



# CPSSMUN World Health Organization

UNIVERSAL HEALTH COVERAGE: EVERYONE, EVERYWHERE



**MUNWHO** 



Harsh Patel Anush Singhal Aatman Shah Rishav Banerji





Invitation Letter October 24/25

Letter Adopted by the Director of the "WHO Committee"

Dear Delegates,

You have been called to join the resolution with the highly prominent public health assembly on October 24 & 25 at Central Peel Secondary School.

The World Health Organization Committee regards the state of affairs in the world to discuss resolutions to numerous medical affairs. Global challenges of providing affordable electronic healthcare, immunization, nutritional support, and control of wide-spread diseases are just some of the issues that will be mentioned during the assembly. This committee entitles each delegate to take on the role of the head of state of a country. You will help one another as a global society by proposing working papers with the goal of resolving 3 set issues during the course of the assembly.

Such global medical affair is not to be taken lightly, as the safety of billions of lives are on the table. I, along with the rest of the dais - Rishav Banerji, Aatman Shah, and Harsh Patel - are primed for the action this committee is sure to entail and am excited to what innovative solutions this committee will create.

This committee plans on going paperless as it will make sure the assembly runs in a systematic and effective manner. It is requested delegates bring a laptop to the conference as it will be required to send working papers and reference information which will all be administered through Slack (a secure online messaging system). Please be advised that roles will be given out on a first come, first serve basis: it is recommended the delegates fill out the Google Form as soon as possible.

Sincerely,

Anush Singhal

Director of the World Health Organization Committee allsinghal@gmail.com

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Director's Letter October 24/25

Letter Adopted by the Director of the "WHO Committee"

Dear Delegates,

Welcome to the World Health Organization committee. I am Anush Singhal, a grade 11 AP student who attends Central Peel Secondary School. As the director of this committee, I would like to welcome you to what is sure to be an exquisite committee in this amazing conference CPSSMUN has been planning for months. I have been associated with Model UN since grade 10, I have participated in several conferences where I have constantly been in General Assemblies (GA) where I have constantly been memorable.

It is clearly seen that I love GAs, and in result asked to direct CPSS's World Health Organization (WHO) committee. After thorough research it was decided that the committee would split all the topics addressed by the WHO into: recent electronic healthcare/systems, international epidemics, and health in developing nations, as, it was decided that all topics covered the WHO are important.

This committee will be set up as a regular GA, with minor upgrades. This committee is striving to be paperless in result we ask all delegates to bring a device to create and read resolutions. We will also be using a secure messaging app called Slack to share important files and allow the dais to speak to committee members without disrupting the flow of the session. Though devices are allowed, they shall only be taken out during break or unmoderated caucuses for obvious reasons. It is expected all research is done before the conference and in result; delegates must send a PDF that is a 2 page chicago style position paper with footnotes on the delegates' country's stance on the issue, to my email by October 15<sup>th</sup>, to be eligible for awards. Good luck delegates and welcome to CPSSMUN WHO.

Sincerely,

Anush Singhal
Director of the World Health Organization Committee
allsinghal@gmail.com



Dais Letter October 24/25

Letter Adopted by the dais of the "WHO Committee"

Dear Delegates,

Hello! I am Harsh Patel, currently in grade 11 at Central Peel Secondary School (CPSS), and one of your committee daises for the Model UN World Health Organization Committee. My associations with Model UN dates back from grade 9, where I was an active member of Model UN. When I'm not studying until 3AM or working tirelessly with my co-chairs to plan the best committee at CPSS, you can find me watching reality TV shows or playing basketball.

My name is Aatman Shah, a grade 12 student attending CPSS and another one of your committee dais for the Model UN WHO conference. Being a part of CPSS MUN since 2016, I have been a part of the General Assembly and have assumed different roles to understand how the committee works. Other than planning for Model UN or anything school related, I love to travel and read.

