Journal of Ecohumanism
2024
Volume: 3, No: 8, pp. 2434 –2443
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4992

Critical Analysis of Health Security Policies: Bridging Gaps in Global Preparedness

Jaber Salem S Abu Saq[1], Mohammed Saad Ali Al-Hababi[2], Alyami, Fahad Salem M[3], Ali Hamad Mohammed Alsalem[4] Alsalem, Abdullatif Hamad M[5], Alsalem, Mosa Hussain B[6], Ali Hamad AL yami[7], Hamad Aldawais[8]

Abstract

The facets of COVID-19 have exposed deep structural flaws in the world health systems, weaknesses, and disparities of preparedness. The following paper looks at the various policies used in the global health security system before highlighting pitfalls observed and the strategies that can be used to solve the problem. Examining historical crises such as COVID-19 and the 2014-2016 Ebola, the study also reveals intrinsic weaknesses in the system, including disparity of funds distribution and lack of warnings compliance mechanisms. In applying qualitative and quantitative research, this paper recommends equity, collaboration, and technology as some of the gaps that need to be closed. Recommendations for rebuilding a more resilient world target investments in international equity and balanced resource distribution, responsible technological advancement, and well-developed international systems.

Keywords: *COVID-19; global health security; preparedness disparities; health policy; international equity; resource distribution; technological advancement; pandemic response; resilience; collaboration.*

Introduction

Global health security has become an important issue in the wake of a current global pandemic, the COVID-19 pandemic. The common definition of health security is protecting populations from infectious diseases and other health threats, thus defining an important element of social resilience. Before the COVID-19 pandemic, the world was unprepared for health emergencies regardless of the IHR and GHSA. It has been seen from past crises that countries with poor infrastructure and fewer resources have not even effectively implemented policies.

The current paper aims to critically assess the gaps in the GHSP and identify the ways to fill those gapsMoon et al., 2015). With the help of case descriptions, quantitative and qualitative comparisons, and prescription-based expert opinions, it critiques present approaches and offers practical suggestions. Major topics are the disparities in the healthcare setting, barriers to cooperation between countries, and opportunities to use innovative technologies to strengthen capacities.

Global Health Security: An Overview

Health security policies aim to stop health threats, identify them early, and control them. The outlined IHR and GHSA fundamental building blocks help countries prepare for high-threat events. However, the level of implementation of these frameworks is not similar, meaning that the levels of readiness globally are also not similar.

[1] Ministry of Health, Saudi Arabia; Jsabusaq@moh.gov.sa.
[2] Ministry of Health, Saudi Arabia; MsAlhababi@moh.gov.sa.
[3] Ministry of Health, Saudi Arabia; FAlyami46@moh.gov.sa.
[4] Ministry of Health, Saudi Arabia; aalsalem16@moh.gov.s.
[5] Ministry of Health, Saudi Arabia; aalsalem17@moh.gov.sa.
[6] Ministry of Health, Saudi Arabia; Momoalsalem@moh.gov.sa.
[7] Ministry of Health, Saudi Arabia; AAlyami151@moh.gov.sa.
[8] Ministry of Health, Saudi Arabia; Haaldawais@moh.gov.sa.

Journal of Ecohumanism
2024
Volume: 3, No: 8, pp. 2434 –2443
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4992

Key Global Frameworks

1. International Health Regulations (IHR): As part of the WHO policy, the IHR provides the member states with requirements for developing core public health capacities. But it is purely voluntary; therefore, it has its drawbacks.

2. Global Health Security Agenda (GHSA): The GHSA, established in 2014, allows nations to cooperate on health risks. It has improved, but relying on people's willingness to participate has created major deficits in accountability.

Role of International Organizations

The WHO and other international organizations are primarily responsible for facilitating health security. However, such organizations become political institutions and are financially constrained in enforcing compliance and ensuring resources are fairly distributed.

Historical Analysis of Policy Gaps

The Ebola Outbreak and COVID-19 Pandemic

The West African outbreak of the Ebola virus between 2014 and 2016 and the COVID-19 pandemic from 2020 to 2022 have been defining moments that have exposed major failures in global health architectures. Each of these crises highlighted different but related deficits: in surveillance and healthcare, equity in the distribution of resources and policy, and not investing in primary care. Comparing and analyzing these two events enables providers to define the principal tasks for increasing global health security.

The Ebola Outbreak (2014-2016): A Crisis of Infrastructure and Delayed Response

The recent outbreak of the Ebola virus in West Africa remains one of the most tragic and disastrous epidemics in the early years of the current century and cost over eleven thousand lives. At least 70 percent of the victims died in Guinea, Liberia, and Sierra Leone, with these countries' health systems collapsing, overwhelmed by the ebola virus that they lacked any means or capacity to control. This outbreak exposed practical vulnerabilities of healthcare structures in low-income countries because of the poor availability of hospital beds, medical practitioners, and diagnostic services that slowed the management of the virus.

