

Section 8. Economics and management

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THE WHO AND INTERNATIONAL HEALTH REGULATIONS: LESSONS FROM THE EBOLA VIRUS DISEASE OUTBREAK IN WEST AFRICA

Abstract. The revised International Health Regulations – IHR (2005), a framework that provides public health response during disease outbreaks – is certainly not far from ensuring that WHO remains the coordinator and strategic planner in global public health emergencies. However, it needs to incorporate enforcement mechanisms to avert state parties non-compliance during public health emergencies. This paper critically assesses the extent to which the Ebola outbreak has challenged WHO authority as a key global health actor. While IHR (2005) vagueness and State Parties' misunderstanding may have contributed to non-compliance, the Ebola outbreak revealed that lack of enforcement mechanism underpinned the non-adherence to these regulations. Subsequently, State Parties' failure to comply with regulations challenged the WHO's authority and exposed it to criticism.

Keywords: International Health Regulations, Ebola Virus Disease, World Health Organization, Global Health, Infectious Disease, Public Health.

Introduction

The increasing emergence of disease outbreaks and globalization of public health birthed the International Health Regulations (IHR) (Piot et al. [19]). The IHR which was revised in 2005 to IHR (2005), is a framework that provides guidelines to avert, control, and provide public health response during disease outbreaks while avoiding unwarranted travel and trade restrictions (WHO, 2008). This global health security framework was expected to birth an era of global cooperation. However, to date, it has faced criticism and recommendations for urgent reforms from the various entities including the WHO following the EVD outbreak (Gostin & Katz [9]). It is important to acknowledge WHO at this point as the governing authority aimed at preventing and

responding to public health emergencies instituted by the IHR (2005) (Gostin & Friedman [8]).

This paper critically assesses the extent to which the EVD outbreak has challenged WHO' authority as a key global health actor in the field of international health work concerning IHR (2005). The paper gives an overview of the Ebola epidemic. It shows the extent to which IHR (2005) non-compliance by some State Parties questioned the WHO's authority during the Ebola outbreak. It argues that the IHR (2005)'s lack of enforcement mechanism dissuaded countries from meeting the minimum core capacities (surveillance and reporting capacities) resulting in WHO's late response during the epidemic. Subsequently, it discloses how the IHR (2005)'s lack of enforcement mechanism led to State Parties' failure to comply with

IHR (2005) travel and trade recommendations. This paper also highlights how the confrontation of WHO's authority as a key global health actor spurred criticism and led to the re-emergence of a new global health actor which leaves the WHO with some valuable lessons.

Ebola in West Africa

The EVD outbreak in West Africa was one of the numerous outbreaks that threatened global health security (Kalra et al. [11]). This outbreak which began in 2013 greatly highlighted the inadequacies of international and national institutions responsible for shielding the public from political, social, economic, and most importantly human consequences of infectious diseases outbreaks (Moon et al. [16]). In December 2013, the outbreak began spreading silently in southeast Guinea with a case fatality rate (CFR) of 30–60%, rapidly spreading to neighboring countries like Liberia and Sierra Leone due to the high mobility of people (Baize et al. [2]). By August 8, 2014, the WHO declared the outbreak a Public Health Emergency of International Concern (PHEIC) in accordance to the IHR (2005) and three days later, Guinea, Liberia, Sierra Leone and Nigeria recorded a total of 1.843 EVD cases and 1.013 deaths from EVD (The Lancet Infectious Diseases [25]).

In 2015, a Lancet correspondence revealed that the EVD became by far the largest disease outbreak with over 20,000 cases recorded (Helleringer & Noymer [10]). The correspondence presumed that these statistics were likely to be 2.5 times higher due to under-reporting with an estimated CFR of 60–80%. Unarguably this hypothesis is valid, given that Liberia, Guinea and Sierra Leone previously ravaged by civil war were among the world's poorest countries with weak health systems (WHO, 2015). With the weak health system and huge potential for mortality, it is shocking that the WHO declared a Public Health Emergency of International Concern (PHEIC) four months after *Medecins Sans Frontieres* (MSF) disclosed the unprecedented outbreak (CNN [5]).