Hi! My name is Rishav Banerji, a current grade 12 student attending Central Peel Secondary School, and one of your committee daises for the Model UN WHO conference. I have been involved with Model UN since grade 10, where I had assumed various roles while encountering amazing experiences along the way. Other than Model UN, I enjoy robotics and playing the guitar.

Sincerely,

Aatman Shah Harsh Patel Rishav Banerji Dais of the World Health Organization Committee



Introduction October 24/25

The World Health Organization (WHO) originated in 1945, along side the United Nations when they agreed on creating a committee responsible for expanding the availability of medicine in the world. The constitution of the WHO was signed on 22 July 1946, establishing a strong foundation for the most extensive medical effort in the international community. The constitution had force on April 7th, 1948, and from that day the WHO has continuously led many advancements in public health.

Today, the WHO has over 194 member states maintaining a presence over 150 countries. The WHO has not strayed from their initial reason but instead has expanded their horizons and is committed to continue efforts to raise accessibility to new treatments. The WHO is also involved in projects to improve living conditions for thousands of people, as with sanitation and nutrition many diseases can be preventable. By formulating new policies, the WHO is also involved in making sure countries develop health infrastructure capable of providing for their populations. During the span of this conference delegates will discuss 3 major issues: health technologies, health in developing nations, and the outbreak of many diseases, hopefully ending with the ratification of decisive treaties that will surely assist the global community.





Electronic Healthcare/Issue 001
October 24/25

#### Introduction

Health technologies equip health-care providers with tools that are indispensable for effective and efficient prevention, diagnosis, treatment and rehabilitation and attainment of internationally agreed health-related development goals. Health technologies in particular medical devices represent an economic as well as a technical challenge to the health systems of many Member States, as health technologies that do not meet high-priority needs, are incompatible with existing infrastructures, are irrationally or incorrectly used, or do not function efficiently. The need for Member States and donors to contain soaring costs by establishing priorities in the selection and acquisition of health technologies, on the basis of their impact on the burden of disease, is rising. The potential impact that advances in information and communication technologies could have on health-care delivery, public health, research and health-related activities for the benefit of both low- and high-income countries are enormous.

Not only are health technologies efficient, eHealth is cost-effective and secure in the use of information and communications technologies in support of health and health-related fields, including health surveillance, and health literature, education, knowledge and research. In result advances in information and communication technologies have led to raised expectations for health. eHealth insures secure, effective and timely transmission of personal data or population data across information systems requires adherence to standards on health data and related technology. Using this available technology, it only seems necessary to make appropriate use of the collected information and communication technologies in order to improve care, to increase the level of engagement of patients in their own care, as appropriate, to offer quality health services, to support sustainable financing of health care systems, and to promote universal

<sup>&</sup>lt;sup>1</sup> EHealth at WHO (World Health Organization, 2018).

<sup>&</sup>lt;sup>2</sup> WHO EHealth Resolution (World Health Organization, February 23, 2012).

access.<sup>3</sup> Through standardized electronic data: health workers can gain access to fuller and more accurate information in electronic form on patients at the point of care; pharmacies can receive prescriptions electronically; laboratories can transmit test results electronically; imaging and diagnostic centers have access to high-quality digital images; researchers can carry out clinical trials and analyze data with greater speed and accuracy; public health authorities have access to electronic reports on vital events in a timely manner, and can implement public health measures based on the analysis of health data; and individuals can gain access to their personal medical information, which supports patient empowerment.<sup>4</sup> This issue can only be resolved by highlighting the need for national eHealth strategies to be developed and implemented and the need to expand expertise in the field of health technologies in particular medical device.

#### Case Studies

#### Case 1 - How Electronic reports are enhancing Canadian health care

Throughout Canada electronic hospital records have been created to ensure a timely access to crucial patients' information, which helps physicians offer better care. These hospital records reliably connect family physicians to each other and other health clinics such as -but not limited to: hospitals, dentists and psychiatrists, by speeding up information transfer.