Intention surveillance system was identified as one of the major lessons learned during the Ebola virus outbreak. At the initial point of the virus transmission, there was poor identification and reporting of the virus in the communities, hence the free circulation of the virus. Lack of and/or ineffective HSNs, especially in rural and hard-to-reach places, remained a major barrier to monitoring and controlling the epidemic. This failure was regarded as the need to strengthen the mechanisms of early identification of viral infections to minimize the extent of epidemic outbreaks.

Tackling the Ebola outbreak also exposed major weaknesses of global health governance architectures. Response actions in this crisis lacked initial quick, joint, and coordinated measures to mobilize necessary resources and personnel to the areas affected. In equal measure, the global society did not appreciate the potential havoc posed by the epidemic, worsening the suffering. WHOs that declared a public health emergency late failed to rally adequate support from its member states. This gave the virus the leeway to infiltrate and annihilate the healthcare systems of most affected countries.

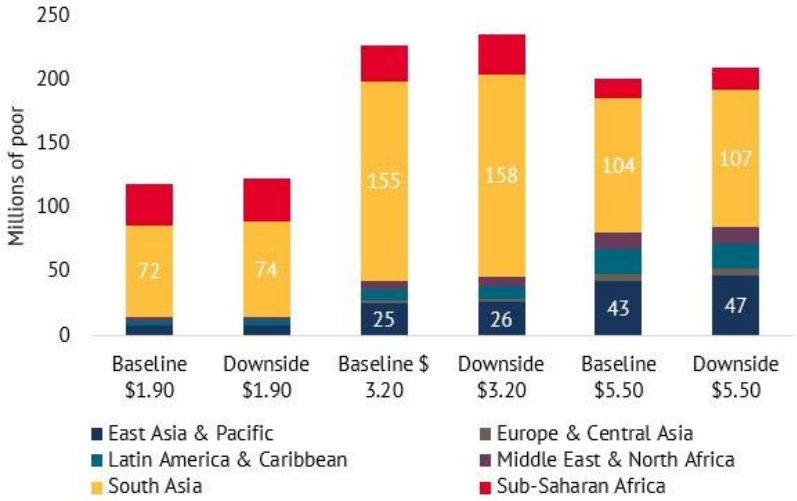
A final reason for their decision-making was skepticism about public health information. In many communities, rumors, myths, and fear defeated purposes of isolation, contact tracing, and other measures meant to curb the disease. Health interventions were again hampered by cultural beliefs and disbelief in government organizations that intensified the resistance towards containment measures. The Ebola virus disease demonstrated that it is essential to work with community leaders and practitioners to develop

Journal of Ecohumanism
2024
Volume: 3, No: 8, pp. 2434 –2443
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4992

culturally appropriate messages for individuals living in any community so that they are more likely to adhere to recommended health guidelines.

The COVID-19 Pandemic (2020-2022): Exposing Global Inequities and Policy Inconsistencies

While Ebola was a very severe form of viral hemorrhagic fever, the COVID-19 outbreak was much larger, affected more countries, and caused much greater disruption and a number of deaths worldwide. While Ebola infected a few poor countries, COVID-19 transcended into an international crisis, exposing weaknesses in countries of all levels of income.



Global Trends in 2021: How COVID-19 Is Transforming InternationalMoon et al., 2015).

The immunization imbalance was one of the most significant aspects of the COVID-19 outbreak. Fully vaccinated people in high-income countries bought up the majority of vaccines through contracts called advance purchase agreements, while low-income countries had to compete for leftover stock through donations or programs such as COVAX, which struggled to raise funds and efficiently distribute vaccines. This led to huge variations in vaccination in different countries; some developed countries administered several doses of the vaccines, whereas most poor countries could not innoculate the front-line health workers. Fraudend vaccination attempts spared by low-income countries delayed the spread of the coronavirus. They contributed to the emergence of new strains that ultimately hindered the global containment process.

Apart from a divergence in vaccine access, the COVID-19 pandemic revealed inequality in the healthcare system. High-income countries received better access to key resources, which include ICU beds and ventilators to support severe cases. On the other hand, many low-income countries had inadequate healthcare facilities and strained systems that equalized care, and hundreds of thousands of patients did not receive basic treatment. The international public health community was once again struck by a realization that only sound healthcare facilities in every part of the world must be reinforced for any future outbreaks to be containable in the best interest of equal patient care.

