MAPPING CONTROVERSIES

THE EBOLA VIRUS DISEASE OUTBREAK

SPRING 2015

Teaching Assistant: Amah Edoh

Sara Chaterjee - Camille Demange - Reidun Gjestard - Clara Gold - Alexandra Guibal
Julia Herve - Elsa Labouret - Yena Lee - Shabnam Moallem - Xun Ji
Zdenka Postrelena - Jeanne Reig - Noé Tissot - Britt Van Der Donk - Pauline Vidal
# Table of Contents

Executive Summary ........................................................................................................4  
Introduction ....................................................................................................................4  
Background on the 2014 Ebola outbreak .....................................................................7  

Chapter 1: Root causes of the outbreak .....................................................................10  
1. Overview of the controversy ......................................................................................10  
2. Methodology ..............................................................................................................11  
3. Unravelling the controversy ......................................................................................11  
4. Main trends of the debate .........................................................................................12  

Chapter 2: Politics of the global response .................................................................15  
1 – Motives of intervention ..........................................................................................16  
1. Overview of the controversy ......................................................................................16  
2. Unravelling the controversy ......................................................................................17  
3. Main trends of the debate .........................................................................................19  
2 – Nature and timing of the international response ..................................................20  
1. Overview of the controversy ......................................................................................20  
2. Unravelling the controversy ......................................................................................21  
3. Main trends of the debate .........................................................................................22  
3 – Quarantine and travel bans .....................................................................................25  
1. Overview of the controversy ......................................................................................25  
2. Unravelling the controversy ......................................................................................26  
3. Main trends of the debate .........................................................................................28  

Conclusion .....................................................................................................................29
Executive Summary

In December 2013, Guinea reported its first casualties from an Ebola outbreak which turned out to be the largest ever witnessed for this disease. While previous Ebola outbreaks did not make more than a few hundred casualties and were contained in remote areas, the virus that spread from Guinea into mostly Sierra Leone and Liberia had conditions that created the ‘perfect storm’ for an outbreak out of containment control (Arkin, 2014). A class of fifteen students at the Paris School of International Affairs at Sciences Po has mapped the controversies around the question why this Ebola outbreak has been able to grow out of control, and why there seems to be a consensus that the international intervention has not been able to control it effectively. The first study dealt with debates regarding the “root causes” of the current Ebola outbreak, analyzing the claims made on the long story of political decisions taken in the last century and having direct or indirect impacts on the health systems and governance of the three main affected countries, Sierra Leone, Guinea and Liberia. A second controversy focused on the intervention of the international community, and found that the controversy is divided over three main issues: the motives of actors to intervene; the nature and timing of the intervention; and the effectiveness of the use of quarantines and travel bans. Further, the development of treatments and vaccines has been studied from the economic as well as the ethical side: issues that have been at the centre of the debate include the responsibility of the pharmaceutical companies to develop treatments and vaccines, the clinical trials designs to test them as well as the prioritization of treatment among the affected population. Finally, a last study reflected on the importance of incorporating socio-cultural norms in an effective response against the outbreak.

Introduction

Overview of the project

In December 2013, Guinea reported its first casualties from an Ebola outbreak which turned out to be the largest ever witnessed for this disease. While previous Ebola outbreaks did not make more casualties than a few hundred and were contained in remote areas, the virus that spread from Guinea into mostly Sierra Leone and Liberia had conditions that created the ‘perfect storm’ (Arkin, 2014) for an outbreak out of containment control. In August 2014 the World Health Organisation declared the outbreak an international health emergency, eight months after the first case had been detected (“WHO | Statement on the 1st meeting of the IHR Emergency Committee on the 2014 Ebola outbreak in West Africa,” 2014). In September statements from the United States and British government followed, urging that the Ebola outbreak posed an international security threat through emigration flows (Fox, 2014).

With a death toll of more than 10,000 so far in more than seven countries (WHO | Ebola Response Roadmap Situation Report, 2014) ¹, the actors interested in the outbreak are largely diverse. Governments, international organisations, pharmaceutical companies, experts and civil society actors are all engaged in the response on the outbreak, acting and arguing from highly different backgrounds and interests. The responsibility of the causes for the outbreak and the subsequent response is being

¹ The reported case fatality rate in the three intense-transmission countries among all cases for whom a definitive outcome is known is 71%.
debated, as well as the unpreparedness of the pharmaceutical industry to have an effective vaccine ready. Non-governmental organisations and academics criticize the sluggishness of the international response, while civil society in affected countries is remarkably absent in the international discussion.

This white paper aims to provide an overview of this debate, in showing the different actors involved, their statements, their interests, and how the discussion on the Ebola outbreak evolved over time. Within a group of 15 students, four controversies were researched, being those that came out of the initial research as the most contested: the intervention of the international community, the incorporation of socio-cultural norms in the response, the development of treatments and vaccines, and the root causes of the Ebola outbreak. Over four months much material has been found to create an overview of the different actors and opinions at stake in the Ebola debate. However, as the debate around Ebola has been playing in many different sectors and arenas, the overview provided in this report is far from exhaustive. Less traditional actors, such as community leaders, patients, and even the affected governments, are less vocal in (online) media and academic articles, and are therefore underrepresented.

**Studying controversies**

Scientific research is at the basis of finding truth in current scientific knowledge creation. However, traditional research methodologies that result in academic publications do not fully cover all aspects of truth that can be found around a (social) phenomenon. Theories debated by scientists, political opinions around the implications of a phenomenon and so on represent the highly diverse nature of phenomena in our world (Lepinay, n.d.).

The tensions between these differentiating opinions and findings can make knowledge controversial. A controversy emerges when there is no absolute answer or opinion, but instead they highly differ among the different actors concerned with the topic. These diverging opinions can come from a wide range of actors, such as academics, politicians, governments, civil society and so on, and can exist both within and between disciplines. When attempting to find the ‘truth’ of a phenomenon, it therefore does not suffice to research only the findings of one of these voices.

Studying controversies, and therewith their many different actors voicing opinions about them, allows to show the complexity of an issue and attempts to overcome the dominance of authoritative voices in the debate, while allowing non-experts on the matter to easily grasp the shape of the controversy and main issues and arguments phrased by the key actors.

**Main questions**

The main questions raised globally, and therefore at the center of this white paper, are the following:

- What were the determinants of the response to the current Ebola outbreak?
- Who were the main actors involved in the debate?
- How did they shape the controversy and its evolution?
Further, many other questions were leading our reflexion on the Ebola outbreak and shaping our sub-controversies:

- What are the “root causes” of the epidemic and its extent?
- How and why has the response to the Ebola outbreak at the national, regional and international level been inadequate in addressing the Ebola outbreak?
- What kind of ethical issues did the development of vaccines and treatments against the Ebola virus foster?
- What were the conflicting view about socio-cultural norms, and how did this shape and influence the debate around the response to the outbreak?

These questions cannot be answered by one single point of view or arena of expertise. A comprehensive combination of disciplines and actors is therefore essential to better understand the range of possible responses to the formulated questions.

**Methodology**

In order to map the controversy and to answer to the main questions raised above, our group of students started by researching a wide range of material on the current Ebola outbreak, reading different academic articles and articles from newspapers to get a sense of the general debate and main controversial issues. After collecting and sharing those data, a discussion within the group allowed to identify important sub-topics and debates, and to make hypotheses on the most important aspects of the controversy in order to conduct more specific and targeted research.

Our methodology is therefore mainly based on in-depth research, using academic papers (e.g. Google Scholar, PubMed, Scopus), news articles and scientific journals (Factiva), websites of the main international organizations present in the debate (WHO, MSF, FDA, NIH etc.), personal blogs focusing on the Ebola disease, social media (e.g. Twitter). Each group also conducted interviews with prominent actors on their specific area of study, allowing us as a class to also gather more personal information and experiences as well as anecdotes from the field, therefore showing a larger picture of the debate.

Then, the identification of key actors for each controversy and their respective arguments, as well as key timeline elements, allowed us to shape the debate and its evolution over time, to analyse the oppositions and discussions between actors, within and between a wide range of arenas.

However, this methodology has some limitations as several actors, less present in the media or the scientific and medical articles, are being under-represented. We tried to fill this gap by using the knowledge produced by the different interviews we conducted.
Background on the 2014 Ebola outbreak

The ongoing outbreak of Ebola virus disease (EVD, also known as Ebola hemorrhagic fever) is the most widespread epidemic of the disease in history. As of April 29th, 2015, the Center for Disease Control and Prevention, in accordance with the World Health Organization (WHO) updates, reports a total of 26,277 suspected, probable and confirmed cases and 10,884 deaths, though the magnitude of the outbreak is substantially underestimated due to missing data. Although Ebola is no longer invading the news headlines in Western media, the epidemic is still striking the three most affected countries, with a total number of 3,548 cases and 2,377 deaths in Guinea, 10,322 and 4,608 in Liberia, and 12,371 and 3,899 in Sierra Leone respectively (“CDC | Case Counts,” n.d.). The reported cumulative case fatality rate climbed up to 71% in the most affected areas for whom a definite outcome is recorded (WHO | Ebola Response Roadmap Situation Report, 2014).

While the Ebola virus disease was first described in 1976 in two simultaneous outbreaks in Nazra, in South Sudan, and in Yambuku in Democratic Republic of Congo, this 26th outbreak is the first one to occur in West Africa reaching both urban and rural areas. Many other outbreaks occurred around sub-Saharan Africa since 1976, yet the ongoing one is the most widespread and complex since it caused more cases and deaths than all the other outbreaks combined, and reached nine countries by land and air: Guinea, Sierra Leone, Liberia, Nigeria, the United States, Senegal, Mali, Spain and the United Kingdom (“WHO | Ebola virus disease,” 2015) Extreme poverty, dysfunctional health systems, local burial customs, mistrust of state officials and the spreading of the disease in dense urban areas are parts of the reasons why the outbreak has reached such a catastrophic level (WHO | Ebola Response Roadmap Situation Report, 2014). Since no case of the Ebola virus disease had ever been reported in the region, it took several months before the authorities recognized the virus (Baize et al., 2014). The WHO only declared the Ebola outbreak a public health emergency on August 8th, 2014.

Researchers believe the outbreak started in the village of Meliandou, in the Guékédou Prefecture in Guinea and later identified a one-year old boy who died in December 2013 as the index case of the current Ebola virus disease epidemic.

Guinea’s Ministry of Health first reported an outbreak in four sub-districts to the WHO on March 24th, 2014, with a total of 86 suspected cases, including 59 deaths, and several suspected countries in neighbouring countries. By late May 2014, the outbreak had reached the capital of Guinea, Conakry, where 2 million people live. Liberia reported the disease in mid-April 2014, and cases in the capital, Monrovia, were described in mid-June 2014. The number of new cases has been decreasing quickly in Liberia. Although one case was identified on March 20th, 2015, no further cases were identified during the 21 days of monitoring of contacts. Despite Sierra Leone’s efforts to slow down the spread of the disease by closing some schools and shutting its borders for trade, the first case in Sierra Leone’s capital, Freetown, was reported in late July 2014 (“CDC | Previous Outbreaks Updates (March 2015),” n.d.). Nonetheless, the first case of Ebola in Sierra Leone occurred in May 2014: the first infected patient was a tribal healer who had been treating infected Ebola patients near the Guinean border and died from the disease on May 26th, 2014. The outbreak is still going on in Guinea, Liberia and Sierra Leone.
Medical Facts

The Ebola virus disease causing the 2014-2015 outbreak belongs to the Zaire species, which is part of the genera of Ebolavirus, which belongs to the virus family of Filoviridae. It is thought that the natural Ebola virus hosts are fruit bats of the Pteropodidae family.

Transmission

- **Animal to Human Transmission**: close contact with the blood and other bodily fluids of infected animals of the rainforest.
- **Human-to-human transmission**: in case of direct contact with blood, secretions, organs and other bodily fluids of infected people, and through contact with surfaces and materials infected by the fluids.
- **Infectiousness**: Infected people remain infectious as long as their blood contains the virus: this explains why health workers and caregivers in burials are the most at-risk groups.
- **Sexual Transmission**: Scientists know that the Ebola virus can remain in seminal fluids of infected men for 82 days after onset of symptoms. Although there is no formal evidence of sexual transmission of the disease, the eventuality should not be ruled out and Ebola patients should refrain from having intercourse (oral, anal or vaginal) until scientists have more information on the issue (“CDC | Transmission,” n.d.; “WHO | Ebola virus disease,” 2015).

Symptoms and Diagnosis

- **Incubation period**: between 2 and 21 days - humans are not infectious until they develop the first symptoms.
- **Symptoms**: fever, fatigue, muscle pain, headache and sore throat.
- **Related symptoms**: vomiting, diarrhea, rash, symptoms of impaired kidney and liver function, and in some cases, both internal and external bleeding.
- **Clinical diagnostics**: low white blood cell and platelet counts and elevated liver enzymes.

Treatment, Prevention and Control

There is no proven treatment for the Ebola virus Disease yet, however two potential vaccines are currently ongoing human trials, as well as other treatments such as blood products, immune therapies and drug therapies. In order to successfully control the outbreak, several control techniques are required: case management, surveillance and contact tracing, a good laboratory service, safe burials, social mobilization, and most of all community engagement and awareness raising (“WHO | Ebola virus disease,” 2015).

Nigeria is one of the countries who successfully contained the disease within a few weeks. The first Ebola case was a Liberian-American who flew from Liberia and landed in Lagos, where he reportedly died on July 25th, 2014 (“WHO | Ebola virus disease, West Africa” n.d.). The WHO declared Nigeria Ebola-free on October 20th, 2014, with a total of 20 cases including 8 deaths (“Ebola crisis,” 2014b). The first case of Ebola in Mali was reported on October 23rd: a two year old girl coming from Guinea (“Ebola crisis,” 2014a). Mali also reported seven cases including five deaths in a separate outbreak in November, but Mali was declared Ebola-free on January 18th 2015. The outbreak also spread outside of West Africa, causing panic in the Western countries: in October 2014, the United States reported their first case of Ebola, a Liberian man who had been traveling to Dallas from Liberia with the disease. Before dying, he infected the two nurses caring him, who recovered and were declared Ebola-free by October 27, 2014.

