

HISAR SCHOOL

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“Globalization: Creating a Common Language”



Special Assembly Third Committee: Health

*Taking Measures Against MERS-CoV
disease in LEDCs*



**RESEARCH
REPORT**

Recommended by:



Center CAMCI

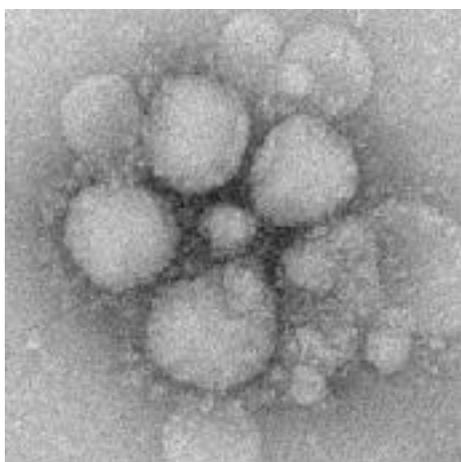
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Forum: SA3: Health

Issue: Taking measures against MERS-CoV disease in LEDCs

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Introduction



Middle East Respiratory Syndrome (MERS) is an illness that affects the respiratory system of living beings and is caused by a coronavirus called Middle East Respiratory Syndrome Coronavirus (MERS-CoV). It was first seen in Saudi Arabia in 2012 and it was reported to be spreading from a person to another especially by the means of close contact and air around the mostly around the Arabian Peninsula (Nichols). Travelling from or to an infected area is the main way the disease spreads over the world.

It is reported that this virus is zoonotic which means that the virus originally passed to humans from animals. Later research showed that the virus was present in camels and bats in the same area, which are said to be affected humans later on. The disease is spreading quickly especially in Saudi Arabia due to the immense number of bats and camels in the peninsula and the constant interaction of those animals with humans. The disease is believed to be spreading through the respiratory system among people and therefore air, which is also specified in the scientific name of the disease itself. Close contact such as living or interacting with someone infected is also a significant way in which this virus spreads.

MERS-CoV has severe consequences as there were several reported deaths due to this coronavirus, 3 or 4 people out of 10 to be exact (Centers for Disease Control and Prevention). Another aspect that makes this coronavirus so dangerous is that it can be seen on anyone and that the patients that were diagnosed with MERS-CoV can range from ages 1 to 100. There is no cure for MERS-CoV and no vaccination is invented yet due to the continuous mutations the coronavirus goes through. In addition, the origin of this illness or the virus itself is unclear, which also slows down the process of finding a cure.

The delegates of the health committee bear the responsibility of finding measures against this illness with a special focus on LEDCs before it kills more people and becomes a global pandemic. They are expected to create a common language and use this language along with mutual respect in

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the process of finding these measures to involve every nation in the fight against this disease in a collaborative way.

Definition of Key Terms

LEDC: It is the abbreviation for Less Economically Developed Countries that are usually known to have low standards of social services such as health services for its citizens which cause diseases to spread faster and easier.

Immunity: If a person has immunity from a disease, it means they will not be affected from that disease at all and that their body is strong against that particular illness.

Contagious: A disease is said to be contagious if it spreads from one living being to another.

Zoonotic: It is an adjective used for diseases that are spreading from animals to humans.

Mutation: A mutation is the genetic change in a virus, which aims to make that virus stronger and resistant for certain environmental conditions or even medications that are aimed to kill that virus.

Peninsula: It is a landscape which has borders with an ocean or a sea in 3 sides.

Respiratory System: The living system of body in which oxygen is taken in and carbon dioxide given out, in other words it is the system where breathing takes place.

Pandemic: An epidemic, in other words a disease which is spreading too fast, cannot be controlled by medications and causes an immense amount of deaths as it expands through globe.

General Overview

Historical Background



MERS-CoV was first seen in Saudi Arabia in 2012, during an outbreak in a national hospital. Authorities said that 10 people were affected and 2 were dead after the outbreak and the cause was not clear. After a couple of months, a man admitted some problems of him, especially shortness of breath, to a doctor in a local hospital who observed the patient and failed to come to a conclusion. The man died after 2 weeks and worried the doctors located in Saudi Arabia. That is why they sent a

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sample from the dead man's blood to Netherlands for them to observe it. The authorities in Netherlands found out that what caused the man's death was a new kind of coronavirus.

After a year, a man died in Germany where he was seeking medical care. It is found that the man was originally from Saudi Arabia and that he was racing camels for living which raised the idea of this coronavirus spreading from animals. In 2013, the virus gained international recognition after the Coronavirus Study Group of the International Committee on Taxonomy of Viruses, the committee which is responsible of naming coronaviruses, named the virus as Middle East Respiratory System Coronavirus. By this, all the nations became aware of the disease itself and some of them started taking precautions or even started researching for a cure.

WHO Emergency Committee on MERS met 5 times to decide whether MERS was a public health emergency or not and they came to the conclusion that it is not after each meeting. However, this decision can change in a later meeting as disease is spreading more rapidly than it was before, killing more people every day.