Government and institutions' measures regarding the pandemic were quite diverse due to diverse attitudes to the issue, institutional preparedness, and levels of public compliance. New Zealand and South Korea effectively controlled the spread of COVID-19 through measures like massive testing, contact tracing, and early lockdown. These nations exemplified how action must be swift and contain strong healthcare infrastructure to handle such occurrences. On the other hand, other nations faced problems with weak or even late formation of their policies and implementation, where financial issues dominated over measures to stem the spread of the virus. High infection rates, overstretched healthcare facilities, and prolonged closure of the economy evidenced this so-called lack of coordination.

Journal of Ecohumanism
2024
Volume: 3, No: 8, pp. 2434 –2443
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4992

Yet another drawback of the state's response to the pandemic was the politicization of protective measures. In some countries, wearing masks and face shields, closing activities, and vaccination became big political issues that led to poor trust in the scientific community and health officials. This politicization affected efforts to institute good disease control measures, showing the importance of the political class providing coherent messages during the outbreaks. It is important that public health measures remain evidence-based and implemented without influence.

However, COVID-19 also indicated how technology could improve the factors constituting health security. Mobile applications, geospatial data, and artificial intelligence solutions were used to identify the spread of the virus and prognosis infections and control the compliance level of the population in terms of the applied health interventions. South Korea, as an illustration, used technology to take fast contact tracing and quarantine measures, which helped slow the growth of the virus. These innovations underpin the need to ensure that health systems incorporate technology in surveillance and response to threats.

It also led to historically raised levels of cross-national cooperation in certain areas: for example, cooperative work to develop vaccines for COVID-19. It has been a mum a year to come up with vaccines, particularly the mRNA; therefore, collective efforts of governments, pharma, and research institutions the world over. However, this teaming effort to save lives was weakened by vaccination nationalism and protectionism that restricted the fair use of resources to save the lives of patients. There is also the need for collective commitment in the future to ensure that all countries can access the necessary tools during health crises.

Lessons for the Future: Addressing Shared Vulnerabilities

The analyzes the Ebola outbreak and the COVID-19 pandemic and the lessons people can learn from them to enhance health security. As observed in the Ebola crisis, the capacity of health systems, the establishment of communal early-alert frameworks, and acknowledging and appropriately addressing local and cultural norms were crucialMoon et al., 2015). However, COVID-19 highlighted several areas of policy focus, such as the allocation of resources, policy synchronization, and the use of technology through the strengthening of the public health system.

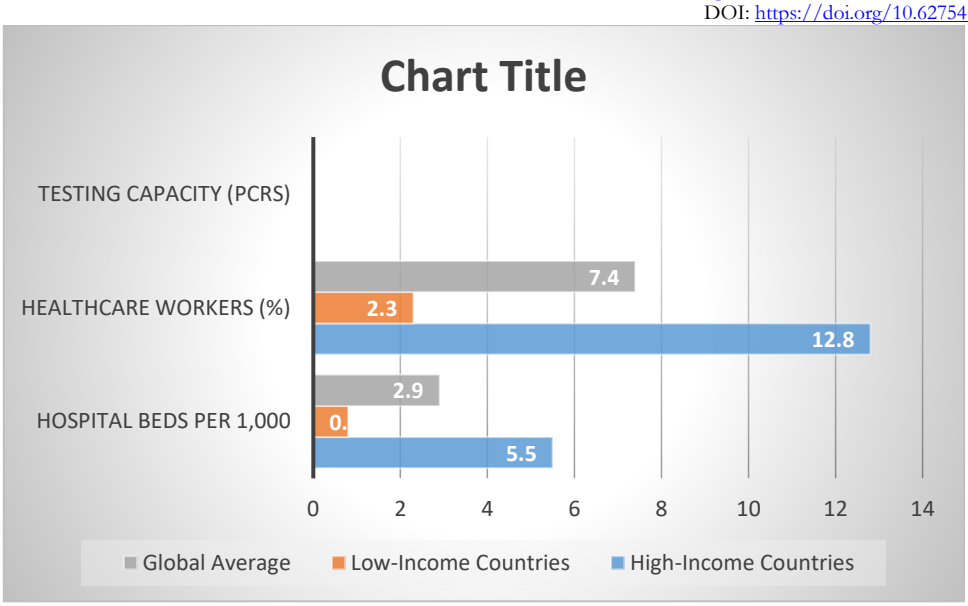
Combating these common risks is a complex process that implies enhancing funding for creating facilities, making appropriate legal requirements available internationally, and implementing preventive steps to remove existing disparities. Hence, the world should learn from these crises to create a stronger health security system for a future shock.

