African Union PSC

Research Report

The Question of

Health care infrastructure for infectious diseases, such as ebola

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Introduction

Infectious diseases are worldwide responsible for about a quarter of deaths and are a big problem in Africa. Almost half of the African population deaths are caused by infectious diseases such as Ebola, HIV/AIDS or malaria. An infectious disease is a disease that is caused by microorganisms such as bacteria, viruses and fungi transferred from human to human or transmitted by animals. Ebola has been around for quite a while, but 5 years ago a big Ebola epidemic broke out, which caused a lot of deaths. HIV/AIDS is also a big problem in Africa as a result of a lack of information/education, low wealth, birth control or contraception. Ebola and HIV/AIDS are two examples of many different diseases found in Africa. These diseases are hard to eradicate and will keep infecting and killing people. To extinguish these diseases, action needs to be taken. A lot of these diseases haven't been thoroughly researched and there aren't any effective cures developed yet. By investing in a good health care infrastructure, the health in Africa will improve and the torment of infectious diseases will reduce.

The Committee

Definition and History

The African Union's Peace and Security Council (AU PSC) is an advanced Ad Hoc committee. As stated on their website it has the following mission and obligations: "The Peace and Security Council (PSC) is the standing decision-making organ of the AU for the prevention, management, and resolution of conflicts. It is collective security and early warning arrangement intended to facilitate timely and efficient responses to conflict and crisis situations in Africa. It is also the key pillar of the African Peace and Security Architecture (APSA), which is the framework for promoting peace, security, and stability in Africa.". The AFPSC is comparable to the UN Security Council with the exception of the P5 (*Note: The AU is NOT part of the UN*).

As stated on the AU website: "The Protocol Relating to the Establishment of the Peace and Security Council was adopted on 9 July 2002 in Durban, South Africa, and entered into force in December 2003. The PSC became fully operational in early 2004. The PSC Protocol, together with the PSC Rules of Procedure, the AU Constitutive Act and the conclusions of various PSC retreats, provide operational guidance to PSC activities.". The AU replaced the Organization of African Unity (OAU) which did little to protect citizens' rights and was dominated by dictators. The AU was founded under the leadership of Libyan head of state Muammar al-Gaddafi witch together with other OAU members issued the Sirte declaration. The declaration was followed by a summit in Lomé in 2000 where the constitution of the AU was adopted. In 2001 at Lusaka the plan for the implementation for the AU was established. The AU began operations in 2004.

Procedure

The AU PSC is an Ad-Hoc committee meaning that there will be no lobbying, therefore, we ask you to prepare amendments for debates. The resolution will be created during the debate with Amendments meaning that we start with a blank page. There are no "P5" countries in the Committee and no Vetoes. All Votes require a two-thirds majority to pass. The AU PSC can take actions which are binding for all members including the deployment of tropes. All motions including follow-ups are at the discretion of the Chairperson. For more detail relating to procedure during debate please refer to the THIMUN rules of procedure.

Key Terms

Contagious

(A disease) spreading from one organism to another. This is mostly via direct contact between the two organisms

Epidemic

"A widespread occurrence of an infectious disease in a community at a particular time." A disease can be called an epidemic if the number of occurrences of the disease, often suddenly, increase above what is normally expected in that area.

Infectious diseases

"Diseases that are caused by pathogenic microorganisms, such as bacteria, viruses, parasites or fungi; the diseases can be spread, directly or indirectly, from one person to another."

Poverty

Not being able to provide yourself with basic needs such as food, shelter and clothing.

Vaccine

"A vaccine is a biological preparation that improves immunity to a particular disease. A vaccine typically contains an agent that resembles a disease-causing microorganism, and is often made from weakened or killed forms of the microbe, its toxins or one of its surface proteins. The agent stimulates the body's immune system to recognize the agent as foreign, destroy it, and "remember" it, so that the immune system can more easily recognize and destroy any of these microorganisms that it later encounters."

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General Overview

Most of the infectious diseases in Africa are poverty related. Not only do they have a devastating impact on individuals, their families and the whole community, but it also affects the economy of their countries. In these countries, there is a big economic impact made on health care costs and lost productivity. According to the World Health Organization (WHO), 13 low- and middle-income countries do not have at least an average of 1 district hospital per 1 000 000 inhabitants, 150 million have not enough money to pay for health care insurance and 100 million of them end up in poverty, because they have to pay for their health care. In Africa a few big infectious diseases put the lives of many inhabitants in danger. And because of the lack of a good health care infrastructure these inhabitants don't have the means to get treated or prevent themselves from being infected.

