E., de Menil V. et al. Global mental health: systematic review of the term and its implicit priorities. BJPsych Open. 2019; 5(3): e47. [Crossref].

31. Stein D.J. Obsessive-compulsive disorder and global mental health. Indian Psychiatry. 2019; 61(Suppl 1): S4-S8. [Crossref].

32. Lora A., Sharan P. Information for global mental health. Glob Ment Health (Camb). 2015; 2: e17. [Crossref].

33. Cherepanov E. Ethical dilemmas in global mental health. BJPsych Int. 2019; 16(4): 81-83. [Crossref].

34.Kirk M.D., Pires S.M., Black R.E., Caipo M. et al. World Health Organization Estimates of the Global and Regional Disease Burden of 22 Foodborne Bacterial, Protozoal, and Viral Diseases, 2010: A Data Synthesis. PLoS Med. 2015; 12(12): e1001921. [Crossref].

35. Roth G.A., Mensah G.A., Johnson C.O., Addolorato G. et al. Global Burden of Cardiovascular Diseases and Risk Factors, 1990-2019: Update From the GBD 2019 Study. J Am Coll Cardiol. 2020; 76(25): 2982-3021. [Crossref].

36. Benziger C.P., Roth G.A., Moran A.E. The Global Burden of Disease Study and the Preventable Burden of NCD. Glob Heart. 2016; 11(4): 393-397. [Crossref].

37. GBD 2019 Viewpoint Collaborators. Five insights from the Global Burden of Disease Study 2019. Lancet. 2020; 396(10258): 1135-1159. [Crossref].

38. Никуличев Ю.В. Глобальное здоровье \ Аналитический обзор. – М. – 2018. – С. 68. [Google Scholar].

Nikulichev Iu.V. Global'noe zdorov'e (Global health) [in Russian]. Analiticheskii obzor. – M. 2018; 68 p. [Google Scholar].

## COVID-19 кейінгі дағдарыс жағдайында әлемдегі денсаулық сақтаудың жаһандық мәселелері

Сарымсакова Б.Е. <sup>1</sup>, Потапова Р.К. <sup>2</sup>, Дуйсекова С.Б. <sup>3</sup>, Саурбаева Г.К. <sup>4</sup>, Тургамбаева А.К. <sup>5</sup>

1 Қоғамдық денсаулық және менеджмент кафедрасының профессоры,

Астана медицина университеті, Астана, Қазақстан. E-mail: bakhyts@yandex.kz

<sup>2</sup> Қоғамдық денсаулық және менеджмент кафедрасының оқытушысы, Астана медицина университеті, Астана, Қазақстан. E-mail: k.ram28@mail.ru

<sup>3</sup> Қоғамдық денсаулық және менеджмент кафедрасының докторанты, Астана медицина университеті, Астана, Қазақстан. E-mail:sammir9088@gmail.com

<sup>4</sup> Қоғамдық денсаулық және менеджмент кафедрасының оқытушысы, Астана медицина университеті, Астана, Қазақстан. E-mail: Saurbayevag@gmail.com

<sup>5</sup> Қоғамдық денсаулық және менеджмент кафедрасының меңгерушісі, Астана медицина университеті, Астана, Қазақстан. E-mail: tak1973@mail.ru

### Түйіндіме

Соңғы уақытта пандемия салдарынан болған жағдай COVID-19-ның жаһандық денсаулық сақтаумен сөзсіз байланысын көрсетті. Әр ел COVID-19-ның медициналық, әлеуметтік және эмоционалды әсеріне куә болды.

Бұл шолудың мақсаты әлемдегі денсаулық сақтаудың жаһандық мәселелері бойынша әдеби дереккөздерді зерттеу болды.

