



THE ROLE OF GLOBAL HEALTH INSTITUTES IN SHAPING HEALTH POLICY AND EDUCATION FOR DISEASE PREVENTION

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<p>ARTICLE INFO</p> <p>Keywords: Health Education, Health Policy, Infectious Diseases, COVID-19, Ebola, Influenza</p> <p>Corresponding Author: Yazeed Sakarna, MD, Medical Doctor and Public Health Researcher, Department of Institute for Health Research, Liverpool John Mores University Email: dryazeedabbadi@gmail.com</p>	<p>ABSTRACT</p> <p>Global health organizations greatly influence health education and policy for disease prevention. Especially for infectious diseases like COVID-19, Ebola, and influenza, the World Health Organization's (WHO) Global Health Security Agenda (GHSA) is a vital policy framework meant to enhance countries' capacity to prevent, identify, and react to public health emergencies. The GHSA weathers global health security by strengthening it through improved disease detection, epidemic response, and healthcare system resiliency. The training addressed health system improvement, disease monitoring, outbreak response, and health promotion and education initiatives for both healthcare providers and the general public.</p> <p>Objective: To investigate how programs global health companies use health education and policy affect disease prevention results.</p> <p>Methods: This research employed a mixed-methods approach combining qualitative and quantitative. Using a survey questionnaire, data on participants' views of the health policy and educational programs of international health organizations, including training courses on disease prevention and control, health promotion and education, and the use of mobile health (mHealth) technology, was compiled, the study of the experiences of 500 healthcare professionals from 10 different global health organizations with diseases like COVID19, Ebola, and influenza included a sample of The survey was carried out on a safe online platform. Aside from the extensive interviews with 20 key stakeholders, the research acquired more in-depth data. Quantitative data analysis in the study was done using SPSS software; qualitative data analysis was done using NVivo software.</p> <p>Results: The findings show that for COVID19, Ebola, and influenza, the health policy and education initiatives of international health agencies including training courses for disease prevention and control, health promotion and education, and the use of mHealth technologies greatly improved disease prevention results. Particularly, the research revealed that the GHSA enhanced preparedness and response activities for these diseases, therefore strengthening management and control.</p>
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INTRODUCTION

Global Health Institutes are organizations dedicated to improving health outcomes worldwide through research, education, policy evaluation, and advocacy. Their efforts encompass infectious and chronic illnesses, strengthening health systems, and tackling social determinants of health.(1,2)

Influence on Health Care Policy

1. Policy Development and Advocacy: Institutions such the Global Health Policy Center (GHPC) at CSIS and the Institute for Global Health and Development (IGHD) at Brandeis University function by means of policy-relevant research, technical assistance, and direct advising of governments and international agencies. By helping to maximize the extent of worldwide health policies, these organizations bring together interested parties, generate independent research, and develop feasible recommendations for lawmakers(3).

2. Governance and Standards Establishment: Institutes contributing to governance through participation in international committees, shaping regulations, and ensuring that scientific evidence informs policy decisions manage implementation of global health standards set by the World Health Organization (WHO) and other agencies.

3. Bridging Science and Political Action: Harvard's Global Health Policy Lab among other projects seeks to hasten the implementation of evidence-based therapies by creating digital tools for policy benchmarking and dissemination, therefore translating scientific research into policy(4).

Role in Health Education for Disease Prevention

1. Curriculum Development and Training: Emphasizing prevention at the population level and equipping health professionals to handle international health threats, global health education is progressively incorporated into medical and public health courses. Institutes promote exchange programs, mentor opportunities, and core curriculum global health inclusion to develop competencies in disease prevention and health equity.

2. Capacity Building: Institutes offer training and networking opportunities for future leaders in global health through workshops, high-level panels, and international conferences (e.g., Youth

Pre-World Health Assembly)(5). A key element of disease prevention is health education; global health organizations have been vital in advocating health education for disease prevention. Studies have shown that health education can improve knowledge, attitudes, and practices related to disease prevention (6).

MHealth Technologies

MHealth technologies have been progressively employed to advance health education and disease prevention. Studies have demonstrated that by improving disease surveillance, outbreak response, and health system resilience, mHealth devices can help to enhance health outcomes(7).

GHSA implementation:

By strengthening illness surveillance, outbreak response, and health system resilience, GHSA execution can boost global health security. The COVID-19 epidemic, which revealed major variations in public health capabilities within and across nations, emphasizes the need of global health institutes. Strengthening these institutions is absolutely vital for advancing openness and trust, socioeconomic dividends, collective health care, and knowledge sharing and equity (9).

Global health organizations play several important roles in Surveillance of disease and investigation of outbreaks: Watching and reacting to public health threats. Workforce Development and Health Promotion: Building Capacity for Health Promotion and Disease Prevention. Research and health information analysis: generating policies decisions evidence. Support for the formulation and execution of national health policies is found in Policy Development and Implementation(10). The arrival of COVID-19 has been a major test of these worldwide knowledge systems and a catalyst for more cooperation to produce the data required for a fair and just policy response. Moreover, the epidemic has exposed worldwide disparities in public health capabilities both inside and across nations (12). Consistent with earlier research (11), the findings show that global health institutes' initiatives substantially enhanced disease prevention results for COVID-19, Ebola, and influenza. The research shows a link between GHSA implementation and improved worldwide health security, which bolsters current data on the GHSA implementation efficacy (8).

