**Essay topic:**Global Health and The Pharmaceutical Industry

**Research Question:** *To What Extent did the ‘Western bias’ in Global Health Security and Pharmaceuticals contribute to the magnitude of the Ebola Outbreak in West Africa?*

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**Introduction**

The West Africa Ebola outbreak in 2014, was both unprecedented in its magnitude and impact, with a mortality rate of up to 90% and a blindspot within the market for vaccines and drugs for this disease (Na et al.). Stemming from this, was the resuscitation in the interest within Global Health Security, the Pharmaceutical Industry and the importance of minimising the vulnerability of societies to diseases that possess the capability of spreading across international borders. This epidemic not only displayed how the world is only as safe as the most fragile states but also the necessity for all countries and all stakeholders, including the private sector, to identify, stop and employ preventive measures in the face of infectious diseases.

Through the course of this outbreak, many issues have been highlighted, with regards to the failures of Global Governance and securitisation attempts, within literature. However, though less analysed, the trend of ‘Western bias’ in both Global Health Securitisation and within Pharmaceutical innovation greatly contributed to the enormity of this Epidemic. An enormity that spanned over 2 years, resulting in a total of 26,616 cases and 11,310 deaths (“2014 Ebola Outbreak in West Africa Epidemic Curves”).

But what is western bias?

Western bias can take on different definitions within different areas of study. In global politics, for example, it can be seen in the fact that international politics and global security policy, still has an unequivocally western bias, with a western political governance structure at its heart, despite being concerned with issues of global significance. Western bias can also be seen in the sphere of businesses, in the tendency for firms to prioritise profitable markets - and in the case of pharmaceuticals, these markets are most often western.

The scope of this essay will be explored under the realm of world studies which will allow for a greater understanding of this concept and its implications both within and beyond the Ebola epidemic. A world studies approach allows for the exploration of a range of perspectives, including global governments, organisations as well as Pharmaceuticals, thus allowing for a deeper understanding of the extent of the manifestation of western bias within the epidemic. In saying this, it is also vital that accounts of the epidemics in the eyes of patients, survivors, and on-site health care workers, are also explored, as these are voices that have at times been silenced by the numbers and statistics that have been greatly publicized in the media. Due to the lack of access to these people, secondary research will be used to obtain interviews and statements from the key stakeholders in this epidemic. Further secondary research will then be conducted to discuss and analyse its relation to western bias. Therefore in this extended essay, I aim to pull back the gossamer that surrounds this epidemic and shine a light on the consequences that western bias holds in epidemics - past, present and future.

This will be done through the lenses of both Business Management and Global Politics. Business management will allow for an understanding of this issue from the perspective of the pharmaceutical industry. Through the use of business concepts, a clearer picture can be painted of the runnings of the pharmaceutical industry and the extent of which ‘western bias’ influences pharmaceutical objectives and research & development. Due to the understanding of multiple perspectives being the core of Global politics, these skills will be used to create an awareness of this issue from a variety of lenses. The interdisciplinary approach required in world studies accommodates a deeper understanding of why this bias exists in the first place, whether or not it can be justified and finally the possibility of this bias being eliminated in the future.

**Through the eyes of Ebola Survivors**

Currently, there is limited information available about the true experiences and sufferings of ebola survivors before, during and after this infection. And as a result of this, we saw that epidemic control measures taken by organisations like the World Health Organisation (WHO) were largely inappropriate for the culture and setting of this epidemic. This will be discussed in a later chapter, however, first, we must understand the implications of Ebola and the western bias that characterised it, on the people and communities that were most deeply affected by it.

A study, titled ‘Once there is life, there is hope’ Ebola survivors' experiences, behaviours and attitudes in Sierra Leone, 2015, explores the myriad of economic, social and health challenges posed on Ebola patients during the Sierra Leone outbreak.

