
Global Health - A Challenge for the Management of Health Care Systems

Submitted 08/09/24, 1st revision 20/10/24, 2nd revision 06/11/24, accepted 05/12/24

Małgorzata Dymyt¹, Artur Szymonik², Marta Wincewicz-Bosy³

Abstract:

Purpose: The purpose of this research was to describe and summarize the essence of the global health concept and its role and utility from a global and national perspective.

Design/Methodology/Approach: Descriptive paper based on conclusions formulated on the basis of a review and analysis of scientific literature, sectoral documents and statistics, as well as a synthesis of experience.

Findings: Globalizing health threats require strengthening national health systems. Analyses of basic health indicators have shown the important role of coordination and an appropriate level of financing of the health care system, allowing for building resilience not only in the national dimension, but also in the global dimension.

Practical implications: The presented results are important for public authorities because they allow for more effective design of changes in health care management, taking into account the context of global health. This is particularly important in the context of global threats to public health.

Originality/Value: The article presents possible directions of changes in health care management and appropriate funding taking into account the role of global health, which may contribute to improving the effectiveness of health care at the national and international level.

Keywords: Global health, health care system, health equity, health security, health care funding.

JEL codes: I15, I18, H51.

Paper type: Review article.

¹General Tadeusz Kościuszko Military University of Land Forces, Poland,
e-mail: malgorzata.dymyt@awl.edu.pl;

²General Tadeusz Kościuszko Military University of Land Forces, Poland,
e-mail: artur.szymonik@awl.edu.pl;

³General Tadeusz Kościuszko Military University of Land Forces, Poland,
e-mail: marta.wincewicz-bosy@awl.edu.pl;

1. Introduction

Health is a valuable individual and socio-economic asset. Public health is therefore the subject of concern for state authorities responsible for shaping and operating health care systems. However, the issue of health care is increasingly becoming a transnational challenge, requiring actions initiated and coordinated at the global level. As Gostin *et al.* (2020) point out, the world is facing an unprecedented global health threat, and the response highlights structural limitations in the ability of international organizations to coordinate the actions of nationalist states, making global health governance necessary to determine a common response to future threats.

Public health threats that increase demand for health care and overburdened care systems may be human-made (e.g., armed conflicts, forced migrations and pandemics) or natural disasters caused by biological, geophysical and climatic and environmental hazards (e.g. effects of climate change) (Khatri *et al.*, 2023).

In the face of threats, it is necessary to manage health at the global level and coordinate health policies at the global level, what is possible only with appropriate funding. As a consequence, the role of international institutions such as the World Health Organization, the United Nations or regional communities (European Union, 2024) is increasing in creating conditions conducive to supporting international activities to strengthen national health systems and improve health globally.

Therefore, the role of the concept of global health and the need for transnational cooperation to implement its assumptions into national health care systems is increasing. The coordinated management of global health is current and important, in particular the measurement of health indicators at the level of national health care systems, allowing for reliable analyses, benchmarking and improvement. The Covid-19 pandemic has particularly highlighted the need for global cooperation in research, exchange of experiences, and agreeing on principles for counteracting the effects of the health crisis.

The article focuses on the issues of managing and financing the health care system in the context of global challenges and threats. In particular, the authors focused on the concept of global health. The considerations were set in the European space, in particular comparisons of the health care system in Poland in the context of the systems of selected European countries, using exemplary indicators.

The thesis that the authors tried to confirm in the article is the assumption that the management of national health care systems requires proper funding, taking into account global health threats and integrating actions taken at the national level with global health management. In relation to the main issues, the following research questions were formulated:

1. *What is the essence and role of the concept of global health in improving the management of health care systems?*
2. *What actions should be taken to develop the idea of global health at the national and international level?*

The main purpose of this research was to describe and summarize the essence of the global health concept and its role and utility from a global and national perspective. Consequently, the detailed purpose of this article is twofold. Firstly, presenting the essence and role of the concept of global health, and secondly, showing fundamental factors that influence the health of the population, identifying the challenges and directions of development of global health management and defining key tasks for national health systems in the context of implementing this idea. Moreover, the study analysed the Polish health care system in comparison to selected European countries using sample global health indicators.

The review focuses on two main conceptual aspects - the essence and role of the idea of global health and how to develop global health governance and implement it at the level of national health systems. A qualitative research approach was used to solve the research problem, referring to the relevant literature in the field of global health and the management of health care systems.

In order to verify the research problems, the following research methods were used: analysis and criticism of literature, analysis of documents and statistical data, case study, synthesis, comparison and generalizations.

The research methodology used by the authors is a qualitative approach, subordinated to the acquisition of secondary data as part of a several-stage review of literature and documents. Based on the research questions, a literature and database search strategy was developed. The search criteria included the conceptual scope of key issues, i.e., global health, global health management, funding of health care system. The selection of literature and documents was based on the analysis of full texts of publications. The research material included domestic and foreign publications, articles in magazines, reports, statistical data and legal acts.

Based on the analysis of literature and documents, the theoretical part of the article regarding specific objectives was developed. In the next stage, using the case study method and based on statistical data regarding selected global health indicators, an analysis was carried out on the example of the Polish health care system. The data were then analysed and interpreted. The last stage of the research procedure was the synthesis of knowledge and experience and the formulation of conclusions.