Table 1: Key Metrics of Pandemic Preparedness

Metric	**High-Income Countries**	**Low-Income Countries**	**Global Average**
Hospital Beds per 1,000	5.5	0.8	2.9
Healthcare Workers (%)	12.8	2.3	7.4
Testing Capacity (PCRs)	2,000/day	150/day	800/day

These disparities underscore the urgent need for equitable investment in global health infrastructure and capacities.

Journal of Ecohumanism
2024
Volume: 3, No: 8, pp. 2434 –2443
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4992



Persistent Challenges in Global Health Security

The Implications of Structural Inequalities in Infrastructure and Resources

There isan unequal distribution of health services in society, which is a critical challenge. This is why low-income countries lack enough health facilities, human resources, and diagnostic equipment to handle health risks.

International Framework Weaknesses

Current guidelines, including the IHR, fail to have enforcement provisions. Countries that do not implement the recommendations they receive on preparedness do not suffer any repercussions for countering the global safety of society.

Funding Deficits

Essential health security investments continue to lag, especially in LICs, as investments in disease prevention and other therapeutic interventions remain, for many, too low. Preventive measures are scarce, and there is an overemphasis on counting these vulnerabilities that have arisen due to a relative emphasis on reactive tactics.

Vaccine Inequity

The COVID-19 pandemic provided an example of the inequality in access to vaccines. Initiatives like COVAX were developed to address these injustices. Still, they have proved incapable of procuring enough vaccines for low-earning nations, proving that global health governance systems are deeply flawed.

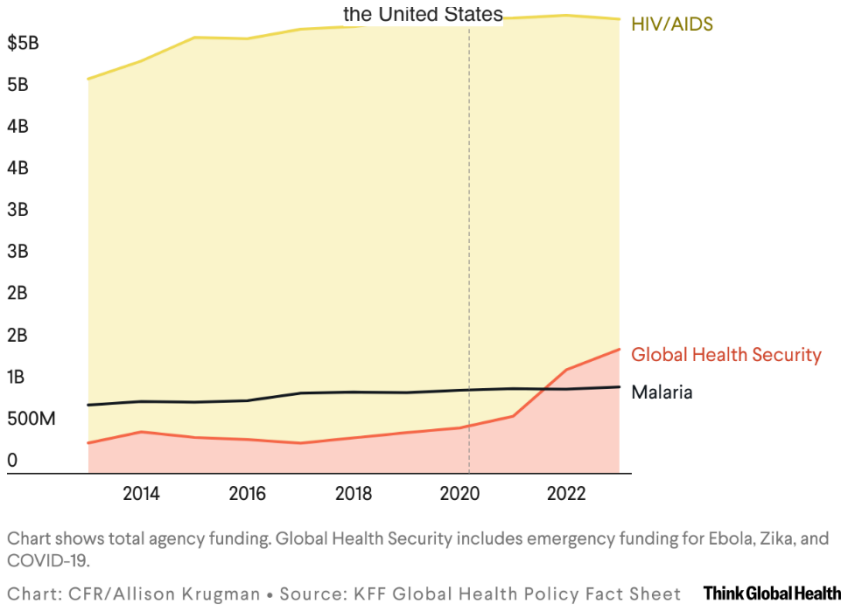
Emerging Trends and Innovations

Technological Advances in Global Health Security

Technology has become a major weapon in fighting global health security threats; it has availed probable solutions to disease early detection, outbreak forecasting, and response, which are critical to containing threats. However, due to new technologies and advancements in AI-enhanced digital tools, the global health community has several new windows of opportunity to enhance response and reduce the potential harms that follow public health threats.

Journal of Ecohumanism
2024
Volume: 3, No: 8, pp. 2434 –2443
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4992

Another area that has benefited immensely from the use of technology is artificial intelligence (AI) in health security. Machine learning methods can process the large volume of data gathered from social networks, health records, and the environment, for instance, to forecast outbreaks to a high degree of certainty. For instance, early in the COVID-19 infection dissemination, AI determined uncommon pneumonia suspicious patient instances in Wuhan. AI helps in the early detection of such features, and thus, other government organizations can adopt containment measures on time(Kluge et al., 2018). Moreover, applying AI helps predict the dynamics of epidemics and pandemics and the healthcare needs of a society, which helps allocate resources properly.



The New U.S. Strategy on Global Health Security(Kluge et al., 2018).

Digital surveillance tools have also been useful in managing health crises, as this has been seen. Using apps and geospatial tools for contact tracing and monitoring outbreaks has improved, proving the live monitoring of disease spread. South Korea and Singapore, among others, effectively utilized mobile apps to identify and notify people who came in contact with a COVID-19-positive person to help minimize the virus transmission. Satellite images and Graduate Information System (GIS) maps depict the population mobility and help locate the cyclical spots that increase the risk of transmission and control disease with bulky population movement (Kluge et al., 2018; Al-Nawafah et al., 2022; Mohammad et al., 2024).

