Public Health in Post-Conflict Societies:

Why Cote d'Ivoire Remained Ebola-Free in the 2014 Epidemic

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Mischief managed!

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I. Introduction

The Ebola epidemic took the globe by surprise. From Médecins Sans Frontières' (MSF) cry for international assistance to the email scandal exposing the World Health Organization's (WHO) intentional delay of humanitarian relief, Ebola exposed the unwillingness of the international community to respond to the budding outbreak causing it grow into a regional epidemic and even crossing into Europe and the United States.[1] Unfortunately, international attention was not garnered for the disease until it had cleared customs at the airports of Western nations. Ebola outbreaks had occurred before in Africa but the virus was new to West Africa. No vaccines or treatment aside from palliative care had been developed, making prevention and quarantine the only methods of combatting the disease[2]. The virus hit fragile post-conflict states that suffered from weak health institutions and lacked the appropriate resources to patrol borders. Ebola was a recipe for disaster.

Health development in developing nations is too often overlooked in favor of other developments such as economic or political, leaving weak nations vulnerable to biological hazards. Health development is critical for healthy populations and extends beyond crisis management to the provision of maternal health, pediatric health, mental health and several other critical health issues. In the Ebola-stricken nations, all health services were affected by the epidemic, causing a vicious cycle of poor health leading to a higher exposure to the virus. Regarding development, Ebola turned back the clock and negatively impacted the economies of Guinea, Liberia and Sierra Leone. [3]

[1]The WHO accused MSF was of inciting public panic by demanding international actin for Ebola. I will expand more on the details of the international community's response in Ch 4.
[2] There is current research for a vaccine.
[3] World Health Organization. "Ebola Response Roadmap Situation Report." The Lancet, 2014: 603-605.

Cote d'Ivoire remained unscathed in the epidemic with no recorded cases despite sharing porous borders with some of the hardest counties in Liberia and Guinea. Why? The simple answer lies in the Ivorian's government leadership of the Ebola effort as compared to relying solely on non-profits or other foreign entities. Cote d'Ivoire shares a similar history with its Ebola-stricken neighbors and also suffers from weak health institutions. This developing nation, however, was able to protect itself from a ravaging epidemic. Thus, it is important to understand why the epidemic was poorly managed in Guinea, Liberia and Sierra Leone but incredibly fended off by Cote d'Ivoire. In this paper, I will limit the discussion to the top two approaches to public health challenges, explain domestic and international challenges to managing the epidemic and conclude with the policy implications for global public health.

II. Approaches to Public Health Challenges

The importance of public health in developing countries is well-established. Inadequate access to medical help is an underlying risk driver, as it leaves populations susceptible to biological hazards. Developing nations receive millions of dollars annually to grant medical care to their disadvantaged populations. As poor as these nations are and despite their higher vulnerability to biohazards, their communities possess the same leadership ability of individuals in developed nations. Experience during the past few decades has shown that people can organize themselves to solve their public-health issues and other concerns in partnership with government and non-governmental organizations. [4]There are many examples of how inaccessible populations have empowered themselves, bringing about substantial changes in their communities.[5] Development is best done through extensive collaboration among all members of civil and political society.

Public health is where medicine and politics overlap. For a long period, this relationship was not fully recognized. A survey of public health literature in 1966 found that the most texts "included nothing more than a passing reference to politics, and most… did not contain even that."[6] Conversely, the political science texts included in that same survey contained "virtually no references to the politics of public programs."[7] However, both disciplines have since recognized their similarities and several schools of public health have been established in the past 30 years. More recently, a relationship has been established between development politics and public health. The role of public health in developing countries has been acknowledged, even in the establishment of the

[4] Macfarlane, S., Muli-Musiime, F., & Racelis, M. (2000). Public Health in Developing countries. The Lancet, 841-846.
[5] I will expand more on this point, with specific examples, in Chapter 3.
[6] Kaufman, H. (1966). The political ingredient of public health services: a neglected area. Milbank Mem Fund Q.
[7] Ibid.

United Nations' (UN) Millennium Development Goals (MDGs), specifically goals 5, improving maternal health, and 6, combatting HIV/AIDS and other diseases. The 2015 Sustainable Development Goals (SDGs)[8] have taken a more expansive role with specific focuses within SDG3; its ambitious goals include reducing the global maternal mortality ratio to less than 70 per 100,000 live births by 2030.[9]

At the core of public health is the necessity of a strong trust relationship between the public, health care providers, institutions, and policymakers. It is a relationship that is concerned with the provision of rights and the responsibility to guarantee said rights. Tension arises in public health development in regards to whom should bear the responsibility and to what extent a state should forgo its sovereignty in the face of an emergency or a disaster. This schism between rights and responsibility is due to the globalization of public health. A phenomenon that has been noted by John Rosenau as "governance without government", where non-governmental organizations such as non-profits or international organizations demand action and assume some of the state's functional responsibility but not its accountability.[10]

The globalization of public health is inevitable and has been leading to the denationalization of public health in states regardless of whether the state is developing or developed.[11] However, developing nations are disproportionately affected more as they have a weaker grasp on their sovereignty. Public health literature is more concerned with medicine and science rather than development and politics.[12] It is only