The issues raised in the article and the results presented have significant practical implications, especially for public authorities, because they allow for more effective design of changes in health care management, implementing appropriate policy enabling increased financing taking into account the context of global health.

This is particularly important in the context of the increasing impact of global public health threats and the need to adapt national health policies and health care management in a comprehensive and integrated manner.

The originality and value of the undertaken considerations concern the explanation of the broad context of the idea of global health and its popularization due to its importance for health management. The article presents possible directions of changes in health care management, taking into account the role of global health, which may contribute to improving the effectiveness of health care at the national and international level.

2. Literature Review

The pursuit of ensuring the health needs of individuals and society is the domain of states, responsible for shaping protection systems. However, different models of health system management, resource potential (including financing, staff education) in individual countries contribute to differences in access to high-quality health services.

These differences do not apply exclusively to developed and developing countries, but are also outlined within these two distinguished groups. In the context of civilization threats, climate change, political and military conflicts or economic crises, health is becoming an important value, a key resource from a socio-economic perspective as well as security, reaching beyond national borders.

In “The 2030 Agenda For Sustainable Development”, the United Nations indicated that good health is essential for sustainable development, therefore the health goals include: increasing economic and social inequalities, rapid urbanization, threats to the climate and the environment, the persistent burden of HIV and other infectious diseases, and emerging challenges such as noncommunicable diseases come up (United Nations, 2015). Therefore, universal health coverage is an integral part of the achievement of SDG 3 (Sustainable Development Goals 3: Good health and well-being) in terms of ending poverty and reducing inequalities.

World Health Organizations, in accordance with the preamble to its Constitution, emphasizes the need to comply with, such principles as (WHO, 2024):

- Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.
- The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.
- The health of all peoples is fundamental to the attainment of peace and security and is dependent on the fullest co-operation of individuals and States.

- The achievement of any State in the promotion and protection of health is of value to all.
- Unequal development in different countries in the promotion of health and control of diseases, especially communicable disease, is a common danger.
- Healthy development of the child is of basic importance; the ability to live harmoniously in a changing total environment is essential to such development.
- The extension to all peoples of the benefits of medical, psychological and related knowledge is essential to the fullest attainment of health.
- Informed opinion and active co-operation on the part of the public are of the utmost importance in the improvement of the health of the people.
- Governments have a responsibility for the health of their peoples which can be fulfilled only by the provision of adequate health and social measures.

Also at European level, the transnational context of health is an important element of cooperation. The European Union, in its "EU Global Health Strategy", adopted in November 2022, set out three priorities to address global health challenges: 1) deliver better health and well-being of people across the life course, 2) strengthen health systems and advance universal health coverage and 3) prevent and combat health threats, including pandemics, applying a One Health approach (European Union, 2024).

The expansion of health issues to a global dimension contributes to the interest in the concept of global health. This concept, known since the 1940s, is becoming a challenge for states and international organizations in the scope and responsibility for health and multi-faceted activities.

Global health is defined in different ways, often in relation to public health and international health. Kickbush defines global health as *“those health issues that transcend national boundaries and governments and call for actions on the global forces that determine the health of people”* (Kickbush, 2006).

More specifically, global health is understood as: “health issues where the determinants circumvent, undermine or are oblivious to the territorial boundaries of states, and are thus beyond the capacity of individual countries to address through domestic institutions. Global health is focused on people across the whole planet rather than the concerns of particular nations. Global health recognises that health is determined by problems, issues and concerns that transcend national boundaries” (UK Government, 2008).

The definition, which is a reference point for theoretical analyses, was formulated by Koplan *et al.* in 2009, according to which “Global health is an area of study,

research, and practice that places a priority on improving health and achieving equity in health for all people worldwide. Global health emphasizes transnational health issues, determinants, and solutions; involves many disciplines within and beyond the health sciences and promotes interdisciplinary collaboration; and is a synthesis of population-based prevention with individual-level clinical care” (Koplan *et al.*, 2009).

According to Engebretsen and Heggen (2015) global health refers to the supranational interdependence in the field of health and refers to a norm or vision of health with global ambitions. Similarly, Wilson *et al.* (2016) accept the supranational scope of cooperation, stating that global health means health problems, issues and concerns that transcend national borders, may be influenced by circumstances or experiences in other countries and can best be addressed through collective action and solutions.

Marten (2015) emphasises the dual nature of responsibility, pointing out that in the area of public health the state is recognised as the dominant actor, while global health recognises the increasing participation of other actors, such as international institutions, civil society and the private sector, who have an influence on health and health policy beyond the national level.

Beaglehole and Bonita proposed a general definition of global health as "an area for study, research, and practice that places a priority on improving health and achieving health equity for all people worldwide", that should be conducted in the setting of strong national public health institutions and within an evidence base for policy based on the full range of disciplines, especially research highlighting the impact of transnational determinants of health (Beaglehole and Bonita, 2010).

In addition to the need for a broader understanding of the role of public health, the idea of global health also touches on environmental aspects. According to Benatar, global health is an ecocentric concept that encompasses the idea of healthy people on a healthy planet and goes beyond anthropocentric considerations of health to recognize the importance of the interconnectedness of all forms of life and human well-being on an ecologically threatened planet.

As Havemann and Bösner (2018) point out, global health encompasses aspects of (tropical) medicine, international health, public health and other disciplines and includes global aspects in the sense of global as supra-territorial.