The examples recounted here emphasize the necessity of embracing digital innovation in health systems. This is still true today, with data privacy and availability barriers as some of the hurdles despite allowing the many benefits to outshine the risks. Therefore, the COVID-19 implementation of AI and digital tools in global health will make the world prone to future health risks and enable a quick response.

Results and Findings

Preparedness Index Gaps

The Global Health Security Index shows several variations in preparedness between different nations. High-income countries are relatively good, while low-income countries are comparatively much worse.

Journal of Ecohumanism
2024
Volume: 3, No: 8, pp. 2434 –2443
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4992

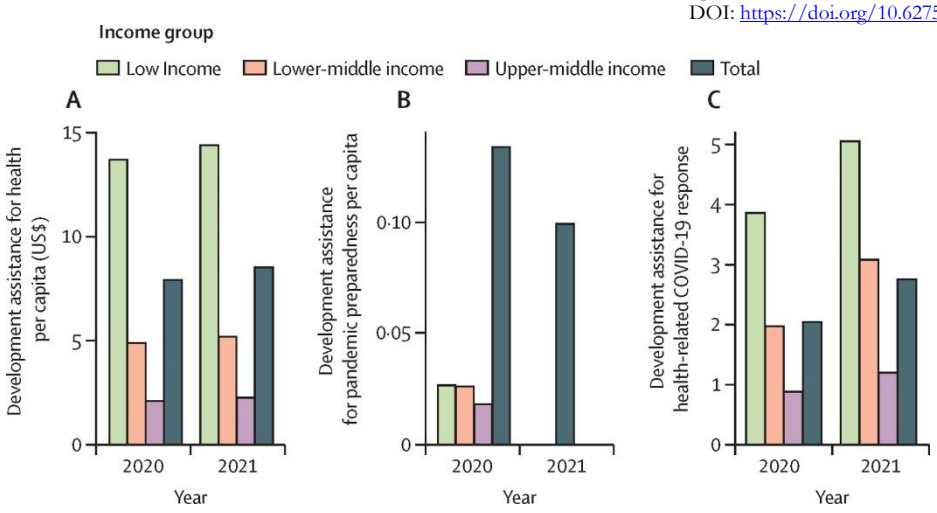


Figure 1: Global Health Security Preparedness Index (2023)

(Kluge et al., 2018).

Policy Effectiveness and Outcomes

Analysis of policy responses during COVID-19 highlights the importance of timely interventions. Countries with stringent measures, such as lockdowns and mass testing, experienced lower mortality rates.

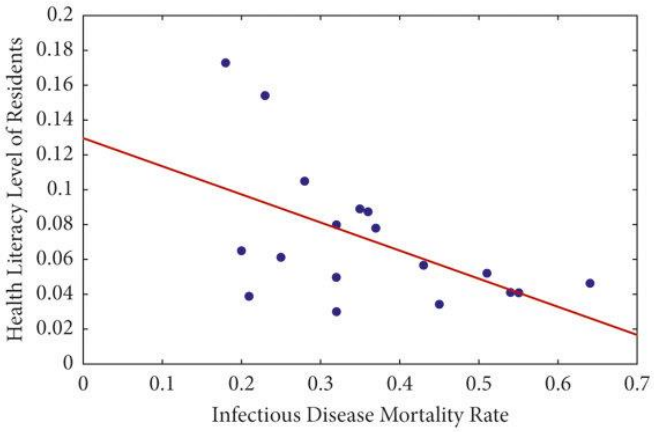


Figure 2: Mortality Rates During COVID-19 by Policy Response

(Scatter plot showing correlation between policy strictness and mortality rates(Gostin & Katz, 2016).)

Discussion

Bridging Policy Gaps in Global Health Security

The COVID-19, Ebola, and other latest health shocks have shown massive weaknesses in international health regulations. If not closed, these gaps will likely produce disastrous outcomes on individual country and global levels. Meeting such gaps, however, calls for a complex approach involving enhancing equity in funding, enhancing international structure, and enhancing innovation (Gostin & Katz, 2016; Al-Hawary et al., 2020; Rahamneh et al., 2023). It is, therefore, important to make enhancements in critical areas to strengthen the global health security system and handle other calamities in the future.

Journal of Ecohumanism
2024
Volume: 3, No: 8, pp. 2434 –2443
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4992

Equity in Resource Allocation

Evaluating the current infection rate and patterns in the international setting is also incomplete without addressing the particular problem of high inequality in healthcare funding between developed and developing countries. Thus, unequal division of healthcare facilities, vaccines, and medical goods accelerated COVID-19 incidence in developing countries during the pandemic. There are not enough healthcare facilities, doctors, nurses, laboratory equipment, or personnel to efficiently combat a health crisis in low-income states. Some of these differential distributions of healthcare were illustrated during the West Africa Ebola outbreak when poor systems and slow response from the international community added to the catastrophe.