Бүкіл әлемдегі денсаулық сақтау жүйелері қазіргі құбылыстың әсерін сезінді және олардың көпшілігі дайын болмады, барлық аймақтардағы денсаулық сақтау ұйымдастырушылары COVID-19-мен де, өмірлік көмек көрсетумен де күресуде. Тағы бір соққымен, пандемия соңғы екі онжылдықта қол жеткізілген жаһандық денсаулық сақтау саласындағы прогресті жоққа шығарады, мысалы, жұқпалы аурулармен күресу және аналар мен балалардың денсаулығын жақсарту секілді жетістіктер. Қазіргі уақытта бүкіл әлемдегі елдер COVID-19-мен күресуді жалғастыруы керек (дегенмен тиімді құралдар әзірленуде). Олар осы құралдарды қамтамасыз ету және негізгі әлеуметтік және экологиялық мәселелерді шешу үшін денсаулық сақтау жүйелерін тез қалпына келтіріп, нығайтуы керек. Себебі пандемия әсерінен халықтың кейбір топтары басқаларға қарағанда әлдеқайда көп зардап шегеді. Мұндай жаһандық күресте еларалық өзара ынтымақтасқан іс-қимыл талап етіледі. Дүниежүзілік денсаулық сақтау ұйымы және басқа да халықаралық ұйымдар елдерге пандемияға және басқа да төтенше жағдайларға дайын болуға көмектесу үшін жұмыс істейді. Өйткені бұл қадамдарға денсаулық сақтау саласын ғана емес, сондай-ақ, барлық біріктіру және олардың үкіметін тарту өте маңызды.

Түйін сөздер: жаһандық денсаулық сақтау, аурудың ауыртпалығы, психикалық денсаулық, COVID-19.

## Глобальные проблемы здравоохранения в мире в условиях пост-ковидного кризиса

Сарымсакова Б.Е.<sup>1</sup>, Потапова Р.К.<sup>2</sup>, Дуйсекова С.Б.<sup>3</sup>, Саурбаева Г.К.<sup>4</sup>, Тургамбаева А.К.<sup>5</sup>

<sup>1</sup> Профессор кафедры общественного здоровья и менеджмента, Медицинский университет Астана, Казахстан. E-mail: bakhyts@yandex.kz

<sup>2</sup> Преподаватель кафедры общественного здоровья и менеджмента,

Медицинский университет Астана, Казахстан. E-mail: k.ram28@mail.ru

<sup>3</sup> Докторант кафедры общественного здоровья и менеджмента, Медицинский университет Астана,

Казахстан. E-mail: sammir9088@gmail.com

<sup>4</sup> Преподаватель кафедры общественного здоровья и менеджмента, Медицинский университет

Астана, Казахстан. E-mail: Saurbayevag@gmail.com

<sup>5</sup> Заведующая кафедрой общественного здоровья и менеджмента, Медицинский университет Астана,

Казахстан. E-mail: tak1973@mail.ru

#### Резюме

Ситуация, сложившаяся в последнее время в результате пандемии, показала неизбежную связь COVID-19 с глобальным здравоохранением. Каждая страна стала свидетелем медицинских, социальных и эмоциональных последствий COVID-19.

**Целью данного обзора** было изучение литературных источников по глобальным проблемам здравоохранения в мире.

Системы здравоохранения во всем мире ощутили влияние нынешнего явления, и многие из них не были достаточно готовы, организаторы здравоохранения во всех регионах борются как с COVID-19, так и с оказанием жизненно важной помощи. Еще одним ударом пандемия угрожает свести на нет с трудом достигнутый прогресс в области глобального здравоохранения, достигнутый за последние два десятилетия, например, в борьбе с инфекционными заболеваниями и улучшении здоровья матерей и детей. В настоящее время странам по всему миру необходимо будет продолжать борьбу с COVID-19 (хотя и с осознанием того, что разрабатываются эффективные инструменты). Им необходимо будет быстро восстановить и укрепить свои системы здравоохранения, чтобы они могли предоставить эти инструменты и решить ключевые социальные и экологические проблемы, в результате которых некоторые слои населения страдают гораздо больше, чем другие. В такой глобальной борьбе требуется межстрановое взаимодействие. Всемирная организация здравоохранения и другие международные организации будут работать над тем, чтобы помочь странам повысить готовность к пандемиям и другим чрезвычайным ситуациям, поскольку крайне важно объединить страны и привлечь все правительство, а не только сектор здравоохранения.

Ключевые слова: глобальное здравоохранение, бремя болезней, психическое здоровье, COVID-19.