Wernli *et al.* (2016) propose a definition of global health based on six core principles: (1) cross-border/multi-level approach, (2) interdisciplinarity/transdisciplinarity, (3) systems thinking, (4) innovation, (5) sustainability, and (6) human rights/ equity. Following this line of thought, according to Mews *et al.* (2018), global health should be considered as an innovative and necessary

perspective for medical education in the context of: health as a human right; global perspective and interdisciplinarity.

Kickbusch (2002) focuses on the role of global health as a field that examines the emerging value base and new agendas and relationships that emerge as health becomes an essential element and expression of global citizenship, collectively recognized as a valuable resource, a fundamental human right, and a global public good that must be protected and promoted by the world community.

As Taylor (2018) emphasizes, global health is a new area around which disputes are taking place regarding ideological interpretation, geopolitical interests, and empirical methods, but regardless of the differences, this concept offers real opportunities for more collective, equitable thinking and action for health.

The global dimension of health can be referred to three global principles covering aspects such as: the health of the entire world's population (health for all), the involvement of a wide range of health-related actors (health by all) and a holistic concept of health dimensions and determinants, based on a multisectoral approach (health in all) (Garay *et al.*, 2013).

Global health, as a field of medical and health sciences, has the following primary tasks: (1) to master the spatiotemporal patterns of a given medical and/or health problem worldwide in order to better understand the problem and assess its global impact; (2) to examine the determinants and factors influencing medical and health problems known to have a global impact; and (3) to establish evidence-based global solutions, including strategies, frameworks, governance, policies, regulations, and laws (Chen *et al.*, 2020). The essence of this concept is therefore to solve problems with a global impact by seeking global solutions.

In summary, the features that are used to define global health can be distinguished (Campbell, 2012):

1. primary characteristics: 1) equity (in health status and access), 2) global conceptualization (as opposed to an international or supranational perspective, 3) causes (of health problems), 4) means (for health actions), and 5) solutions (for solving health problems),
2. secondary characteristics: 1) source of obligation (obligation of privileged people to help those with fewer resources), 2) multidisciplinary approach (involvement of many other professions and disciplines along with health professionals), 3) actors (individuals or groups as agents of global health), and 4) reactive/proactive (provision of global health).

Formulating a comprehensive definition of global health should take into account the following aspects of the concept: a multiple approach to improving health worldwide and a form of expert knowledge taught and researched by academic

institutions; an ethos (ethical orientation and appeal) guided by principles of justice; a mode of governance that provides degrees of national, international, transnational, and supranational influence through policymaking, problem identification, resource allocation, and exchange across borders; and a polysemous concept with multiple meanings and historical antecedents that has a future (Salm *et al.*, 2021).

In conclusion, global health is a broad concept referring to policy, practice, research and education focusing on health in the context of globally influential social, economic, political, technological, cultural and ecological conditions. To sum up, it should be emphasized that the concept of Global Health is difficult to implement on a global scale or even on a smaller scale such as the EU.

This results from the differences in systems and approaches to health and well-being policies, even in the regional dimension of the EU. These differences can be observed through the analysis of selected parameters/factors that are important from the point of view of holistic analyses of Global Health.

3. Global Health Governance - Chosen Indicators of Health Care Systems Using Selected European Countries

The concept of Global Health within the European Union (EU) emphasizes a unified effort to improve and harmonize health outcomes across member states. Despite concerted efforts to standardize healthcare, significant disparities persist across the EU. These disparities are driven by various factors, including economic conditions, healthcare infrastructure, cultural differences, and public health policies, each with unique consequences for population health.

These variations are particularly evident in key Global Health indicators, such as life expectancy, healthy life years, GDP per capita, and healthcare expenditure. By examining these parameters across selected countries that represent different levels of healthcare development and approaches to Global Health challenges, we can gain insights into the diverse health landscapes within the EU.

Increased income allows for better nutrition, housing, and education, which are crucial for maintaining good health and longevity (Miladinov, 2020). Wealthier countries can invest more in public health infrastructure, such as clean water, sanitation, and vaccination programs, reducing mortality rates and increasing life expectancy (Figure 1).

An analysis of selected EU countries reveals a positive relationship between GDP per capita, healthcare spending, and health outcomes, including life expectancy and healthy life expectancy. Generally, nations with higher GDP per capita, like Germany and Norway (Figure 2), demonstrate better health outcomes. Higher national income typically translates to enhanced access to healthcare services,

advanced medical technologies, and improved overall living standards, all of which contribute to longer life expectancies (Figure 3) (Bradley *et al.*, 2017).