[8] The 17 SDGs replaced the 8 MDGs in 2015 to further galvanize international relations and development
[9] UNDP. (2015). Goal 3: Good health and well-being. Retrieved from UNDP http://www.undp.org/content/undp/en/home/sdgoverview: /post-2015-development-agenda/goal-3.html
[10]Sehovic, A. B. (2015). Where are rights? Where is responsibility? Who acts for global public health? Air & Space Power Journal-Africa and Francophonie 6.3, 35-49..
[11]Fidler, D. P. (1997). The globalization of public health: emerging infectious diseases and international relations. Indiana Journal of Global Legal Studies, 11-51.
[12] (Kaufman, 1966)

recently that public health has begun formulating robust social and political theories.[13] There are two main public health theories: the technocratic model and the pluralist model.[14]A third one, the political survival model is not as developed as the other two models and is more concerned with effects of corruption rather than progress and reform. Both models are concerned with the distribution of power in public health development with differences as to where responsibility to provide health and welfare rights lies.

i.) Technocratic Model

The technocratic model of policy presumes the necessity of a political leader to implement reform and progress. While the literature in regards to this model stresses that this political leader does not necessarily have to be from a state's political system, there is no discussion on the effect of outsourcing policy-making in developing countries. Reform can occur from an international organization or other non-state actors (NSA). The literature suggests that a political champion is needed to maximize public interest and motivate global action in response to a public health emergency.[15]

In fact, there are several cases in which a political leader or an NSA successfully garnered attention and mobilized action. The International Campaign to Ban Landmines, championed by Princess Diana led to the creation the 1996 Ottawa Treaty on human security. An alliance between two strong NGOs, US AIDS Coalition to Unleash Power (ACT-UP), and the South African Treatment Action Campaign, brought

[13] Buse, A., & Glassman, K. (2008). Politics, and Public Health Policy Reform. International Encyclopedia of Public Health, 163-170.
[14] Ibid, 165.
[15] Alesina A (1992) Political models of macroeconomic policy and fiscal reform. World Bank Policy Research Working Papers. WPS 970,September 1992.

the HIV/AIDS pandemic to the U.N Security Council's attention.[16] The Global Witness campaign to ban "blood diamonds," whose sale fueled brutal civil wars in Sierra Leone and Liberia, resulted in the Kimberly Process to certify non-conflict diamonds.[17] All these reforms were possible through the experienced planners and managers that had sufficient political will.

Public health policy literature suggests that the technocratic model is the most viable mechanism to implement change. [18]In regards to public health in developing nations, the 'technocrat' tends to be a foreign NSA. While these foreign technocrats may be sufficient to land issues on an agenda and reach implementation, their policies often attempt to force a "one-size-fits-all" development policy. Big development policies often do not travel well because they exclude local input. The best-designed policies are always contingent on local conditions, making use of pre-existing advantages and seeking to overcome domestic constraints. [19][20] An infamous development project that exhibits the shortcomings of a "one-size-fits-all" policy is the PlayPump project which aimed to provide easier water access throughout Southern Africa. PlayPumps are playground merry-go-rounds that are connected to a water pump system and are hence powered by the children's energy. The project was an innovative method of addressing water scarcity, garnered millions in funds and installed hundreds of pumps.[21] However, the PlayPumps cost four times more than traditional pumps and required specialized

[16] Gonzalez A and Munar W (2003) The Political Economy of Social Sector Reforms. Region II, Economic and Sector Study Series. Washington,DC: Inter American Development Bank, December.
[17] Macfarlane, S., Muli-Musiime, F., & Racelis, M. (2000)
[18] (Alesina, 1992)
[19]Rodrik, Dani (2014) World Too Complex For One-Size-Fits-All Models. Havard Kennedy School Website http://www.hks.harvard.edu/news-events/news/news-archive/world-complex
[20]By domestic constraints, I am referring to environmental constraints
[21] Graham Saunders, S., & Borland, R. (2013). Marketing-driven philanthropy: the case of PlayPumps. European Business Review, 25(4), 321-335. (Emphasis added)

maintenance and repair. Several pumps replaced traditional pumps in areas that did not have shallow underground water at all, rendering the PlayPumps useless.[22] In fact, to just meet a community's daily demand for water, "children would have to play for *27 hours every day* to meet PlayPump's target of providing 2,500 people per pump with their daily water need".[23] There was no local consultation, and the pumps were harming local communities. Simply stated, development policies that do not recognize the needs of the local communities and that are not practical are doomed to fail.

ii.) Pluralist Model

The pluralist model highlights the relationship between politicians and interest groups, national and local agencies, political parties and professional medical associations. It assumes that politicians will serve the interests of these different groups and emphasizes the political competition of groups and ideas. This model suggests that policy-making is caused by how organizations and individuals seek to protect and promote their narrow interests. Reforms are the end results of incentives and benefits being given to preferred communities. [24] There is an acknowledgement of the importance of the informal and formal rules of the interactions between these groups and politicians, positing that these factors affect the feasibility of reform.[25] Some rules governing interaction in the public health system of developing countries may include,

[22] (Macfarlane, Muli-Musiime, & Racelis, 2000)
[23] Ibid, 12.
[24] North, D. (1990). Institutions, Institutional change and Economic Performance. Cambridge,UK: Cambridge University Press.
[25] (Buse, 2008)

for example: 'clientilistic hiring practices in public health facilities or extensive discretionary spending on health by entities other than the Ministry of Health'. [26]