Symptoms of MERS-CoV



There are so many symptoms of MERS-CoV, but the most common symptoms are listed as fever, cough and shortness of breath (Nichols). As it can be seen, the symptoms are mostly related with the malfunctions in the respiratory system of individuals. There are still symptoms being discovered and not all of them have been recorded due to the lack of information about this

virus since it has been present for only a couple of years and the necessary work upon the virus has not been concluded. The scientists observed that serious complications of this disease even caused organ failures and pneumonia, such dangerous symptoms even lead to deaths in some cases which shows the dangers this disease possess and importance of finding a cure immediately.

What Can Someone Do to Avoid Getting MERS-CoV?

Avoiding close contact with the infected individuals is the primary thing to do. Hygiene is extremely important if one wishes to avoid getting MERS-CoV. Washing hands frequently and effectively would kill the possible viruses on skin which are received through close contact. Undercooked meals, especially camel meat should not be consumed as well



Avoiding close contact is essential if someone wishes to avoid getting MERS-CoV

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as raw camel milk. To add, seeking medical attention is mandatory if someone shows the symptoms of MERS-CoV.

Major Parties Involved and Their Views



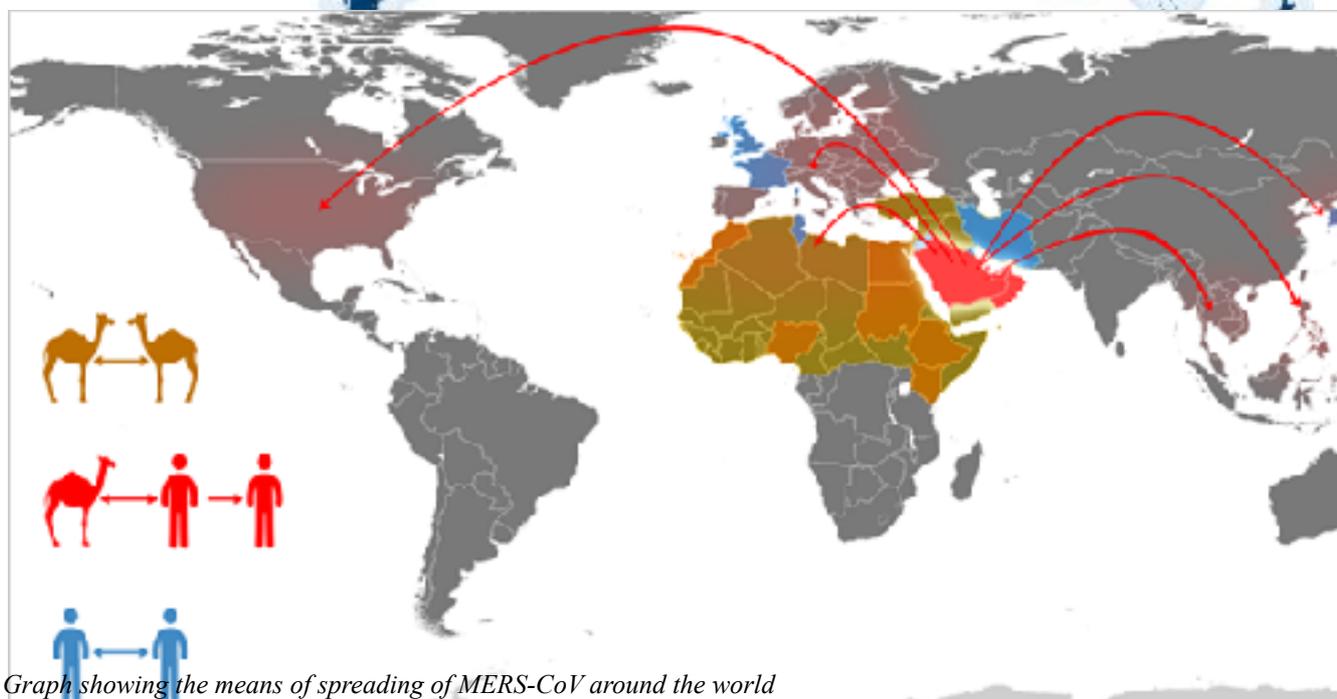
World Health
Organization

Logo of WHO

World Health Organization (WHO): WHO is the leading UN agency that focuses specifically on health which is why WHO plays a significant role upon all the agenda items of the Health Committee. It gathers all the information about MERS-CoV and leads the researches and experiments which are aimed to find a cure. Assistance of WHO is fundamental when finding a cure for a disease. It has the proper knowledge and funds to assist countries while taking measures against MERS-CoV, in other words it will act as a binding power between countries for them to work collaboratively.