HIV/AIDS

HIV is a major problem in Africa and is the cause of death of about 15 million people. HIV stands for 'Human Immunodeficiency Virus', which is a virus that attacks our immune system, the body's natural defense against any kind of illness. HIV is mainly spread through unprotected sexual intercourse, but it can also be spread through using the same needles or it can be transmitted from an infected mother to her child. HIV is in the Sub-Saharan region a big threat to many lives.
One of the main factors is the lack of education provided to the youth. After being infected, most of them die within a short time because of the lack of treatment. Even though there is no cure for HIV yet, there are treatments that will help the HIV-patient live a long and happy life, if medication is taken correctly and constantly.

Ebola

Ebola is first discovered in the 1970's in African villages, near the Ebola River, what is now located in the Democratic Republic of Congo. It's a rare disease that is caused by an infection with four different viruses within the Ebolavirus genus that can be contaminated by humans (*Zaire ebolavirus (EBOV), Ebola Sudan (SUDV), Taï Forest (TAFV) en Bundibugyo (BDDV)*). The disease is transmitted via bodily fluids. The symptoms are: high fever, overall weakness, diarrhea, fatigue, throwing up, stomach ache, peculiar hemorrhage and bleeding. Originally was believed that the Ebola virus was transmitted from wild animals to people. In the past 50 decades, the Ebola virus outbreak has increased. The most severe outbreak in history occurred in 2014, which was announced by the WHO as a public health emergency. This epidemic costed over 11,000 lives and $2.2 billion dollars in the first two years alone. A research in 2016 stated that the main reason that the epidemic had such a big impact in West-Africa was because of the lack of good health facilities and the big poverty, causing the far-reaching and wrecking consequences.

Tuberculosis

Tuberculosis (TB) is responsible for 400.000 deaths per year in Africa, and is responsible for more deaths than any other infectious disease. TB is caused by bacteria, Mycobacterium Tuberculosis, that has the biggest impact on lungs. There is a treatment against TB, but it requires patients to take multiple drugs for at least six months in order for it to work. Unfortunately, some TB-bacteria have developed a resistance against some of the drugs, what makes it harder to cure it. Health organizations are trying to develop shorter and simpler medication to be more cost-efficient and have less side-effects.

People with HIV are far more likely to develop active TB than people without HIV. The combination of HIV and TB is very lethal, because the diseases quicken each other's stages.

Malaria

Malaria is a life-threatening tropical disease caused by a Plasmodium parasite entering the body through a Anopheles mosquito bite. This mosquito is active during the night and lives in (sub-)tropical areas. When being bitten, the parasite travels through the bloodstream and causes red blood cell rupture. WHO stated that in 2016, there were an estimated 216 million cases of malaria around the world. Malaria can cause severe complications such as: swelling of the blood vessels, failing of an organ (liver, kidney or spleen), anemia, accumulation in the lungs that causes breathing problems or low blood sugar. Malaria can be transmitted through blood transfusion, organ transplants or sharing a needle/syringe.

Measles

Measles is a highly contagious disease, mostly common among children. Measles were once a very big concern in the world and quite common, but it can now be prevented with vaccination. It can easily be spread through the air, coughs, sneezes or saliva and other body fluids. Measles can be fatal for little babies. Even though there is a vaccination, it's still very common in developing countries, especially in Africa and Asia. The overwhelming majority of deaths caused by the measles are in countries with a low wealth and a fragile health infrastructure.

Diarrhea

It's more common among young children and is caused by different bacteria, viruses and parasites. Diarrhea is mostly caused because of bad hygiene or poor standards. It can lead to dehydration, which will eventually lead to weakening and death. Due to a big water and food shortage in Africa, can infected children not fully recover. Not only is there a shortage of water, but the water that is present in those regions are not clean, which makes them more vulnerable to also get infected by other diseases, such as cholera.

These diseases are a few of many that puts a lot of African lives in danger. Most of these diseases can be prevented or cured, but in order for this to happen there needs to be a good and innovating healthcare system that will improve the health in Africa. Investments in for example vaccinations can help thousands of people. Take for instant the measles. With good vaccination, measles can be prevented and less and less children will be infected. Or take HIV for example. Since 2001, the number of infected people has reduced dramatically, thanks to the awareness and education on HIV/AIDS. By giving sex and HIV education, the people will become more conscious and will take safer measures.

According to the IZUMI foundation an adequate health care infrastructure needs: "*physical facilities that make care accessible; laboratory, training, and other support facilities; reliable supplies of pharmaceuticals and other materials; trained staff and professional training systems; and mechanisms to distribute resources and expertise to people who need them. An adequate system is capable of providing preventive, diagnostic, and curative care, according to the requirements of the people being served.*"[1]

[1] http://izumi.org/about/how-we-work/health-care-infrastructure/

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Difficulties in dealing with infectious diseases

There are several reasons why treating these infectious diseases have been difficult to tackle. Below some of these reasons are listed and explained shortly. There are many more reasons and each of the reasons mentioned below is far more complex than presented here.