Traditional messaging techniques – such as fax or mail – would take up to weeks at times for vital patient information to reach physicians, reducing their effectiveness. Automated hospital reports enable doctors to receive information in a fraction of the time. This allows hospital to electronically deliver more than 400,000 patient hospital reports per month to primary care providers, from 54% of Ontario's hospitals.<sup>6</sup>

#### Case 2 - ClinicalConnect in Canada

As an initiative from eHealth Ontario's provincial program, ConnectingOntario, they established ClinicalConnect. ClinicalConnect makes an individual's health information available across the board. This program works to ensure that patients anywhere in the province will have their health information accessible to care professionals across the entire province.

Dr. Vincent, lead physician of North Woodlands Medical Centre, believes in the great applications of ClinicalConnect as it enables real-time access to patient information, test results and consults and improves information sharing among clinicians.<sup>8</sup>

<sup>3</sup> Ibid

<sup>&</sup>lt;sup>4</sup> G. Eysenbach, What Is E-health? (Advances in Pediatrics., 2001).

<sup>&</sup>lt;sup>5</sup> EHealth Ontario, *Electronic Reports Enhancing Health Care* (eHealth Ontario, 2018).

<sup>&</sup>lt;sup>6</sup> Ihid

<sup>&</sup>lt;sup>7</sup> EHealth Ontario, Ehealth Progress Leads to More Efficient Flow of Communication (eHealth Ontario, 2018).

<sup>8</sup> Ibid.

Sharing a common interface, health care providers are able to access patient health information through ClinicalConnect at anytime. ClinicalConnect has opened doors to several advancements in eHealth the most noticeable being; real-time collaboration and communication through online consultations, or expanding ClinicalConnect to not only connect Ontario, but Canada and maybe even the world allowing a tailored assessment no matter where the patient is.

#### Case 3 - Infosys in India

In result to the healthcare industry pushing to reduce costs, Infosys (an IT solutions company based in India) was hired to develop a program which allows users to be more active in managing their own healthcare.<sup>10</sup> The way Infosys accomplished this was by making a comprehensive personal health record for the user that would also be sent to the physicians. The personal health record would act like a portfolio that stored information inputted by the user, physician or another healthcare professional that was added to the group allowing all the data to be accessible by everyone.<sup>11</sup> The program ultimately empowers the user and saves time/money by completing online diagnostics rather than going to health clinics.

#### **Possible Solutions**

There could be a myriad of possible solutions, but the committee urges member states to look towards formulating appropriate national strategies for the establishment of systems for the assessment, planning, procurement and management of health technologies, create national or regional guidelines for good manufacturing and regulatory practices, establish where necessary regional and national institutions of health technology, and to collaborate and build partnerships with healthcare providers, industry, patients' associations and professional, scientific and technical organizations. Also member states must understand that it is difficult to insure all signatories are accomplishing their tasks so consider drawing up a long-term strategic plan for developing and implementing eHealth services in the various areas of the health sector and build closer relations with non-profit sectors in information and communication technologies, to further advertise the use of the eHealth services of WHO and other health organizations, and to seek their support in the area of eHealth.

#### **Guiding Questions**

1. Are health technologies necessary? Do they truly positively impact the global community, is the advancement worth the cost?

<sup>&</sup>lt;sup>9</sup> Ibid.

Infosys, *PHR Solution for a Health Insurer* (Infosys Healthcare, 2017).
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- 2. What arguments do member states have against the use of updated medical technologies and/or virtual health care. What arguments do member states have for the use of technologies to help advance medical practices?
- 3. Noting that many countries would like to upgrade their medical practices but can not for many possible reasons, what actions can the global community take ensure all member states that would like to update, can?
- 4. Though eHealth insures secure, effective and timely transmission; should this practice be used less frequently due to the rising threat of hacking and effects on virtual security?
- 5. Are health technologies feasible?