The survey showed that when questioned about potential sources of transmission, ‘60.7% of the participants stated that they had taken care of sick individuals’, ‘14.3% had participated in burial or funeral’ practices. In doing further secondary research, this large percentage is unsurprising, as official reports displayed these foreign attempts of securitisation and advising the public to seek medical aid and deviate from traditional burial practices, as being met with extreme local resistance in all three nations.

Attempts to control this crisis included foreign aid, dressed in what would have resembled spacesuits, coming into homes, disinfecting and setting up quarantines, have all been disrupted by a nationwide distrust, stemming from fear. Locals were persistent in denying the existence of the disease as these communities had been living in the same environment for centuries, without ever encountering Ebola. Thus it was perceived to be a fabrication by Governments to spread fear, mayhem and thus compliance.

In fact, at this time, hospitals became associated with death, as most often those who were admitted, did not make it out alive. Thus locals turned to traditional healers and medicines. The most celebrated was the employment of “warm salt baths and salt drinks for the prevention of Ebola ” (Umeora et al.). This is reflected in the fact that ‘21.4% of participants (in the survey, had) sought treatment from medical professionals outside a healthcare facility’ and ‘3.6% (had sought treatment) from a traditional healer’. The study also displays that before alerting officials, ‘self-medication was used’, thus seeking aid would only be employed as a ‘means of survival’. It is important to note here that although this study may seem to paint the full picture of the Ebola outbreak in Sierra Leone, this survey was only conducted on 28 people. However, despite the relatively small sample size, this survey does still characterise the general reactions and behaviours of the communities in question. For example, Data from Guinea’s Ministry of Health indicated that 60% of Ebola cases were the result of taking part in traditional burials. And in Sierra Leone, the WHO estimated that 80% of cases were also linked to these practices (“Factors That Contributed to Undetected Spread of the Ebola Virus and Impeded Rapid Containment”).

Though these numbers were displayed in official reports, what was not reflected, however, was that these failed attempts of securitisation stemmed from a lack of understanding of the societal premise of this epidemic, which led to this resistance and thus adherence in the first place. With regards to the burial practices, the WHO attempted to convince the public to opt for cremation. Although in theory, this would allow for a decrease in transmission, it would involve abandoning centuries of tradition and denying their loved ones a crucial step in fostering the “transition from the world of the living to the spiritual world.'' (Manguvo and Mafuvadze).

To counter this, Public Health officials aimed to emphasize the incredible lethal nature of Ebola and the fact that there was no treatment, vaccine or cure available, in hopes of drawing members of the public experiencing symptoms into Ebola containment facilities. However, these messages had the opposite effect, as in the eyes of the public, if western medicine had no treatment or cure, there would be no point in hospitalizing sick family members. Instead, they continued to tend to the sick in the comfort of their homes, as opposed to allowing their loved ones to die in isolation.

After evaluating the information above, it can be said that the magnitude of this epidemic can be largely attributed to the failures of the ‘Western focused’ Health Security measures put in place. These measures, though not stemming from a place of mal-intent, still posed great consequences to these three countries. The actions taken by world governments and the WHO were largely derived from Western standards and policymakers, which have proven to have had a complete disregard of local values and customs So even though these securitisation attempts may theoretically work in a western setting, they were perceived as violent and thus compromised the trust between the public and members of the government and international aid.

**WHO to blame?**

It is clear now that health security should be “people-centred” as, after all, irrespective of threat, what matters is people -- not borders, international relations or even politics and economics. Though this people-focused approach may seem obvious for an entirely *human* problem, as seen in the previous section, the understanding of the societal context in which the epidemic took place was not implemented in the WHOs attempts of securing the disease. However, the magnitude of the Ebola epidemic cannot be attributed *solely* to this western bias.

Throughout the course of the outbreak, the WHO faced immense criticism over their ineffective and inadequate response to the epidemic. In March 2014, the WHO tweeted that “Ebola has always remained a very localised event”. It was not until August 2014 - 138 days after it was first identified and the death toll had reached over 1,000 people - when the WHO finally declared Ebola as a Public Health Emergency of International Concern (PHEIC) (“Progression of the Epidemic”).