(More information about WHO's initiatives on MERS-CoV can be viewed on <http://www.who.int/emergencies/mers-cov/en/>)

Saudi Arabia: The disease was first seen in Saudi Arabia and that was said to be spreading from there. The large numbers of camels and bats in the area who seem to be the source of this virus contributes to the spreading of it. With its rapidly growing population, more people get infected. All the severe cases are reported to be in the borders Saudi Arabia. However, there have been reports of MERS-CoV all over the world including USA and UK. After investigations, the reason for the disease to spread over continents was seen to be the tourists that came from Saudi Arabia, that is why Saudi Arabia bears the responsibility of controlling the people who leave their country in order to prevent more cases of MERS all over the world.

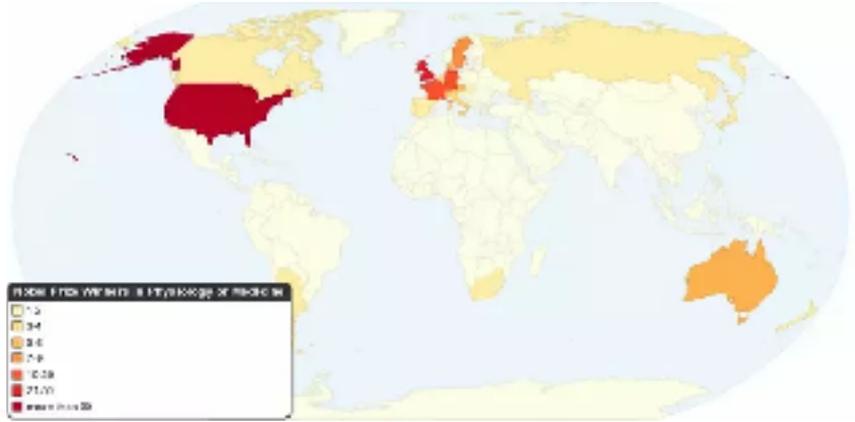


Graph showing the means of spreading of MERS-CoV around the world

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United States of America (USA):

USA is reported to have citizens that have MERS-CoV, who have recently travelled back from Saudi Arabia. Since this virus spreads through close contact along with air, it is contagious. It can easily spread in a country as large as USA without being noticed and cannot be controlled easily.



Graph showing the amounts of Nobel Prizes for Medicine won by countries

Authorities from USA should prioritize their investments upon the virus before it spreads all around the country. There have been only a few reported cases of MERS-CoV in USA, but there can be ones who are not yet detected, that is why USA has to be actively participating in the discussions for measures to be taken against this disease if they wish to eradicate it in their own land. As a matter of fact, USA has been one of the best countries in terms of health and medicine. They have won the most amount of Nobel Prizes for medicine as it can be viewed from the map on the upright corner. That is why they are expected to lead the later researches and experiments upon this disease to increase the efficiency of the process of finding a cure.

Timeline of Events

2012	<i>First report of MERS in Saudi Arabia.</i>
April 24, 2013	<i>MERS first appears in USA.</i>
July 9, 2013	<i>WHO organized a meeting with the aim of deciding upon whether MERS is a Public Health Emergency or not</i>
May 13, 2014	<i>MERS-CoV was reported in a total of 18 countries.</i>

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2015	<i>The biggest outbreak of the disease in South Korea. It killed approximately 40 people.</i>
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Evaluation of Previous Attempts to Resolve the Issue

Since this is a disease that was first discovered in 2012, there haven't been so many attempts to resolve the issue. However, WHO has organized many summits with the participation of member states to decide whether MERS is a public health emergency or not. It has been concluded that MERS was not a public health emergency. This result can be discouraging for some member states and research institutions which can lead them to view the disease as not a threat. However, it is certain that this disease has some severe consequences and that it is spreading rapidly around the globe. To conclude, it can be said that if WHO decides to declare MERS as a public health emergency, the precautions and investigations for a cure would gain importance and more countries would contribute to the overall cause.

Possible Solutions



A quarantine applied in a hospital due to MERS-CoV

First of all, since this is a disease, more research and experiments about it is essential for the process of finding a cure. Assistance of experienced scientists along with WHO would increase the effectiveness of the process too. Summits among UN member states should be organized with the help of WHO with the aim of discussing upon measures to take against this coronavirus. Moreover, raising awareness by the means of media would increase the knowledge of public about this disease for them to also take necessary measures in their daily lives or go to the nearest community clinic or hospital if they think they are affected. In addition,

border checks at airports for the planes who are coming from infected areas is essential as well as checking the passengers at infected areas before leaving the country. In other words, restricting the entrances into a country would decrease the risk of that disease spreading into that region. Putting quarantines to the mostly infected regions where the disease can be seen on almost everyone would also limit the spreading.

Financial support to research institutions and scientists for their experiments upon the subject is also important. This financial support can be given to LEDCs too for them to improve the health care in their borders. Opening local health centers in LEDCs is also essential since the medical attention in such areas are underdeveloped. By providing health care or even information to the

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citizens, the spreading of the disease in LEDCs can be slowed down. In this process what is expected from MEDCs is their support for LEDCs both financially and morally.

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