#### References

- EHealth Ontario. "Electronic Reports Enhancing Health Care." EHRs Explained EHealth Ontario | It's Working For You. 2018. <a href="https://www.ehealthontario.on.ca/en/success-stories/view/electronic-reports-enhancing-health-care">https://www.ehealthontario.on.ca/en/success-stories/view/electronic-reports-enhancing-health-care</a>.
- EHealth Ontario. "Ehealth Progress Leads to More Efficient Flow of Communication." EHRs Explained EHealth Ontario | It's Working For You. 2018. <a href="https://www.ehealthontario.on.ca/en/success-stories/view/ehealth-progress-leads-to-more-efficient-flow-of-communication-and-increase">https://www.ehealthontario.on.ca/en/success-stories/view/ehealth-progress-leads-to-more-efficient-flow-of-communication-and-increase</a>.
- Infosys. "PHR Solution for a Health Insurer." Healthcare. 2017. <a href="https://www.infosys.com/industries/healthcare/case-studies/Documents/personal-health-record.pdf">https://www.infosys.com/industries/healthcare/case-studies/Documents/personal-health-record.pdf</a>.
- N, Ravishankar. "IT Applications for Healthcare." Enterprise Quality Services. 2008. <a href="https://www.infosys.com/IT-services/validation-solutions/white-papers/Documents/healthcare-applications-process-quality.pdf">https://www.infosys.com/IT-services/validation-solutions/white-papers/Documents/healthcare-applications-process-quality.pdf</a>.
- "EHealth at WHO." World Health Organization. 2018. <a href="http://www.who.int/ehealth/about/en/">http://www.who.int/ehealth/about/en/</a>.
- "WHO EHealth Resolution." World Health Organization. February 23, 2012. <a href="http://www.who.int/healthacademy/news/en/">http://www.who.int/healthacademy/news/en/</a>.
- Eysenbach, G. "What Is E-health?" Advances in Pediatrics. 2001. <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1761894/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1761894/</a>.





Non-communicable Diseases /Issue 002 October 24/25

#### Introduction

Consequences of non communicable diseases are felt by all countries. According to the World Health Organization, NCDs are those of long duration and slow progression. Four types of non communicable diseases include: cardiovascular diseases, cancer, chronic respiratory diseases and diabetes. NCDs, represent the leading cause of death in the world. A study conducted by WHO depicted that NCDs kill more than 36 million people each year, where 80% of all NCD deaths occur in low-income countries. NCDs can fortunately be preventable through effective interventions that tackle shared risk factors. Tobacco use kills 6 million people a year, and this number is expected to increase to 7.5 million, ultimately accounting for 10% of all deaths.

Reducing global percentages of NCDs is necessary for sustainable development. NCDs take responsibility for 38 million deaths annually. 13

Accelerating efforts to diminish the issue is key. The WHO placed into action a comprehensive global monitoring framework with indicators and voluntary global targets for 2025. <sup>14</sup> Furthermore, WHO also took a set of actions for the prevention and control of noncommunicable diseases, when implemented by Member States, and international partners will help to achieve the commitments made by world leaders. Change needs to be made, as the World Health Assembly has noticed little progress in the last couple of years.

<sup>13</sup> Ibid

<sup>&</sup>lt;sup>12</sup> Ibid.

<sup>&</sup>lt;sup>14</sup> World Health Organization. NCD Global Monitoring Framework (WHO, 2018)

#### Case Studies

#### Case 1 - Chinas Neglected Health Challenge: Non-communicable Diseases

Accounting for more than 85 percent of the total burden of disease in China, NCDs have been high on the list of national disease control priorities. 15 China has fallen behind in its development and implementation of effective policies to tackle these diseases. With more than 200 million hypertensive patients and 90 million diabetes patients, only a small proportion of these patients are under effective treatment and control. 16 Furthermore, funds provided from central and local governments for NCD control have been very limited. According to the World Economic Forum's 2010, NCDs pose a bigger threat to global developments than fiscal crisis and natural disasters. Although China had just over 750,000 HIV-positive patients in 2011, HIV/AIDS in China has attracted much political attention and significant financial resources. 17 The mortality rate in China from stroke, for example, is 4-6 times as high as in France, Japan or the U.S. International organizations and national governments agree that the rise of NCDs has devastating social and economic consequences for developing countries. With an alarming situation facing China, it is often the poor who are mostly likely to suffer from NCDs rather than the rich. Now is the time for urgent action by the Chinese government to develop domesticallydriven and evidence-based disease control policies with adequate funding, while continuing the fight against infectious diseases. There must be enough room in the political agenda for this multi-pronged approach.