The outbreak also spread to Senegal, Spain and the United Kingdom to a lesser extent, with one case and recovery each. The first cases were reported on August 29th, 2014 in Senegal, on October 6th, 2014 in Spain, and on December 29th in the United Kingdom. The WHO declared those countries Ebola-free on October 17th, December 2nd and March 10th, respectively (“WHO | Are the Ebola outbreaks in Nigeria and Senegal over?,” 2014; “WHO | Disease Outbreak News (DONs),” n.d.; (“WHO | Ebola outbreak 2014,” 2015 ).
Table 1: Total number of EVD cases* and deaths by countries as of 29th April 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Total Number of Cases</th>
<th>Total Number of Deaths</th>
<th>End of the Outbreak***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sierra Leone</td>
<td>12,371</td>
<td>3,899</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Liberia**</td>
<td>10,322</td>
<td>4,608</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Guinea</td>
<td>3,548</td>
<td>2,377</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Nigeria</td>
<td>20</td>
<td>8</td>
<td>October 20th, 2014</td>
</tr>
<tr>
<td>Mali</td>
<td>8</td>
<td>6</td>
<td>January 18th, 2015</td>
</tr>
<tr>
<td>United States</td>
<td>4</td>
<td>1</td>
<td>October 27th, 2014</td>
</tr>
<tr>
<td>Senegal</td>
<td>1</td>
<td>0</td>
<td>October 17th, 2014</td>
</tr>
<tr>
<td>Spain</td>
<td>1</td>
<td>0</td>
<td>December 2nd, 2014</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1</td>
<td>0</td>
<td>March 10th, 2015</td>
</tr>
</tbody>
</table>

*suspected, probable and confirmed cases.  **data is until 23rd April
***a country is considered to be free of Ebola virus transmission when 42 days (double the 21-day incubation period of the Ebola virus) have elapsed since the last patient in isolation became laboratory negative for EVD.


Infographic

1. Overview of the controversy

Why are root causes controversial for the Ebola outbreak?

As the 2014 Ebola outbreak affected several countries in West Africa, debates surrounding the reasons behind its extent and various propositions to avoid such human tragedies in the future arose in the media. Voices started to consider not only the medical aspects of the disease but also the root causes, addressing the following questions: why was this outbreak so viral? Who should be blamed? What if rather than an epidemic disaster, this crisis was the result of socioeconomic policies? The main debate surrounding the root causes of the 2014 Ebola outbreak can be summed up in this problematic: are neo-liberal economic policies or bad governance to blame for the weak health care systems of affected countries?

How did this controversy start?

This shift occurred during summer of 2014. In an article published in The Conversation on 24 August 2014, “Epidemic ethics: four lessons from the current Ebola outbreak” (Kerridge & Gilbert, 2014), Ian Kerridge who is the Associate Professor in Bioethics & Director of the Centre for Values and Ethics and the Law in Medicine at University of Sydney and Lyn Gilbert, Professor in Medicine and Infectious Diseases at University of Sydney, argued that the root causes of the outbreak were socio-political and economic conditions: poverty, global capitalism and neoliberalism.

Following this article, several scholars also published papers about the socioeconomic causes of Ebola. For instance, Guillaume Lachenal, who is Professor of Sociology at Sciences Po, wrote in a chronicle published in Le Monde, arguing that sanitary crises such as Ebola have direct causality with IMF-imposed “neoliberalism” (Lachenal, 2014). Again, in September, in an article became popular, “Don't be scared, be angry: the politics and ethics of Ebola” (Hooker, Mayes, Degeling, Gilbert, & Kerridge, 2014), Gilbert and Kerridge underline their reasoning behind the causes, pointing out the lack of basic infrastructure in Ebola-hit countries, a situation they say resulted from IMF policies.

Finally, the spark that caused a blaze was an article published in The Lancet, one of the world’s leading health journals, by Alexander Kentikelenis and his associates on 21 December 2014 (Hooker et al., 2014). He wrote that IMF policies are partly responsible for “underfunded, insufficiently staffed, and poorly prepared health systems” in the three countries most severely hit by the Ebola epidemic — and for him, this is one of the main explanations to why the outbreak spread so rapidly.
2. Methodology

Our discussion was found through searching for articles concerning socio-economic and historical causes of the outbreak in Google Scholar, Pub Med, news websites and activists blogs. The key word searches included “Ebola”, “root causes”, “neo-liberalism”, “IMF”, “World Bank”, “development”, “health care systems”, “development economics” and their various combinations. Interviews were also conducted via Skype with Alexander E. Kentikelenis, Research Associate in Sociology and Political Economy at the University of Cambridge and Guillaume Lachenal, lecturer in History of Science at Paris Diderot University, a specialist in history and anthropology of biomedicine in Africa.

The main issues we came across were the responsibility of the Bretton Woods Institutions in de-structuring national healthcare systems and bad governance on a local and international scale.

3. Unravelling the controversy

Kentikelenis draws a parallel between current austerity in Greece and the situation in affected countries in West Africa. According to him, this health crisis is simply more proof of the danger of the IMF’s structural adjustments. By deconstructing the healthcare systems with cuts in budget and staff, the Bretton Woods institutions would be directly responsible for the intensity of the outbreak and the insufficient and disorganized response. He is in accordance with a school of thought critical to Structural Adjustment Programmes (SAPs) implemented under the pressure of the IMF and the World Bank as a condition for further loans, led by economists as Michel Chossudovsky (1995; 2003), Eric Toussaint (Toussaint & Comanne, 1995), George Tsebelis (1995; 2002), etc. According to them, this outbreak serves their demonstration by illustrating the viciousness of neo-liberal policies. Kentikelenis’ article sparked a debate amongst scholars who took to the mainstream media (The Washington Post) to discuss the extent of the IMF’s role in the crisis.

Responding to these criticisms, some academics disagree and publish articles to deconstruct this explanation. For instance, Chris Blattman, an Associate Professor of Political Science & International and Public Affairs at Columbia University, disagrees with Kentikelenis’ argument. In an article published on The Washington Post, he writes that “we so easily default to a Western-centric view, where it’s our aid or financial policies that are responsible for the success or failure of poor countries. It’s egoistic and exaggerated, and ignores domestic politics” (Blattman, 2014). Interestingly enough, both Kentikelenis and Blattman claim to be trying to help the affected countries by giving them more autonomy - one says the IMF reduced this autonomy, and the other that putting too much responsibility of the IMF is reducing their autonomy...

The debate develops when African studies scholar Kim Yi Dionne and her colleague Adia Benton publish an article in the same newspaper as Kentikelenis and Blattman, titled “5 Things You Should Read Before Saying the IMF is Blameless in the 2014 Ebola Outbreak” (Benton & Dionne, 2015). The authors defend Kentikelenis’ study and add a few analytical comparisons by citing research that has highlighted the IMF and the World Bank’s role in weakening the fight against HIV/AIDS through their neo-liberal healthcare policies.

The IMF does not respond to all these criticisms until December 22, 2014, when Santee Gupta,
Deputy Director at the IMF Fiscal Affairs Department writes a response to *The Lancet* article on "The International Monetary Fund and the Ebola Outbreak" (Gupta, 2015). His response, addressed directly to Alexander Kentikelenis and his colleagues, states that “there are several factual inaccuracies” in Kentikelenis’s statements. It is striking to see the promptitude of the IMF responding to his article, compared to the total absence of response given to previous attacks. The Kentikelenis article in *The Lancet* was adapted for the general media in *The Washington Post* and gained enough media attention for the IMF to respond. Moreover, it directly accused the IMF as being responsible for the Ebola outbreak unlike the more nuanced propositions of Gilbert and Kerridge.

This is the only confrontational debate found in our research, although other actors are expressing opinions on the topic, thus contributing to the debate.

The World Bank director **Jim Yong Kim** is a medical doctor with a PhD in anthropology; he worked for the WHO and has been an administrator for the most part of his career. He suggests that the world should be better prepared for future pandemics with an international “insurance” system made up of bonds on the financial market. At an annual meeting with the World Bank and the IMF on October 10th 2015, Dr Kim announces that one plan his team has suggested is a global pandemic fund that would make it so that “when a global health emergency is declared, financial support would be readily available and flow quickly to support an immediate response” ("World Bank Group President Calls for New Global Pandemic Emergency Facility," 2014).

Two senior academics at Georgetown University specialised in Global Health, **Law Prof. Gostin** and **Prof. Friedman**, also point to the necessity of a Global Health Fund. Their article (Gostin & Friedman, 2014) published in *The Lancet* on October 11th 2014 highlights their opinion that the outbreak intensified because of a failure in leadership. The authors point to the WHO budget cuts and says that the 2014 Ebola crisis calls for a WHO reform.

**Rose Ann DeMoro**, a member of a Californian nurses’ union, wants the world to enforce the Robin Hood tax (a global tax on financial transactions) in the name of better wealth distribution. This would, according to DeMoro’s article "The Underreported Side of the Ebola Crisis" (DeMoro, 2014), strengthen health care systems, making them better prepared for any future pandemics.


### 4. Main trends of the debate

All these actors concede political significations to Ebola. Many actors have not contributed thoroughly to the different debates, which shows little commitment and interest as well as limited knowledge about Ebola. As a matter of fact, people with specific proficiency about this outbreak (medical scientists, West-African specialists) are less present than social scientists. We believe that this constitutes an incoherent nebula of actors who cannot be put together as it is rare that they interact as seen with Kentikelenis’s article. Instead, actors publish their opinions directly on the blogs of
mainstream media outlets such as The Huffington Post or The Washington Post with few attempts to talk to each other in the public domain.

More generally, the multiple debates about root causes of Ebola – and consequently, about relevant responses that should be given – are mainly conducted in the West. Almost none of the actors of our controversy are from the affected countries or have specific knowledge of the country. On the contrary, many actors in developed countries use Ebola as a symbol of their own fight, benefiting of it to drift the debate and make their own political agenda.

The debate surrounding the root causes remain in the field of social science - even though some medical experts take part in the debate, the content focuses around economic systems, world order, politics and governance, colonial history, prioritization of health care and the controversies about development in general in the African continent. For most actors many of these reasons overlap, but two distinct groups and a middle-way group of actors can be distinguished according to their interpretations of the response to the outbreak (figure 1).

- Those who point to the neoliberal world economic order as the root cause of the 2014 Ebola outbreak
- Those who point to bad governance on a local or international scale as the root cause
- The inbetweeners: those who suggest solutions focused on tackling tax evasion or promoting a tax on financial transactions in the world showing the limits of the neoliberal system yet not outright condemning the system

The actors who put forward arguments are medical professionals, sociologists, scholars of African studies, activists and leaders of international organisations. The arenas they present their arguments hover between academic journals and media outlets - the latter being predominant.
Figure 1. Root causes of the outbreak

**Neoliberal choices**
- Ian Kerridge • Prof. Bioethics
- Lyn Gilbert • Prof. Infectious Diseases
- Guillaume Lachenal • Prof. History of Science
- Alexander Kentikelenis • Sociologist
- Kim Yi Dionne • Prof. Poli-Sci & African studies

**Market failure**
- Rose Ann DeMoro • National Nurses United • California Nurses Association

**Bad governance**
- Winnie Byanyima • Dir. Oxfam International • Development, Engineering

**Lack of preparedness**
- Jim Yong Kim • Pres. World Bank Group • M.D & Dr in Anthropology
- Pr. Gostin • Prof. Public Health Law
- Chris Blattman • Prof. Pol-Sci, Economics
- Santee Gupta • Fiscal Dep, IMF • Dr in Economics

Figure 2. Timeline of the actors’ statements

Academic Articles
Organization’s Reports, Blogs
Newspaper Articles
Chapter 2: Politics of the global response

A consensus has been reached concerning the inefficiency and the inadequacy of the response to the 2014 Ebola outbreak at the local, national, regional and international levels. The failure of the international community and of affected West African states to contain the epidemic can be partially explained by pre-existing factors that include corruption, a lack of coordination and weak health systems. Addressing the topic of the response seems essential as it relates to the broader issue of global health governance and ethics and will determine the way future health crisis are handled.

In order to highlight the main controversies regarding the response to the 2014 Ebola outbreak, the following questions have been analysed:

- What is the relative impact of local governments in opposition to international actors?
- What is the effectiveness and credibility of international organisations?
- What roles do local and international economic interests play in the response to the Ebola crisis?
- What is the best way to allocate resources?

Three main sub-controversies related to the Ebola response have been identified:

1. Motives of intervention
2. Nature and timing of the international response
3. Travel bans and quarantines

Methodology
To address those controversies, various statements have been examined, coming from affected and non-affected governments, NGOs, official statements of international organizations, private statements of high level international organisations’ workers (on social and traditional media) and academics.
1 – Motives of intervention

1. Overview of the controversy

Why are the motives of intervention controversial for the Ebola outbreak?
During the outbreak of Ebola how the international community was designed to respond to an imminent health threat became apparent. With the response came along an open discussion on why different actors intervened in controlling the outbreak. Several actors coming from the academic and NGO field blamed the ineffectiveness of the response on the hidden political agendas of the non-affected countries, prioritising former colonial ties over coordination for a most efficient impact. Also, self-interest was raised as one of the reasons why the intervention has not been adequate enough.

Additionally, within this controversy formed a sub-controversy on the adequacy of spending on the response, in which the amount of money spent by the non-affected countries in the outbreak was openly questioned by the United Kingdom.

How did the controversy start?

Debates on how to effectively intervene in the Ebola outbreak took off heavily in the summer of 2014, leading to debates on the controversy identified above.

In July 2014, Laurie Garrett, an expert on viral diseases, published an article on the weak health systems in affected countries as a reason for the outbreak spinning out of control. Swiftly after, in August 2014, John Ashton, president of the UK Faculty of Public Health, criticized very openly the “moral bankruptcy of capitalism acting in the absence of an ethical and social framework” (Ashton, 2014), specifying that the British government and the pharmaceutical industries responded too late to properly halt the spread of the disease. His article was picked up by several newspapers, and evolved into a lengthy discussion on the motivations of Non-Affected governments to intervene in the crisis.

Earlier, in July, Prime Minister David Cameron recognized that the Ebola outbreak might be a threat to the United Kingdom, announcing the donation of aid to Sierra Leone. Several months later in October, he played a leading role in calling for more aid within the Non Affected countries’ community, specifically in the European Union.

The main question guiding the controversy on the motives of intervention is therefore the following: what role did the motives of donors play in the intervention in the Ebola crisis?
Debates surrounding humanitarian intervention

The aid given by non-affected countries and international institutions to contain the Ebola outbreak can be classified as humanitarian aid, which can be defined as “the aid and action designed to save lives, alleviate suffering and maintain and protect human dignity during and in the aftermath of man-made crises and natural disasters” (“Defining humanitarian assistance,” n.d.). This type of aid is to be distinguished from development assistance, which has a more structural, long-term approach.

The controversies often involved with humanitarian assistance are very present in the debate on the motives of intervention in the Ebola outbreak. Humanitarian aid is presented as a neutral form of assistance, irrespective of political association and guided by criteria of impartiality and neutrality (among others). However, in practice the decision to allocate aid, and to whom, are political decisions taken by the respective governments of intervening forces. These questions are pertinent in the debate on the Ebola response, as governments are blamed for acting out of self-interest, and along politically established lines of neo-colonialism.

2. Unravelling the controversy

Once foreign aid starts flooding towards Western Africa at the end of the summer 2014, certain academics, speaking through Laurie Garrett, John Ashton and Peter Piot, suggest that the modality in which aid has been given in the past year, and especially its reliance on former colonial ties, is jeopardizing an effective response by making it inefficient and unequal. After the articles published by Garrett and Ashton in July and August, it took another month before critiques on the motives of aid accelerated, despite the initial large media pick-up of Ashton’s article.