We can now begin to evaluate whether this is an isolated case, did the failings of the WHOs response extend solely to the 2014 Ebola epidemic?

Since 2005, the WHO has declared four PHEICs; the 2009 H1NI influenza epidemic, Polio in 2014, Ebola in 2014 and Zika in 2018 (Giesecke et al.). The H1N1 epidemic was declared a PHEIC 41 days after detection and Zika 65 days (Hoffman and Silverberg). Though this time period was not as extreme as the case in the Ebola epidemic, we see that there is still a significant delay in framing global health threats as security threats. But the matter of the fact is, health is a security issue. Especially in a world where the shortest incubation period (time between exposure and appearance of first symptoms) can be shorter than the longest plane ride, thus disease can spread beyond means of control in a matter of days.

In a report, released by the Ebola Interim Assessment Panel (though commissioned by the WHO), it was summarised that this slow response was “surprising” given WHO’s experience with outbreaks and health promotion and it is “still unclear” why no response was taken sooner. Instead, many of the nongovernmental organisations already running in these countries (like Médecins Sans Frontières, or MSF) were rendered helpless in the face of this disease, with no guidance or adequate coordination mechanisms to aid their response. Yet despite being commissioned by the WHO, this 12-page report was incredibly critical of their actions throughout their response, underpinning the major faults within the WHOs capacity to respond to international health emergencies. Although the lack of contextual understanding of the setting of this epidemic was highlighted, the report lacks the portrayal of the manifestations of western bias within their response.

In a report by AM J Public Health titled ‘Delays in Global Disease Outbreak Responses: Lessons from H1N1, Ebola, and Zika’, it is made apparent that there is a consistent trend between the WHOs framing of PHEICs and the disease in question having a direct impact on a US citizen. H1N1 was declared a PHEIC ten days after a US citizen was infected, Zika, 7 days after and Ebola, 6 days. Although this is merely an observation, it is hard to deny that a direct impact on the United States, a country with immense social, political and economic power, is a swaying factor in the framing of diseases as PHEICs.

It can be argued that the spread of the disease across international borders and placing a larger number of communities at risk, characterises the urgency and threat needed to declare a PHEIC. However, it cannot be denied that other cases of international transmission of these diseases do not appear to be as closely tied to the WHO fueling a global political response. Zika was, for example, present in 21 countries, spanning across the entire world. However, most of these countries were developing countries.

Thus, after reviewing the data, it is apparent that this idea of a western bias also lends itself to the sphere of global disease outbreak responses. The severity of the Ebola epidemic was, unfortunately, not the only manifestation of this bias. These diseases have shown us that there is no place for discrimination in the realm of health. Where it is clear that it is not within the WHO’s capacity to handle an outbreak of this magnitude, health is still an increasingly global issue, and therefore should be the responsibility of world leaders, in order to create a truly ‘Global’ Health Security framework.

**Ebola from the frontlines**

A paper by the BMC Health Services Research, titled ‘Health workers experiences of coping with the Ebola epidemic in Sierra Leone’s health system: a qualitative study’, explores the challenges that several health workers in Sierra Leone faced at the time of the outbreak. As summarised in the paper, “Health workers are at the heart of the health system, and therefore listening to their voices about what helps them stay and do their job during a crisis is vital for building a responsive health system”.

The paper characterises many of the struggles that would have been faced by health workers as a whole during this epidemic and their opinions on the preparedness of health systems in managing a disease like Ebola. It was found that many of the interviewed health care workers reported experiencing a shortage of medical resources, such as isolation beds, personal protective equipment (PPE) and infection prevention and control (IPC) training. In a particular case, “one health worker explained that he was allocated 2 pairs of gloves per week”. Once again, this study was only conducted on a small group of 25 health workers, thus the conclusions drawn are merely explorations of their experiences in specific communities, instead of generalisations. Despite this, many of these findings carry similarities to other reports on the Ebola epidemic, for example in a study conducted by UNICEF, it was found that 87% of primary health units felt that the lack of PPE was a large inhibiting factor in their ability to fight against this disease. This study also highlighted the strain caused by the lack of medical tools, such as vaccines and treatment options, as a challenge, hindering them from meeting the needs of the people they aim to serve.