#### Case 2 - U.S. Governments Attention to NCDs

Though not an area of huge focus, U.S. government attention to NCDs has recently grown. U.S. contributions in global NCDs have largely included health diplomacy, scientific research, and technical assistance, often drawing on the U.S. government's experience with NCDs domestically.

Despite the fact that there is no U.S. program that focuses on NCDs, they have been addressed as part of other U.S. global health activities, such as maternal and child health, and nutrition efforts. Efforts are supported with the Department of Health and Human Services (HHS), The Centers for Disease Control and Prevention (CDC) and the National Institutes for Health (NIH), as well as other agencies. Currently, funding to address NCDs in low-income countries is not of importance by Congress, and where NCDs are fundable, it remains relatively small.

Going forward, an overarching question is whether the current presidential administration will support global NCD efforts. Other opportunities and challenges facing policy makers include:

<sup>15</sup> Global Health Institute. China's Largest, Most Neglected Health Challenge: Non-communicable Diseases (Duke, 2015)

<sup>16</sup> Ibid. 17 Ibid.

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- addressing a growing NCD problem
- deciding how to contribute to global NCD efforts
- supporting further research
- addressing trade and intellectual property concerns

#### Case 3 - Nigeria's National Crises

Nigeria has seen an increasing growth of cardiovascular diseases, diabetes mellitus, chronic respiratory diseases, and cancer. Cerebrovascular diseases are significant causes of global mortality, accounting for 80% of deaths in developing nations. 18 Nigeria has an approximate population of 160 million, and a proportional mortality of 12%. 19 Furthermore, DM (Diabetes Mellitus), specifically Type 2 DM affects a majority of the population. The Framingham study determined that DM, affecting CVD (Cardiovascular Diseases), have remained fairly constant throughout the past 50 years.

In terms of chronic respiratory disease, it is majorly present in the spectrum of airway ailments, ranging from reversible and irreversible obstructions. On a global scale 235 million individuals are affected with BA and another 64 million by COPD (Chronic Obstructive Pulmonary Disease). 20 Unfortunately paying for medication in Nigeria is extremely difficult as poverty dense areas are areas with a likely chance of developing such diseases.

#### Possible Solutions

Creating possible diplomatic solutions and creating goals for the future in order to fight this affair is crucial. Proposing adequate goals similar to the ones that the United Nations have already implemented includes: a reduction in mortality from NCDs, a reduction in inappropriate use of alcohol, within the national context, reduction in the lack of physical activity, a relative reduction in the mean intake of sodium concentrations, a reduction of intake of tobacco in persons aged 15+ years, a reduction in the prevalence of raised blood pressure, according to national circumstances, a halt in the rise of diabetes and obesity, and an increasing availability of the affordable technologies and medicines, including generics, of which are required to treat major noncommunicable diseases in both public and private facilities.

Furthermore, raising the priority accorded to the control of NCDs in global agendas and agreed development goals, through strengthened international advocacy, national capacity, leadership, governance, multispectral action and partnerships is pivotal. To accelerate global responses for the prevention of NCDs, member of states must reduce modifiable risk factors for NCDs and underlying determinants through creation of sustainable health environments as a method to strengthen the presence of NCDs globally.

African Medicine, The Burden Of Non-communicable Diseases in Nigeria: In The Context of Globalization (Annals Of African Medicine, 2014)

19 Ibid.

<sup>20</sup> Ibid.

#### **Guiding Questions**

- 1. Why is it important to focus on primary health care as an avenue for the management of noncommunicable diseases?
- 2. Why are people with non communicable diseases more vulnerable to the health impact of emergencies?
- 3. What are the challenges in treating and managing noncommunicable diseases in emergencies?
- 4. What should be the focus for noncommunicable disease management during emergencies?