In September 2014, David Fidler, a law professor at Indiana University and associate fellow at the Global Health Security at Chatham House, evaluates the response so far as a “massive failure” of global health governance, causing unnecessary further suffering (Fidler, 2014). In the same period, several academics and journalists openly question the choice of aid allocation towards affected countries. Aryn Baker, the Africa Bureau Chief for the Times, describes the USA military intervention in Liberia claiming that it is helping the country, but leaves the other affected countries out of the response (Baker, 2014).

In October, the discourse intensifies. Laurie Garrett posts another influential article on the post-colonialist patterns of the allocation of aid, warning that the neo-colonial organisation of aid can get donors into sticky situations if the virus cannot be controlled (Garrett, 2015). Peter Piot, the initial discoverer of the Ebola virus, joins in the debate by arguing that the reason for the immense outbreak lies in poor health care systems and a sluggish Western response (Arkin, 2014). John Ashton, whose critique on the British response and the pharmaceutical industry was already picked up in August, follows with a new critique on the slow western response, and the incapability of the pharmaceutical industry to find a solution. An official post from Annick Girardin, the secrétaire d’Etat au développement et à la Francophonie, states the close link between France’s colonial history in Guinea and its current readiness to help (Ministère des Affaires étrangères et du Développement international, 2014).

Various other opinions on the motives of the international response are stated in blogs, most notably by Siobhan O’Grady, a Foreign Policy writer, and Jessica Pearson-Patel, an academic at the University of Oklahoma who researches colonial ties in international public health. Both argue that the strongest incentive for governments to assist in the response is political interest, and closely linked to former colonial structures.

In that same period, governments become more vocal on the threat that Ebola poses to global
security and on their contributions to the fight against the outbreak. The United States recognizes in September Ebola as a global threat, and mentions the exceptionalism of the United States’ position to have the capacity to intervene, when explaining the American intervention in Western Africa to the American population. Shortly after, the country announces its scaled-up military support to mostly Liberia.

Others such as French President François Hollande do mention humanitarian responsibility, insisting on their country’s humanitarian and historical duty towards Guinea.

However, economic, security and diplomatic interests of the non-affected countries providing aid to Western Africa remain the main driving force for the response. In the speeches that followed the WHO’s declaration a state of public health emergency and urged for an international response, some heads of governments such as President Obama, Prime Minister Cameron and President Morales, mention the interests of their own country, mainly relating to the domain of the economy and national security as one of the main reasons for their intervention.

In the beginning of 2015, the debate around the most effective way of intervention becomes more quiet. In February, John Ashton reiterates the importance of pressuring governments to continue health care spending to the affected countries, even when the immediate pressure is gone (Chonghaile, 2015). In support of this argument, the British government insists on the lack of funds that are made available by other Western countries for the response, and lobby for a reform of the WHO emergency team. (Holehouse, 2014; Blanchard, 2015).
3. Main trends of the debate

**Figure 3. Motives of intervention according to actors**

**Politics**
- Francois Hollande • France President
- Laurie Garrett • Academic • Contributor, Foreign Policy
- John Ashton • President UK Faculty of Public Health
- David Fidler • Law prof. Indiana University • Associate fellow at the Global Health Security
- Peter Piot • Discovered Ebola virus
- Siobhan O’Grady • Journalist Foreign Policy
- Jessica Pearson-Patel

**Insufficient intervention**
- David Cameron • UK Prime Minister
- John Ashton • President UK Faculty of Public Health
- Peter Piot • Discovered Ebola virus

**Security**
- David Cameron • UK Prime Minister
- Francois Hollande • France President
- Barack Obama • USA President
- Evo Morales • Bolivia President

**Figure 4. Timeline of actors’ statements**

- London Evening Standard (Joseph Watts) 7/10/2014
- The Independent (Jane Merrick) 8/3/2014
- International Business Times (Connor Adams Sheets) 10/15/2014
2 – Nature and timing of the international response

1. Overview of the controversy

Why is the nature and timing of the international response to the Ebola outbreak controversial?

The international response to the Ebola outbreak has attracted significant attention. On the 17th of October, 2014, in an internal document obtained by the Associated Press, the WHO admitted a “botching response to Ebola outbreak” (Boseley & editor, n.d.). Likewise, a week before, on the 9th of October, 2014, Jim Yong Kim, the president of the World Bank, declared that the global response to Ebola had “failed miserably” (Elliott, 2014).

Two main questions have created tension between the three main actors within this controversy, Médecins sans Frontières (MSF), the WHO and affected governments.

- Whose responsibility is it to lead the response?
- What should be the priorities of global health institutions?

The controversy was first crystallized around the issue of declaring Ebola an “international emergency”. At the time we are writing this report (April 2015), the controversy revolves around the conclusions to draw from the first anniversary of the outbreak.

This controversy mostly involves institutions and their employees and raises the issue of decision-making, leadership and resource prioritization in global health.

How did the controversy start?

The conversation was sparked on the 17th of October, 2014, with the publication of a statement from MSF in the newspaper Le Temps then, two days later, on the MSF website, that called the international response “slow and derisory”, regretting that only an handful of actors are “engaged in the fight over Ebola”.

This conversation is still ongoing and peaked at the end of March 2015, with the publication of the annual report on Ebola of MSF that heavily criticizes the lack of willingness of the WHO to take the lead on the field and to rather rely on fragile health systems in affected countries while reducing operational capacities (MSF, 2015).
The international health response mechanisms

Although MSF had been warning WHO Regional Offices for Africa since March 2014, only in August 2014 did the WHO declare the outbreak an international emergency, which activated the UN Mission for Ebola Emergency Response.

According to its statuses, the WHO “is the directing and coordinating authority for health within the United Nations system. It is responsible for providing leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries and monitoring and assessing health trends” (“WHO | World Health Organization,” n.d.).

The WHO was crippled by pre-existing weaknesses that were recognized in an internal note shared by Associated Press and previously denounced by MSF, Oxfam and Richard Horton from The Lancet:

- The WHO only controls 30% of its own budget and relies on voluntary contribution from the Member States
- There is a lack of coordination between local WHO offices and the Geneva Office. Heads of WHO country offices in Africa are “politically motivated appointments” made by the WHO regional director for Africa, Dr Luis Sambo, who does not answer to the agency’s chief in Geneva, Dr Margaret Chan. According to Peter Piot, director of the London School of Hygiene and Tropical Medicine “What should be [the] WHO’s strongest regional office because of the enormity of the health challenges, is actually the weakest technically, and full of political appointees” (Boseley, 2014).
- The WHO suffered from the diversification of global health actors and institutions: the health sector (the Global Fund to Fight AIDS, Tuberculosis and Malaria, GAVI, and the Bill & Melinda Gates Foundation have all encroached on WHO’s traditional role); non-governmental organisations “[WHO governance mechanisms include only health ministries); the multilateral system (thanks to expanding roles for UNAIDS, and, under Jim Yong Kim’s leadership, the World Bank)” (Horton, 2015b).

2. Unravelling the controversy

The tardiness and adequacy of the WHO actions lead to the introduction of a new actor supported by NGOs and States.

As early as March 2014, the Guinean health authorities ask for MSF’s support in investigating several deaths from unknown causes in the south of the country. On the 31th of March, MSF calls for mobilising “against an unprecedented Ebola epidemic” in a press release. The day after, when asked whether the spread of Ebola was unprecedented, Gregory Hartl, the spokesperson of the WHO, declares that the outbreak is “relatively small still” (MSF, 2014).

On the 8th of August 2014, the WHO declares the spread of Ebola in West Africa “an international health emergency”. However, on the 15th of August 2014, MSF states that, despite the WHO’s declaration, the international effort to stem the largest-recorded Ebola haemorrhagic fever epidemic is “dangerously inadequate to meet the requirements to control the spread of the virus” (“International Response to West Africa Ebola Epidemic Dangerously Inadequate,” n.d.). Furthermore, on the 27th of August 2014, Thomas Nierle and Bruno Jochum of MSF publish a statement on the international Ebola response calling it "slow, derisory, irresponsible".

According to MSF, the level 3 emergency was declared because of the first Western patients who drew large international media attention (“WHO | One year into the Ebola epidemic,” n.d.). However, according to WHO, the emergency was declared after the report on the reunion of a steering committee that “included several MSF staff” was sent to Margaret Chan who “took personal responsibility for the WHO response”. The WHO recognizes the “political dimension of the outbreaks”. The report states that the reasons the WHO cited in internal deliberations included worries that following the procedures for public health emergencies of international concern (PHEIC) to curb the
Ebola epidemic “could anger the African countries involved, hurt their economies, or interfere with the Muslim pilgrimage to Mecca” (“Ebola crisis,” n.d.). However, the WHO denies that politics swayed its decision to declare an international emergency over the spread of the Ebola virus and stress that they had to follow legal constraints.

On the 2nd of September, in a speech to UN member states, MSF International President Dr Joanne Liu warns that the world is “losing the battle against Ebola” and denounces “a global coalition of inaction”. She then officially introduces of a new actor: the military. Indeed, in this speech, MSF officially calls on the UN Member States to deploy civilian and military biohazard assets. Their rationale is the following: the delayed and fragmented response to Ebola left a vacuum that can only be filled by military deployment—logistics, engineering, and supply-chain management. This plea is supported by Oxfam (2014). In their March 2015 reflection report, MSF notes that “This was a very unusual call for MSF, known for keeping a safe distance from military and security agendas to protect its independence in conflict zones. However [...] a desperate call of last resort has to be made”. On the 16th of September, US President Barack Obama announced a military-led response in Liberia, calling for community engagement and decentralization instead of claiming the USA’s role as a leader in the international response.

Following MSF critics, on the 4th of September 2014, WHO leader Margaret Chan describes the WHO as an advisory body that does not have the vocation to provide “direct services”. According to her, the WHO is a “technical agency”, with the governments having “first priority to take care of their people” (Fink, 2014). Presenting the WHO as an advisory body implies a strategy of decentralization. In its reflection report, the WHO highlights the role of countries instead of its own and point out the weak health systems. There are no mentions of their role as leader in the field. However, according to the MSF March report, “instead of limiting its role to providing advisory support to the national authorities for months, the WHO should have recognised much earlier that this outbreak required more hands-on deployment. All the elements that led to the outbreak’s resurgence in June were also present in March, but the analysis, recognition and willingness to assume responsibility to respond robustly were not”. Indeed, they argue that the “WHO is internationally mandated to lead on global health emergencies and possesses the know-how to bring Ebola under control”.

Actors do not all reject the importance of the WHO. According to Richard Horton, in the poorest countries of the world, the WHO remains trusted and influential and “retains extraordinary convening power” (Horton, 2015, p. 1).

The question of priorities also has to be addressed. Indeed, according to Maria Neira, director of WHO’s Public Health and Environment Department: “We have to take into account the other diseases. Just because Ebola is important and spectacular should not necessarily make it a priority from the beginning” (Jóźwiak, 2014). In their 2015 “One year into Ebola report”, the WHO also highlighted the fact that other diseases are as urgent to tackle (“People stopped receiving – or stopped seeking – health care for other disease, like malaria, that cause more deaths yearly than Ebola.”).

3. Main trends of the debate

What are the conflicting views in this debate?

First, MSF argues that the WHO is the only agency with the authority and the legitimacy to lead a
global response to health crises by diverting financial, human and logistical resources to epidemic response.

However, the WHO is not willing to take the lead in the field: their argument is that this institution has an advisory role (Fink, 2014). Some commentators, such as Richard Horton of the Lancet, argue that the WHO is still an essential actor thanks to its legitimacy (Horton, 2015).

Second, MSF blames the WHO for not declaring the situation an emergency until August because of a lack of political will and a fear of economic consequences.

The answer of the WHO is that they were aware of how dramatic the situation was but were stuck to the legal framework regarding an emergency declaration. Moreover, some individuals from the WHO argue that other diseases such as malaria should be given attention as well and that the money for pre-existing programs should not be diverted towards fighting Ebola (figure 5).

*Figure 5. Role of the WHO in the outbreak according to actors*

The shape of the controversy

Analysing the issue was challenging due to the fact that Ebola is still ongoing and that all the actors we identify agree that the response was a “failure of the international community” (Jim Yong Kim, 2014). Although actors communicate, the articulation of the controversy may at times appear to be a “blame game” that does not provide us with constructive comments for the future (figure 6).

- The WHO perceives that MSF is playing the “blaming game”, which makes the conversation tense.
- MSF blames the WHO for being “irresponsible”.
- The WHO expects affected African countries to be leading the response, while African
countries rely on the WHO due to their weak health systems.

- Affected countries tend to be suspicious of NGOs and agencies that might go against their interests (as with Guinea accusing WHO of exaggerating the issue for their own benefits). MSF claims to be pragmatic and recognizes the weakness of affected countries’ health systems.
- Hence, the introduction of a new actor that gathered consensus by affected States and NGOs but was not addressed by the WHO: the military.

*Figure 6. The power plays*

![Diagram showing the power plays between WHO, affected countries, MSF, and the military.]

**The politics of knowledge creation**

Although it is encouraging to see a discussion taking place between the institutional actors, what is striking in this controversy is the absence of the voices of the affected people. Although this debate refers to global anarchy which defines international relations, it would be relevant to hear the opinion of medical workers, patients and the general population. Local communities have a significant role to play in governance and their voices should be heard.

As MSF puts it, “What have we learned from this outbreak and what must be done differently in the future? There are many questions and few simple answers”. (MSF, 2015)
Figure 7. Timeline of the actors’ statements

3 – Quarantine and travel bans

1. Overview of the controversy

Why is the implementation of travel bans and quarantine controversial for the Ebola outbreak?

In order to prevent the spread of the disease, both affected and non-affected countries have resorted to quarantine and travel bans. As of October 2014, 30 countries had enacted travel bans against Liberia, Sierra Leone and Guinea. Several airlines have suspended their flights coming from or to the three most affected countries. Certain countries have also prohibited travellers coming from those countries into their territory. All in all the idea has been to “quarantine West Africa” (Boisselet, 2014).

In the meantime, in affected countries, quarantine has been forced on populations in order to detect new contaminations. In affected countries, mainly in the USA, local authorities have tried to implement mandatory quarantine for returnee healthcare workers who had been helping in affected countries. In both cases, many debates have emerged regarding the trade between costs and benefits of such decisions in terms of winning the fight against Ebola. Notably, an important gap has appeared between politics and bioethics.

The implementation of travel bans and quarantines has been at the heart of many debates between medical workers, populations, NGOS, politicians and so forth, about whether or not it was a useful
measure to fight Ebola. The question is important because it is linked with economic questions, stigma and the ability to recover from the outbreak.

More importantly, both measures are going against the freedom of movement. Thus, the decision of implementing them has to be made seriously. Three questions need to be answered when looking at the question of travel bans and quarantines as a method to control outbreaks: efficiency, ethics and legality.