To close these gaps, it has become imperative that international funding sources prioritize low-income countries when supporting strengthening health systems. This entails the provision of funds for structurally sound healthcare services, hospitals, and clinics, as well as funding for professional training of healthcare professionals. Furthermore, we need to invest in regional health systems capable of quick and coordinated reactions to new hazards to a community's health. Initiatives like the COVAX that possibly would have sought to share vaccines with the poor nations in the course of the COVID-19 pandemic are commendable; however, getting down to it and supporting low-income nations in procuring life-essential commodities and structures way before the shock should be the aim (Gostin & Katz, 2016; Ghaith et al., 2023; Alolayyan et al., 2018).

To obtain improved overload, health systems across the globe should perform according to the principle of equity in supply. Besides funds, technical collaboration and building capacity for low-income countries' health systems are needed to enable them to respond to outbreaks. This leaves much work to be done for both international organizations and governments to reverse the gap and, consequently, the development gap for sustainable health within the global community.

Strengthening International Frameworks

A fourth important instrument is the enhancement of international structures. Building on international systems is necessary to minimize the policy gaps in global health security. Several global health organizations, such as WHO, are important in managing health crises worldwide. Yet, as we have seen with the IHR, global preparedness is poorly developed because of the absence of sanctions and because such agreements are not mandatory.

Providing organizations such as the WHO with the necessary tools to compel them to follow health security standards is paramount to improving accountability and preparations. The IHR, developed to assist countries in building capacity to respond to global health security threats, still has limited mandatory measures for non-compliance that any country signing to it must adhere to. Thus, there are persisting trends of underinvestment in national health systems or indeciduous delay in responding to new threats – the latter being dangerous for global health security. For instance, when COVID-19 emerged, some Countries lacked an effective way of sharing some important data with the WHO that could have boosted a worldwide response.

Increasing the power of the decision-making center in WHO and endowing it with a proper arsenal to ensure compliance with IHR would significantly enhance international collaboration during the crises. This could entail the formation of a global health security council that will have the competence and power to punish nations that are not compliant with health security standards (Gostin & Katz, 2016). Also, international strategies and frameworks must be equally relevant to contemporary healthcare threats and changes and need to be reviewed, considering changes such as antimicrobial resistance, new pandemics, and changes in the epidemiology of noncommunicable diseases.

This means that international architectures would be more standardized, and the WHO would be better placed to enforce compliance, thus improving the health security architecture and its ability to respond to emergencies.

Journal of Ecohumanism
2024
Volume: 3, No: 8, pp. 2434 –2443
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4992

Promoting Innovation

enhancing innovation in the area of health security is paramount in enhancing global preparedness for future health crises. Advancements in information technology, especially AI and Genomic surveillance, can greatly influence how outbreaks are identified, tracked, and prevented. They can provide real-time data, forecasting, and warning lights for timely action.

AI, for instance, can sift through a combination of large data inputs from various sources to look for pathogens of disease spread, observe areas of high vulnerability, and possible means of reckoning for future causations. During the pandemic, tools based on artificial intelligence will be utilized to study changes in new mutations in the virus and trends in the incidence of new cases (Gostin & Katz, 2016; Alzyoud et al., 2024; Alolayyan et al., 2024). Also, through proper analysis, AI can help scientists determine which virus strains are most likely to surface to launch the development of vaccines that speed up the process and be more effective.

Another diagnostic technique that has also been identified and used is genomic surveillance, which is the sequencing of pathogens' genomes. This means that with the tracking of gene mutations, the science community can look for new strains of a virus, check on the progression of viruses, and assess if therapies and preventative measures, such as vaccines, remain useful. This was particularly important during the COVID-19 pandemic, as it monitored the novelty of the variants, such as the Delta and the Omicron, and the changes that may need to be made to the vaccines and emergent health policies.

This is why investing in such technologies is critical to future health security. There is a particular call to improve funding in health technologies, especially in low-income countries that might not have the capacity to independently fund research in these tools (Gostin & Katz, 2016; Mohammad et al., 2022; Al-Husban et al., 2023). Therefore, the global health society can implement a stronger, faster, and more anticipatory system to combat health crises worldwide by motivating innovation in areas such as AI, genomic surveillance, and digital health tools.