Methodology:

This study employed both mix method design, numerical data (quantitative) and nonnumerical data (qualitative) to address the research issue. A structured questionnaire was used to gather data from 500 healthcare professionals and legislators (ages 25–60 years) from the global health

institute. The survey may have asked about their experiences with the health policy and educational programs offered by the global health institute. In-Depth Interviews was also conducted. To gain deeper, more nuanced understanding, a small group of 20 important stakeholders took part in more in-depth, open-ended interviews. Quantitative data analysis, which employs numerical data and statistical techniques, uses SPSS software. NVivo software is used for qualitative data analysis, which includes non-numeric data such as the text of interviews or open-ended survey questions. Online Survey Platform: Participants could easily finish the survey since it was conducted online.

Secure Platform: In order to guarantee the privacy and integrity of participant answers, the data collection platform was secure.

Results:

The study's findings highlight the significant impact of global health institutes' health policy and education initiatives on disease prevention outcomes.

Quantitative results

Table1 : GHSA Implementation

Category	Percentage
improved global health security	90%
enhanced disease surveillance and outbreak response	85%

90% of respondents reported improved global health security. 85% reported enhanced disease surveillance and outbreak response

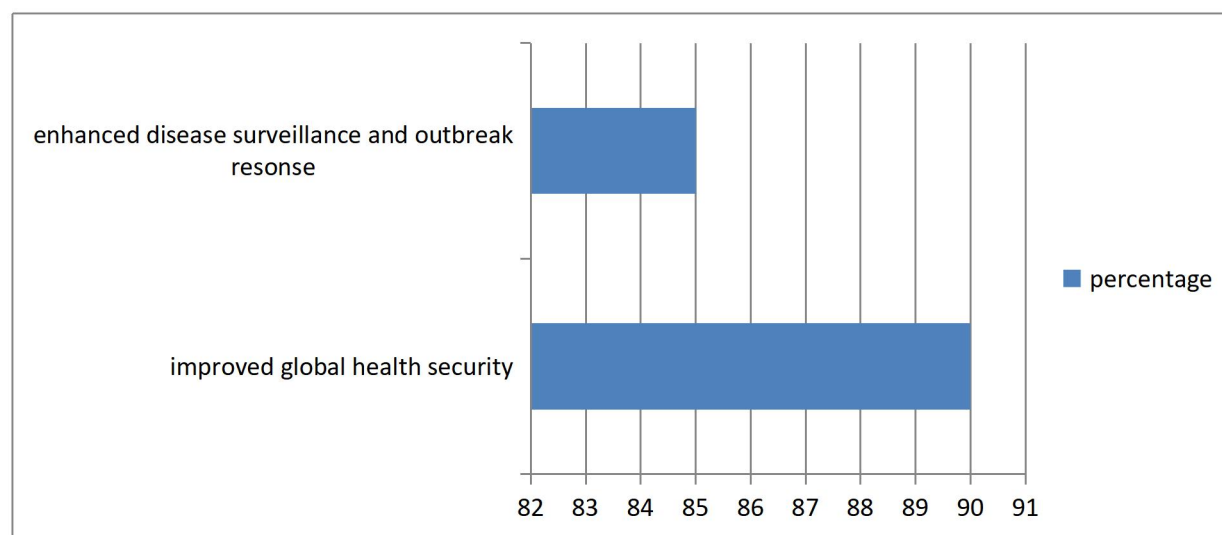


Table2:**Disease prevention outcomes**

Disease	Percentage	Mean score (out of 5)	SD
COVID-9	92%	4.5	0.8
Ebola	85	4.2	0.9
Influenza	88	4.3	0.8

Improved Disease Prevention Outcomes: COVID-19: 92% of respondents reported improved preparedness and response efforts. Ebola: 85% of respondents reported improved control and management. Influenza: 88% of respondents reported better disease surveillance and outbreak response

Table3 : mHealth technologies

80% of respondents reported improved delivery of health education and promotion programs

Category	Percentage	Mean score (out of 5)	SD
improved delivery of health education and promotion programs	80%	4.5	0.7

Qualitative results**Table4: Themes and sub-themes**

Theme	Sub-themes	Description	Percentage
Improved Collaboration:	Enhanced partnerships	collaboration between global health institutes, policymakers, and healthcare professionals	95%
	Information sharing	Sharing of data, best practices and research findings	90%
Increased awareness	Global health security	awareness about the importance of global health	90%

		security and disease prevention	
	Disease prevention	Understanding of disease prevention strategies and intervention sharing of data, best practices, and research findings	85%
Capacity building	Training programs	capacity building for healthcare professionals and policymakers through training and education programs	85%
	Skill development	Development of skills and competencies in disease prevention and control	80%