The controversy about quarantine and travel bans is two-sided. On the one hand there is a debate about what should be the response of non-affected countries in order to stop the Ebola outbreak. Should they implement travel bans? Is quarantine of healthcare workers a good measure to protect their population?

The situation in the USA has received the most international attention. The issue of quarantines flared in the United States after the governors of New York and New Jersey ordered in October 2014 the quarantine for health care workers who may have been exposed to Ebola in Africa, even if they showed no symptoms and were therefore not contagious.

On the other hand, the implementation of quarantine in affected countries has also been controversial. Indeed, in August 2014 in Liberia, a whole slum of the capital was put into quarantine, sparking massive riots between the police and the inhabitants. People felt they were being left to die, with no food, no sources of income and no access to medical care. Debates followed about the efficiency of quarantines in controlling the Ebola outbreak.

How did the controversy start?

The controversy over quarantine emerged when the international community started to respond to the outbreak by sending aid to the affected region supporting local efforts. When we pay attention to the statements of actors involved it seems that it is mainly the motives behind the decision to implement quarantine that have been questioned along with the way political authorities manage them.

The first massive opposition to quarantine occurred in August 2014 in Liberia, where the quarantine of a slum ended in massive riots. In Monrovia, the slum of Westpoint has been put under quarantine leading to strong clashes between the police and the inhabitants. People tried to break through the barriers as they felt that the quarantine was condemning them. Indeed, people were not able to go to work and to provide for their family which made their situation even more critical. Furthermore, the prices of basic goods rose tremendously as a consequence of the quarantine. In March 2015, Elle Jonhson Sirleaf admitted errors in the response, more precisely regarding the use of military forces to impose quarantine on communities.

2. Unravelling the controversy

Following the Monrovia riot, the assessment on the effectiveness of the quarantines in Sierra-Leone emerges in November 2014. According to the Disasters Emergency Committee, an umbrella organization for aid organisations, “The quarantine of Kenema, the third largest town in Sierra Leone, is having a devastating impact on trade — travel is restricted so trucks carrying food cannot freely
drive around,” the committee says in a statement. “Food is becoming scarce, which has led to prices increasing beyond the reach of ordinary people”, thus forcing them to break quarantine.

Brice de le Vingne, MSF’s coordinator in the region, also voices his concerns regarding the efficiency of quarantine measures. “We are very reserved on these quarantines. In addition, they sometimes prevent the return of bodies, and even healed people in their village. This increases the lack of confidence of families, who may no longer entrust us with their sick. Trapped, people may be tempted to escape and thus exacerbate contagion, especially if the food runs out”.

Quarantine also raises tensions between affected countries. In a recent interview, Alpha Condé, President of Guinea, accuses Liberia of putting people in quarantine without feeding them or providing them with the care they need, thus encouraging them to break quarantine and flee the region. Addressing Liberian authorities, he says: “When you put people in quarantine (like in Liberia), you do not feed them, you do not care for them, what they do, they cross the border, they come in Guinea; it's how Ebola has returned. Then in Monrovia, people are sent to the city, they will infect others, people die …” (Europe 1, October 2014).

In October 2014, the debate sets foot in the American society as the first case of Ebola is declared on the American territory on October 23rd 2014. President Barack Obama, his administration, and Thomas Frieden, the former director of the Center for Disease Control, have to face the panic and fear among the American society which quickly pressures the government to implement travel bans.

Nonetheless, the Obama administration rejects the implementation of travel bans. In a public statement on the 19th of October, a US official stressed that "if we were to put in place a travel ban or a visa ban, it would provide a direct incentive for individuals seeking to travel to the United States to go underground and to seek to evade this screening and to not be candid about their travel history in order to enter the country. And that means it would be much harder for us to keep tabs on these individuals and make sure that they get the screening that's needed to protect them and to protect, more importantly, the American public.” (Fuller, 2014).

Regarding the use of quarantine in the USA, Mark A. Rothstein, director of Louisville Institute of Bioethics, is categorical. According to him, “there has been a wealth of misinformation, politicization of public health, public panic, and unnecessary quarantine” (Rothstein, 2015). Furthermore, the lack of coordination among states has increased panic among the country leading to more confusion and more decisions to implement quarantines. To him, this is dangerous since it could in turn discourage health care workers from serving in Ebola-stricken countries because of the threat of unnecessary confinement upon their return.

He stresses the fact that scientific evidence must support the necessity of quarantine, the selection of the individual to be quarantined, the duration of the quarantine and the place and manner of the quarantine must be reasonable, and the individual must be afforded a means of challenging the confinement. In the US those criteria have not been followed by decision makers. The most striking example is one of a nurse forced to a 21 days confinement in despicable conditions when she arrived back from Africa.

Sophie Delaunay, executive director of MSF in the USA is also sceptical. According to her, quarantine is used by politicians to please their electorate with no consideration for the concrete outcomes. According to her, quarantine on health care workers can undermine the efforts to curb the epidemic. “There are other ways to adequately address both public anxiety and health imperatives, and the response to Ebola must not be guided primarily by panic in countries not overly affected by
Any regulation not based on scientific medical grounds, which would isolate healthy aid workers, will very likely serve as a disincentive to others to combat the epidemic at its source, in West Africa.” (“Ebola: Quarantine Can Undermine Efforts to Curb Epidemic | MSF USA,” n.d.).

3. Main trends of the debate

Figure 8. Effects of quarantine according to actors

Quarantine of returnee health care workers and travel bans can undermine the efforts to fight Ebola

- Sophie Delaunay
  • Executive Director MSF-USA

- Obama administration

- Mark A. Rothstein
  • Director, Louisville Institute of Bioethics

- Quarantine in affected countries have not been handled properly

- Alpha Condé
  • Guinea President

- Ellen Johnson Sirleaf
  • Liberia President

- Brice de le Vingne
  • MSF

- Disasters Emergency Committee

Figure 9. Timeline of the actors’ statements
Conclusion

The three main controversies related to the Ebola response that have been identified, known as motives of intervention, the nature and timing of the international response, and the implementation of travel bans and quarantines, are shaped by various types of actors such as: affected and non-affected governments, NGOs, international organizations including the World Health Organization, journalists, bloggers and academics.

The first controversy identified on the motives of intervention mainly evolved between academics and NGOs against the political leaders of non-affected countries. After the governments of the non-affected countries started sending aid to Western Africa in the summer 2014, several academics and journalists blamed the hidden political agendas of the non-affected countries for the ineffectiveness of the response. Although the concerned leaders of the non-affected governments did not necessarily deny these statements, they mainly argued in favour of the argument stating that international and domestic security reasons were leading the shape of the response. Both academics and politicians claimed that the level of the intervention coming from non-affected countries and institutions was insufficient.

The second controversy focused on the nature and timing of the response highlighted a clear separation between the coordinators of the response against Ebola, such as the NGOs, and the leaders of the response, known as the WHO principally. NGOs, notably MSF and Oxfam, have criticized the slow and inefficient intervention of the WHO, mainly blaming it on its pre-existing weaknesses and decentralized system. In order to answer those critics, the heads of the WHO highlighted the initial role of the organization as a technical and leadership agency, contrasting with the coordination role of countries and NGOs.

The controversy surrounding the implementation of travel bans and quarantine has revealed an important gap between politics and bioethics. The question of the usefulness and ethics of implementing travel bans and quarantine has been at the heart of many debates between medical workers, populations, NGOs, politicians. The main debate concerned the motives behind the decision to implement quarantine and the way political authorities managed them, with opposition coming from NGOs and public opinion. Heads of affected government, especially in Liberia and in the United States, quickly recognized the errors committed. In the end, there seemed to be a consensus among actors regarding the inefficiency and potential dangers linked to the implementation of travel bans and quarantines.
Chapter 3: Ebola vaccine and treatment

The absence of vaccines and treatments against the Ebola virus has been criticized as playing an important role in the severity of the current Ebola outbreak and in the delays of the international response. The funding of research has been controversial, raising the issue of the very business model of Big Pharma, the pharmaceutical industry, that lack economic incentives to develop vaccines for non-profitable markets. Furthermore, testing experimental vaccines and treatments in the midst of an epidemic with fatality rates sometimes above 70% bring about a lot of ethical issues and debates. Debates emerged about the right clinical trial design to adopt to efficiently and rapidly test treatments while guaranteeing safety of patients and respecting ethical concerns. Last but not least, given limited supplies of treatments, the prioritization of treatments has also been a highly debated question.

1 - Research funding

1. Overview of the controversy

Why is research on Ebola vaccine and treatment controversial for the Ebola outbreak?

The absence of a vaccine for Ebola virus is one of the reasons why the response for the Ebola outbreak in the summer 2014 was delayed. This absence is controversial because a vaccine against the Ebola virus had been ready for a long time. Indeed, in 2005, scientists from Canada announced they had developed an Ebola vaccine that was highly effective in monkeys. Along with collaborators in the United States, Germany and France, they even published the results in the journal Nature Medicine (Peter B Jahrling et al., 2005). The main actor behind this research of a vaccine against Ebola was Thomas W. Geisbert, today a virologist at the University of Texas Medical Branch at Galveston.

There were two rationales behind this research of a vaccine against Ebola, which was strongly supported by governments. Thomas W. Geisbert says that reports published on the development of Marburg and Ebola viruses as weapons during the Cold War by the Soviet Union spurred the U.S. military's search for a vaccine, and government funding for Ebola research also jumped after the Sept. 11, 2001 attacks. “The National Institutes of Health came up with a program called Partnerships in Biodefense that partnered researchers like me with companies, usually small companies,” Dr. Geisbert said. Therefore, in 2005, researchers announced that tests on humans might start within two years, and a product could potentially be ready for licensing by 2010 or 2011.

However, the development of a vaccine against Ebola virus stalled for two distinct reasons. First, until
2014, Ebola had been so rare before this outbreak - only 2,000 cases since 1976 - that many health officials felt it could be handled by isolation and quarantine, as previous outbreaks had infected only a few hundred people at a time. "Until the current outbreak, many people believed there wasn't a great need for an Ebola vaccine, because the virus would cause only 10 to 100 cases a year", says Scott Lillibridge, assistant dean at the Texas A&M School of Public Health, who served as medical director of the U.S. Office of Foreign Disaster Assistance during the Ebola outbreaks in the 1990s. "In the past, it was felt that this was something we could treat with hospital infection control," Lillibridge says. "The current outbreak has somewhat changed our thinking."

Second, experts acknowledge that the absence of follow-up on such a promising candidate for disease control reflects a broader failure to produce vaccines for diseases that affect only poor countries. Daniel Bausch, director of the emerging infections department of Naval Medical Research Unit Six (NAMRU-6), a biomedical research laboratory in Lima, stated in August 2014 that “These outbreaks affect the poorest communities on the planet. Although they do create incredible upheaval, they are relatively rare events”. Pr Yazdanpanah, Head of Infectious and Tropical Diseases at Bichat Hospital in Paris, responsible for research on Ebola at INSERM (French Institute for Medical Research) agrees that no one could have expected such an outbreak and the production of vaccines in consequence. Governments and Big Pharma could have responded more quickly, considering the context in the affecting countries. To him, the main error was to minimize the outbreak, knowing the healthcare situation.

Therefore, the debate is around Big Pharma not having developed a vaccine despite having the know-how. Indeed, most drug companies have resisted spending the money needed to develop vaccines useful mostly to countries with little ability to pay. Geisbert explained in October 2014 that there had never been a big market for Ebola vaccines (Grady, 2014): “If you look at the interest of pharmaceutical companies, there is not huge enthusiasm to take an Ebola drug through phase one, two, and three of a trial and make an Ebola vaccine that maybe a few tens of thousands or hundreds of thousands of people will use.” “So Big Pharma, who are they going to sell it to?” He added: “It takes a crisis sometimes to get people talking. ‘O.K. We've got to do something here.”

How did the controversy over research on Ebola vaccine start?

The debate started when Dr. Margaret Chan, the head of the WHO, castigated in November 2014 the pharmaceutical industry for failing to develop a vaccine for Ebola, although it was discovered in the Democratic Republic of Congo, then known as Zaire, in 1976. Dr. Chan asserted that insofar as it was confined to poor African countries, there was no incentive to develop a vaccine until 2014, when Ebola became a threat to non-African countries, including the U.S (Barber, 2014).

2. Methodology

To analyze the controversy around the lack of research funding for and Ebola vaccine, we first focused on who were the actors who stated such criticism in major newspapers and then we tried to search for Big Pharma’s answers, which were almost inexistent. We dug deeper in the controversy looking for a potential background of a development of an Ebola vaccine in Medical reviews. Finally,
to get information from a direct source, we interviewed Professor Yazdan Yazdanpanah, Head of infectious diseases service at Bichat Hospital in Paris, who is in charge of coordinating Ebola response in France.

3. Unravelling the controversy

The Ebola 2014 outbreak and the lack of vaccine highlight the controversy around the business model of Big Pharma

In November 2014, Dr. Chan does not only criticize the Big Pharma industry for not developing a vaccine against Ebola virus but castigates the whole business model behind vaccines development stating simply that: “A profit-driven industry does not invest in products for markets that cannot pay. The R&D incentive is virtually non-existent”. Dr. James E. Crowe Jr., the director of a vaccine research center at Vanderbilt University, holds the same critique arguing that “academic researchers who developed a prototype drug or vaccine that worked in animals discovered a “biotech valley of death” in which no drug company would help them finalized their vaccines.”

For James Surowiecki, a journalist and author of The Wisdom of Crowds, the lack of development of an Ebola treatment was predictable given the way drug development is funded. He explains that when Pharma companies decide where to direct their R&D money, they need to evaluate the potential market for a drug. Therefore, this means that they have three incentives to consider: targeting diseases that affect people who can afford to pay a lot, making drugs that many people will take and making drugs that people will take regularly for a long time. To sum up, targeting a lot of rich people affected by chronic diseases. As a result, for Surowiecki, there is no doubt that this system leads to enormous underinvestment in certain kinds of diseases and certain categories of drugs: diseases that affect poor people in poor countries do not appear as a research priority, because it’s unlikely that those markets will ever provide a decent return. As an example, diseases like malaria and tuberculosis, which together kill two million people a year, have received less attention from pharmaceutical companies than high cholesterol. Pr Yazdanpanah also deplores the fact that, because of international phobia, there are now ten times more studies made on Ebola than on malaria, which kills more than ten times more people. Therefore, according to Surowiecki, Dr. Chan, and Pr Yazdanpanah, the core of the problem is the very business model of the Pharma industry: a good public health policy can also be a bad investment prospect.

John Ashton, president of the UK Faculty of Public Health, writes a vituperative opinion piece in the Independent on August 2014, decrying “the scandal of the unwillingness of the pharmaceutical industry to invest in research to produce treatments and vaccines, something they refuse to do because the numbers involved are, in their terms, so small and don’t justify the investment. “This is the moral bankruptcy of capitalism acting in the absence of an ethical and social framework,” he concludes.