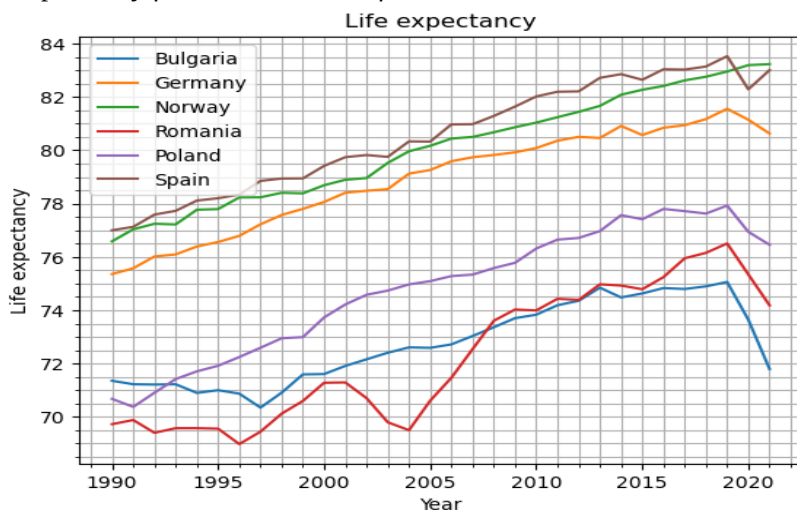
Due to the deviation from the general trend indicating a positive correlation between life expectancy and GDP per capita (Figures 4 and 5), in the case of Spain, additional factors influencing the overall health level of the population can be considered. In this specific case, it is the beneficial impact of the Mediterranean diet on the condition of the body (Martinez-Gonzalez *et al.*, 2016).

The Mediterranean diet significantly increases life expectancy, reduces the risk of major chronic diseases, and improves quality of life. Recent studies consistently show that the Mediterranean diet reduces the risk of myocardial infarction, stroke, heart failure, breast cancer, and total mortality.

Generally, there is a positive correlation between GDP per capita and healthcare expenditure per capita. Countries with higher GDP per capita, like Germany and Norway, tend to spend a larger percentage of their GDP on healthcare. There are variations based on national priorities, healthcare systems, and economic policies.

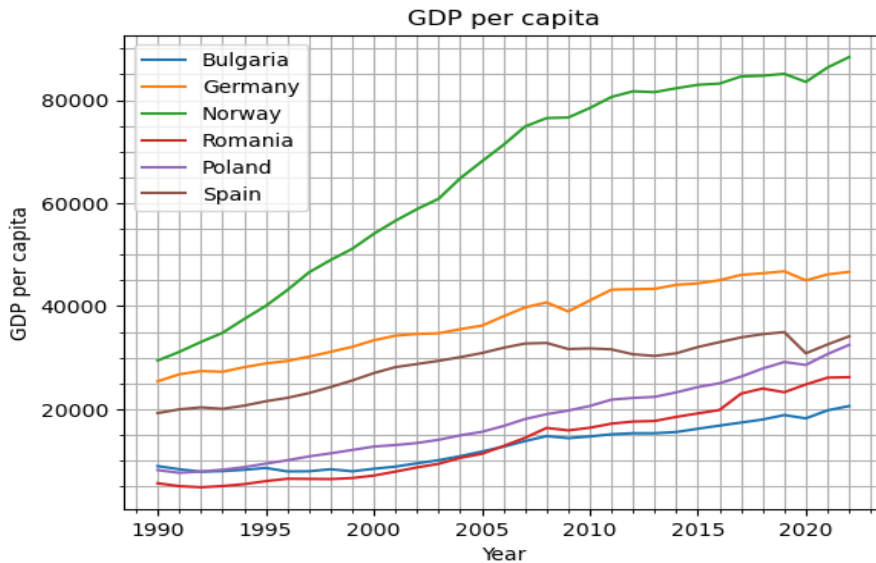
For instance, Spain has a moderate GDP per capita but still invests significantly in healthcare due to its public health policies. Some countries may not follow the general trend due to unique factors. For example, Bulgaria and Romania have lower GDP per capita and healthcare expenditure, reflecting their economic status and healthcare infrastructure.

Figure 1. Life expectancy from 1990 to 2022 for chosen countries.



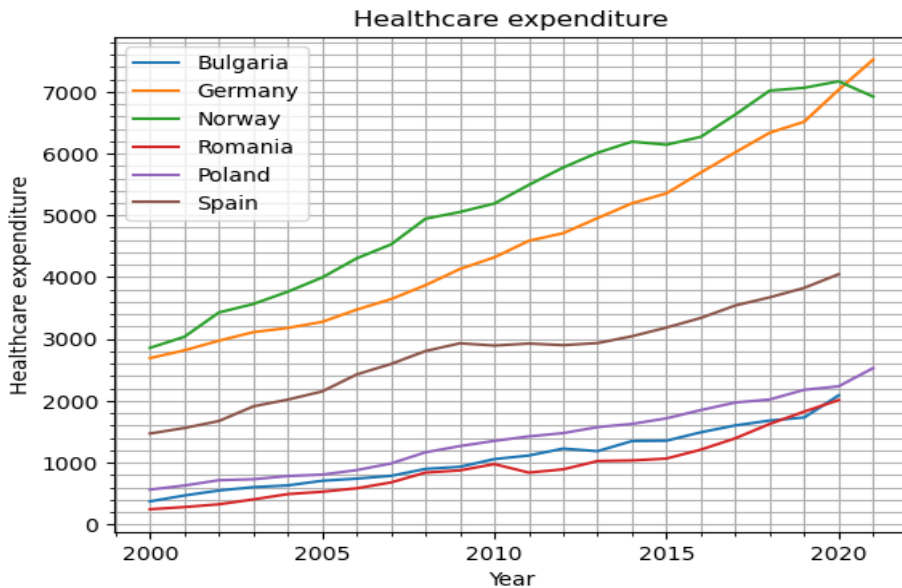
Source: Author's design based on EViews 11 software using annual time series data from 1990 to 2022 for chosen countries: Bulgaria, Germany, Norway, Romania, Poland and Spain. <https://ourworldindata.org/>.