Within the context of development, the pluralist model is difficult to represent with specific cases as previously discussed with the technocratic model. The technocratic model is a top-down approach to development, with a champion directing a development target or project. Hence, it is easy to pinpoint specific cases and to analyze closely their impacts-simply follow the technocrat. In the pluralist model, it is a bottom-up approach where several stakeholders collaborate to develop widespread development measures. The pluralist model's "champion" is the collaboration itself not the collaborators. Pluralism is the method by which health, sustainable democracies develop. It is the development of civil and political society by the people of a state as compared to a technocrat leading short-sighted development targets. Pluralist policy approaches have a far more-reaching effect because the collaboration is not merely concerned with a specific tangible development goal; it is concerned with the development of the society as a whole.

The pluralist model appears to be the most successful path for public health development as it includes all responsible stakeholders and does not place all the responsibility in the hands of a single champion or an ambitious politician. In developing countries, especially post-conflict nations, the civil and political society have been deeply affected by brutal conflicts and need to recover to lead further the path to resolution and democracy. Additionally, it closely reflects how developed nations form public health policies. Health systems are very prone to corruption. Corruption can

[26] Ibid,164.

occur through several channels such as excessive medical treatment, fraud in billing, large and small-scale diversions of public funds at different levels of management, no guarantee that all health services are of value to those buying them, and many other examples. Pluralism, where all actors are given equal weight, reduces corruption and promotes oversight. [27]

[27] (Buse, 2008)

III. Domestic Challenges

Wars, fought against a foreign enemy, often unite countrypersons in the name of nationalism and patriotism. Civil wars tear the fabric of a country- a tear that more often than not does not fully heal. Civil wars fracture the public's trust in the state and its institutions. Cote d'Ivoire, Guinea, Liberia and Sierra Leone all protracted brutal civil wars which have greatly weakened the already fragile states. As the public health industry centers on a relationship of trust between the public and health institutions, they are difficult to develop in post-conflict societies. Non-state actors (NSAs) are therefore extremely critical in providing much-needed health services to the underserved populations. NSAs in all four countries consist of foreign non-profit organizations, WHO missions and aid from Western nations. They tend to be considered more trust-worthy than state institutions as they provide critical health necessities such as vaccinations and emergency care. However, NSAs tend to be more focused on short-term goals rather than long-term development goals that would develop the state's national capacity. In Guinea, Liberia and Sierra Leone, years of short-term goals by health NSAs led to the weakening of state public health institutions rendering them incapable of facing the 2014 Ebola outbreak. That is not to suggest that Cote d'Ivoire does not also suffer from structural problems within its health system. However, the difference between Cote d'Ivoire and its Ebola-stricken neighbors lies in Cote D'Ivoire's higher inclusion of local stakeholders in the development of its health system. If the public health institutions of a developing country involve more local and national organizations as compared to foreign organizations, then it will increase the country's resilience to biohazards, thereby increasing its potential for political development.

Cote D'Ivoire, Guinea, Liberia and Sierra Leone share more in common than simply their geographic locations. The borders of the four nations are mere lines that cut through towns, ethnic groups and even families.[28] Hence, travel between all four nations is very common as borders cut through unmarked forests. Gregory Warner, African correspondent for NPR, documented the porosity of the borders in the region during the Ebola outbreak while visiting Nimba County in Liberia which borders both Cote d'Ivoire and Guinea: "I'm standing on the edge of a shallow stream through the forest that separates two West African countries: Ivory Coast and Liberia. Here there is no fence. No sign. No border guard to prevent my crossing".[29]In fact, throughout the region travel between nations is fairly common as states lack the resources to effectively patrol borders. This diffusion of borders allowed Ebola to travel rapidly between Guinea, Liberia and Sierra Leone. During the peak of the epidemic, several Liberian and Guinean counties bordering Cote d'Ivoire were among the most affected counties with infection rates of 100- 296 cases per 100,000 inhabitants[30]. Cote d'Ivoire shares a quite porous 778km long border with Liberia and 812 km border with Guinea, but there have not been any cases on the border. The epidemic managed to cross the European continent into the UK and Spain and the Atlantic Ocean but could not cross into a neighboring country.

A safe assumption to make would have been that Cote d'Ivoire would have had some cases of Ebola if not, at least, one case. Not a single case, however, has been reported throughout the duration of the epidemic. What policy decisions make Cote

[28] Warner, G. (2014). Guarding The Ebola Border. Retrieved from NPR: http://www.npr.org/sections/money/2014/11/18/ 364144837/guarding-the-ebola-border
[29] Ibid.
[30] Dixon MG, S. I. (2014). Ebola viral disease outbreak—West Africa. CDC

d'Ivoire distinct from its neighbors? Is it possible to pinpoint the policies that effectively protected the nation from the largest known outbreak of Ebola? West Africa facesseveral domestic challenges in that allowed stem the rapid spread of Ebola. Before the epidemic had struck West Africa, the public health institutions in the region were fairly weak. Sierra Leone has two doctors per 100,000 people, Liberia has only one per 100,000 inhabitants, and Guinea has 12 doctors per 100,000 people.[31] While Côte d'Ivoire has more health professionals than its respective neighbors at 14 doctors per 100,000, it was not and still is not ready to handle an Ebola outbreak. They do not have enough ambulances or enough protective health gear to protect health professionals. [32]However, they still work to prevent an epidemic despite their glaring inability to deal with an outbreak if it does occur.