Moreover, Anthony Fauci, the head of the National Institute of Allergy and Infectious Diseases, declares that “an Ebola vaccine would be within spitting distance if it weren’t for the corporate skinflints”. “We have been working on our own Ebola vaccine, but we never could get any buy-in from the companies,” he tells USA Today in July 2014.
Ebola is not unique in highlighting the flaws of the Big Pharma business model. Indeed, the example of antibiotics is also striking: for thirty years, the large pharmaceutical companies have refused to engage in research into new classes of antibiotics. Christopher T. Walsh, a professor of biological chemistry and at Harvard Medical School, noted in 2009 that “no major classes of antibiotics were introduced” between 1962 and 2000 and refers to the interim as an « innovation gap » (Lynn L., 2011). For Manica Balasegaram, Executive Director at the Médecins Sans Frontières Access Campaign, the problem regarding antibiotics is simple: pharmaceutical companies like Pfizer, AstraZeneca and Bayer lack the incentives to develop drugs like antibiotics that are only taken for a short period of time, or against diseases that primarily affect the poor. With an obligation to shareholders, pharma companies develop those drugs that will most enable them to achieve high sales in targeted lucrative markets. Typically, these drugs are for diseases that affect mostly people in wealthy countries who can afford to pay the high prices that come with a R&D system which relies on patent monopolies to recoup costs (MSF, 2014). For Leigh Phillips, science writer and EU affairs journalist, the reason for this is straightforward, as the companies themselves admit it: it simply makes no sense to pharmaceutical companies to invest an estimated $870 million (or $1.8 billion accounting for the cost of capital) per drug on a product that people only use a handful of times in their life when suffering from an infection, compared to investing the same amount on the development of highly profitable drugs for chronic diseases such as diabetes or cancer that patients have to take every day, often for the rest of their lives. For Phillips, the situation is the same with vaccine development. People purchase asthma drugs or insulin, for example, for decades, while vaccinations usually require only one or two doses once in a lifetime. According to him, for decades now, so many pharmaceutical companies have abandoned not just vaccine research and development but production as well, that by 2003, the US began to experience shortages of most childhood vaccines. The situation is so dire that the CDC maintains a public website tracking current vaccine shortages and delays.

As for the controversy around the drugs developed only for wealthy customers, The CEO of German pharmaceutical company Bayer, Marijn Dekkers, was reported in 2013 as saying that the company did not develop a cancer drug for the Indian market, but rather “for Western patients who can afford it”. MSF stated that that statement summed up the attitude of the pharmaceutical companies towards the poor and succinctly described what is wrong with today’s research and development system. The NGO concluded “This is a side effect of the way drugs are developed today. Pharmaceutical companies are singularly focused on profit and so aggressively push for patents and high drug prices. Diseases that don’t promise a profit are neglected, and patients who can’t afford to pay are cut out of the picture. Drug companies claim to care about global health needs, but their track record says otherwise.” (Dr. Manica, 2014).

Reactions of Big Pharma and institutions to the crisis

Big Pharma does not react publicly to the WHO’s accusation regarding their responsibility for not developing a vaccine for Ebola. But with the reaction of international organizations and governments after the Ebola outbreak scaled up, funds are allocated to finance the next steps of the research for an Ebola vaccine. For instance, in August 2014, the NIH gives Geisbert’s lab a five-year, $26 million grant to research three of the most promising treatments for Ebola. These include a man-made antibody treatment; a promising Canadian drug from Tekmira Pharmaceuticals shown to protect monkeys from Ebola; and a vaccine that can be used both to prevent and treat infection. Big Pharma firms such as GSK, Merck and Johnson & Johnson have been developing an Ebola vaccine since the summer of 2014.

Ebola has played a catalyst role to question the Big Pharma business model

Moreover, the controversy around the Big Pharma business model leads to rethink the model of funding research and the actors behind it. Indeed, for Thomas Geisbert (Sneed, 2014), interviewed about the development of the VSV vaccine, “there’s not a big incentive for a large pharmaceutical company to make an Ebola vaccine, so it’s going to require government funding.” Therefore, for some, it appears that governments could play a role to compensate the Big Pharma market failure. Pr Yazdanpanah explains that the problematic comes from a political more than an economic point of
As Big Pharma gives small financial support to develop these vaccines, and human studies are really expensive, the only solution appears to ask for government dollars. As we have seen previously, this financial predicament about Ebola research and development makes them unwilling to help small companies working on these medicines.

The part played by the governments in the alliance with Big Pharma: example of ZMAPP and VSV-EBOV

In the US and Canada, governments are taking preventative measures against the use of Ebola for bioterrorism. For Pr Yazdanpanah, governments invoke bioterrorism to convince the public opinion of the legitimacy of their expenses. For instance, the experimental anti-viral drug BCX4430 is co-developed by BioCryst Pharmaceuticals and the US Army Medical Research Institute for Infectious Diseases (USAMRIID). The federal government has then backed research and ordered stockpiles of anti-Ebola drugs. For those companies, the only emerging market is the US government (Harris, 2014).

Similarly the development of Zmapp, the serum of monoclonal antibodies created by a small San Diego-based biotech firm Mapp Biopharmaceutical, is backed both by the USAMRIID and the Canada’s Public Health Agency, as part of a ten-year research program. Although at the stage of experimental serum, never having been tested on human beings before, it is administered in August 2014 to two American contaminated doctors, Kent Brantly and Nancy Writebol, who recovered within a couple of weeks (Gupta & Dellorto, 2014).

ZMapp is made of three antibodies: two of them were originally identified and developed by researchers at the National Microbiology Laboratory in Winnipeg and at Defyrus, a Toronto-based life sciences biodefense company, with funding from the Canadian Safety and Security Program of Defence. Californian company Mapp Biopharmaceutical produced the third antibody in collaboration with USAMRIID, the US National Institutes of Health, and the US Defense Threat Reduction Agency, and holds intellectual property rights to the molecule. ZMapp has then been developed thanks to the Pentagon and Canadian Defense department, which advocates for the decisive role of the public sector as funder of innovation. Pr Yazdanpanah specifies that whereas Zmapp fostered a lot of hope in 2014, the production of the necessary antibodies remains very complicated making laboratories unable to replicate it and produce it in large quantities, especially in a short period of time.

Another example of government-Big Pharma alliance is the VSV-EBOV experimental vaccine, discovered by researchers from the National Microbiology Laboratory (NML) and Canada’s Public Health Agency. The Public Health Agency and the Canadian Safety and Security Program of Defence finance it. Collaboration between Ministries, private sector and international partnerships were made necessary. If the Canadian government has the intellectual property rights associated to the vaccine, the private company NewLink, which has to produce big amounts of vaccine and organized clinical trials, owns the licensing revenues.
Toward a solution scenario to “de-risk” Big Pharma investment and end the controversy?

However, not all unprofitable diseases are the object of bioterror concerns. And why should the private sector get to cherry pick the profitable conditions and leave the unprofitable ones for the public sector?

**Leigh Phillips**, a science writer, argues that “If, due to its profit-seeking imperative, the pharmaceutical industry is structurally incapable of producing those products that are required by society, and the public sector (in this case in the guise of the military) consistently has to fill in the gaps left by this market failure, then this sector should be nationalized, permitting the revenues from profitable treatments to subsidize the research of unprofitable treatments”. The Big Pharma profit-seeking initiative has led to a market failure, unveiled by the Ebola outbreak (Leigh Phillips, 2014).

The conversation between scientific experts who are not part of the pharmaceutical sector comes to the same conclusion: the need for public money to support research on unprofitable diseases. Leigh Phillips summarizes the problem saying that as private pharmaceutical companies have given up targeting both the prevention of global diseases, such as malaria, polio or measles, and neglected ones, such as Ebola, the public sector appears to be the only way out a system that had proven to function in a wrong way, not addressing public-health needs but profitability goals. The question is not to discuss whether the behaviour of Big Pharma is moral or not, but how to deal with these constraints to better address future outbreaks.

According to WHO Director general, Dr. Margaret Chan, Big Pharma is not the only institution to be blamed (Bisset, 2014). Governments should have invested more in the first place in long neglected healthcare systems, because the severity of this outbreak is due to the failure to put public health infrastructures in place. Pr Yazdanpanah insisted that Western countries should invest now to build better infrastructures and give a technical aid to poor countries. France for instance has a role to play in training doctors on the field. This is the only way to prevent African countries from a future outbreak of this kind. Besides, in the past decades wealthy governments have not provided sufficient incentives for developers to create vaccines when it comes to neglected diseases. When targeting unprofitable medicines for risky markets, governments should “de-risk” Big Pharma investment.

The morale of Dr. Chan’s concern is that, in a free market, governments should do more to encourage development of vaccines for diseases that affect a relatively small number. By doing that, they de-risk Big Pharma investment in products made for markets which cannot afford them.

The American, Canadian and European biotechs and pharma are now developing treatments because there is enough government support to de-risk investment in products intended for countries who cannot afford them. These major actors offered a response to the controversy making the government an essential risk-taker in the vaccine production’s game.

Governments should reward companies for creating substantial public health benefits without making terrific profits. Some have imagined offering prizes for new drugs developed. **Kevin Outterson**, a co-director of the Health Law program at Boston University and a founding member of the C.D.C.’s working group on antimicrobial resistance, imagines one scenario (Surowiecki, 2014): “The government would make a payment or a stream of payments to the company, and in exchange the company would give up the right to sell the product.” The pharmaceutical company would get revenues but would not have to pay for making it profitable. The rationale behind is that public health
officials provide the drug or vaccine to the users, and they have the benefit to promote and control the medicine diffusion. As the human trials and production can be the most expensive part of the drug development, public money could be the solution to bring a new vaccine all the way to market.

Another idea, brought by Pr Yazdanpanah during our interview, is that governments could implement a tax, making the Big Pharma raise their prices and use the amount earned for vaccines research. It would make a small difference for customers and raise a lot of money for unprofitable diseases.

4. Main trends of the debate

*Figure 10. Actors in the Big Pharma debate*
2 – Design of clinical trials from debate to practice

1. Overview of the controversy

Why is clinical trial design controversial for the Ebola outbreak?

Clinical trials to develop potential vaccines and treatments to treat the Ebola virus or prevent contamination can only be developed in the midst of an epidemic, as those trials usually require a large amount of patients to actually be tested and certified as safe and efficient in human beings. However, as in the case of the Ebola virus fatality rates are as high as 50%, ethical issues are much more complex. Those experimental vaccines and treatments can either foster unrealistic expectations or further mistrust from local populations.

Further, existing supplies of those experimental medicines are very limited, which is increasing the dilemma over the choice of trial design to adopt in order to test them. The recent declining number of cases is also increasing the difficulty to conduct trials and collect reliable results.
How did the controversy start?

The controversy started with the recovery of Dr Kent Brantly and Nancy Writebol, two US health workers who were infected by the Ebola virus and treated with Zmapp, an experimental drug that was produced in very low quantity and provided to those patients for “compassionate use” (Coleman, 2014) (see Chapter 3.1).

Soon after the recovery of the two patients treated with Zmapp, a group of experts convened by WHO during an Ethics Panel meeting on 11th of August 2014 recognized that “the use of experimental vaccines and therapies under the exceptional circumstances of the Ebola epidemic was ethically acceptable” (“WHO | Ethical considerations for use of unregistered interventions for Ebola virus disease,” 2014). Those unregistered and experimental drugs and therapeutics should however be tested for safety and efficacy, using “rigorous methods and simple but properly designed clinical trials”: if all experts agreed on this statement, the clinical trials designs themselves have been highly debated during the meeting and the following months. The debate generally focuses on treatments rather than on vaccines, as “ethical considerations for preventive vaccine trials in healthy and presumably uninfected individuals are different” and less controversial, since they do not apply to infected patients with a high probability of dying from the disease.

Therefore, the main question raised by the key actors of this controversy is the following: What approaches should be employed to conduct the clinical trials to test experimental treatments during the current Ebola outbreak?

2. Methodology

This section employed a qualitative and comparative methodology that first collects data from Scopus, Factiva, Google News and Pub Med as well as refers to reports from various organizations. A preliminary analysis of the data yields the main divergence in clinical trials design and the key actors who proposed the debates. A further research was conducted based on the analysis in order to collect detailed data of the controversy detected. Then a timeline was drawn based on the findings and trends of the controversy are detected according to the timeline.

3. Unravelling the controversy

After the August 2014 expert meeting, researchers and bioethicists enter the debate by issuing statements over the use of RCTs in academic journals. The first important article on the topic, entitled “Ethical considerations of experimental interventions in the Ebola outbreak”, is published by Annette Rid and Ezekiel J. Emanuel in The Lancet, on August 22nd, 2014. Those two professors, respectively affiliated to the Kings College of London and the University of Pennsylvania, argue that the first need for this Ebola outbreak is “strengthening of health systems and basic infrastructure, rather than experimental treatments and vaccines” (Rid & Emanuel, 2014b). They however take position in favour of RCTs, and against compassionate use, arguing that “it would be wasteful to use the small amount of experimental interventions with no collection of systematic data about safety and efficacy” (Rid & Emanuel, 2014b). Moreover, they openly state that they are supporting the bioethicist Steven Joffe,
working in the Department of Medical Ethics & Health Policy of the University of Pennsylvania, who is arguing for RCTs “with participants receiving either experimental interventions with supportive care or supportive care and placebo” (Rid & Emanuel, 2014b). Steven Joffe publishes a letter in the Journal of the American Medical Association on September 11th to reiterate those arguments.

The main response to those arguments comes on October 10th in The Lancet: 17 senior health professionals and medical ethicists from Africa, Europe, and USA, argue that randomized controlled trials should not be the only trial design used in the case of the Ebola epidemic (Adebamowo et al., 2014). In this letter, they explicitly demonstrate their disagreement with the aforementioned article by Steven Joffe. Indeed, they argue that RCTs could be helpful in different situations, but would be unethical in the case of the Ebola virus. Their main argument is that in the affected countries, “conventional care offers little benefit” to control groups and that the risk of dying without receiving any treatment is too high. They have a second “practical” objection to RCTs, pointing out the risk of increasing mistrust over Ebola Treatment Centers (ETC) by offering only placebo to local populations, or even by delivering a medicine to certain groups and not to others. They therefore emphasize the need to develop alternative approaches that would be more feasible to a time and resource-constrained environment. According to them, alternative and more flexible designs would allow different groups of population to receive different treatments, so that those with no effect could “be discarded quickly”. Those designs could be adaptive in time according to the first results.

One of the authors of this letter, Piero Olliaro (Burton & Loftus, 2014), further argues that: “a placebo group is unnecessary because in given villages or clinics, doctors will know roughly what the death rate has been there. They can use that rate as a historical control where patients getting a drug are compared with past experience.” He therefore emphasizes the need to collaborate with local doctors to better collect data over the trials, and advocates for the use of historical comparisons.