#### References

Annals of African Medicine. "The burden of non-communicable diseases in Nigeria; in the context of globalization." African Medicine. 2018. <a href="http://www.annalsafrmed.org/article.">http://www.annalsafrmed.org/article.</a> asp?issn=1596-3519;year=2014;volume=13;issue=1;spage=1;epage=10;aulast=Maiyaki

Global Health. "China's largest, most neglected health challenge: Non-communicable diseases." Duke Gloabal Health Institute. 2018.

https://globalhealth.duke.edu/media/blogs/china/ chinas-largest-most-neglected-health-challenge-non-communicable-diseases

Kaiser Family Foundation. "The U.S. Government and Global Non-Communicable Disease Efforts." The Henry J. Kaiser Family Foundation. 2018. <a href="https://www.kff.org/global-health-policy/fact-sheet/the-u-s-government-and-global-non-communicable-diseases">https://www.kff.org/global-health-policy/fact-sheet/the-u-s-government-and-global-non-communicable-diseases</a>



Diseases in Impoverished Nations/Issue 003 October 24/25

#### Introduction

The outbreak of diseases in impoverished nations leads to millions of deaths with not enough medical attention or equipment readily available for these individuals. Proper care and treatment regarding health issues and diseases like yurtak, hikol, tuberculosis, ebola, and cancer are not affordable, and the number of new annual cases is growing uncontrollably. These diseases are spreading through the air, water, by animals, and from direct contact of people. Deaths and new cases are stopping the economies of these countries from being fully operational and beneficial to the global economy. If not addressed, socio-economic and environmental factors, as well as international travel, can cause such diseases to turn into epidemics and threaten global health security. Reducing the number of deaths and new annual cases is necessary for the development and sustainability of economical, commercial, and environmental factors in such countries.

The World Health Organization (WHO) has been working towards addressing such issues before epidemics and plagues destroy socioeconomic and international relations. In order to combat these issues, multiple decisive and orderly steps are taken to ensure mass panic does not occur and the situations can be easily dealt with. First, the WHO will analyze the geography and accessibility of the area of concern to try and quarantine it as to not spread the disease. They will then detect and track all the current cases, while keeping track of other contacts as well. In order to ensure the disease does not spread rapidly, the infected are stopped from going to public places and buildings such as parks and schools. In addition, the WHO will send representatives into the area and other surrounding areas to educate citizens of the impending issues and concerns. Along with the steps listed above, they will be setting up camps or treatment centers for the infected patients as to cure them as soon as possible. Before leaving the area, the team will use screening processes to ensure other symptoms or more infected people are not found.

#### Case Studies

#### Case 1 - Cancer Care in Africa

The survival rate of cancer-diagnosed individuals living in African countries is far lower than that of developed European and North American nations. There are factors that come into play for this poor survival rate, most of which are socioeconomic. For instance, a survey conducted by the World Health Organization in the African region yielded results in which, from the 46 responsive countries, only 17 had plans, strategies, or policies which could be implemented to combat cancer cases<sup>21</sup>. Even from these 17 countries, most did not have enough funds to implement the plans had cancer become a major issue.

In order to combat the issue, it is first necessary to understand, using statistics, how different factors such as sex, age, race, and quality of life affect the results, but the data needs to be collected first. According to the African Cancer Registry Network, only 22 such cancer registries exist in the Sub-Saharan Africa Region, and all of them are not even national registries<sup>22</sup>. This disallows governments to know about the health of their own citizens and leads them to only estimate such numbers, leading to biased data and possibly untrue facts. The latest estimation done by the International Agency for Research on Cancer (IARC), done in 2012, showed that almost 850,000 new cancer cases appeared in Africa<sup>23</sup>. The estimates for 2020 are an increase by 24% for new cancer cases in this region<sup>24</sup>. Based on the 2012 study, an estimated 79 people from every 100,000 have some sort of cancer<sup>25</sup>.

