Forum: GA2

Issue: Strengthening Global Strategies for Preventing and Responding to

Pandemics

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Section One: Introduction Of The Issue

Introduction

Pandemics rank among the gravest challenges at a global level, which have the potential to disrupt societies, bring economic growth to a juddering halt, and take millions of human lives. This has been constantly accelerated by factors such as urbanization, climatic changes, and global mobility. These changes have provided very conducive paths for infectious diseases and opened up fissures in global health systems.

The COVID-19 pandemic was a stark reminder of the ravaging impact of being unprepared. It overwhelmed the health systems, shut down supply chains, and sent countries into months-long lockdowns with devastating economic and social impacts. The very uneven distribution of vaccines and treatments further revealed stark inequities within and between countries.

These gaps need upscaling toward global strategies on pandemic control, with the aim of building resilience, equity, and solidarity. Key investments are needed in health infrastructure, science, and international cooperation. The report brings into relief the multifaceted nature of the issue while proposing sustainable solutions that can help prevent future pandemics and limit their impacts.

Definitions

Pandemic: A worldwide spread of disease across several countries and which is usually widespread among a large portion of the population.

Global Health Security: Efforts to prevent, detect, and respond to public health threats that can cross borders.

Surveillance: The ongoing, systematic collection, analysis, and interpretation of health-related data needed for the planning, implementation, and evaluation of public health practice.

Equity: Fair and equal access to health care services without regard to socio-economic status, geography, or demographics.

Resilience: Refers to health systems' capacity for preparation, response, and recovery in the face of crises, while their core functions must be maintained.

Background Information

The threat of pandemics

Pandemics like the Spanish Flu (1918) and COVID-19 have profound socio-economic and health impacts. They overwhelm healthcare systems, disrupt economies, and deepen inequalities. Economic shutdowns lead to business closures, job losses, and recessions, disproportionately affecting vulnerable communities. Healthcare strains intensify, while marginalized groups face higher exposure risks. Urbanization, globalization, and climate change increase the risk of zoonotic diseases, as expanding human settlements and increased global travel facilitate the spread of pathogens. Climate change also alters ecosystems, contributing to new disease patterns. These factors highlight the urgent need for proactive measures, including stronger healthcare infrastructure, early warning systems, and global collaboration on pandemic preparedness and prevention.

Shortcomings in current systems

The visible weaknesses that the COVID-19 pandemic brought into the open also included global health systems issues like fragmented coordination among countries and organizations, which resulted in responses ill-timed; vaccine distribution was also disparate, underlining the unevenness in wealthy nations with much of the supplies while poorer countries struggled to find access. Decades of investment neglect in public health infrastructure set up many of the health care systems that should have been sufficient in a pandemic of this caliber. The pandemic has also brought out the inadequacy of depending on a reactive approach that banked on lockdowns and emergency treatments instead of strategies that involved early detection, ensuring access to health services, and efficient surveillance. As this pandemic has

very clearly shown, proactive, long-term public health strategies for prevention, preparedness, and global cooperation have become well-nigh imperative.

Importance of Multilateralism

Global health challenges do not respect national borders-the same diseases and health threats rapidly cross regions and can affect entire populations. To meet these challenges, multilateral institutions, especially under the leadership of the World Health Organization in commanding international responses to global health crises, are required. The WHO has led the world's preeminent standardization of international health standards, technical guidance, and resource coordination on the prevention, surveillance, and management of disease outbreaks. However, how well these organizations function today is mostly hampered by lack of financing, political issues, and divided international support. COVID-19 has illustrated how health crises, due to such deficiencies in funding and other forms of support, undermine the capacity of the World Health Organization toward a rapid, robust response. Reinforcing the mandate and the wherewithal to fulfill it is what will make multilateral institutions more effective in dealing with the increasingly complex global health crises.

Section Two: United Nations and International Involvement

Major Countries and Organisations Involved

World Health Organization (WHO):

As the leading authority in global health, WHO plays a central role at the global level in the prevention and response to pandemics through much work in coordination, technical guidance, and advice on the implementation of the IHR. This covers most of the activities, events, and processes that are undertaken, including the Global Influenza Surveillance and Response System, an international monitoring of influenza trends, enabling early warnings that help predict the impact of an outbreak. However, big challenges usually involve political interference by member states, limited funding that is inconsistent, and delays in declaration of public health emergencies. These came into full view during the early COVID-19 pandemic, when there were delays in recognizing the severity of the virus and navigating political pressures from different countries. Despite these challenges, WHO has remained a key driver in the ever-evolving landscape of global health.

United States:

For many years, the United States has been a global health security leader, resourcing and harnessing expertise to meet health threats from around the globe. Specifically, agencies like the Centers for Disease Control and Prevention and the National Institutes of Health have been at the leading edge of important research, infectious disease monitoring, and response to health emergencies. The U.S. has been a leading financial contributor to a number of other global health initiatives, including: Gavi, dedicated to increasing access to immunization in poor countries; and the Global Health Security Agenda (GHSA), an effort to build capacity in countries to prevent, detect, and respond to outbreaks. Yet, this has often been undermined by shifting political priorities and fluctuating funding, raising concerns about the continuity that the U.S. can enforce toward leadership of global health security across successive administrations with potentially different policy directions.