In a fair attempt by the WHO to critically evaluate the outbreak, Dr Margaret Chan, WHO's Director-

General (DG) at the time addressed the Ebola Response Review committee of the International Health Regulations. She highlighted State Parties' poor surveillance and reporting, sole reliance on health ministries for IHR (2005) implementation, some State Parties trade and travel restrictions, and lack of formal alert as contributing factors to EVD widespread while excluding the late PHEIC declaration (WHO, 2015). The IHR (2005) addresses all the DG's concerns, although, without clearly stating its enforcement mechanism (WHO, 2005). Remarkably, this was acknowledged by the WHO DG as a necessary reform to fulfill its mandate as a key global health actor (WHO, 2015). Thus, reiterating that IHR (2005)'s lack of enforcement mechanism averted the WHO from fulfilling its mandate in international health work during the EVD outbreak, hence, it challenged WHO authority in global health governance.

IHR (2005)'s lack of enforcement mechanism challenged the authority of the WHO

Globalization of public health associated with opportunity and threat refers to the approach of increasing political, social, and economic integration and interdependence (Brown et al. [4]). As persons and goods move from place to place, this globalization poses a threat through the spread of infectious diseases (Brown et al. [4]). For instance, the EVD which started in Guinea was recorded in Nigeria, Mali, and Senegal and beyond West Africa to countries like Spain, the United States of America, and the United Kingdom (WHO, 2015). Therefore, the WHO transitioning from international health to global public health makes it pertinent that State Parties comply with the IHR (2005) – a laudable initiative aimed at protecting nations in the event of public health emergencies by the WHO.

Minimum Core Capacities – Surveillance and Reporting

The IHR (2005) was meant to minimize the threat of globalization of public health given its sole function to avert, control and provide public health response during disease outbreaks. According to the IHR

(2005), States Parties are expected to communicate all events that represent a PHEIC to the WHO and, develop and maintain core public health capacities for surveillance and response using their national resources (WHO, 2005). However, most countries do not meet the IHR (2005)'s minimum core capacities for surveillance and reporting. For instance, despite WHO's second extended deadline for setting up these capacities, only 64 out of 81 countries that requested extension met these minimum core capacities (WHO, 2015).

During the EVD outbreak, the Guinean health officials misdiagnosed its first Ebola case while Sierra Leone's first suspected case failed to reach the surveillance team on time (Gostin & Friedman [8]). This disclosed that both countries lacked the IHR (2005)'s minimum capacity. Poor surveillance and reporting capacities by these countries particularly Guinea where the outbreak began undoubtedly spurred the slow response by the WHO during the EVD outbreak. Thus, accelerating the widespread of EVD.

The WHO's Interim Assessment Panel at some point diplomatically claimed that it is either their senior colleagues who failed to identify the magnitude of EVD, or the urgent warnings did not reach the senior leaders (WHO, 2015). However, the late declaration is unlikely due to the former given technical expertise and quality research output by the WHO (Luca & Claude-Henri [15]). This late declaration is closely linked to the poor surveillance and reporting capacities by the affected countries. The late response by the WHO would have been averted if the IHR (2005) incorporated an enforcement mechanism for State Parties to ensure that all countries meet the minimum core capacities. As a result of the late response by the WHO, the Harvard-LSHTM Independent Panel on the Global Response to Ebola lost confidence in the leadership ability of the WHO (Moon et al. [16]). An action that challenged the WHO's authority. To the extent that it led to the re-emergence of MSF, an international health organization that pioneered international health work during the outbreak, by deploying health workers to the af-

ected countries, issuing EVD preventive and control measures and even contacting the WHO (Williams [36]). Hence, the WHO's authority in international health work was greatly challenged.

A critical assessment of the Integrated Disease Surveillance Response (IDSR) recommendations in the WHO African region revealed that only 43 out of 46 countries implement them because it resonates with their priorities (Kasolo et al. [12]). The IDSR was formulated to boost African countries capacities to meet the IHR (2005), yet not all African countries comply. All African countries would have complied if IDSR had an enforcement mechanism, thus spurring IHR (2005)'s compliance which would have strengthened WHO's authority during the EVD outbreak. Ultimately, this shows that the lack of enforcement mechanism on health regulations underpinned the confrontation of WHO authority during the EVD outbreak which disrupted global health security. Nonetheless, the tendency of the IDSR resulting in duplication and fragmentation of the IHR (2005)'s effort needs further investigation given its protection of Africa countries' priorities.