Figure 2. GDP per capita for chosen countries.

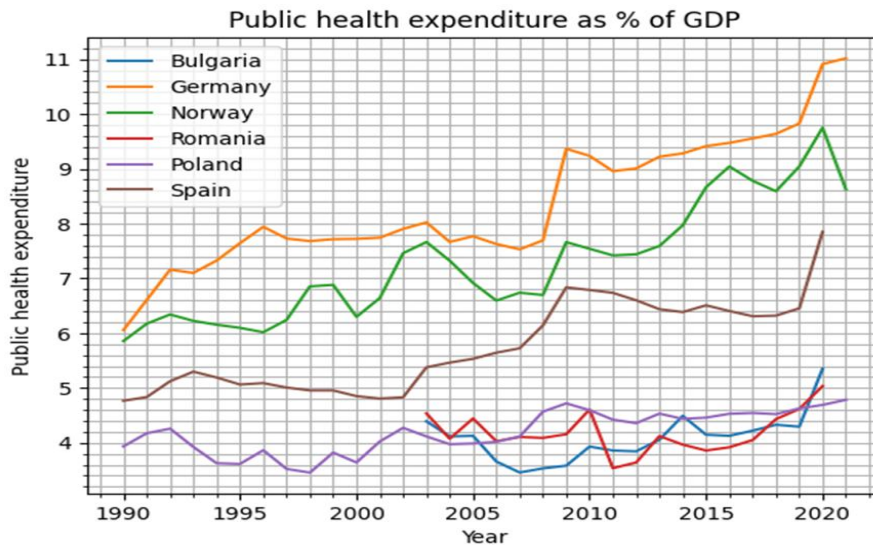


Source: Author's design based on EViews 11 software using annual time series data from 1990 to 2022 for chosen countries: Bulgaria, Germany, Norway, Romania, Poland and Spain. <https://ourworldindata.org/>.

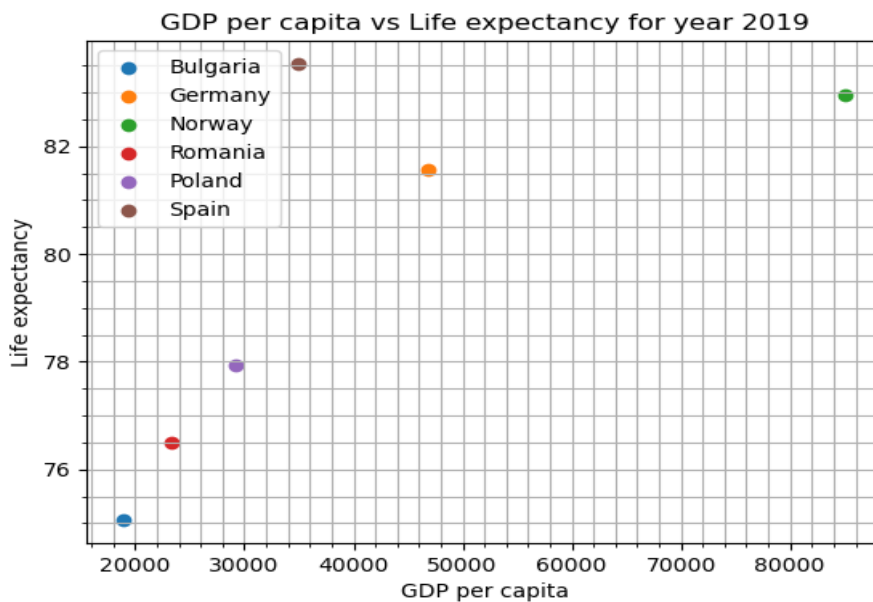
Figure 3. Healthcare expenditure per capita.



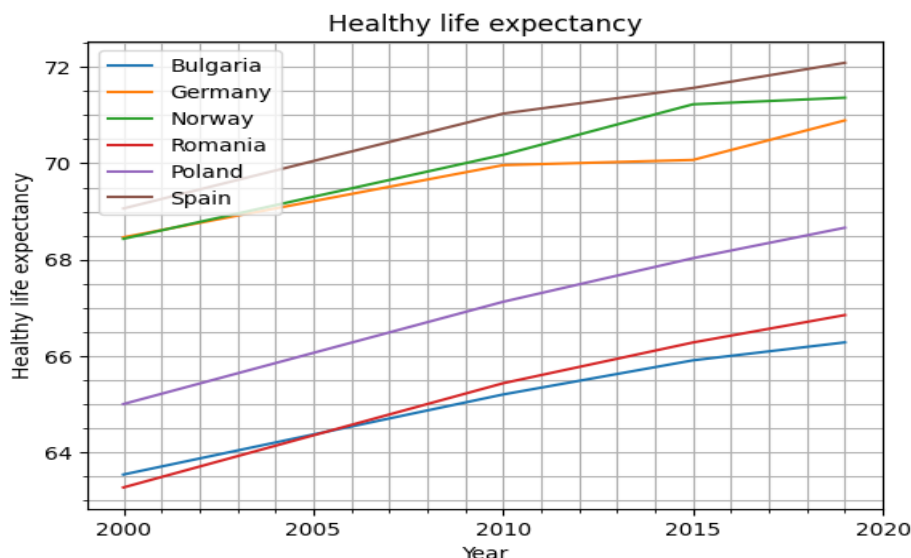
Source: Author's design based on EViews 11 software using annual time series data from 1990 to 2022 for chosen countries: Bulgaria, Germany, Norway, Romania, Poland and Spain. <https://ourworldindata.org/>.