i.) Challenges Within

Meliandou, a village in the rural Guinea Forest Region, is where Ebola first struck. A young boy, Emile, became infected after playing with bats, natural hosts of the *ebolavirus,* in December 2013. He passed the disease onto his family members, and when community members were assisting with the burials, they became infected as well. The disease was starting to spread to other communities as well and by late March, it had reached Liberia and Sierra Leone. The disease remained hidden for nearly three months as symptoms develop after the lengthy incubation period of two-three weeks. Symptoms appear suddenly and are flu-like for the first week followed by a hemorrhagic fever leading to a coma or shock and eventually death. As such, the first stage of the disease is difficult to distinguish from other common diseases. In fact, some officials

[31] CIA. (2013). The World FactBook: Phyiscian Density.
[32] Coulibaly, D. S. (2014, October 29). Regional Health Director. (G. Warner, Interviewer)

mistook the outbreak for cholera.[33]Ebola is transferred through close contact with an infected individual's bodily fluids, and infected corpses are the most infectious source of Ebola. The virus is not airborne- yet the rate of the infection during the epidemic was akin to that of the common flu.[34]Ebola's rapid transmission can be partially pinned to West African burial traditions. One of the traditional burial customs is to wash the deceased and then for the relatives of the deceased to wash in the same water. [35] Other traditions include going through the deceased's belongings and even sleeping in the same room.[36] As these procedures involve high contact with bodily fluids, it is not surprising that Ebola was able to spread quickly among communities.

No cases had been previously identified in Guinea, let alone in the region. [37]The Ebola epidemic has affected the country's economy, social relations, food security, politics and its overall development. While the nation is rich in natural resources, poverty is widespread. Average living conditions are considered poor even by regional standards.[38] The current president, President Alpha Conde has been dramatically improving the economic governance and attempting to weed out the widespread corruption. However, Guinea came to be viewed as a source of regional instability due to its periodic political unrest, ethnic tensions and the rise of transnational drug trafficking. While most global engagement in Guinea has been focused on health assistance, Guinea has very few fully- equipped hospitals and inadequate access to

[33] lynn, Daniel, and Stephanie Nebehay. "Aid Workers Ask Where Was WHO in Ebola Outbreak?" Reuters. Reuters, 05 Oct. 2014. Web. 23 Nov. 2014

[34] Nishiura, H., & Chowell, G. (2015). Theoretical Perspectives on the Infectiousness of Ebola Virus Disease. Theoretical Biological and Medical Modelling 12.1

[35] Chippaux, J.-P. (2014). Outbreaks of Ebola Virus Disease in Africa: The Beginnings of a Tragic Saga. Journal of Venomous Animals and Toxins including Tropical Diseases.

[36] Ibid.

[37] There has been a single case of an Ebola subset virus Taï Forest virus in 1994. It involved a scientist who became ill after conducting an autopsy on a wild chimpanzee in the Tai Forest. The patient was successfully treated in Switzerland.

[38] Human Rights Watch (HRW), "Guinea: Witnesses Describe Security Force Excesses," November 29, 2010.

diagnostic tests. The epidemic further highlighted the weaknesses of the nation's healthcare infrastructure. Most importantly, it cast a spotlight on the deep mistrust between the population and the absent or abusive state institutions. Local health institutions in all three nations and international health NSAs were quickly overwhelmed by the growing number of cases. "In the current outbreak, the number of patients has far exceeded local capacity, which resulted in a vicious cycle in which more cases lead to overloading of facilities which leads to more cases"[39]

Sierra Leone has a high number of international organizations that focus on improving the security sector at the expense of developing other areas, especially health. [40] Maintaining stability in the region is a high priority for most Western countries for economic reasons, especially the procurement of bauxite.[41]At the height of the epidemic, the British military was deployed to Sierra Leone to enforce quarantines and provide logistical support.[42]They also built a temporary treatment facility and assisted other international organizations. Conversely, Liberia has already seen a significant investment in its health systems, engineered by one of the best-managed assistance programs in Africa. However, health workers were not being regularly paid and went on several strikes demanding pay:

> In February 2014, nursing staff in a number of public health facilities went on strike. The employees wanted to raise awareness of the precarious financial situation they were in and refused to accept any reductions of their allowances. In response, Walter Gwenigale, the minister of health at the time, threatened not to pay their salaries for February 2014 and to lay people off. This led to criticism by the National

[39] Frieden, T. R. (2015). Ebola in West Africa—CDC's Role in Epidemic Detection, Control, and Prevention. Emerging infectious diseases.
[40]Topka, K. H., Kaufmann, A., & Zanker, F. (2015). The Ebola Outbreak in Comparison: Liberia and Côte d'Ivoire. African Affairs, 72-91
[41] State Department, Country Reports on Human Rights Practices for 2013, February 27, 2014.
[42] Human Rights Watch (2010)

Health Workers Association of Liberia (NAHWAL) and a refusal to work with the minister, with the strikes resuming in March.[43]

Most health professionals are located in the capital, Monrovia, or regional capitals. However, most clinics are run by international organizations. There was never an extensive public health network in the country. This absence of state institutions fueled the deep mistrust between the public and the state, leading to great challenges in the epidemic's management.