Then, on December 3rd, Edward Cox and Robert Temple, both working at the FDA’s Center for Drug Evaluation and Research, publish a letter in the New England Journal of Medicine, arguing that “RCTs […] will […] not be depriving patients of treatment but will provide a pathway for identifying effective treatments as rapidly and reliably as possible”, and that a control group is necessary in particular to “distinguish serious adverse drug effects from manifestations of EVD”. They also criticize “historically controlled studies” as not reliable enough, saying they could do harm instead of helping developing safe treatments. While emphasizing RCTs as the best possible practice for clinical trial design, they however recognize the need for flexibility and adaptation, saying that “if multiple investigational drugs are simultaneously available for clinical testing, an RCT could include more than one drug and a shared control group.” (Cox, Borio, & Temple, 2014)

The last important contribution comes from MSF, who led a clinical trial to test the drug Favipiravir in Guinea and chose not to use RCTs. MSF indeed refused to “deny a group of patients the higher chance of survival that may come with the new treatment” (MSF, n.d., 2014), and let the choice to the patients themselves to decide whether or not they would take the experimental treatment.

On the other hand, the study led by the National Institutes of Health (NIH) upholds the use of RCTs. National Institute of Allergy and Infectious Diseases (NIAID), part of the NIH, began its trial study on Feb 2nd, 2015 with the intention to test the safety and efficacy of two drug candidates – cAd3-EBOZ co-developed by NIAID scientists and GlaxoSmithKline, and VSV-ZEBOV developed by the Public Health Agency of Canada and licensed to NewLink Genetics Corporation and Merck. This study employs a RCT, a double blinded approach that randomly assigns participants to three groups: one group receiving cAd3-EBOZ, one group receiving VSV-ZEBOV, and a control group receiving a
placebo. The results indicated that the vaccines tested appear to be safe in phrase 2 clinical trials and may now advance to phrase 3 trials.

Apart from the main arena debating over the use of RCTs, some actors are arguing for alternative approaches. For example, Nancy Kass, Professor of bioethics and public health at Johns Hopkins University, argues in an article published on Dec 1st, 2014 that in the context of the current outbreak, an “adaptive approach” (Kass, 2014b) randomizing more patients to whichever therapy that appears most effective seems most appropriate. Professor Peter Horby from Oxford University who leads the fast tracked Ebola trials also embraces an alternative approach.

4. Main trends of the debate

Expertise and Opposition

The controversy is mainly shaped by bioethicists, researchers, academics and pharmaceutical groups in the North, with very few actors from the Global South and the Ebola-affected countries. Further, the positions assumed by the different actors reflect an opposition between practical and ethical issues, as pharmaceutical companies and FDA researchers are more concerned with the feasibility and reliability of the trials in the context of a declining number of cases; whereas bioethicists are primarily concerned with ethical issues. Another way to consider it is to say that the first group is mostly concerned about efficiency, while the second one is more concerned by safety issues. Finally, there is also a tension between the need to study effects of a vaccine or treatment at a population level, and the need to provide individuals with the best option possible, while preserving their dignity and treat them in a way that is ethical.

The debate is across different areas of expertise but is most intensified in domains of bioethics and public health. The Lancet and New England Journal of Medicine served as the main arena for the debate. While actors affiliated with official institutions, like FDA and NIH, agree on pushing for RCTs, actors affiliated with academia disagree on the use of RCTs.
Figure 12. Actors’ opinions on RCTs

<table>
<thead>
<tr>
<th>Pro RCTs</th>
<th>Against RCTs</th>
<th>Other approaches</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIH</td>
<td>MSF</td>
<td>Nancy Cass</td>
</tr>
<tr>
<td>WHO</td>
<td>Peter Piot</td>
<td>• Adaptive approach</td>
</tr>
<tr>
<td>FDA</td>
<td></td>
<td>Peter Horby</td>
</tr>
<tr>
<td>David Heyman</td>
<td></td>
<td>• Alternative but non randomized</td>
</tr>
<tr>
<td>Repley Ballou</td>
<td>Arthur Caplan</td>
<td>• Master Protocol</td>
</tr>
<tr>
<td>Carl Coleman</td>
<td></td>
<td>• Cluster Randomization</td>
</tr>
<tr>
<td>Ed Cox</td>
<td></td>
<td>• Adaptive trials</td>
</tr>
<tr>
<td>Robert Temple</td>
<td>Piero Olliaro</td>
<td>• Step-wedge approach</td>
</tr>
<tr>
<td>David Shaw</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steven Joffe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anthony Fauci</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 13. Timeline of the actors’ statements

- WHO 8/11/2014
- NIH 2/2/2015
- MSF 12/16/2014
- The New York Times (Kass) 12/1/2014
- Journal of the American Medical Association (Joffe) 9/11/2014
- Lancet (Adebamowo et al.) 10/10/2014
- Lancet (Rid & Emanuel) 8/22/2014
What has been done in practice?

While analyzing the shape of the past and current debate over clinical trials design during the Ebola outbreak, it is also interesting to compare what has been done in practice to test the different treatments and vaccines that have been developed. The first reason is that a few key actors in the debate are referring to previous cases of clinical trials outside the Ebola outbreak, using comparisons with other diseases. Second, we will focus on what has really been done in practice regarding the clinical trials for potential treatments and vaccines to prevent or cure the Ebola virus. The table below, drafted by the WHO, will bring an overview of the different clinical trials being conducted worldwide.

Table 2. Vaccine clinical trials

<table>
<thead>
<tr>
<th>Product / Company</th>
<th>Phase</th>
<th>Trial Location</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>ChAd3-ZEBOV</td>
<td>Phase I</td>
<td>By VRC at NIH, USA</td>
<td>September 2014</td>
</tr>
<tr>
<td>GlaxoSmithKline and PHAC</td>
<td></td>
<td>By Oxford University in the UK</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>By CVD in Mali</td>
<td>October 2014</td>
</tr>
<tr>
<td></td>
<td></td>
<td>At the University of Lausanne, Lausanne, Switzerland</td>
<td></td>
</tr>
<tr>
<td>rVSV-ZEBOV</td>
<td>Phase I</td>
<td>By WRAIR in the US</td>
<td>October 2014</td>
</tr>
<tr>
<td>NewLink Genetics and Merck Vaccines USA</td>
<td></td>
<td>By NIAID in the US</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>By CTC North GmbH in Hamburg, Germany</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>At Albert Schweitzer Hospital in Lambarene, Gabon</td>
<td>November 2014</td>
</tr>
<tr>
<td></td>
<td></td>
<td>At the University of Geneva, Geneva, Switzerland</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>By KEMRI Wellcome Trust in Kilifi, Kenya</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>At the IWK Health Center, Halifax, Canada</td>
<td>December 2014</td>
</tr>
<tr>
<td>Ad26-EBOV and MVA-EBOV</td>
<td>Phase I</td>
<td>By Jenssen Institute in the UK</td>
<td>January 2015</td>
</tr>
<tr>
<td>Johnson &amp; Johnson and Bavarian Nordic</td>
<td></td>
<td>TBD, US</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TBD, Ghana</td>
<td>1Q2015</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TBD, Kenya</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TBD, Uganda</td>
<td></td>
</tr>
<tr>
<td>Recombinant protein Ebola vaccine candidate Novavax</td>
<td>Phase I</td>
<td>Australia</td>
<td>February 2015</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>---------</td>
<td>-----------</td>
<td>--------------</td>
</tr>
<tr>
<td>ChAd3-ZEBOV GlaxoSmithKline and PHAC</td>
<td>Phase II</td>
<td>TBD, Cameroon</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TBD, Ghana</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TBD, Mali</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TBD, Nigeria</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TBD, Senegal</td>
<td></td>
</tr>
<tr>
<td>rVSV-ZEBOV NewLink Genetics and Merck Vaccines USA</td>
<td>Phase III</td>
<td>By WHO and MOH Guinea in Conakry, Guinea</td>
<td>March 2015 – Ring vaccination trial design</td>
</tr>
<tr>
<td>ChAd3-ZEBOV GlaxoSmithKline and PHAC</td>
<td>Phase III</td>
<td>By US NIH and MOH Liberia in Monrovia, Liberia</td>
<td>March 2015 – Randomized control trial design</td>
</tr>
<tr>
<td>rVSV-ZEBOV NewLink Genetics and Merck Vaccines USA</td>
<td>Phase III</td>
<td>By US CDC and MOH Sierra Leone in Freetown, Sierra Leone</td>
<td>March 2015 – Stepped wedge trial design</td>
</tr>
</tbody>
</table>


### 3 – Prioritization of Treatment

1. **Overview of the controversy**

Why is the prioritization of treatment controversial in the Ebola outbreak?

While prioritizing treatment in any healthcare emergency becomes an issue when resources are scarce the Ebola outbreak in 2014 highlighted particular difficulties. As there was no drug available that had been through clinical trials at the time of the outbreak, giving experimental treatments to patients would mean exposing them to unknown risks and side effects.

Discussions about who should have access to limited supplies of drugs arose in this context. Is the
concept of “paying back for a service” strong enough justification to prioritize healthcare workers? Is the only argument for not giving the treatment first to the local population the fear of making a Western laboratory out of Africa? The debate around this controversy tackled these questions as it investigated the ethics behind using experimental treatment and who should receive it.

How did the controversy start?

This conversation around prioritization was triggered by a very specific series of events. While scarcity created the context for the controversy around who should receive the treatment available, the real dilemma arose following the decision of the WHO and MSF to not give Dr. Sheik Umar Khan of Sierra Leone the treatment available while it was given to Dr. Kent Brantly and Nurse Nancy Writebol, two Americans working with Samaritan Purse, just days later.

According to the WHO and MSF, since Dr. Khan was a high profile doctor in the region, there was a fear that giving him untested treatment that might not help him recover would be too high of a risk. Not only would the public relate it back to a history of drug testing in Africa without informed consent (see side box), but the health institutions could also be blamed for his death if the treatment was unsuccessful. Yet when both Dr. Brantly and Nurse Writebol recovered with the help of the treatment and evacuation from the region, the issue of an apparent priority treatment for Westerners became evident.

2. Methodology

This discussion was found through searching for articles concerning treatment in the Ebola outbreak in Google Scholar, Pub Med, Scopus, Factiva and news websites. The key word searches included “ebola”, “healthcare”, “ethics”, “prioritization”, and “treatment” and their different combinations. Interviews were also conducted via Skype with Dr. Salim S. Abdool Karim, Director of Center for Aids Programme of Research in South Africa, and Rony Brauman, Director of Research at the Doctors Without Borders Foundation. Websites of organizations involved with the outbreak like the WHO and Samaritan Purse also provided links to news and opinion articles.

3. Unravelling the controversy

The actors and the arguments they stand for could be divided into those who are for or against prioritization for health care workers (even though the discussion also touches people working in close proximity to the sick, like volunteers burying the deceased people, the health care providers were more frequently used in the argument) and for or against prioritization for the local population.
Bioethics and the use of experimental treatments in Africa

The field of bioethics is concerned with ethical and moral considerations when medical and biological issues are confronted with political, legal and societal realities. These issues are playing a large role in the decisions to use experimental treatment during the Ebola outbreak because of a history of experimental treatment being administered without informed consent of patients in Africa. For example, in the 1980s and 1990s, American Dr. Michael Swango was suspected to be responsible for the deaths of 60 people in Zimbabwe and Zambia and South African cancer researcher Dr. Werner Bezwoda tested high doses of chemotherapy on black patients seemingly without their knowledge of consent (Washington, 2007). This context affected the dilemma around giving local patients the available treatment in the Ebola outbreak and was referred to by those opposed to doing so. Dr. Salim S. Abdool Karim, Director of Center for Aids Programme of Research in South Africa, noted that even if these concerns are often misconceptions they must be addressed when conducting research in two ways. Local scientists must be involved in leadership roles and the people to test on must be fully aware of the risks so that they can give genuine informed consent when partaking in research (Karim, 2015).

Health care workers prioritization

From the academic point of view, two figures in particular raise their voices for health care workers prioritization, namely Dr. Kevin Donovan from Georgetown University, who “would contend that an argument can be made that we owe a duty to those workers who have knowingly placed themselves at risk of disease and death in order to serve the needs of others. That duty to first responders is not just to Americans or Europeans, but to the great number of Africans as well.” (Donovan, 2014, p. 3) and Nancy Kass, ScD from John Hopkins University, who thinks “there are very special commitments that we must make ethically to the health care providers that are willing to go in and serve.” (Kass, 2014a). Moreover, according to Donovan (2014, p. 3) it can be argued “healthcare workers might be the ones most likely to accept enrolment in trials of these medications, and understand the requirements of informed consent in the treatment”.

The media covered statements made by medical doctors as well. Most of them supported the idea that health care workers are rightfully given priority for the treatment. For instance, Dr. Daniel Bausch, an associate professor from Tulane University and a consultant for the WHO, UN and NIH, explains, “We feel like we owe that to healthcare workers,” Bausch said. “We owe it (taking care) to them for taking on these dangerous jobs” (Linshi, 2014). He also explains the rationale of WHO behind prioritization, “If I try to recruit you as a healthcare worker to go to Sierra Leone in relatively rough circumstances to treat people with a dangerous disease, it’s hard for me not to say, ‘well, we’re going to take care of you” (Linshi, 2014). Also, Peter Singer, a moral philosopher from Princeton University, advocated the priority access to treatment saying, “If a promising vaccine is available – and if safety trials in healthy human volunteers who are not at risk of infection demonstrate that it does no harm – to deny it to those who are tending to the sick and dying, at great risk to their own health, seems unethical” (Singer, 2014).

Of those discussing the issue, many medical professionals and academics argue that prioritizing health care workers should work as an incentive for putting their lives at risk and they even go as far as saying that it is unethical to deny the treatment to health care providers.

Local population prioritization

The other side of the argument, in favour of general population prioritization, is advocated by Dr. Annette Rid of Kings College London and Ezekiel J. Emanuel of University of Pennsylvania who
believe that “because of the scarcity of investigational agents, fair selection of participants is essential and must be ensured. Especially in a dire emergency such as this one, well-off and well-connected patients should not be further privileged” (Rid & Emanuel, 2014, p. 1897).

This view is not as clearly polarized as the previous one. Even though the actors do agree that Westerners should not receive priority treatment, there is a clear argument for why there might be dangers to administering the trials and testing the drugs in African countries.

The issue of race and history plays an important role in the dispute. Looking into past, there were a lot of failures and scandals in the global health where Africans viewed themselves as “guinea pigs” being used for the sake of Western tests and purposes. From the beginning of 2014 Ebola outbreak, there already was a lot of suspicion against Western doctors. Adding the risk of the treatments not working and Africans viewing themselves as a laboratory for European and American practices was too dangerous. To illustrate this notion, Dr. Salim S. Abdool Karim, director of CAPRISA and a professor of Columbia University supports the those fears by saying, “It would have been the front-page screaming headline: ‘Africans used as guinea pigs for American drug company’s medicine’” (Pollack, 2014). However, Rony Brauman, (2014) highlights that ”the argument of ‘guinea pigs’ does not hold with Dr. Khan as he was perfectly able to judge by himself whether he was or not a guinea pig.” (Rony Brauman, 2015).