Figure 4. Public health expenditure as % of GDP.

Source: Author's design based on EViews 11 software using annual time series data from 1990 to 2022 for chosen countries: Bulgaria, Germany, Norway, Romania, Poland and Spain. <https://ourworldindata.org/>.

Figure 5. Life expectancy vs GDP per capita for chosen year (2019 – newest data).

Source: Author's design based on EViews 11 software using data from 2019 for chosen countries: Bulgaria, Germany, Norway, Romania, Poland and Spain. <https://ourworldindata.org/>.

Figure 6. Healthy life expectancy.

Source: Author's design based on EViews 11 software using annual time series data from 1990 to 2022 for chosen countries: Bulgaria, Germany, Norway, Romania, Poland and Spain. <https://ourworldindata.org/>.

There is also a positive correlation between healthcare expenditure and healthy life expectancy - countries with higher spending tend to have higher life expectancy (Figure 6). However, this correlation is not perfectly linear. Spain stands out as an outlier where despite relatively lower expenditure compared to Germany and Norway, it achieves the highest healthy life expectancy.

This suggests that factors other than expenditure, like healthcare efficiency, lifestyle, and environmental factors, play a significant role. Countries like Romania and Bulgaria, with lower healthcare spending, have correspondingly lower healthy life expectancy, reinforcing the idea that investment in healthcare is critical to improving health outcomes.

Higher healthcare spending in most cases aligns with longer life expectancy and healthier lives, though the strength of this relationship differs by country. Norway and Germany exhibit strong positive correlations, whereas Spain demonstrates that effective healthcare systems and other factors can achieve high life expectancy even with relatively lower spending. In contrast, Bulgaria and Romania, with the lowest healthcare expenditures, also have the shortest life expectancies, underscoring the urgent need for greater healthcare investment in these nations.

While the EU aims to create a cohesive framework for Global Health, existing disparities in health indicators among member states highlight the ongoing need for customized strategies. Recognizing these differences allows policymakers to tailor

interventions that address each country's unique healthcare challenges and resource capacities. This approach is essential for moving closer to the EU's vision of health equity across its diverse population.

4. Discussion

Global health requires cooperation not only in the sphere of shaping and popularizing ideas and values, but above all, specific actions conducted on the basis of reliable research, as well as supported by financing. This appropriate financing refers to national policies as well as to support health policies conducted in the cross-border dimension.

The analysis conducted above was based on basic general health indicators, indicating the role of countries' wealth and the possibility of financing the health care system and other social policies increasing the quality of life. International comparisons show differences in the financing of health services and average life expectancy also between European countries.

This is a challenge for shaping health policy at the national and international level within the European Union. Currently, it is not possible to achieve a uniform approach to Global Health within the EU because, as the analysed indicators show, individual countries differ too much, especially in the concept of financing health services and the possibilities of their implementation. Although the EU makes efforts to support national policies, achieving a comparable level is extremely difficult.

Nevertheless, phenomena such as the pandemic or the Russian-Ukrainian war, which require cooperation and undertaking coordinated activities, are "boosters" justifying the validity of coordination of actions and global health management. Without such an approach, individual countries left to themselves are not able to create conditions for well-being, and even more so an effective health care system.

A comprehensive approach to solving health problems at a global level means the need for global health governance. Fidler (2010) defines global health governance as the use of formal and informal institutions, rules and processes by states, intergovernmental organizations and non-state actors to address health challenges that require cross-border collective action to effectively address.

Global health governance requires cooperation between countries to ensure an effective, efficient and coordinated response to health threats and challenges in the global world. Therefore, the role of international organizations, including WHO, is essential, as they provide technical leadership and expertise, build capacity and support to health systems that are underfunded, are essential for a coordinated global response and provide a collective source of assistance in protecting the health of the world's citizens (Global Health Council, 2022).

Designing health policies and actions within the framework of global health governance should be based on the use of reliable comparisons of health indicators over time and across regions within a country or across countries, which require common indicator definitions, similar data sources and standard data collection methods (Tolonen *et al.*, 2021).

Measuring achievements in achieving global health management goals can be useful both at the international and national levels. Global health estimates can be used for activities such as (AbouZahr *et al.*, 2017):

- a) internationally: tracking progress toward agreed goals and targets within countries and internationally, comparing progress with socioeconomic or regional “peers”, informing performance-based resource allocation, reporting program outcomes to international agencies, donors, funds, and foundations, identifying emerging international health priorities, generating interest in and advocating for programs, and providing comprehensive, comparable, internally consistent estimates of the burden of disease (and risk factors);
- b) nationally: using global health estimates within countries, identifying emerging health trends that need to be considered in developing national policy, comparing national data and comparing progress with peers, monitoring trends over time and across subnational administrative areas is more meaningful than comparisons between countries, addressing data gaps and highlighting and advocating for a health issue.