Gavi, the Vaccine Alliance

Gavi, the Vaccine Alliance, was created in 2000 to improve access to vaccines in low and middle-income countries, thus saving millions of lives with affordable immunization programs. Its innovative financing models and partnerships between governments and the private sector have been instrumental in reducing inequity to vaccines around the world. During the COVID-19 pandemic, Gavi co-led the initiative COVID-19 Tools (ACT) Accelerator (COVAX), along with the World Health Organization (WHO) and Coalition for Epidemic Preparedness Innovations (CEPI), in hopes of ensuring fair distribution to the most vulnerable populations of the vaccines. But while COVID-19 Tools (ACT) Accelerator (COVAX) faced significant challenges, including vaccine shortages, export restrictions, and funding gaps, it underscored the critical roles of multilateral partnerships in the response to global health crises. These setbacks excluding the efforts by Gavi underlined the importance of collective action in promotion of equity in health outcomes during emergencies.

Relevant UN Treaties and Events

- International Health Regulations (2005): Established guidelines for responding to public health emergencies of international concern (PHEIC).
- 2030 Agenda for Sustainable Development: Includes health-related goals (e.g., SDG 3) emphasizing universal health coverage.
- Global Health Security Agenda (GHSA): A partnership to strengthen health security capacities globally.

Section Three: Solving The Issue

Previous Attempts to Solve the Issue

1. International Health Regulations (IHR):

Adopted to improve global health security, the IHR tried to improve international preparedness and response against health threats. But in practice, there has been inadequate implementation due to inconsistent compliance from member states, as a few countries have failed to declare outbreaks on time or lacked proper adherence to rules. Moreover, underfunding and resource constraints have also contributed to limiting the effectiveness of the IHR and, in turn, have hampered the efforts of the WHO to support countries in building resilient health systems and responding to emerging global health threats.

2. COVAX Initiative

While COVAX did help with the distribution of vaccines among developing countries, it was hampered by supply shortages, unequal distribution, and logistical problems, leaving many countries with short doses. The efforts were also characterised by delays in obtaining adequate funding, which affected the ability of the programme to meet worldwide demand, ensuring equity in access for all populations, especially those in low-income settings. Such unevenness underscored the challenges with global health coordination and disparities in vaccine availability that typified the COVID-19 pandemic.

3. WHO Pandemic Influenza Preparedness (PIP) Framework:

This framework aimed at improving the sharing of the influenza virus and access to vaccines, particularly in pandemic preparedness. However, due to the narrow scope of focus on influenza, it lacked wide applicability on other emerging infectious diseases, making it less effective in addressing global health security comprehensively. Moreover, the framework faced challenges with regard to balancing the interests of pharmaceutical companies, national governments, and

public health organizations further hindered the potential impact in promoting equitable access to vaccines and treatments during global health crises.

Possible Solutions

Strengthening Early Warning Systems:

An effective early warning system forms the bedrock of pandemic prevention. Advanced investments in surveillance technologies are needed, using AI, machine learning, and other related areas that promise to revolutionize the detection of outbreaks. AI can analyze vast amounts of data to predict patterns of spread and identify new emerging pathogens and variants with genomic sequencing. To make it possible, nations need to establish robust global data-sharing agreements. Sharing health data in a timely and transparent way will permit harmonized responses and trust among countries that will avoid delays in containing outbreaks.

Building Resilient Health Systems:

A health system's resilience is tied to its ability to respond effectively during a crisis. It begins with increased funding for primary health care, which serves as a foundation for preventing and managing diseases. Strengthening the public health infrastructure through improving laboratories, hospitals, and supply chains makes sure a country prepares for large-scale emergencies in health. Training healthcare workers is not less important. Programs must concentrate on building capacities in pandemic preparedness, equipping workers with the skills and resources to manage surges in patient volumes, and advanced care protocols.

Promoting Equity in Healthcare:

Pandemics affect the most vulnerable in society, including marginalized and low-income groups of people, even harder than others, which widens inequalities. That is going to require deliberate policy interventions aimed at ensuring equity of access to vaccines, diagnostics, and treatments. Global mechanisms like COVAX need to be expanded and enhanced to ensure that lifesaving tools reach the most vulnerable first. In addition, by supporting those initiatives that are directly aimed at social determinants of health-poverty, education, and housing-long-term resilience will be built among underserved communities, making their populations less vulnerable during health crises.

Enhancing Global Governance:

This makes the strengthening of mandates of international health entities like the World Health Organization quite relevant for effective pandemic governance. The current role being played by the World Health Organization in coordinating global health responses needs underpinning with powers of enforcement that ensure compliance with International Health Regulations. For example, a dedicated pandemic preparedness fund can be established to finance emergency responses for low-income countries. A fund of this kind, augmented by contributions from the more affluent nations and other philanthropic organizations, would ensure resources are available where they are most needed, rather than relying on ad hoc funding appeals in times of crisis.

Public-Private Partnerships:

Collaboration between the public and private sectors can greatly accelerate the development of diagnostics, vaccines, and treatments. Pharmaceutical companies, biotechnology firms, and technology developers can drive innovation through partnerships and rapid scaling. For example, with COVID-19 vaccines, the rapid development demonstrated what was possible. Incentivizing corporate social responsibility can help better align objectives of the private sector with priority public health needs. Where companies can offer resources, expertise, and logistic support, pandemic responses can be further enhanced in effectiveness and scope.

Section Four: Resources

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