#### Case 2 - Major outbreak of Ebola in Democratic Republic of Congo

Thousand of people have perished of Ebola of an outbreak which occurred four years ago. While the World Health Organization declared the epidemic to be over in 2016, a new outbreak has been reported in the Democratic Republic of Congo, where at least 44 people have been infected with the virus and 23 deaths are under investigation <sup>26</sup>. On December 28th 2013, A two-year-old boy named Emile Ouamouno dies of a mysterious hemorrhagic fever in the Guinean village of Gueckedou after playing with fruit bats<sup>27</sup>. His mother, three-year-old sister, and grandmother all died shortly afterwards. On March 23rd 2014, Guinea confirms that the disease is the hemorrhagic fever Ebola, which was first discovered in 1976<sup>28</sup>. To date, it has

<sup>&</sup>lt;sup>21</sup> Daniela Stefan, Cancer Care in Africa: An overview of resources (ASCO Journals, 2015).

<sup>&</sup>lt;sup>22</sup> Ibid.

<sup>&</sup>lt;sup>23</sup> Ibid.

<sup>&</sup>lt;sup>24</sup> Ibid.

<sup>&</sup>lt;sup>26</sup> Xavier Greenwood, Ebola: Did it ever really go away? A timeline of key events (Independent, 2018).

<sup>&</sup>lt;sup>28</sup> Ibid.

killed 59 people in the West African country. April 8th to May 24th 2014, the virus spreads to Sierra Leone and Liberia<sup>29</sup>. Hospitals that were treating Ebola, became contaminated and killed all workers and patients. August 4th 2014, this outbreak was considered an international emergency, as it reached Nigeria<sup>30</sup>. This outbreak continued throughout 2014, 2015 and 2016. An official end to an epidemic that killed more than 11,000 people is declared by WHO after no new cases are reported in Guinea, Liberia and Sierra Leone in 42 days, on January 14th 2016<sup>31</sup>.

Recently there was an Ebola outbreak in the Democratic Republic of Congo, with a total of 32 suspected cases, including 18 deaths<sup>32</sup>. In May of 2018, The World Health Organization calls an emergency meeting to consider the international risks of the latest outbreak after a case of Ebola is confirmed in Mbandaka, a major city in the DRC. The current outbreak totals 44 cases, including 23 deaths<sup>33</sup>.

#### Case 3 - Outbreak of Tuberculosis in South Africa

For the past decade, an effort to gain Tuberculosis control in South Africa has resulted in changes in case-finding and treatment policies. There were changes in standardization of recording and reporting systems along with improved monitoring of the symptoms.<sup>34</sup> The elements of the revised strategy, implemented in 1996 after Tuberculosis were declared a national emergency. This included bacteriological confirmation of the disease, standardized firstline treatment regimens and an electronic recording and reporting system. 35 This strategy was the internationally recommended DOTS strategy. Expansion of the DOTS strategy followed rapidly. In 2003 there was complete coverage in all nine provinces, covering over 183 health districts. Comprehensive management of patients with that were diagnosed with Tuberculosis or a form of it, became a national policy in 2000 and was implemented through a network of provincial TB referral centers'. Despite these efforts, TB fatality rates have increased. 36 There are more than 400, 000 cases of Tuberculosis annually, with cure rates only reaching to about 50%. TB related mortality rates are at an all time high.<sup>37</sup>

In order to find a resolution to this issue, it is necessary to consider the following: Detection, treatment, and prevention. South Africa has an extensive network of microscopy centers' and diagnostic laboratories with the capacity for culture and drug susceptibility testing

30 Ibid.

<sup>&</sup>lt;sup>29</sup> Ibid.

<sup>31</sup> Ibid.

<sup>32</sup> Ibid.

<sup>&</sup>lt;sup>34</sup> Robin Wood & Linda-Gail Bekker, An epidemic uncurbed: tuberculosis in Cape Town, South Africa, 1910–2010 (ResearchGate, 2017)

<sup>35</sup> Ibid.