Given the impact of the IHR (2005), its lack of implementation by some State Parties become worrisome. Surprisingly, at the time of the IHR (2005)'s second Review Committee meeting, 48 countries were yet to communicate their intentions regarding its adoption (WHO, 2015). Certainly, this would not have been the case if the IHR (2005) incorporated an enforcement mechanism. Although, one may argue that this is due to conflicting global interests and desire for national autonomy. However, these excuses would be invalid if the IHR (2005) had an enforcement mechanism.

Travel and Trade Restrictions

Globalization transcends the health sector thereby serving as a driver of trade, economic growth, and human rights – all of which the IHR promised to protect (Ruger & Yach [21]). By acknowledging the importance of trade and travel, the IHR (2005) upholds three vital ethos namely, public health, commerce and

human rights (Gostin & Katz [9]). Hence, an important objective of the IHR (2005) is to minimize unnecessary travel and trade restrictions by clearly identifying appropriate public health measures (WHO, 2005). However, due to IHR (2005) lack of enforcement mechanism, some countries did not adhere to these regulations during the EVD outbreak.

Research conducted by Wendy Rhymer and Rick Speare, both academicians in Australia and England respectively disclosed State Parties non-compliance to the travel and trade recommendations of the IHR (2005) during the EVD outbreak thus challenging WHO's authority as a key global health actor (Rhymer & Speare [20]). The research revealed that 58 State Parties either disregarded or exceeded these international health regulations, 43 countries prohibited the entry of foreigners from the EVD affected countries and 15 of them applied substantial restrictions from travellers from affected countries. According to Rhymer and Speare, six State Parties enforced quarantine against the health regulation while eight State Parties requested a medical certificate proofing that travellers were EVD free. The research shockingly revealed that a country allowed entry of foreigners working in the EVD affected region but not citizens of EVD affected countries. This expression of stigma questions the essence of a global corporation and WHO authority in global health governance.

Despite the IHR (2005)'s mechanism to harmonize global procedures during public health emergencies, Australia and Canada were among the 30 State Parties that enforced substantial travel restrictions on travellers from most EVD affected regions (Pattani [18]). In addition to these countries' refrainment to justify their actions, Pattani [18] posits that their decision as high-income countries potentially reduced global cooperation degraded the IHR (2005) and ultimately challenged the authority of the WHO as a key global actor. These countries actions were not justifiable given the travel and trade recommendations of the IHR (2005) during pandemics. Particularly for Canada, whose researchers deduced

that only two or three EVD-affected persons had the likelihood to depart the affected countries monthly (Bogoch et al. [3]). Yet, it still restricted travel thus challenging the authority of the WHO.

Canada's action which unarguably was underpinned by the IHR (2005) lack of enforcement mechanism questions the need for low-income countries and lower-middle-income countries to associate with the global community. It also impedes one of the IHR (2005) vital ethos which is human rights while increasing other countries refrainment from reporting to the WHO during public health emergencies (Pattani [18]). Perhaps, Canada intended to choose safety over global cooperation given the widespread of the EVD and its experience with the WHO-imposed travel ban during the severe acute respiratory syndrome outbreak in which it lost about \$2 billion (National Advisory Committee on SARS and Public Health [17]). However, this does not allude to the fact that its action contradicted the IHR (2005) thus weakening the WHO's power to coordinate at the time.

As countries continued to refrain from their obligations to the IHR (2005), the WHO's power in global health governance and coordination becomes challenged. Even Afghanistan, one of the world's poorest countries (Afghanistan Times [1]), requested that travellers presented a medical certificate to prove that they were EVD-free (Rhymer & Speare [20]). This unnecessary travel restriction did not even consider EVD's incubation period which is 2–21 days with symptoms manifesting only after 3 days (WHO, 2020). More so, does a country with such a weak economy have the capacity to verify the authenticity of international travellers' medical certificates? – is a salient question suggesting that if Afghanistan risked being sanctioned by the WHO, such actions void of medical evidence and critical appraisal would have been avoided. Iraq also followed suit, requesting a medical certificate from travellers from EVD-affected countries while exempting diplomats (Rhymer & Speare [20]). Thus, instigating stigma among nations. This highlights the extent to which the

IHR (2005) was disregarded ultimately challenging the power of the WHO in global health governance.