Global health management is therefore a field of knowledge and practice that requires continuous cooperation and decision-making at various decision-making levels and in various spheres, not only medical ones. It is indicated that global health governance has four main functions such as: 1. production of global goods, guidelines, policies, research and technology, 2. management of external threats, 3. facilitating global solidarity and 4. stewardship function (Frenk and Moon, 2013).

It should also be emphasized that the concept of global health in a broad context touches on the sphere of security, solidarity and equality. Global public health security encompasses the proactive and reactive actions required to minimize the danger and impact of acute public health events that threaten the health of people across geographic regions and international borders (WHO, 2024). Global health equity is defined as mutually beneficial and sustainable partnerships and processes that lead to equitable health outcomes for people and the environment on a global scale (August *et al.*, 2022).

In this context, the implementation of adequately financed health policies at the national level, ensuring that the health needs of citizens are met, is the basis for the implementation of health protection tasks on a global scale.

5. Conclusions

The issue of global health is a broad field of knowledge and practice, a holistic approach at various decision-making levels (from global to local) and dimensions of implementation (institutional and individual). This means the need for integrated public health management, starting from planning goals and actions, organizing forces and resources, motivating for continuous action and control and improvement.

The starting point is to identify health threats and plan collaborative responses to challenges to ensure global health security and equity. Coherence of action at the global level seems to be crucial for achieving health goals. Therefore, it is important to measure and compare achievements in the sphere of accessibility and quality of health services. In this context, it can be concluded that global health governance requires coordinated actions at the following levels:

1. global, implemented by institutions coordinating directions of action, responsible for identifying, assessing health threats, initiating research, creating knowledge bases, framework programs and good practices, guidelines, supporting training, exchange of experiences,
2. international, implemented within the framework of associated countries cooperating in the field of public health (e.g. EU), responsible for more detailed objectives and actions within the framework of health policy and financing its activities, taking into account the cross-border nature of health threats,
3. national, implemented at the level of individual countries responsible for shaping and financing health care ensuring an appropriate level of health services in the context of accessibility, equity and quality,
4. individual, implemented at the social level, of patients, whose involvement and awareness of threats and health needs and the possibilities of meeting them constitute the foundation for the effectiveness of systemic actions.

In conclusion, it should be emphasized that global health can be considered a new field of knowledge that is interdisciplinary, practical and theoretical in nature and requires a broad discourse in medical, financial, political and ethical aspects. The importance of this discussion and cooperation was demonstrated by the Covid-19 pandemic, during which the weakness of health systems was revealed not only in developing countries but also in highly developed ones.

In the face of the challenges of globalization, it should be recognized that the concept of global health is an important field of science and practice and requires further in-depth research within interdisciplinary international research teams. Globalizing health threats require strengthening national health systems. Analyses of basic health indicators have shown the important role of an appropriate level of financing of the health care system, allowing for building resilience not only in the national dimension, but also in the cross-border dimension.

The research conducted in the article is of a preliminary nature. Due to the requirements and objectives of the publication, only basic statistical data were selected that can constitute research material.

Due to these limitations, the article has a review-theoretical character and is the basis for continuing further research. In conclusion, it should be stated that the results of the analyses conducted allowed the formulation of a number of conclusions that constitute the basis for further, broader research on this current and important problem.

The general analysis carried out in the article showed that the issue of global health is particularly important and requires further in-depth research in the interdisciplinary field.

References:

- AbouZahr, C., Boerma, T., Hogan, D. 2017. Global estimates of country health indicators: useful, unnecessary, inevitable? *Global Health Action*, 10:sup1, 1290370. DOI: 10.1080/16549716.2017.1290370.
- August, E., Tadesse, L., O'Neill, M.S., Eisenberg, J.N.S., Wong, R., Kolars, J.C., Bekele, A. 2022. What is Global Health Equity? A Proposed Definition. *Annals of Global Health*, 88(1), 50, 1-6. DOI: <https://doi.org/10.5334/aogh.3754>.
- Beaglehole, R., Bonita, R. 2010. *Global Health Action*, 3, 5142. DOI: 10.3402/gha.v3i0.5142.
- Benatar, S. 2016. Politics, power, poverty and global health: systems and frames. *International Journal of Health Policy and Management*, (5), 599-604.
- Bradley, C., Canal, M., Smit, S., Woetzel, L. 2022. A miracle of widespread progress: A 20-year journey of health and income, McKinsey Global Institute. Available at: <https://www.mckinsey.com/mgi/our-research/pixels-of-progress-chapter-2>.
- Campbell, R.M., Pleic, M., Connolly, H. 2012. The importance of a common global health definition: How Canada's definition influences its strategic direction in global health. *Journal of Global Health*, 2(1), 010301. DOI: 10.7189/jogh.01.010301.
- Chen, X., Li, H., Lucero-Prisno, D.E., Abdullah, A.S., Huang, J., Laurence, Ch., Liang, X., Ma, Z., Mao, Z., Ren, R., Wu, S., Wang, N., Wang, P., Wang, T., Yan, H., Zou, Y. 2020. What is global health? Key concepts and clarification of misperceptions. Report of the 2019 GHRP editorial meeting. *Global Health Research and Policy* 5(14). <https://doi.org/10.1186/s41256-020-00142-7>.
- Engebretsen, E., Heggen, K. 2015. Powerful concepts in global health: Comment on "Knowledge, moral claims and the exercise of power in global health". *International Journal of Health Policy and Management*, (4), 115-117.
- European Union. 2024. Available at: https://health.ec.europa.eu/internationalcooperation/global-health_en.
- Fidler, D.P. 2010. *The Challenges of Global Health Governance*. Council on Foreign Relations. New York, NY, USA.
- Frenk, J., Moon, S. 2013. Governance challenges in global health. *N. Engl. J. Med.*, 368, 936-942.

