

The 2020's world deadliest pandemic: Corona Virus (COVID-19) and International Medical Law (IML)



Abstract

This research article overviewed briefly the new re-emerged Corona Virus (COVID-19) and the role of International Law (IL) along with State Law (SL) in 2020's pandemic to control the spread of Corona Virus (COVID-19). Since the declaration of Public Health Emergency of International Concern (PHEIC), the number of COVID-19's confirmed cases jumped so fast to reach by today to 2074529. The virus's fatalities until the moment are 139378. At first, however, the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) had a high rate of mortality in percentage 22% on the 28th March, 2020. On the contrary, today the mortality rate has decreased to 15% dated 17th April, 2020. This proves the effectiveness of the international

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The study also discussed the conceptual framework of COVID-19 and its history. A short introduction was given about the previous two Coronaviruses (SARS and MERS). The deadliest pandemic of 1918 (Spanish Flu) was debated as part of pandemic history. The explosion of COVID-19 to the world was explained in detail. Symptoms of COVID-19 were elaborated in order to understand the virus's impact on its victims. This study also showed the easy method to prevent the spread of the COVID-19. The treatment of the COVID-19, which the patients of the virus can offer currently, was explained. International Health Regulations (2005) (IHR) was analyzed in respect of the current pandemic.

Q Keywords: pandemic WHO PHEIC pathogen COVID-19 public health emergencies

PUBLIC INTEREST STATEMENT

Optimistically, the 2020's world deadliest pandemic is ending this time faster than ever. That because we are folks of most eminent technology of all times. The technology works hand to hand with us to overcome our terror of dying due to what we cannot see via our bare eyes. Of course, it is very small; nevertheless, it is the killer of more than six hundred thousand of humankind. Corona Virus-19 (COVID-19) has paralyzed us and changed our lifestyle from normal to new normal. The eruption of the virus caused an international epidemic that limited the movement of people from one place to another. Not only that but also forced us to stay in quarantine, curfew, and lockdown. These are rules when such a pandemic takes place anywhere. Internationally, the World Health Organization (WHO) has power that is empowered by International Law (IL) to declare such a Public Health Emergency of International Concern (PHEIC).

1. Introduction

Is the year of 2020 ending the world? To answer this question, people are divided into two schools of thought. On one hand, the first school of thought, who is optimistic and represents the majority of people, argues that there is no way the virus is going to kill each one of us.

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20 years, and then they were defeated by the invented vaccines. Human beings are no longer weak with the help of technological advancement. On the other hand, the second school of thought thinks pessimistically; hence, their answer is "yes." They think that the pandemic of COVID 19 is going to kill every single creature on the planet. They might be right; according to the World Health Organization updates, the number of confirmed cases of Coronavirus-19 has escalated inconceivably from the second week of March to today's date (28.03.2020) in entire the world. The World Health Organization (WHO) as of 28 March 2020¹ has reported 512701² confirmed cases of COVID-19 and the deaths of 23,495 persons. 202 countries and territories have got infected due to the virus's exposure globally. Obviously, the mortality rate of this virus keeps increasing day by day; based on the Organization's updates of confirmed cases and deaths, the mortality rate up to this moment is 22%.³ Therefore, it proves the theories of the second team of people who think COVID 19 is the end of the world are partially right.

2. Why COVID-19 has been declared as a pandemic?

Our nature is full of contagious, infectious pathogens that are invisible to the human being's eyes. Not only nature has tons of viruses, but also the human body. Apparently, these viruses have existed for a very long time. However, they can be harmful to mankind when they interact with certain substances. When they harm a massive number of people, a pandemic is declared. Pandemics happened several times previously during the last decades, e.g., 1918's Pandemic and most recently 2009's Pandemic. Those pandemics were results of infectious influenza spilled over from swine to human. Eleven years ago, the world witnessed an unprecedented influenza pandemic which has changed the view of the scientists of infectious diseases permanently; they designated as (H1N1) Doshi (2011) This kind of viruses turned the global community, especially Europe, 4 upside down for more than a year. The World Health Organization (WHO) took firm steps to gather its descriptions in order to formulate a formal definition of what is called "Pandemic." The reason behind that is the consequences of 2009's pandemic, which were not as they were expected. They had less seriousness and severity to be labeled a pandemic. A month before the declaration of H1N1's pandemic, it was stated on the top of the World Health Organization (WHO) Pandemic Preparedness homepage that "An influenza pandemic occurs when a new influenza virus appears against which the human

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enormous numbers of deaths and illness." Nonetheless, the last four words of the definition were deleted. This act made the Council of Europe understand that the WHO has changed its definition of a pandemic. The Council criticized the altered definition because it enabled the Organization to declare the 2009 pandemic.

The term pandemic is slightly confused to be defined. However, a modern, simple definition of a pandemic is that "a large epidemic may make ultimate sense in terms of comprehensibility and consistency" Morens et al. (2009) The definition referred to the largeness and the impact of the epidemic is a matter in order to decide the pandemic.