<sup>&</sup>lt;sup>36</sup> Ibid.

<sup>37</sup> Ibid.

using the Mycobacterium Growth Indicator Tube liquid culture system.<sup>38</sup> In 2011, South Africa introduced Xpert MTB/RIF as a replacement for sputum smear microscopy for the diagnosis of pulmonary Tuberculosis. Although nationwide implementation of Xpert MTB/RIF is almost complete, numerous challenges to its implementation remain.<sup>39</sup> This method is not universally utilized along with its cartridges being highly in demand. South Africa's treatment success rate among new smear-positive and smear-negative TB patients has improved to 79% and 76%, respectively, achieved largely as a result of an increase in cure rates and a decline in the treatment default rate following the introduction of community-based tracing teams. 40 South Africa is in the process of withdrawing the use of streptomycin for retreatment TB. Prevention of TB has been a neglected aspect of TB control. Tuberculosis prevention strategies include treatment of latent TB infection among high-risk persons and TB vaccination strategies. 41

#### **Possible Solutions**

There could be many possible solutions, but the committee urges member states to look towards formulating appropriate national strategies for the establishment of systems for the assessment, planning, procurement and management of disease control, create national or regional guidelines for manufacturing vaccines and regulatory practices, establish where necessary regional and national institutions of health centers, and to collaborate and build partnerships with healthcare providers, industry, patients' associations and professional, research and experimentation based organizations. Also member states must understand that it is difficult to ensure all signatories are accomplishing their tasks. It is recommended to establish a long-term and short term strategic plan for treatment and prevention to avoid future outbreaks. Information regarding detection, prevention and treatment are crucial towards resolving this case.

#### **Guiding Questions**

- 1. Is there enough focus and money being put towards making cures for such diseases in impoverished countries that are both affordable and accessible? How can current focuses be altered or improved to reduce the number of annual new cases of said diseases?
- 2. What arguments do member states have to hold back from providing more support to impoverished nations facing these problems? How can the global community put together resources to combat this issue?
- 3. How feasible and accessible are current cures for impoverished nations relative to developed nations?

<sup>&</sup>lt;sup>38</sup> Ibid.

<sup>&</sup>lt;sup>39</sup> Ibid.

<sup>&</sup>lt;sup>40</sup> Ibid.

<sup>41</sup> Ibid.

4. Which diseases should be the prime focus for member states to pitch in resources for combating? Why should countries facing these problems support other countries first based on what most countries think should be considered of as a priority?

#### References

"An Epidemic Uncurbed: Tuberculosis in Cape Town, South Africa, 1910–2010." Taylor & Francis. https://www.tandfonline.com/doi/full/10.1080/0035919X.2017.1290709.

Greenwood, Xavier. "Ebola: Did It Ever Really Go Away? A Timeline of Key Events." The Independent. May 18, 2018. <a href="https://www.independent.co.uk/news/world/africa/ebola-crisis-outbreak-timeline-disease-virus-africa-congo-facts-who-a8357676.html">https://www.independent.co.uk/news/world/africa/ebola-crisis-outbreak-timeline-disease-virus-africa-congo-facts-who-a8357676.html</a>.

Stefan, Daniela Cristina. Advances in Pediatrics. October 2015. <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5551648/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5551648/</a>.

"The Top 10 Causes of Death." World Health Organization. February 28, 2017. <a href="http://www.who.int/mediacentre/factsheets/fs310/en/index1.html">http://www.who.int/mediacentre/factsheets/fs310/en/index1.html</a>.

Kasprowicz, Victoria O., Achkar, Jacqueline M., Wilson, and Douglas. "Tuberculosis and HIV Epidemic in South Africa and the KwaZulu-Natal Research Institute for Tuberculosis and HIV | The Journal of Infectious Diseases | Oxford Academic." OUP Academic. November 15, 2011. https://academic.oup.com/jid/article/204/suppl 4/S1099/1008566.