This is an issue that, throughout the Ebola epidemic, MSF has been quite vocal on. As put by a MSF Health worker in Guinea, “[they were] fighting forest fires with spray bottles” (“Why Don’t MSF Teams Have the Tools They Need?”). It is worth noting that at the emergence of the disease, there were zero vaccines or other medical tools to treat Ebola patients in the market, despite the fact that a promising vaccine candidate emerged 10 years prior to the epidemic. A vaccine that potentially could have saved the lives of more than 11,000 people, but never made it into clinical trials, as there was no great enough demand to justify the costs. Therefore health workers were left empty-handed and their ability to provide adequate treatment as a result of the inability of the pharmaceutical industry to recognise ebola as a profitable disease, which will be explored in the next section.

**Can we expect Private firms to take on a role in Public Health?**

From 2007 to 2016, the global Pharmaceutical industry invested USD 1.36 trillion in R&D (EvaluatePharma 19). Today, the cost of developing a new drug can amount to over USD 1.38 billion, and consequently, it can take 10 to 15 years before a drug reaches the market (“The Pharmaceutical Industry and Global Health: Facts and Figures”). For example, in 2015, only 56 new pharmaceutical products were launched, with over 7,000 compounds still in the development stages (“The Pharmaceutical Industry and Global Health”).

Although it is easy to place the blame on the pharmaceutical industry for being a profit-driven corporation, it is important to note that this is often the nature of all private sector businesses. Thus we cannot necessarily hold the pharmaceutical industry accountable for not choosing to invest in more ‘benevolent’ endeavours.

Though financial information is not always easy to come by - with regards to firms operating within this industry - it is safe to assume that the continuous increase in the industries R&D expenditure over the past twenty years has only amounted to great profitability, as the Pharmaceutical industry, particularly in the US, consistently ranks as one of the most profitable industries.

So, how does Ebola play into this?

The problem here is that high R&D expenditure can drive businesses to focus on medical innovation that will in return, yield the greatest return. Though this focus on profits may seem inherently immoral, firms within the Pharmaceutical industry - despite the role they play in Public Health - are businesses first and foremost. They have shareholders. They have employees. And just as any other business, they must be able to generate profit in order to survive.

However, the reality of this is that the medical needs of people who *can* afford to pay the prices for medicine trumps the needs of the poor. The result? A severe lack of drugs, treatments and vaccines for diseases that account for 90% of preventable deaths worldwide (Stevens 4).

This Pharmaceutical focus on western medical markets left healthcare officials, governments and patients in a severely compromised position, with no means to combat the Ebola epidemic. And as a result, a decision was made to conduct clinical trials on experimental medicines - that prior to this, had never been given to a human - on Ebola Patients. On the 11th of August 2014, a WHO panel came to “the consensus that it is ethical to offer unproven interventions with as yet unknown efficacy and adverse effects, as a potential treatment or prevention.” (“Ethical Considerations for Use of Unregistered Interventions for Ebola Virus Disease (EVD)”). This decision was completely unconventional, as ordinarily strict policies are put in place to ensure that new drugs and vaccines undergo extensive testing prior to public exposure. These measures are put in place to guarantee the safety of consumers, as 17% of drugs fail clinical testing solely on the basis of safety (Fogel). The ethical dilemma behind this decision becomes even more apparent when we take into account that the majority of Ebola patients, were those originating from impoverished backgrounds, with low literacy levels, thus bringing about the question of whether or not these patients were able to comprehend the extent of risk imposed on them by taking part in these trials.