Although various news organizations published the same quote of Dr. Karim concerning Africans being used as guinea pigs, when asked about it it does not seem to be an accurate reflection of his views. If a treatment were made available, he says the “highest priority would be those patients who are ill and already in hospital, admitted and are being cared for with diagnosed Ebola infections so that we can look at, in a randomized control trial setting, what is the frequency or what effect these drugs have or can have on mortality” (Karim, 2015). In cases where there is not enough medication for the patients, he “would prioritize healthcare personnel is because the more healthcare personnel we have that have recovered from Ebola infections the stronger our ability would be to deal with the epidemic going forward.” However he does not believe that this is the case currently (Karim, 2015).

Of course, these precautions lead to the other problem of the local affected population being viewed as not being good enough to be healed. As put by Kenyan human rights activist and UN Special Rapporteur on the rights to freedom of peaceful assembly and of association Maina Kai, “There was a sense of the same pattern, that the life of an African is less valuable” or Dr. Armand Sprecher, an MSF doctor specialized in hemorrhagic fevers, “It was unfortunate that the first doses went to white Americans ‘because it confirms all the suspicions people have’”(Pollack, 2014). Another argument in support for local population prioritization says “priority access should go to locals — they are the ones who are most affected. It’s quite telling that it’s only when two Americans and one European have Ebola that suddenly an experimental treatment comes out of the woodwork and gets administered” (Yasmin, 2014). “The need for these drugs”, Dr. Ruth Macklin of Albert Einstein College of Medicine says, “is greatest in the countries where the epidemic is raging. Their residents come first ... severely limited supply should be granted first to inhabitants of the nations that have been most severely affected” (Yasmin, 2014).

On the other hand, there is also the case of Thomas Duncan, an African American who contracted Ebola in Liberia but was treated in the U.S. where he tested positive for Ebola, and later died. His family blamed the delay in his receiving treatment on racial bias. His nephew Josephus Weeks argues “It is suspicious to us that all the white patients survived and this one black patient passed away ... He didn't begin his treatment in Africa. He began treatment here, but he wasn't given a chance” (Karimi &
Shoichet, 2014).

The debate around the issue of race later developed into a bioethical issue (supported by academic publications already mentioned) which has its roots long before the 2014 Ebola outbreak, known for instance for the case of HIV clinical trials.

There were not many direct statements on prioritization from the organizations involved in fighting the outbreak. In MSF for instance, there are sometimes different individual opinions, like Dr. Bertrand Draguez who directly stated that “treatments need to be made available in sufficient quantities to be administered to all the patients in need” (“Ebola,” 2014). MSF showcases differences of opinion regarding the case of Dr. Khan, for example, but it refuses as an organization to officially admit the mishandling of this case. On the other hand, FDA was quite vague in their position, as according to them “Priority might go to those who had access to other supportive care because they were most likely to benefit” (Pollack, 2014).

4. Main trends of the debate

Shape of the controversy

Following the events around the death of Dr. Khan in Sierra Leone and the treatment and recovery of Americans Dr. Brantly and Nurse Writebol in late July of 2014 after being given ZMapp treatment, the discussion of prioritization comes up in the media. This is months after the first cases of Ebola are detected but occurs at the same time as the WHO declares the outbreak a public health emergency on August 8th.

First, suspicions are focused around racial reasons for the Americans receiving treatment over Dr. Khan or other African doctors. Yet, as the WHO defends its decision not to have given Dr. Khan treatment and other professionals are consulted, the conversation moves towards the rationale for prioritizing treatment for healthcare workers over the local population. It is necessary to reiterate that a distinguishing aspect of the debate is the fact that the treatments available are not fully tested or proven to be successful.

It is clear that this event was the catalyst for the conversation and the academic articles concerning prioritization of treatment in the Ebola outbreak. After an initial influx of news articles and multimedia concerning the issue and the choices made, the conversation remains unsettled and the news media moves on to newer issues.

Arena of the debate

The debate around prioritization has been mostly active in the Western media. After the already mentioned treatment of Dr. Kent Brantly and Nurse Nancy Writebol that was denied to Sierra Leone’s Dr. Khan drew a lot of media attention, the academic debate appeared in the field of bioethics.

All major Western news outlets like The Wall Street Journal, BBC, The New York Times, The Guardian, The Times, NPR and more ran stories concerning the use of ZMapp while tracking the healing process of the two American doctors. By analyzing the most relevant and comprehensive articles (figure 15), it is apparent that the majority of articles came out from August to mid-September.
2014 (13 of 29 articles). Then there were articles concerning the broader issue of ethics in the Ebola outbreak in October and November 2014 (8 of 29 articles). Following this are scattered articles on the vaccines and developing treatment that engage the issue of race and fair design of trials (7 of 29 articles).

While the events concerned a difference in prioritizing treatment Western doctors and African doctors, the discussion in academia did not tackle the race issue. The first two in the *Annals of Internal Medicine* (by Nancy Kass) and *Philosophy, Ethics, and Humanities in Medicine* (by Kevin G Donovan) supported the prioritization of health care workers when giving treatment while the third in *The Lancet* (by Anette Rid & Ezekiel J. Emanuel) made the argument for treating local patients.

While organizations like MSF and the WHO defended their decision to not give Dr. Khan treatment, there was no larger response to the academic articles. The conversation was static and as focus shifted to developing treatment and long-term preventative measures, the discussion around prioritization died out in the media as well.

**Results of the discussion on prioritization**

The WHO panel examining the ethical issues around using untested and unknown interventions decided that in this case of the Ebola outbreak using such treatment was ethical provided that certain conditions are met. These conditions included transparency about all aspects of care, informed consent, freedom of choice, confidentiality, and respect for the person, preservation of dignity and involvement of the community (“WHO | Ethical considerations for use of unregistered interventions for Ebola virus disease (EVD),” 2014). Furthermore, any use of these experimental treatments requires transparent data collection that is as thorough as possible for the medical community in order to assess the safety and efficacy of the treatment.

Since healthcare workers are more aware of the risks and procedures for taking experimental drugs so their ability to give consent is viewed by bioethicists as more legitimate. Since they are also able to properly track changes in their health in order to collect as much information as possible about the drug, their treatment is a means of better assessing the effects and risks of the drug. Therefore while the bioethical approach does not disapprove of treating local patients with experimental drugs, it sets requirements and protocols that are difficult to follow within the context of a medical emergency on the ground.
Figure 14. Priority receivers of treatment according to actors

Healthcare workers
- Dr. Kevin Donovan • Georgetown University
- Ruth Macklin • Albert Einstein College of Medicine
- Nancy Kass • John Hopkins University
- Peter Singer • Princeton University
- Dr. Daniel Bausch • Tulane University
- Dr. Salim S. Abdool Karim • Columbia University
- WHO
- FDA
- Samaritan's Purse
- Welcome Trust & CIDRAP

African vs. Western population
- Dr. Armand Sprecher • Doctor, MSF
- Maina Kiai • Lawyer, United Nations
- Dr. Jerome Amir Singh • Centre of AIDS Research
- Thomas Duncan
- Rev. Jesse Jackson

Local / general population
- Dr. Annette Rid • Kings College London
- Dr. Ezekiel J. Emanuel • University of Pennsylvania
- MSF
- CDC
- NIH • Medical Research Organization
- GlaxoSmithKline • Healthcare Company
- Merck • Healthcare Company
Figure 15. Timeline of the actors’ statements
Chapter 4: The socio-cultural context

1. Overview of the controversy

Why are socio-cultural norms controversial for the Ebola outbreak?

The objective of our project was to study the debates concerning the importance of incorporating an acute understanding and attention to socio-cultural sensitivities into the response to the current Ebola outbreak in West Africa. It quickly became evident that there was a lively conversation around the issue. Experts, policymakers, journalists and global institutions all voiced different opinions on how and to what extent socio-cultural norms were relevant in the containment efforts.

How did the controversy start?

The debate on how much socio-cultural context matters in medical response has a long history, but it seems that the controversy first emerged in relation to the Ebola virus during the outbreak in Uganda in 2000-2001. Pr Barry Hewlett was the first anthropologist to ever be invited by the World Health Organization (WHO) in fighting Ebola at that time. He believes that anthropologists were not invited previously because institutions like the WHO and the Center for Disease Control and Prevention (CDC) had limited experience with medical anthropologists, and were likely to have doubts about how much they could contribute in a rapidly killing epidemic (B. Hewlett & Hewlett, 2007). He continued his work in Congo-Brazzaville in 2003 with Dr Alain Epelboin, stressing the importance of involving local communities in the medical response. More recently, both have argued that institutional actors have not provided an adequate framework within which anthropologists can work, and that there may be a lack of continuity in different anthropological practices, which vary from expert to expert.

2. Methodology

We undertook a broad search to find actors and their arguments, believing that these would be available in a range of arenas. While we read some academic work (books, peer-reviewed articles), the bulk of our research was based on news articles and blog posts, particularly from websites specifically serving as platforms for this issue: Somatosphere and Ebola Deeply, for example. We also conducted 4 interviews with experts representing differing views in the debate.
3. Unravelling the controversy

Traditionally, institutional actors tend to focus on the fact that in health emergencies the priority is to save lives, even if it may be at the cost of local beliefs and practices. The CDC has made its position known by the conspicuous absence of socio-cultural considerations or anthropological expertise in its discourse, as their 2011 Framework for Preventing Infectious Diseases shows (CDC, n.d.). Moreover, the CDC did not involve anthropologists in its West African control efforts until November 2014. Similarly, Dr Kent Brantly from Samaritan’s Purse, one of the leading NGOs in the field, who advocates for an adjustment of the medical response, states that community members and leaders should adapt their cultural practices to provide the best care possible – not the other way around (“Former Ebola patient delivers testimony before Senate committee,” 2014).

On the other hand, in much of the mainstream media, representing socio-cultural norms as an obstacle to medical response to Ebola is pushed to its limits. For example, a June 2014 story by VICE (“Bushmeat in the Time of Ebola,” 2014) and an August 2014 article in Newsweek (Gerard Flynn & Scutti, 2014) present “local practices” like the consumption of bushmeat as a key contributing factor to the spread of Ebola, suggesting that if West Africans did not radically modify their cultural habits, medical response could be hindered. This sensationalist representation of cultural norms in the media is highly criticised by social scientists, but medical response teams, relayed by mainstream media, are repeating time and again that some community practices are dangerous as they help spread the virus further. It is important to institutional actors that endangered communities follow guidelines regardless of cultural specificities, while medical anthropologists would argue that these guidelines should be applied bearing the cultural context in mind.

As the international global health agency and the primary intervention institution on the outbreak, the WHO is the leading voice on the importance of a safe medical response. Spokesperson Tarik Jasarevic states in August 2014 that local communities reacted violently to health workers who adopted sanitized burial procedures involving body bags and disinfectant, a procedure far removed from traditional burial rituals which involved touching and kissing the departed and keeping an open casket for several days (“WHO,” n.d.). The WHO holds on to the importance of safe practices, the priority being the containment of the virus, but local communities have voiced concerns for the protection of their culture.

Over time, the approach of the WHO (Geneva) took a different turn. It published in 2012 a Communication for Behavioural Impact (COMBI) toolkit for behavioural and social communication in outbreak response, which includes a section about the role anthropologists can play in bridging the gap between communities and medical staff (“WHO | Communication for behavioural impact (COMBI),” n.d.). Accordingly, the WHO hires Dr. Alain Epelboin as a consulting anthropologist in Guinea in March-April of 2014. While traditionally the WHO would not necessarily have considered it its responsibility to involve local communities in its intervention, the Ebola outbreak sees the creation of community burial teams who assist health workers in carrying out sanitized burials (“Liberian Ebola burial teams stressed, traumatized,” n.d.). Of course, this comes with its issues of stigmatisation for them, but the fact that they come from the communities is telling in terms of involving local populations in medical decisions.
At the same time, from the point of view of medical anthropologists, more ground remains to be covered. On 5 August 2014, Pr. Hewlett says that Ebola response teams are repeating the same mistakes made in previous outbreaks despite the new protocols (“Mistakes in fighting Ebola repeated all over again, says pioneer,” n.d.). More recently, he points to the fact that the WHO constantly hires different consultant anthropologists with different approaches and there could therefore be a lack of continuity (Interview, 4 April 2015). Moreover, Dr Alain Epelboin explains that the hired medical anthropologists are insufficiently experienced or trained, that teams are constantly rotating and that the chaotic nature of the outbreak requires much stronger coordination between institutions and anthropologists as well as among actors of the same field (Interview, 30 March 2015).

In Dr Epelboin’s opinion, better communication is key to coordinating the medical response with local customs (Ibid). The focus on the practice of medicine, which leads to many instances of insensitivity to the socio-cultural context, triggers mistrust and resistance from local populations. He did a significant study on the Ebola outbreak in the Democratic Republic of Congo in 2012 (Epelboin, 2014), which has been cited extensively by other anthropologists (e.g. Sylvain Landry Faye) with respect to the current outbreak. His principal criticism is that the need to involve medical anthropologists was pointed out over ten years ago, but has still not been mainstreamed. Furthermore, Dr. Epelboin stresses the values of anthropology not only as an attention to cultural norms, but as a facilitator in disease control through knowledge of chains of transmission for example. Anthropologists can understand and explain the behaviour of communities and individuals facing the disease and act as an intermediary for medical response teams. They can help reach equilibrium between sanitary protocols and empathic approaches.

Finally, Sharon Abramowitz, a leading voice from the American Anthropologists’ Association, also argues that institutional actors are not using medical anthropologists to their fullest potential (“Ten Things that Anthropologists Can Do to Fight the West African Ebola Epidemic | Somatosphere,” n.d.). She is extremely critical of the initial lack of involvement of medical anthropologists in the fight against the current outbreak even though medical institutions have voiced the importance of cultural, social and political factors in the outbreak. She also writes that MSF directly rejected her offer to provide assistance early in the outbreak, explaining that they did not hire medical anthropologists.