NSAs in West Africa have been provide health necessities and serve underserved populations. However, while they take on the responsibility of the state to provide health and welfare services, they are not accountable for the rights of the individuals they serve. The state is accountable for these rights. States are responsible for ensuring a) the territorial and physical security of citizens, b) protecting lives and livelihoods, and c) bearing accountability internally and internationally.[44] The rise of NSAs is leading a shift away from developing nations' sovereignty, fragmenting their already weak grasp on power and ability to guarantee traditional and human security.[45]In the rural regions of West Africa, NSAs are the main providers of necessary services that governments are unable to deliver, acting as an added patch of fabric to the government. This shift in power is changing the role of states to becoming regulators rather than providers of citizen welfare, health, and security.[46]

This phenomenon of "governance without government" is best exhibited in Haiti's 2010 post-earthquake relief situation, where hundreds of NSAs descended onto

[43] Ibid
[44]. Conteh-Morgan, E., Šehović, A. B., Gilbert, A. N., Hook, K., Spet, L. C. S., Force, F. A., ... & Rajagopalan, R. P. La vision du monde de la Chine et les représentations de so n engagement en Afrique. Self-translated.
40–47
[45] Ibid.
[46] Sehovic (2015)

to the country to provide assistance. The Haitian government and its citizens were excluded from their nation's own recovery as the NSAs desired to be "in on the action".[47] No single entity was leading the relief effort, not even the Haitian government, which led to countless redundancies and widespread corruption.[48]The same scenario unfolded during the Ebola outbreak, where local inclusion was at a minimum in the Ebola-stricken nations. In fact, an official who works for Samaritan's Purse, which was providing extensive relief during the epidemic, stated: "Why would the world allow what is potentially a global epidemic to be managed by three of the poorest countries in the world?".[49] That statement is emblematic of the problem with the NSA industry, where they are viewing the tragedy and not the solution. In Haiti and West Africa, foreign NSAs were managing the catastrophe at hand but not fully understanding the construct of the social and cultural system in which it occurred. NSAs are a self-feeding industry whose survival relies on the demand for their services; a successful NSA is one that is no longer needed for its services. A common occurrence is the growing need and influence of the NSAs. The final mission of an NSA is to ensure that it aids in the development and cultivation of a state's national capacity, not increase a state's dependence on the NSA.

ii.) Cote d'Ivoire's Health Campaign

Governments of developing nations are often well-aware of their country's needs and shortcomings. The government of Côte d'Ivoire was well aware that the nation was

[47] Ibid.
[48] Schuller, M. (2007). Invasion or infusion? Understanding the role of NGOs in contemporary Haiti. *Journal of Haitian Studies* , 96-119.
[49] Sun, L. (2014, September 11). Global response to Ebola marked by lack of coordination and leadership. Retrieved from Washington Post:< https://www.washingtonpost.com/national/health-science/global-response-to-ebola-marked-by-lack-of-coordination-and-leadership-experts-say/2014/09/11/35365264-39dc-11e4-8601-97ba88884ffd_story.html>

not equipped to handle an Ebola outbreak.[50] Instead, the national government focused on prevention. Prevention began when the government set up a hotline number for anyone who suspects they or someone has Ebola. The capital also sent out orders to have health workers to take people's temperature when they crossed national borders. [51] The health officials had no training in Ebola management but attempted their best to monitor for any signs of symptoms that are associated with Ebola. [52] These measures were being taken in March 2014 when the outbreak began in Guinea.

The Ivorian government also sought the assistance of NSAs but maintained its role as the leading entity behind its Ebola awareness campaign. CARE International is a prominent international NSA with substantial influence. They assisted the Ivorian campaign by leading educational sessions in rural areas. The session utilized posters and storyboards designed by the Ivorian Ministry of Health, further supporting the government's campaign.[53] Locals were more receptive of these sessions as they were led by Ivorian individuals who worked for CARE as compared to having foreigners lead the sessions. Adjoua Martine Konan, who attended a session, initially thought Ebola "was a just a rumor…created by Westerners to stop us from eating bushmeat."[54] As bushmeat is an affordable source of protein that locals long relied on, it was difficult to accept that it was causing the spread of Ebola. However, after understanding how Ebola spread and the risk bushmeat poses, Konan went back to her village and spread the news about the epidemic.

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[50] Coulibaly, D. S. (2014)
[51] Ibid.
[52] Traore, M. (2014, October 29). Field Coordinator, CARE International. (G. Warner, Interviewer)
[53] Palmer, M. (2014, July 11). Ivory Coast: Stopping Ebola at the Borders. Retrieved from CARE Internationsl: http://www.care.org/impact/stories/ivory-coast-stopping-ebola-borders
[54] Ibid.