In the end, this global feat to accelerate a process that under normal circumstances could extend to a decade, resulted in great costs reaching hundreds of millions of dollars, all of which could have been avoided, had Pharmaceuticals invested in drugs for non-western markets in the first place. The western bias here refers to the market focus on western or profitable markets. In theory, we cannot blame industry for prioritising profitability, as it is after all the nature of business. However, in the case of pharmaceuticals, where their runnings are so closely intertwined with matters of global health & security, there should be greater prioritisation of the people instead of profits, which, especially during and before the Ebola epidemic, did not seem to exist.

**The implications of ‘Western bias’ beyond the Ebola epidemic**

Today, there is still a long list of neglected tropical diseases (NTDs), with no available medical treatments, affecting billions of people and costing developing countries billions of dollars every year. Additionally, on average, a new infectious disease has emerged every year for the past 30 years (“Ready or Not? 2017”). Researchers estimate that “birds and mammals harbour anywhere from 631,000 to 827,000 unknown viruses” that could potentially spillover into human populations (Yong). Though we are unable to predict the next big disease outbreak, global governance structures **must** realign their frameworks to facilitate a truly global response.

If we look at Influenza, for example, the 1918 pandemic is estimated to have infected 500 million people, or one-third of the global population (“1918 Pandemic (H1N1 Virus)”). If this virus returned in our modern-day society, it is estimated that the death toll could reach 400 million people (Quick). Because of the interconnected nature of our world, through air, land and water transport, an outbreak could theoretically bypass its epicentre and spread to every population in the world within a hundred days. This holds tremendous consequences on every functioning level of society. If we take into consideration the implications of this on industry, disease outbreaks hold the capability affecting staff, customers, suppliers and transportation, thus rendering firms unable to carry out their functions, leaving a gaping hole in the economy. It is for this reason that disease is often considered as a greater risk than a nuclear bomb, as it carries the potential to affect not only the immediate impact zones but global populations.

Thus the ‘Western Bias’, as seen in the Ebola Epidemic, could only result in disastrous global consequences if change is not put in place. It is clear that greater investment is required within the pharmaceutical industry, to foster innovation in medicines that target diseases outside of the Western sphere. Similarly, greater communication and transparency between global governments and affected populations and a consideration of cultural structures should be prioritised, in order to accelerate global preparedness for the next epidemic.

**Conclusion**

Overall, it is safe to say that this concept of western bias manifests itself in both areas of global health security and within pharmaceutical objectives. Although not the sole factor, it is this bias that largely contributed to the severity of the epidemic, rendering all stakeholders unprepared for the tragedy that was the 2014 West African Ebola outbreak. We can only hope that world Governments, pharmaceutical industries and the WHO have all recognised their failings, with regards to Ebola, in order to ensure that they are better suited to take on the next global health crisis. Because, when referring to disease, it is not a question of *if* it will happen again, but *when*.

The interdisciplinary focus of this essay, within areas of both Global Politics and Business Management, allowed for the exploration of the ways in which this bias manifested itself in the Ebola epidemic, and made it clear that:

1. ‘Classic’ outbreak methods are ill-suited for large scale epidemic control responses.
2. All stakeholders (including world governments) should play a role in health security because health is a truly *global* issue.
3. Pharmaceuticals must realign their R&D models in order to suit public health concerns.

How realistic these actions are go beyond the scope of this 4,000-word paper, but should be explored in order to gauge a greater understanding of the issue at hand. However, it can be said that this western bias played a large role in the magnitude of the 2014 West Ebola outbreak, one should also note that there were a number of other factors, such as the existing fragility of health systems in the three countries, that when coupled with the failings of global health security and global pharmaceuticals, left us with the monstrosity that was the Ebola epidemic.

Through looking at the research question - To What Extent did the ‘Western bias’ in Global Health Security and Pharmaceuticals contribute to the magnitude of the Ebola Outbreak in West Africa? - under these two lenses, facilitated for a more holistic understanding of how health threats, such as disease, requires a global multi-stakeholder response. This collaboration between stakeholders - Governments, NGOs, Pharmaceuticals - equally applies to how Global Security Policy can move forward from its western roots and, in time, shape itself to be a truly global framework.

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