- Garay, J., Harris L., Walsh, J. 2013. Global health: evolution of the definition, use and misuse of the term. Face à face. Available at: <https://journals.openedition.org/faceaface/745>.
- Global Health Council. 2022. Strengthening Multilateral Relationships for Global Health, Available at: https://globalhealth.org/wp-content/uploads/2022/07/GHC_Multilateral_Pillar-Brief_Multilaterals_FINAL_051222-1-1.pdf.
- Gostin L.O., Moon S., Meier B.M. 2020. Reimagining Global Health Governance in the Age of COVID-19. *American Journal of Public Health*, 110(11), 1615-1619. doi: 10.2105/AJPH.2020.305933.
- Havemann, M., Bösner, S. 2018. Global Health as “umbrella term” – a qualitative study among Global Health teachers in German medical education. *Global Health*, (14), 1-14.
- Khatrri, R.B., Endalamaw, A., Erku, D., Wolka, E., Nigatu, F., Zewdie, A., Assefa, Y. 2023. Preparedness, Impacts, and Responses of Public Health Emergencies Towards Health Security: Qualitative Synthesis of Evidence. *Archives of Public Health*, 81, 208.
- Kickbusch, I. 2002. Global Health - A definition. Yale University. Available at: www.ilonakickbusch.com/kickbusch-wAssets/docs/globalhealth.pdf.
- Kickbush, I. 2006. The need for a European strategy on global health. *Scandinavian Journal of Public Health*, (34), 561-565.
- Koplan, J.P., Bond, T.C., Merson, M.H., Reddy, K.S., Rodriguez, M.H., Sewankambo, N. K., Wasserheit, J.N. 2009. Towards a common definition of global health. *The Lancet*, 373(9679), 1993-1995.
- Marten, R. 2015. Global health warning: definitions wield power comment on "navigating between stealth advocacy and unconscious dogmatism: the challenge of researching the norms, politics and power of global health". *International Journal of Health Policy and Management*, (5), 207-209.
- Martinez-Gonzalez, M.A., Martin-Calvo, N. 2016. Mediterranean diet and life expectancy; beyond olive oil, fruits, and vegetables. *Current opinion in clinical nutrition and metabolic care*, 19(6), 401-407.
- Mews, C., Schuster, S., Vajda, C., Lindtner-Rudolph, H., Schmidt, L.E., Bösner, S., Güzelsoy, L., Kressing, F., Hallal, H., Peters, T., Gestmann, M., Hempel, L., Grützmann, T., Sievers, E., Knipper M. 2018. Cultural Competence and Global Health: Perspectives for Medical Education - Position paper of the GMA Committee on Cultural Competence and Global Health. *GMS Journal for Medical Education*. 15, 35(3). doi: 10.3205/zma001174.
- Miladinov, G. 2020. Socioeconomic development and life expectancy relationship: evidence from the EU accession candidate countries. *Genus* 76, 2. doi:10.1186/s41118-019-0071-0.
- Salm, M., Ali, M., Minihaane, M., Conrad, P. 2021. Defining global health: findings from a systematic review and thematic analysis of the literature. *BMJ Global Health*, 6, e005292. doi:10.1136/bmjgh-2021-005292.
- Taylor, S. 2018. ‘Global health’: meaning what? *BMJ Global Health*, 3, e000843. doi:10.1136/bmjgh-2018-000843.
- Tolonen, H., Reinikainen, J., Koponen, P., Elonheimo, H., Palmieri, L., Tijhuis, M.J. 2021. Cross-national comparisons of health indicators require standardized definitions and common data sources. *Archives of Public Health*, 79, 208.
- UK Government. 2008. Health is global: a UK Government strategy 2008_13. London.

- United Nations. 2015. Transforming Our World: The 2030 Agenda For Sustainable Development A/RES/70/1. Available at: <https://sustainabledevelopment.un.org>.
- Wernli, D., Tanner, M., Kickbusch, I., Escher, G., Paccaud, F., Flahault, A. 2016. Moving global health forward in academic institutions. *Journal of Global Health*, 6(1), 010409. doi: 10.7189/jogh.06.010409.
- WHO. 2024. Available at: https://www.who.int/health-topics/health-security#tab=tab_1.
- WHO. 2024. WHO remains firmly committed to the principles set out in the preamble to the Constitution. Available at: <https://www.who.int/about/governance/constitution>.
- Wilson, L., Mendes, I.A., Klopper, H., Catrambone, C., Al-Maaitah, R., Norton, M.E., Hill, M. 2016. 'Global health' and 'global nursing': proposed definitions from the Global Advisory Panel on the Future of Nursing. *Journal of Advanced Nursing*, 72(7), 1529-1540. doi: 10.1111/jan.12973.