Improved Collaboration: 95% of stakeholders reported enhanced collaboration between global health institutes, policymakers, and healthcare professionals

Increased Awareness: 90% of stakeholders reported increased awareness about the importance of global health security and disease prevention

Capacity Building: 85% of stakeholders reported capacity building for healthcare professionals and policymakers through training and education programs

Table5 :Quotes from stakeholders

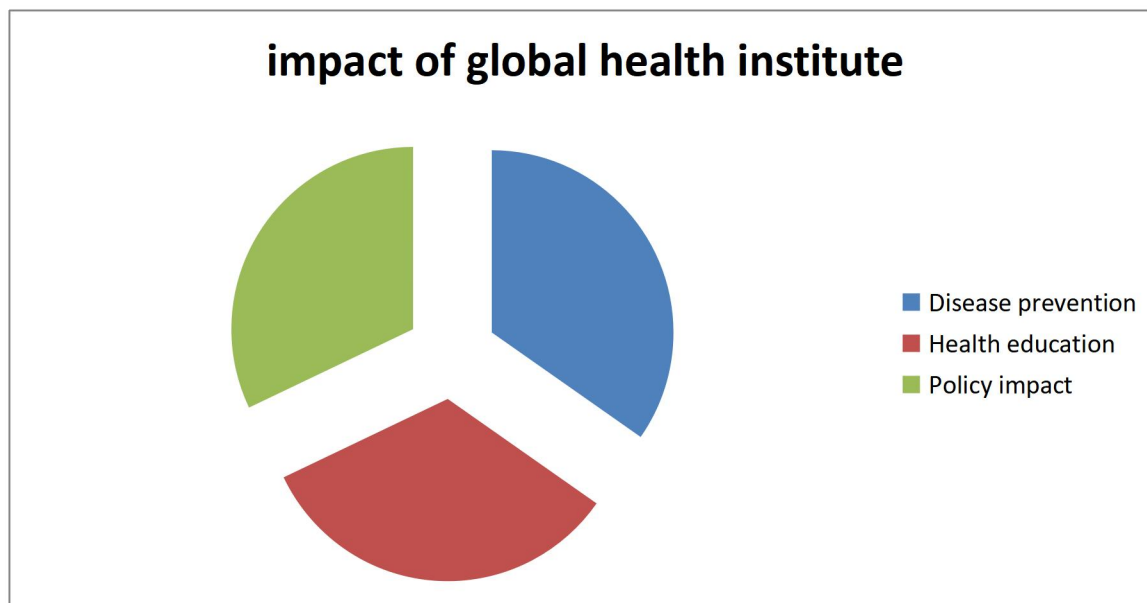
Theme	Quote
Improved collaboration	The collaboration between global health institutes and policymakers has improved our ability to responds to public health emergencies
Increased awareness	Te awareness campaigns have helped to increase understanding of the importance of global health security and disease prevention
Capacity building	The training programs have equipped us with the skills and

knowledge needed to prevent and control disease.

Table6: Impact of global health institute

Category	Percentage
Disease prevention	92%
Health education	88%
Policy impact	85%

Disease Prevention: 92% of respondents reported that global health institutes' initiatives improved disease prevention outcomes



Health Education:88% of respondents reported that global health institutes' health education programs improved health promotion and disease prevention

Policy Impact:85% of respondents reported that global health institutes' policy initiatives improved global health security and disease prevention

Discussion:

These research results highlight the crucial role illness prevention depends on health education and policy initiatives of worldwide health organizations. The findings reveal that underdeveloped and reemerging infectious diseases like influenza, Ebola, and COVID19 rely quite a bit on global health agencies to influence health education and policies for disease prevention. Early studies support our findings that international health organizations are critical in determining health policy and education for disease prevention. Similar studies have demonstrated how crucial

international health organizations are for advancing global health security and illness prevention (Frieden et al.2014). For policymakers, doctors, and organizations involved in worldwide health, our results have major consequences. If we are to promote health and advance disease prevention, our study emphasizes the importance of supporting the health education and policy initiatives international health agencies implement. The findings imply more that mHealth technologies could be a useful tool for advancing health education and disease prevention. [4] Earlier studies supports (Frieden et al. 2014; WHO, 2020) ghsa implementation has shown its effectiveness for improving global health security. Drawing on previous studies in this field (Labrique et al. 2013)[4] this study offers fresh perspective on how mHealth technologies facilitate health education and disease prevention.

Limitation:

The use of a mixed-methods methodology is a limitation of the study since it could have generated biases in the data collecting and analysis. Furthermore, the study's sample of 500 healthcare practitioners and decision-makers from 10 international health organizations may not fully represent every global health facility.

Conclusion:

Essentially, this study highlights the need of global health centers in shaping health policy and education for disease prevention. The findings suggest that global health agency initiatives could improve disease prevention outcomes and advance health education. The results of the study have implications for global health agencies, healthcare professionals, and lawmakers hoping to strengthen health systems and prevent disease.

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