Remarkably, the United States was one of the few countries that showed compliance despite recording a few EVD cases acknowledging that travel bans put Americans at substantial risk (The Guardian [23]). An action that must have relieved the WHO. Unlike the US, most State Parties downplayed the implications of disregarding the IHR (2005). This threatened global health security, governance and corporation emphasizing the IHR (2005)'s weakness – lack of enforcement mechanism. Consequently, this weakness presumably spurred by the lack of understanding of the IHR (2005) may be attributable to the IHR (2005)'s vague language directing State Parties to collaborate *to the extent possible* (WHO, 2005).

Before the revision of the IHR, it has always sought to achieve global health security while minimizing trade restrictions (Giesecke [6]). With the cholera outbreak associated with frozen fish, Giesecke posits that most countries often choose national sovereignty over infectious disease importation (Giesecke [6]) due to the movement of goods and people. The EVD outbreak was no exception as trade and aid were also hindered due to travel restrictions (Gostin & Friedman [8]). Perhaps due to EVD transmission from human-to-human and wild animals-human (WHO, 2020). A comprehensive report by the World Bank Group revealed the economic impact of the EVD outbreak on the affected countries and neighbouring economies (The World Bank [26]). The report showed that trade and commerce dwindled during the outbreak and had continued potential in the absence of proactive actions. This inference comes with no surprise given the cancellation of nearly 30% of flights travelling to the most affected regions (Lamprey & Awojobi [13]). Hence, commerce, a vital ethos of the IHR (2005) was threatened at the time. Yet again, revealing the extent to which the WHO's power as a key global health actor was challenged.

Constructive Criticism of the WHO: Re-Emergence Of a Global Actor And Lessons

Before the EVD outbreak, the Director-General of the WHO expressed the organization's inability to promptly respond to the rapid global health challenges and sought ways to reclaim its relevance (Sridhar et al. [22]). The EVD outbreak presented the WHO with this opportunity. However, the IHR (2005) non-compliance by state parties weakened its effort at the time. As a result, experts criticized the WHO for the late declaration of the EVD outbreak as a PHEIC (The Guardian [24]). Furthermore, the WHO use of both the IHR (2005) and the Emergency Response Framework in its declaration spurred confusion and criticism (Gostin et al. [8]).

Beyond these criticisms, the WHO's authority was extremely challenged as it saw the re-emergence of a new global health actor- MSF. MSF, established to provide humanitarian service was the first to disclose the unprecedented outbreak (Gostin & Friedman [8]). The organization created awareness and eventually took proactive steps to secure global health security by mobilizing the Guinean authorities, notifying WHO, giving guidelines and containing infected patients even before the arrival of medical experts from the WHO thus receiving the 2015 Lasker-Bloomberg Public Service Award (Williams, [36]). The MSF's actions during the EVD outbreak questions the alertness and responsiveness of the WHO in no small measure.

Given the extent to which the authority of the WHO was challenged which saw the re-emergence of MSF, WHO should enforce routine health reports by State Parties, publicly acknowledge reports from non-governmental organizations, ensure State Parties justify any action of IHR (2005) non-compliance as well as to conduct its analysis to verify State Parties and other actors information (Gostin et al. [8]). Although, this proposal does not completely address all the critiques faced by WHO, however, it will contribute to ensuring its authority is strengthened.

Conclusion

Beyond the implications of IHR (2005)'s criticism of WHO, its infringements on human rights, public health and trade due to State Parties non-compliance are huge concerns. Therefore, the urgent reform of the IHR (2005) becomes paramount in ensuring global

health security and global corporation given the globalization of public health. These reforms must incorporate compliance mechanisms otherwise key global health actors risk confrontation and exertion of national autonomy in the event of public health emergencies, which remains unpredictable.

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