> Konan returned to home and started holding meetings with neighbors. Families are now eating more fish, pork and beef instead of bushmeat, she said. Konan also has coached her neighbors in washing their hands regularly and encouraged them to avoid shaking hands and other normal greetings that involve touching. She crosses her arms over her chest to demonstrate. "It is hard for us to change our habits," she said, "but we know we need to, to stop transmission."[55]

Koné Disso, an Ivorian social worker, was on an Ebola education campaign greeting the families he met with both hands in the air, a smile and says, "I greet you like this now! Remember, Ebola!" [56]The state led a campaign which involved the participation of social workers, preachers, teachers, soldiers and health professionals. They involved all important stakeholders who have the most contact with citizens. This campaign consisted of training all participants how to teach and approach their audiences on Ebola prevention, disease identification and how to act if a person appears to be infected."[57] Ebola awareness campaigns have been airing on radio and television. Songs have been written about the disease, its symptoms and how to avoid transmission. Ringtones airing in markets were advising against shaking hands, eating bushmeat or touching the sick/dead.[58] Ivorian culture is not very different from Liberian or Sierra Leonean, where families live close together in tight living space, share meals from the same plate and take great care of their sick. These campaigns were not easy to conduct as it was hard to reconcile disease prevention with cultural customs. However, the campaign's promotion was aggressive and eventually effective.

Before being asked by the central government to gather reports on Ebola, a regional health director was telling clinics and hospitals to send him daily Ebola watch

[55] Ibid.
[56] Gilliam, E. (2014, October 8). In Côte d'Ivoire, Ebola knocking on the door. Retrieved from UNICEF:Cote D'Ivore: In Côte d'Ivoire, Ebola knocking on the door
[57] Ibid.
[58] Ibid.

reports, receiving a hundred reports a day at times. [59]The central government later issued official prevention directives and requested continuous monitoring and data reporting. This prognosis was not placed simply to prevent an outbreak but to be able to manage successfully the first possible case. Cote d'Ivoire's success in preventing Ebola from entering its borders lies not in a robust public health infrastructure but solid, widespread communications networks.

[59] Coulibaly (2014)

IV. International Community's Response: WHO's failures

From an epidemiological perspective, the 2014 Ebola epidemic was a surprise. The most common explanation for the spread of the Ebola epidemic is the institutional failure at the international level, specifically the World Health Organization (WHO). The WHO has an office dedicated specifically to epidemic management, Global Outbreak Alert and Response Network (GOARN). In September 2015, the Associated Press published several internal GOARN emails, dated June 2014-August 2014, which revealed the inner workings of the organization during the rise of the epidemic.[60] In these emails, a field Dr., Dr John Scheifflin, stated that Liberia and Sierra Leone were "overwhelmed with outbreaks… outbreak vigilance is at a minimum".[61] Two days later, a staff epidemiologist suggested the invocation of the International Health Regulations, or IHR (2005). [62]The IHR is an agreement between 196 countries to work together for global health security in the face of epidemics and pandemics. The agreements specify four key guidelines: development of national public health capacities; identification of priority areas for action; expansion of national IHR implementation plans and maintenance of said capacities. However, Sylvie Briand, the head of the Pandemic and Epidemic Diseases Department at the WHO, stated that IHR invocation should be maintained as the last resort, despite the fact that it was the largest outbreak of Ebola. [63]A few days later, a memo prepared by senior WHO officials stated that "IHR invocation "could be seen as a hostile act in the current context and may hamper collaboration between WHO and the affected countries."[64] In response to a Médecins

[60]Associated Press. Interactive document archives. 29 Nov 2015. http://hosted.ap.org/specials/interactives/_documents/who-ebola-emails/
[61] Ibid.
[62] Ibid.
[63] Ibid.
[64] Garrett, L. (2015, December 09). Ebola's Lessons. Foreign Affairs.

Sans Frontières report on the outbreak, Several WHO officials accused (MSF) of exaggerating the extent of the epidemic and "inducing panic". By August 28th, 2014, there were 3,052 confirmed cases and 1,546 deaths. In the same week, IHR was finally invoked and on September 19th, the U.N Mission for Ebola Emergency Response (UNMEER) was established.

In addition to the late response, inefficient equipment was delivered by WHO to health officials out on the field. An email dated August 20th, 2014 sent by Dr. Jacob Mufunda highlighted the fact that his treatment center in Sierra Leone received inefficient chlorine, which is vital for disinfection. Dr. Mufunda stated that "we could hardly detect any active ingredient in it".[65] He also discovered that the stock delivered to the capital, Freetown, was just as inefficient. If the inefficiency were not discovered, "the consequences of using it could [have been] catastrophic, and cause immediate infection to the entire staff with the deadly virus". [66]

Other scholars have pointed to the disparity between the amount of aid pledged and the amount that is mobilized. The U.S. Agency for International Development (USAID) issued a press release stating that will commit to “providing resources for 1,000 new beds, 130,000 sets of personal protective equipment, and 50,000 hygiene kits'. [67]As of February 2015, less than half of the finances, personnel, and supplies promised by the global community had materialized on the ground. [68]However, even the aid that had reached the field was expensive and inadequate. Cases were in the thousands, and there was a high demand for hospital beds. The Department of Defense

[65]Garrett, L. (2015, December 9). Ebola's Lessons. Foreign Affairs.
[66] Ibid.
[67] Ibid.
[68] Quigley, F. (2015, December 9). The Poor and the Sick. Foreign Affairs.

built a "$22 million, 25-bed field hospital in Liberia to provide care for Ebola-stricken health workers"[69]. Several analysts and organizations later panned the hospital as a paltry response when at least 800 beds were needed in Freetown alone.