Conclusions

The COVID-19 pandemic can be seen as a wake-up call and illustrates major gaps in global health security's strategic importance. System blocks and policy disparities still have not been solved to the optimum. Closing these gaps requires developing and strengthening resilient health systems, international cooperation, and using technology. Without seriously addressing these problems, the world community cannot be ready for future public health challenges.

Recommendations

Enhance Funding for Health Security

- Increase investments in healthcare infrastructure and workforce development, particularly in low-income nations.
- Establish global health funds to support resource-strapped countries.

Strengthen International Collaboration

- Empower the WHO to enforce compliance with IHR.
- Foster regional partnerships to enhance collective preparedness.

Promote Equity in Vaccine Distribution

Journal of Ecohumanism
2024
Volume: 3, No: 8, pp. 2434 –2443
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4992

- Expand initiatives like COVAX to ensure equitable access to vaccines.
- Develop global supply chains that prioritize low-income nations during crises.

Leverage Technology for Preparedness

- Utilize AI and big data for real-time outbreak detection and response.
- Support the development of digital tools for contact tracing and surveillance.
- Conduct Regular Assessments of Preparedness
- Mandate periodic evaluations of health security frameworks to identify and address gaps.
- Include independent audits to ensure transparency and accountability.

References

Al-Hawary, S. I. S., Mohammad, A. S., Al-Syasneh, M. S., Qandah, M. S. F., Alhajri, T. M. S. (2020). Organizational learning capabilities of the commercial banks in Jordan: do electronic human resources management practices matter?. International Journal of Learning and Intellectual Capital, 17(3), 242-266. https://doi.org/10.1504/IJLIC.2020.109927

Al-Husban, D. A. A. O., Al-Adamat, A. M., Haija, A. A. A., Al Sheyab, H. M., Aldai-hani, F. M. F., Al-Hawary, S. I. S., Mohammad, A. A. S. (2023). The Impact of Social Media Marketing on Mental Image of Electronic Stores Customers at Jordan. In Emerging Trends and Innovation in Business And Finance (pp. 89-103). Singa-pore: Springer Nature Singapore. https://doi.org/10.1007/978-981-99-6101-6_7

Al-Nawafah, S., Al-Shorman, H., Aityassine, F., Khrisat, F., Hunitie, M., Mohammad, A., Al-Hawary, S. (2022). The effect of supply chain management through social media on competitiveness of the private hospitals in Jordan. Uncertain Supply Chain Management, 10(3), 737-746. http://dx.doi.org/10.5267/j.uscm.2022.5.001

Alolayyan, M.., Al-Hawary, S. I.., Mohammad, A. A., Al-Nady, B. A. (2018). Banking Service Quality Provided by Commercial Banks and Customer Satisfaction. A structural Equation Modelling Approaches. International Journal of Productivity and Quality Management, 24(4), 543–565. https://doi.org/10.1504/IJPQM.2018.093454

Alolayyan, M.N., Alnabelsi, A.B., Bani Salameh, W.N., Al-shanableh, N., Alzyoud, M., Alhalalmeh, M.I., Hunitie, M.F., Al-Hawary, S.I.S., Mohammad, A.A., Aldaihani, F.M. (2024). The mediating role of medical service geographical availability between the healthcare service quality and the medical insurance. In: Hannoon, A., and Mahmood, A. (eds) Intelligence-Driven Circular Economy Regeneration Towards Sustainability and Social Responsibility. Studies in Computational Intelligence. Springer, Cham. Forthcoming.

Alzyoud, M., Hunitie, M.F., Alka'awneh, S.M., Samara, E.I., Bani Salameh, W.M., Abu Haija, A.A., Al-shanableh, N., Mohammad, A.A., Al-Momani, A., Al-Hawary, S.I.S. (2024). Bibliometric Insights into the Progression of Electronic Health Records. In: Hannoon, A., and Mahmood, A. (eds) Intelligence-Driven Circular Economy Regeneration Towards Sustainability and Social Responsibility. Studies in Computational Intelligence. Springer, Cham. Forthcoming.

Centers for Disease Control and Prevention. (2018). Operational Planning for Global Health Security. Retrieved from https://www.cdc.gov/

Durrheim, D. N., Gostin, L. O., & Moodley, K. (2016). When does a major outbreak become a Public Health Emergency of International Concern? The Lancet, 387(10027), 719-721. https://doi.org/10.1016/S0140-6736(16)00252-4

European Commission. (2018). Building resilient health systems in Europe and globally. Retrieved from https://ec.europa.eu/

Fischhoff, B., & Davis, A. L. (2015). Communicating global health security. Risk Analysis, 35(3), 289-302. https://doi.org/10.1111/risa.12393