- Poverty:
  Economic poverty is one of the major underlying issues in dealing with most of the infectious diseases. Lack of access to sanitation, for example, can rapidly increase the spread of a disease. Patients might not be able to afford treatment, or afford to take time off work to recover.
- Education:
  A lack of education is a major problem in combatting infectious diseases within AU Member States. Many citizens do not know how to identify diseases or their symptoms and do not know how to deal with them. Information regarding risk factors might not be understood and spreading necessary information might be difficult.
- Lack of (general) infrastructure:
- In some areas there is a lack of infrastructure. Regions might be difficult to access due to poor conditions of roads, or due to dangers on the roads. Electricity can also be an issue in those regions. Access to clean water is a key factor in combatting infectious diseases. Internet access can also improve the flow of information to and from affected regions.
- Lack of medical infrastructure:
  In many regions there is a lack of medical infrastructure. In remote regions, there is often a lack of trained medical personnel, a lack of hospitals or other medical buildings and a lack of medication and other medical supplies. This makes it difficult to combat infectious diseases because it is harder to treat patients, but also because it becomes harder to identify outbreaks of diseases and accurately report on developments.
- Conflict and civil wars:
  Several African Union Member States are experiencing civil wars. This has mainly been due to problems of governance in Africa. The result can be the displacement of large populations within the country, or migration to large refugee camps in another country. This sudden increase in numbers of people living closely together, coupled with a breakdown of health services, can mean an increase in the transmission of diverse infectious diseases. Worse still, there may be no surveillance system in place or clinical services to detect the problem early. This will make any epidemic worse. It also increases the risk in nearby regions, even if those haven't been involved in the conflict.
  Violent conflict also causes a setback for the region even after the conflict has abated. Doctors might have been killed or fled the area, and it might still be unsafe for medical personnel to enter the area, causing a lack of experts and medical personnel in the region. The conflict might also have destroyed any medical infrastructure, such as hospitals and valuable medical equipment.
- Cultural aspects:
  Differing regions in the multiple Member States have differing customs and traditions. In a previous outbreak of Ebola, local customs of keeping close to a deceased loved one caused the disease to spread amongst mourning family. Plans of fighting outbreaks of infectious diseases will have to take into account such cultural practices and traditions.
- Migration:
  Increasing migration in Africa causes an increased risk of infections and diseases to spread to new areas and populations. It will also make it more difficult to have an accurate picture of how many people are in which regions. Especially in the case of refugees fleeing from conflict, migration combined with a lack of sanitation, medication and doctors, can cause an increase in the amount of victims and can cause a disease to spread to other vulnerable regions.
- Lack of trust towards health care professionals
  The local populace does not always trust medical professionals, especially those from abroad, preferring to seek treatment from local or traditional healers. They might also mistrust vaccines,

believing it will cause long-term harm to them or their loved ones.

- Inconsistent national policy:
  Another reason why it is difficult to tackle is that some countries often change national policy, making it harder to implement long-term plans.
- Lack of international coordination:
  There is also a lack of international coordination and cooperation to tackle the issue, due to both inability and unwillingness. The problems mention earlier make it extremely difficult to form an accurate picture of the situation in affected areas and thus to effectively cooperate with neighboring countries. On the other hand, countries might be unwilling to give open and transparent information about the situation, fearing to cause civil unrest, economic instability, loss of reputation or that neighboring countries might close borders.

Major Parties Involved

World Health Organization (WHO)

The World Health Organization is the United Nations special agency that involved with the international public health. It was established on April 7th 1948, a day that is now every year celebrated as the 'World Health Day'. The World Health Organization is mainly focused on health systems, infectious diseases, non-infectious diseases, nutrition and occupational health.

The World Health Regional Office for Africa mainly focus on combating infectious diseases, like TB, HIV and Ebola, and non-infectious diseases like cancer, diabetes and heart diseases. They also ensure that all people will receive accessible, good and affordable health care without falling into poverty.

IZUMI Foundation

The in 1998 founded IZUMI Foundation helps the world's poorest people by providing supporting programs that will improve health in developing countries. They look for practical and useful innovations to reduce the infectious diseases in these countries. These support projects in the following five areas: Infectious diseases with high morbidity and mortality, neglected tropical diseases, malnutrition, maternal and neonatal health and health care infrastructure. Their focus is mainly on most of the countries in Sub-Saharan Africa, but they also afford help to a few countries in Latin America and the Caribbean.