In August 2014, the CDC's director, Thomas Frieden visited Liberia to assess the extent of the Ebola epidemic. He later told reporters "“I will say that in the 30 years I've been working in public health, the only thing like this has been AIDS. And we have to work now so that this is not the world's next AIDS".[70] Frieden was, in fact, referring the international community's response to the diseases rather than the disease itself. Just as with the AIDS pandemic, the WHO failed to recognize the magnitude of Ebola early on in the outbreak. While the international response to the epidemic was slow and contributed to its spread across West Africa, it still does not explain why Ebola did not cross into Ivorian borders.

ii.) Media Coverage

Media coverage of the epidemic in the Western hemisphere was rather frantic as West Africans were attacked for being primitive and refusing care. "Whereas American aid workers infected with the Ebola virus are portrayed as unlucky heroes, ordinary West Africans navigating the Ebola outbreak are seen as fearful and ignorant deniers clutching to traditional practices."[71] Stigmatization of subpopulations affected by an unfamiliar disease is not new and was rather common during the AIDS pandemic. Stigmatization leads to the inhibition of any effective public health response. In the mid-1980's several WHO officials raised the alarm about the amount of attention the disease

[69] Ibid.
[70] Ibid.
[71] D'Harcourt (2015)

was receiving, the common refrain was "Since more people die of diarrhea—or cancer, or hypertension, or malaria, or whatever—than of AIDS, why is it getting so much money and media attention?"[72] As with both diseases, stigmatization only increased fear and contributed to its spread. Additionally, fear of a disease tends to make governments view a public health issue as a security threat and in turn they might issue security and military responses. In fact, the U.S and the U.K have both channeled aid through the military.

The media along with several health officials suggested the spread of Ebola was due to the consumption of bushmeat and traditional burial customs, which usually involved kissing or touching the deceased. While these practices might explain the contagion's spread, they do not account for the hostility towards health officials by the locals:

> Guinean Villagers deliberately withheld initial Ebola virus cases from an outbreak team led by the U.S. Centers for Disease Control and Prevention (CDC), Doctors Without Borders, and their own government…Health workers sent to inform communities about the epidemic in remote regions of Sierra Leone were ignored, threatened, or, in one tragic case, killed… Residents of the West Point neighborhood in Monrovia, pillaged and looted an Ebola holding center.[73]

These were all events caused by the deep distrust between the people of the affected countries and their respective institutions. As the Ebola-stricken nations have witnessed blatant corruption the suggestion that the Ebola epidemic was a conspiracy or a ploy to collect money is not unthinkable. The governments of all three countries did not effectively communicate details about the disease. In Liberia the army was used to enforce quarantine: ineffective communication and displays of brute force do not build

[72] Garret (2105)
[73] Ibid.

trust. Rural villagers in Guinea, who are the most at risk for the virus, had no reason to trust corrupt government officials that barely interact with their respective regions in the past thirty years. Weeks before the epidemic struck Liberia, health workers went on a massive strike over pay and thus were viewed with suspicion when Ebola arose as rumors had spread that it was a plot to collect foreign aid. In fact, only a third of all public health officials in Liberia are paid. [74]As for the residents of West Point, they were livid that an Ebola holding center was placed in their community overnight without any consultation.

When appropriately educated, locals were willing to change their beloved traditions and enforce self-quarantines. For example, villagers in Sierra Leone's Kenema District were willing to forgo traditional burials as long as the sanitized burials could be witnessed and, in some cases, done by members of the community trained for this purpose. [75]A CDC report even indicated that locals protected themselves using "plastic bags and other household items". [76]In rural villages in Sierra Leone, simple quarantines were created and imposed by the locals themselves. Guests were welcomed but then instructed to sit a few feet away. In another village, "the women's group agreed to stop traveling to trade in surrounding areas, and the young people's group agreed to stop attending parties in nearby villages".[77] Since these measures were created and well-understood by the locals, they were immensely successful.

[74] Ibid
[75] Sharma, A. e. (2014). Evidence for a Decrease in Transmission of Ebola Virus — Lofa County, Liberia, June 8–November 1, 2014. CDC.
[76] Ibid
[77] D'Harcourt (2015)

V. Conclusion & Policy Implications

Emile, the two-year-old who was patient zero in the outbreak, poked a major hole in global health policy and shed light on the weaknesses in the World Health Organization. The Ebola epidemic has raised the question of "Who acts for global health?" and has led to several reforms in the World Health Organization, as it attempts to restore its position as the leading entity on global health issues. Most of these reforms have focused on the expanding the IHR to include new, emergent and re-emergent diseases as well as non-infectious diseases. The IHR will also focus on developing core public health preparedness and response at national levels by designating national contacts in every member state to ensure adherence to the new regulations.[78] However, the language of these new reforms is rather vague in regards to *how* it intends to strengthen the public health institutions of developing nations, especially in post-conflict societies. As a continent, Africa has 25 percent of the global disease burden but only 3 percent of the world's health workers. [79] Developing strong health institutions in the region is not an easy task, yet not impossible if development policies account for the local communities and their needs. Social actors in disadvantaged communities are knowledgeable and capable of acting in creative ways that ultimately transform structures from within[80] as seen in Cote d'Ivoire.