Ghaith, R. E. A., Al-Hawary, S. I. S., Mohammad, L. S., Singh, D., Mohammad, A. A. S., Al-Adamat, A. M., Alqahtani, M. M. (2023). Impact of Artificial Intelligence Technologies on Marketing Performance. In Emerging Trends and Innovation in Business And Finance (pp. 49-60). Singapore: Springer Nature Singapore. https://doi.org/10.1007/978-981-99-6101-6_4

GHRF Commission. (2015). Global Health Risk Framework: Pandemic Financing. National Academy Press. Retrieved from https://www.nap.edu/

Global Health Security Agenda. (2016). Implementing the Global Health Security Agenda: Progress and Challenges. WHO Bulletin. Retrieved from https://www.ghsa.org/

Gostin, L. O., & Katz, R. (2016). The International Health Regulations: The governing framework for global health security. The Milbank Quarterly, 94(2), 264-313. https://doi.org/10.1111/1468-0009.12186

Jerving, S. (2017). WHO reforms and the Global Health Security agenda. Devex. Retrieved from https://www.devex.com/

Journal of Ecohumanism
2024
Volume: 3, No: 8, pp. 2434 –2443
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4992

Kamradt-Scott, A. (2015). WHO's to blame? The World Health Organization and the 2014 Ebola outbreak in West Africa. Third World Quarterly, 36(10), 1876-1891. https://doi.org/10.1080/01436597.2015.1080155

Katz, R., & Dowell, S. F. (2015). Revising the International Health Regulations: Call for a 2017 Review Conference. The Lancet, 385(9965), 203-204. https://doi.org/10.1016/S0140-6736(14)61336-4

Katz, R., Kornblet, S., Arnold, G., et al. (2015). Defining health diplomacy: Changing demands in the era of globalization. The Milbank Quarterly, 89(3), 503-523. https://doi.org/10.1111/j.1468-0009.2011.00637.x

Kluge, H. H. P., Martin-Moreno, J. M., Emiroglu, N., et al. (2018). Strengthening global health security by embedding the International Health Regulations requirements into national health systems. BMJ Global Health, 3(2), e000656. https://doi.org/10.1136/bmjgh-2017-000656

Mohammad, A., Aldmour, R., Al-Hawary, S. (2022). Drivers of online food delivery orientation. International Journal of Data and Network Science, 6(4), 1619-1624. http://dx.doi.org/10.5267/j.ijdns.2022.4.016

Mohammad, A.A, Barhoom, F.N., Alshurideh, M.T., Almohaimmeed, B.M., Al Oraini, B., Abusalma, A., Al-Hawary, S.I.S., Vasudevan, A., Kutieshat, R.J. (2024). Impact of Green Supply Chain Practices on Customer Satisfaction of Industrial Sector in Jordan. In: Musleh Al-Sartawi, A.M.A., Ghura, H. (eds) Artificial Intelligence, Sustainable Technologies, and Business Innovation: Opportunities and Challenges of Digital Transformation. Studies in Computational Intelligence. Springer, Cham. Forthcoming.

Moon, S., Sridhar, D., Pate, M. A., et al. (2015). Will Ebola change the game? Ten essential reforms before the next pandemic. The Lancet, 386(10009), 2204-2221. https://doi.org/10.1016/S0140-6736(15)00946-0

Powers, M., & Faden, R. (2019). The Ethics of Health Security. Cambridge Quarterly of Healthcare Ethics, 28(2), 209-217. https://doi.org/10.1017/S0963180118000496

Rahamneh, A., Alrawashdeh, S., Bawaneh, A., Alatyat, Z., Mohammad, A., Al-Hawary, S. (2023). The effect of digital supply chain on lean manufacturing: A structural equation modelling approach. Uncertain Supply Chain Management, 11(1), 391-402. http://dx.doi.org/10.5267/j.uscm.2022.9.003

Resolve to Save Lives. (2019). Preventing Epidemics: Tracking Progress in Health Security. Retrieved from https://resolvetosavelives.org/

Roser, M., Ritchie, H., & Ortiz-Ospina, E. (2019). Global Health. Our World in Data. Retrieved from https://ourworldindata.org/health

Ruckart, P. Z., Burgess, J. L., & Gist, R. (2019). Public health responses to mass exposures. American Journal of Public Health, 109(4), 553-558. https://doi.org/10.2105/AJPH.2018.304885

The Global Health Security Index. (2019). Annual Report. Retrieved from https://www.ghsi.org/

Wenham, C., & Farias, D. B. (2019). Securitizing Zika: The case of Brazil. Journal of Global Health, 9(1), 020103. https://doi.org/10.7189/jogh.09.010310

World Health Organization. (2017). Joint External Evaluation (JEE) of IHR Core Capacities. Retrieved from https://www.who.int/ihr/procedures/implementation/en/