Many anthropologists have been critical of MSF, in whose practice it has not always been a priority to hire such experts, following the same medical framework as WHO and other global health institutions. Their goal, MSF has argued, is not to provide individually-tailored care, but to stop an epidemic (Interview, 3 March 2015). Their position on the topic is that the response should be medical in priority, regardless of cultural aspects. In keeping with this idea, Dr Michel Janssens of MSF gave a conference on Ebola after returning from West Africa in February 2015. An anthropologist in the audience explained that the word “isolation” in “isolation camp” is often translated as “abandonment” in local West African languages and wondered whether more culturally sensitive terminology should be adopted in dealing with the outbreak. Dr Janssens responded that an isolation camp was abandonment, and that while it could be reassuring for outsiders to be considerate of the local cultural context, the crux of the matter for medical actors was treatment (Ibid.).
There have also been debates between diverging voices from within MSF regarding the type of anthropology that should be involved in medical interventions. Rony Brauman, the former director of MSF, has explained in the past that institutions do not have much to gain from anthropology that “encloses societies in a fixed representation weighed down by traditions” (La Revue Humanitaire, 2007). Instead, anthropology should be dynamic, include historical and political considerations and better help medical personnel to situate themselves in local contexts. On the other hand, Jean-Hervé Bradol, research director of the MSF CRASH Foundation and former president of MSF France, puts the practice of medicine in perspective and points out to the necessity to care for the patients as humanely as possible. According to him, some advice for the containment of the disease, such as the interdiction to eat bushmeat, are inconsiderate of the communities’ lifestyle, but the communication gaps between intervention teams and local populations are not at all specific to the West Africa region. He also stresses that in many instances, communication and adaptation happened smoothly, and warns against overplaying the importance of the socio-cultural context (Interview, 8 April 2015).

 Similarly, some leading medical anthropologists have pointed out that local norms and medical intervention are not necessarily at odds with each other. Pr. Hewlett has studied and highlighted instances where local traditional practices are actually well aligned with medical containment (for example, among the Acholi tribe in Uganda) (B. S. Hewlett & Amola, 2003). Following his experience in Uganda, he pointed out that indigenous peoples’ responses to Ebola are rarely mentioned in dominant discourse and, when they are, “images of ignorance, superstition and exoticism emerge” (B. Hewlett & Hewlett, 2007).

 Many other experts on West Africa, journalists and prominent voices on race relations have spoken out against a reductionist view of a fictional “African” culture and the idea that outdated practices and superstitions were responsible for a lack of adaptability to the medical response. For example, in a tweet, Howard French referred to the issue of Newsweek as an example of “ooga booga” writing on Africa. Mike McGovern, a professor of anthropology at the University of Michigan, has explained that such representations of Africa as an indiscernible whole are completely inappropriate and miss the structural causes behind the spread of Ebola (McGovern, n.d.).

 Others point out that the local “socio-cultural context” should not be considered to imply only the adaptation of burial rituals or communication with community leaders, which in themselves are important, but reproduce a rather limited view of African societies. For example, Cyril Lemieux, a leading French sociologist from the EHESS promotes “pragmatic sociology”, which takes into account political and structural elements rather than solely belief systems (“Ebola et les superstitions journalistiques,” n.d.). Dr. Epelboin also warns against the use of culturalist arguments as an “alibi” that eclipses underlying political and economic realities (Interview, 30 March 2015). Sharon Abramowitz has also recommended a series of ways in which anthropologists should be able to contribute to the fight against Ebola, that go beyond culturalist visions of “African belief systems” (“Ten Things that Anthropologists Can Do to Fight the West African Ebola Epidemic | Somatosphere,” n.d.). These include using the expertise of anthropologists in counting the dead and explaining local reactions, but also tapping the resilience and inventiveness of local populations as a resource. Finally, as Professor Barry Hewlett pointed out, “the political-economic or postmodern [views] are also ‘cultural’. Culture is both public and ‘out there’ as well as cognitive and ‘in our heads’ (Interview, 4 April 2015).”
4. Main trends of the debate

Conflicting views

We identified two broad antagonistic views. The first we came across is a trend favoured by the media, which prioritises medical care and presents socio-cultural practices as hindering the containment of the disease. The second trend, supported by social scientists and anthropologists, is the claim that the outbreak could be under better control if intervention teams were more sensitive to the local context, not the other way around. Proponents of this view tend to view this socio-cultural context not solely as a static and closed entity composed of rites and traditions, but include more political and structural considerations in their analysis. The institutional response has evolved over time to make more space for social scientists.

The shape of the controversy

Upon analysis, it took some time to identify the shape of the controversy. Our original diagram was relatively simple and identified 3 voices: the institutions, which did not consider it their role to adapt to socio-cultural contexts, the anthropologists, who considered it primordial to take such contexts into account and strongly criticized the institutional response, and, finally, a third set of actors who felt that insisting on socio-cultural norms was irrelevant, because the real issues were structural: poverty, corruption, a consequent lack of adequate health infrastructure, etc. (figure 16).

Figure 16.
In reality, the shape of the discussion is far more complex, and while there are points of divergence, there has also been convergence over time. We see for example a change in institutional discourse, as institutions are increasingly trying to involve anthropologists. Publications regarding medical intervention increasingly tend to include a segment on involving local communities. The lack of united position within institutions and among anthropologists is an indicator of the complexity of this controversy. In that sense, our distinction between “anthropologists as proponents of the socio-cultural context” versus “other actors who advocate structural problems” was too simplistic. We also see voices in the media crying out against those who portray Africans as “bushmeat-eaters”, “believers in witchcraft” and “conspiracy theorists”, which have been repeatedly criticized by anthropologists and social scientists. We have rethought the diagram accordingly (figure 17).

Figure 17. The power plays

The politics of knowledge creation

Finally, in terms of the politics of knowledge creation, it has been interesting to consider biases in what is considered a legitimate actor, or credible information, and what is not. Official statements from institutions, for example, necessarily have more credibility than information released by an independent blogger. The UN, and other international actors have been following the WHO in their approach to the outbreak, giving the institution legitimacy. Moreover, as MSF has been on the frontline of the outbreak since the beginning, they have gained legitimacy globally and their data/statements regarding the current outbreak are widely recognized.

More broadly, relying on primarily the Internet for our research has implied that the voices we heard were limited to those present online. Not only does this significantly limit the voices that we hear - voices on the ground in West Africa, for example, who may not be sharing their views on the Internet - but also in itself gives credibility to some arguments over others and is an accurate reflection of postcolonial realities. For example, it is telling that essentializing views on “African culture” are widespread on the Internet and in leading publications such as Newsweek, but conspiracy theories on the spread of Ebola are dismissed by predominant voices. Ultimately, the voices we heard in our research were predominantly Western, and privileged in the context of North-South dynamics.
Figure 18. Timeline of the actors’ statements
Conclusion

The controversy concerning the current Ebola outbreak touches upon several important issues regarding global health, medical ethics, international politics and legal issues in international affairs. The outbreak highlighted global inequalities and illustrated the complexity behind efforts in aid politics and health interventions, as well as socio-cultural norms and the role of local communities in the current response. Some actors argue that response can be slow out of the fear of taking action that is not politically correct and that does not consider the historical or cultural context of a country, whereas others label the current neo-liberal global economic system as unjust and a root case for the current crisis.

Looking at the many different issues involved in this controversy, we came across various diverse arguments and actors. Our research has led us to approach various fields of studies from medical science to social science, anthropology and political economy. The work we have analysed helped us to discover the main axes of contention in the 2014 Ebola controversies. Indeed, the debates surrounding the Ebola outbreak played out in different arenas such as mainstream media, academic and medical journals. However, these discussions are predominantly based in the developed Western countries, Western journals and Western media. This does not mean that the voices of the South have no input to add, but that the findings of our research are limited to what we have access to.

For example, the Western media focuses on the opinions of medical professionals and bioethicists when analysing views on the use of experimental treatments in the field. And it must be taken into account that these opinions only reflect those who agreed to speak with journalists. While most supported the prioritization of other health care workers, they did not engage in the arguments coming from the few dissenting voices that took into account the issue of racial discrimination. This lack of discussion coupled with the move towards issues of developing new treatments and medication, causing the issue of prioritization to die out in the news media where it was most vibrant.

Overall, the debate surrounding the root causes of the 2014 Ebola outbreak, the questioning of the adequacy of the international response, the ethical debates around vaccine production, clinical trials and prioritization and the discussions on how to comprehend the various socio-cultural contexts of Ebola-hit countries have raised various questions regarding the approach to the current Ebola outbreak.

First of all, the discussions surrounding the root causes remain in the field of social science - even though medical experts take part in the conversation, the content focuses around economic systems, world order, politics and governance, colonial history, prioritization of health care and the controversies about development in general in the African continent. All of these views were displayed in the media as actors try to make the public aware of their opinions. Although publications in The Conversation and The Lancet triggered the most fruitful discussions, the main action took place on a
more mainstream American news website – *the Washington Post*, potentially reaching a much larger audience. The main arguments were thus published in mainstream media of the West.

For most actors many of the root causes overlap, but two distinct groups and a middle-way group of actors can be identified according to their interpretations of the response to the outbreak. The 2014 Ebola outbreak is for some observers an example of the weakness of the current economic system and for others a matter of lack of preparedness. In short, the core of the debate is on whether the IMF-World Bank dominated world economic order is valid.

We wanted to look further into what the root causes of the outbreak were thought to be and the controversy surrounding this issue. The debate however was in itself not very lively as most actors did not engage with each other, preferring instead to use the example of the failures of the 2014 Ebola response to advance their own political causes. Incidentally, the only major confrontation we encountered was between American economist and political scientist Chris Blattman and UK-based Greek sociologist Alexander Kentikelenis.

Next, we took a look at the politics of the international response, that is generally considered late and inadequate, examining specifically the questions of the motives behind the intervention, the nature of the response and the debates surrounding quarantines and travel bans. The main actors we looked at were institutional actors: the WHO, the African Union, affected and non-affected governments and NGOs, especially MSF, that became the de facto leaders in the field. We realised that the voices of the local population were largely ignored by the media. International relations and NGOs are starting to interact since March of 2015 through their annual reports and perspectives for the Ebola outbreak. The politics of the international response address more generally the issues of health governance: who should be the leader in the field, how actors perceive themselves and the others and what should be given priority given scarce resources.

The medical side of the response was affected by a lack of available treatment and dilemmas around how to test and use the experimental treatment that did exist. The absence of a vaccine against Ebola ready in the summer 2014 is one of the reasons why the global response was incomplete and delayed. Media articles relaying accusations and statements between WHO, medical experts and Big Pharma spokespersons mainly led the controversy. The debate behind this absence is that it is not profitable for Big Pharma to develop a vaccine for such a small market population. Even if a vaccine was found in 2005, it was too expensive to produce it and didn’t seem necessary as the precedent outbreaks were contained. American and Canadian governments offered financial support to the development of these vaccines with small laboratories and then Big Pharma. For the WHO and medical professionals, this crisis put into question the very profitability model of the Big Pharma, who would not face unprofitable diseases without support from public sectors. The controversy over vaccine production was needed to call into question the financial decisive factors behind medical products for the neglected and unprofitable diseases.

There is also controversy over the design of clinical trials which focuses on whether it is ethical and practical to use randomized controlled trials (RCTs) in the context of the outbreak. The controversy
started with the recovery of Dr Kent Brantly and Nancy Writebol, two US health workers that have been infected by the Ebola virus and treated with Zmapp, an experimental drug that was produced in very low quantity and provided to those patients. Then a panel of experts was convened by WHO to discuss the design of clinical trials.

*The Lancet* and *New England Journal of Medicine* served as the two key arenas for the discussion. The former posed itself in favour of RCTs, which is considered the gold standard and proves to be the most effective and safest design of clinical trials, while the latter proposed against RCTs, for the reason that in the context of an outbreak it would be unethical to randomize people to receive a trial. Apart from the main arenas for RCTs and non-RCTs, there were other actors arguing for alternative approaches. In practice, MSF led a clinical trial not using RCTs while the NIH-led study used RCTs as part of its approach.

On the other hand, the discussion surrounding prioritization of treatment concerning the Ebola outbreak was a controversy defined by its media attention rather than academic analysis. With only three academic articles concerning the bioethics of prioritization and little recognition of the issue from large medical aid organizations and institutions, the issue was more of a media concern that was triggered by the use of the little ZMapp available on American doctors following the death of the notable Dr. Khan in Sierra Leone, who was denied the same treatment.

The Western media focused on the opinions of medical professionals and bioethicists when analysing views on the use of experimental treatments in the field. However, it must be taken into account that these opinions only reflect those who agreed to speak with journalists. While most supported the prioritization of other health care workers, they did not engage in the arguments coming from the few dissenting voices. This lack of discussion coupled with the move towards issues of developing new treatments and medication, causing the issue of prioritization to die out in the news media where it was most vibrant.

We chose to study one more controversy that sparked a very lively conversation in the media and amongst academics: the discussion concerning the place of socio-cultural norms. The media portrayed the current outbreak in various ways, often blaming the “African culture” as the main obstacle to an efficient response. The debate touched upon the extent to which socio-cultural norms are relevant, and ways of incorporating such norms into medical response to the outbreak.

We identified two broad antagonistic views in this debate. First, we came across is an institutional trend favoured by the media, which prioritises medical care and presents socio-cultural practices as hindering the containment of the disease, the main actors being WHO and MSF. Secondly, social scientists and anthropologists often make the claim that the outbreak could be under better control if intervention teams were more sensitive to the socio-cultural context, not the other way around.

This controversy traces back to 2000 during the Ebola outbreak in Uganda when anthropologists challenged the WHO their strictly medical response. Since then, anthropologists have been involved in the outbreak by the global health institutions, but according to most anthropologists little has changed overall as the same “mistakes” are being repeated. Moreover, the issue of “culture” is not always clear-cut and is also present in the institutional trend, as different “medical cultures” are also
shaping the debate, highlighting the importance of not overplaying the importance of the socio-cultural context.

The many controversies that came up during the Ebola outbreak reflect the intersectionality between the medical, social, and political fields. They each highlight an aspect of the global politics of aid and development and illustrate how public actors handle such issues. In many cases it is clear that the media has a large role in disseminating information and thus framing the debate. While academia is still the source of intellectual argumentation, it is slow to respond and therefore provides a more factual foundation rather than a venue for debate. The Ebola outbreak as a whole was a point of controversy as people from around the world and various fields of study criticized the response. Looking into each of the issues allows not only for a better understanding of things that may have gone wrong, but also tracks the flow of information and the exchange of ideas at the global scale during times of emergency.
Bibliography

Executive Summary & Introduction


Chapter 1


Chossudovsky, Structural Adjustment. Notebooks for Study and Research, 1995
Toussaint, E. and Comanne, Globalization and Debt. Notebooks for Study and Research 1995

Chapter 2.1


Chapter 2.2


Ebola timeline, MSF Canada


MSF, "Pushed to the limit and Beyond", 23 March 2015

Oxfam report


WHO,”One year into the Ebola epidemic”, January 2015

Chapter 2.3


Chapter 3.1


Harris, R. (2014). Ebola drug could be ready for human testing next year. NPR.


Sneed, A. (2014). When will we have a vaccine for Ebola virus? Scientific American.


Chapter 3.2


Chapter 3.3

Donovan, G. K. (2014). Ebola, epidemics, and ethics—what we have learned. Philosophy, Ethics, and Humanities in Medicine, 9(1), 15.


Chapter 4

Revenue Humanitaire (2007): Anthropologues et ONG : des liaisons fructueuses ?


68
CDC Framework For Preventing Infectious Diseases: Sustaining the Essentials and Innovating for the Future, 2011


Former Ebola patient delivers testimony before Senate committee. (2014, September 16).