Democratic Republic of Congo

The Democratic Republic of Congo is one of the countries in Africa with the poorest health treatment, limited medical facilities and a short supply of medical materials. Congo has one of the highest rates for deaths caused by infectious diseases. Diseases as HIV/AIDS, Ebola, cholera and tuberculosis are an enormous problem and affect the lives of many inhabitants. Because a lack of good sanitation and a lot of people living in poverty, the diseases can easily be spread and are hard to prevent. After being infected, are there not enough resources to pay for medication.

Centers for Disease Control and Prevention (CDC)

CDC is an American organization that helps to fight diseases, especially the infectious one. Even though CDC mostly cares about the American health, they also track, confront and fight diseases in other countries.

Doctors without borders (MSF)

Doctors without borders are doctors that provide lifesaving medical care for those in need. They have had many operations in Africa where they help(ed) to combat infectious diseases and helped preventing them.

Timeline of Events

7 April 1948	Establishment of the United Nations World Health Organization 1951 Creation of the WHO Regional Office for Africa
1963	The first vaccine against measles was developed by John Enders
1976	Ebola has been discovered near the Ebola River
1983	Luc Montagnier discovered that HIV is the cause of AIDS
2001	A great decreasing of patients that get infected with HIV
February 2014	The biggest Ebola outbreak in history. This outbreak was the cause of death of more than 11.000 people.
9 May 2015	WHO declared that Liberia is Ebola-free
7 November 2015	WHO declared that Sierra Leone is Ebola-free 29 December 2015 Guinea is officially last declared Ebola-free.

Previous attempts to solve the issue

Different organizations such as the World Health Organization or MSF sent a lot of medicine, doctors and other medical materials/help to Africa. On august 2015, 193 countries reached an agreement on the 17 Sustainable Development Goals that should be carried out before 2030. The third Sustainable Development Goal is 'good health and well-being'. This third SDG brings attention to many of the previous called infectious diseases, looks for a solution to end these diseases and tries to offer everyone a good, accessible and affordable health care. Also is education increasing and more and more children are learning about the importance of hygiene and precautions.

For more detailed information on previous outbreaks of various diseases, research the Ebola outbreak in 2014 and the current one in Congo, a current cholera outbreak in Mozambique, a bubonic plague outbreak in Madagascar that started in 2014, a yellow fever outbreak in Sudan in 2012, a measles outbreak in Congo in 2011, a meningitis outbreak in West Africa in 2011-2012, or a cholera outbreak in Zimbabwe in 2008-2009. These can give a more detailed overview of what the AU PSC will face when combatting infectious diseases in its Member States.

The Future

There is still more than 10 years until the deadline of the Sustainable Development Goals, which means that a lot could happen in the innovation of this issue. Scientist are still trying to develop medicine to cure, prevent or restrain infectious diseases. A good hygiene and sanitation is one of the most

important elements for a good health. Africa has a big hygiene and sanitation shortage, and the sources that are already there are often unsafe or miles away. Different organizations such as UNICEF and WHO are working on creating safe and clean water and sanitation sources, which is also a SDG (number 6).

Questions a Resolution Must Answer (Q.A.R.M.A.)

Delegates, here are a few guidelines of what you could/should include in the resolution. But keep in mind that these are only a few guidelines and that you should **not** limit yourselves to the following examples.

The health care infrastructure in Africa lacks a lot of structure, what should be kept in mind if actions are going to be made? When writing a resolution, you should think about the health care infrastructure of the country you represent: are you a developed or developing country? How is the wealth of your country? Does it have a high of low GDP? And most importantly: Is the health care good organized and has the majority of your people access to it?

What should be kept in mind is that in (Sub-Saharan) Africa a lot of people live in poverty and don't have the funds to pay for health care, medicine, nutritious food or proper sanitation. There are a lot of different cultures, religions and languages in Africa, which could lead to disagreements on for example vaccinations, but it can also lead to language barriers. Another thing is that in developing countries women are often neglected and have less opportunity than men.

Another question that the resolution must answer is how would the infrastructure of health care improve. How would health care be accessible and affordable by everyone? Will there be more facilities (hospitals, nursing homes etc)? And where would these be located? What are you going/can you do to do about improving of the medicine? Finally, you have to understand that this resolution would have an impact on millions of people.

Further Reading

- World Health Organisation: www.WHO.int

- About tackling infectious diseases in Sub-Saharan Africa by the European & Developing Countries Clinical Trials Partnership (EDCTP): http://www.edctp.org/web/app/uploads/2018/09/Tackling-infectious-disease-in-sub-Saharan-Africa_EDCTP-funded-clinical-studies-for-medical-interventions-2003-2018-4.pdf

- For any biological information, on for example the diseases: https://www.ncbi.nlm.nih.gov/

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