NSAs, such as MSF, which provided two-thirds of the treatment and care in the regions affected by Ebola, led the effort in the 2014 Ebola epidemic relief. While the approach of most NSAs excluded local input, they were critical in providing health

[78]Sands, P., Mundaca-Shah, C., & Dzau, V. J. (2016). The Neglected Dimension of Global Security—A Framework for Countering Infectious-Disease Crises. New England Journal of Medicine.
[79] Anyangwe, S. C., & Mtonga, C. (2007). Inequities in the global health workforce: the greatest impediment to health in sub-Saharan Africa. International journal of environmental research and public health, 4(2), 93-100.
[80] Metzl, J. M., & Hansen, H. (2014). Structural competency: Theorizing a new medical engagement with stigma and inequality. Social Science & Medicine,103, 126-133.

necessities in West Africa and should not be completely excluded from future developments or crises. However, NSAs must be accountable to at least national governments and the World Health Organization. This lack of accountability arises from the fact that there is no one entity that leads the development process in developing nations. Too often are developing nations excluded from their own recovery or development; this exclusion leads to weaker national capacity. It also leads to the following: "NSAs that can pick and choose where they serve, under what policies, and for how long; a lack of protocols … and a dearth of deployment trained professionals"[81]

Health emergencies do not arise without some forewarning. Zoonoses, diseases that cross over from animals to infect human beings, such as HIV and Ebola have long been predicted.[82] While there is little incentive in the pharmaceutical industry to research and create vaccines or treatments for rare zoonotic diseases[83], prevention is possible through other means. Prevention involves developing health education campaigns and improving educational, financial, and governance structures. Individual and population health is intricately linked to political and economic systems. Research has proven that "resource-poor environments elicit a range of physiological and cellular adaptive responses that lead to chronic diseases".[84]

Global health policy should look more systematically at how to strengthen countries in their health policy capacity at the national level and how to increase the

[81] Sehovic (2015)
[82] Ibid.
[83] Orphan drugs are medicinal products intended for the diagnosis, prevention or treatment of life-threatening or very serious diseases or disorders that are rare. As the FDA mandates that orphan drugs are not allowed to be patented, there is little incentive to develop orphan drugs as they are not profitable for pharmaceutical companies. As such, most orphan drugs come out of academia where the prime incentive is a dedication to research. A similar mandate also exists in the EU.
[84] Ozanne, S. E., & Constância, M. (2007). Mechanisms of disease: the developmental origins of disease and the role of the epigenotype. Nature clinical practice Endocrinology & metabolism, 3(7), 539-546.

accountability of NSAs.[85] There is a need for a multilateral global framework that can (a) provide an adequate rapid response for public health emergencies and (b) further develop national capacity of public health networks in weak nations. Most importantly, national capacity development should involve local stakeholders and be led by national governments. Weak states' public health institutions are also weak links in global health, strengthening them translates into a stronger global health network that would be more resilient to pandemics and rising non-infectious diseases such as diabetes and obesity.

Former US Health and Human Services Secretary Kathleen Sebelius and WHO Director-General Margaret Chan announced the Global Health Security Agenda (GHSA) in announced in February 2014; the GHSA is aimed at accelerating IHR implementation, particularly in resource-poor countries that lack the capacity to comply with the regulations. The GHSA consists of 50 nations, international organizations, and non-governmental stakeholders, acting as global entity leading NSAs. GHSA offers a structure through which developing states can seek assistance in developing core public health capacities, while maintaining a central role in guiding aid. The GHSA has 11 action packages that outline targets and objectives to be undertaken within five years.[86] The GHSA addresses the issue of no leadership among NSAs and would allow affected states to maintain control over the recovery and development process, thereby increasing their national capacity. This would allow weak states to grasp firmly their sovereignty and regain their responsibility as the provider of citizen rights and welfare.

[85] Kickbusch, I., & de Leeuw, E. (1999). Global public health: revisiting healthy public policy at the global level. Health Promotion International, 14(4), 285-288.

[86] The GHSA packages1. *antimicrobial resistance*; 2. *zoonotic diseases*; 3. *biosafety and biosecurity*; 4. immunizations; 5. *national laboratory systems;* 6. *surveillance systems*; 7. disease reporting; 8. *workforce development*; 9. emergency operations centers; 10. linking public health with law and conducting multi-sectoral rapid responses; and 11. medical countermeasures and personnel deployment.

The Ebola epidemic was nothing short of a tragedy that ravaged the already-fragile states of Guinea, Liberia and Sierra Leone. The international community failed to prevent adequately prevent the outbreak from spreading turning it into a regional epidemic. NSAs were too often viewing the tragedy of the epidemic rather than the solution of developing stronger health institutions. The GHSA will attempt to resolve the issue of NSAs "non-leadership" and allow states to maintain their sovereignty in the times of crisis but also develop their capacities beforehand. Long-term research is needed to assess the effect of the GHSA on weak states' development. It is eventually up to the states themselves to assert their sovereignty and be assisted by NSAs to develop their capacity.

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