The ability of the virus to spread on a fast basis makes it travel to large geographical locations in a short time and affects every creature confronting it. COVID-19 is an invisible, invincible, and contagious nano-inhabitant. Additionally, the 2019's discovered pathogen is a hidden monster which its symptoms do not appear at the outset of its invasion which continues to damage the lungs' alveoli, and at last (in severe cases) other body's organs. To know utterly about the 2020's pandemic timeline, here is the story of discovering the virus: on 31 December 2019, the WHO received a report from China saying that "a cluster of cases of pneumonia of unknown cause detected in Wuhan City, Hubei Province of China" Hui et al. (2020) The well-known name of Novel Corona Virus was given by the Chinese Government on 7th of January 2020 Hsu et al. (2020) The World Health Organization declared the international health emergency on 30th January 2020^{6} after intensive meetings with the highly respected delegates from China. The pathogen has become a global pandemic when the infection of people grows up exponentially out of its original region. The main factor, which contributes to the widespread to the other countries, was the international flights from China to the world's areas. At this moment, the epidemic went out of hand. Confirmed deaths are increasing day by day, and the infected people exceeded the million.⁷

3. Importance of study

There is nothing in this universe more important than our lives. Wealth, power, strength, *etc.*, have no meaning when we are sick or dead. Therefore, everyone on this planet does everything necessary to be healthy. The healthier you are, the happier you live. Today, however, mankind is

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a global pandemic that has no mercy to any nation irrespective of its economic condition or healthcare system. The entire world is fighting against what is well-known COVID-19. Almost 3 months have been passed from the first recognition of the virus in China. The infection of COVID-19 has killed more than 50000 people worldwide and more than million are suffering because of the virus's invasion of their body. What is the solution to stop the acuteness of the COVID-19 from spread? And how we can prevent such awful pathogens from occurring again in future? These two questions are the essence of the study to be answered. It is a humble attempt to summarize the international pandemic of COVID-19 and its current situation. The study also will discuss the role of international law and state law in case of such a pandemic like Corona Virus 19.

4. Statement of Problem

Pandemics are a critical alert to the Public Health Emergency of International Concern (PHEIC). Of course, they are considered as the actual threat to wave off the existence of human species in particular, and the entire survivors of the earth. Pathogens are the causative agents of the pandemic. The year of 2020 has been declared as the twenty-first century's cruel pandemic; COVID-19 is the uninvited evil guest of the year. This unwanted evil guest has visited almost all countries; inhabitants are the victims of its devil regardless of who they are. But, why we cannot stop this devil from spreading now/future all over and destroy all that we have been building for decades? And why we could not find such a vaccine for the previous pandemic. These two questions are the core of the research. In addition to them, the research problem will extend to involve the role of law to prevent such spreading.

5. Literature review

The COVID-19 is currently considered as the Public Health Emergency of International Concern (PHEIC). Therefore, tremendous amounts of research efforts started to take place since the declaration of international public health emergency. Nevertheless, until this moment, no vaccine has been proven to treat the virus effectively. The World Health Organization (WHO) has

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is concerned with COVID-19, is called as (R&D Blueprint).

Before going to undertake the previous studies on COVID-19, it is slightly important to take a look at some significant studies on what is similar to the current pandemic of COVID-19 in its transmission, the Spanish Flu (1918) (the Black Death). Spanish Flu was described by many as the deadliest pandemic of 20th century. The reason for giving this name is that it killed millions of people in a short time. Moreover, the flu occurred in the middle of World War I. It took more souls of soldiers than combat. The contagion was extremely dangerous with an extremely rapid morality rate, sometimes killing the victim within 12-hours Barry (2005) to cease the victim totally. All segments of the population were susceptible to the flu; no one had immunity against it. In regard to the Spanish Flu, the Surgeon General of the Army, Victor Vaughan said in October 1918 "If the epidemic continues its mathematical rate of acceleration, civilization could easily disappear from the face of the earth within a few weeks." Spanish Flu (1918).

The historian John Barry explained the pandemic of 1918 in his book "The Great Influenza, the Story of the Deadliest Pandemic in History." The book was the bestseller of the New York Times, which was published by Penguin Group in 2005, New York City, USA. Barry explained the pandemic of 1918 in fascinating details. He began to talk about the World War I, then, explained the very beginning of the outbreak when it was spillover from pigs to humans. In his fifth chapter, he elicited the explosion of the flu all over the world. In the following chapters, the author continued to describe the events that contributed to spread the pathogens across the globe. Finally, in the tenth chapter of the book (last chapter), he explained how the pandemic was ended.

In this study, two studies related to COVID-19 were reviewed. The first review was dedicated to a research article entitled "Identifying SARS-CoV-2 related coronaviruses in Malayan pangolins," Tsan et al. (2020) published by nature on 26 March 2020. The study elicits what is well-known "Corona Viruses" and concentrated on the most recent corona virus (COVID-19). It identified the origin of COVID-19; the researchers stated that the bat is the source that transferred the virus to the Malayan pangolin then spills over to the human. Additionally, the article discussed the Chinese wild animal market in Wuhan city which caused the spillover to the human being. Finally, the study compared the three kinds of corona viruses consecutively; SARS-CoV, MERS, and COVID-19. The second research article reviewed by this study is a medical empirical

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COVID-19 by using the method of a clinical trial. The study was applied in China in March 2020. It is entitled "Characteristics of COVID-19 Clinical Trials in China Based on the Registration Data on ChiCTR and ClinicalTrials.gov." Huang et al. (2020) It was a unique study and first one that dedicated to understand the characteristics of the current virus from its origin (Wuhan, Hubei Province, China). The research was published on 29 May 2020 and came up with very useful guidance for future clinical trials on COVID-19 to be adopted in other places rather than China.

Recently, Google has launched information and resources about COVID-19 related to the government system. It mainly aims to spread awareness amongst the citizens about the virus's symptoms, how to prevent yourself and your family from getting infected and available treatments currently to alleviate the disease's complications.

6. Research questions

The research aims to provide essential details in regard to the pandemic. The study has two sides. The first one is devoted to the 2020's pandemic: COVID-19, while the second side is related to the role of law in case of international health emergency. Thus, the questions that the research tries to find their answers are as follows:

- What is COVID-19?
- Why did it happen in this era?
- When it will end?
- How such a future pandemic would be prevented?
- What is the role of international law and state law in case of international health emergency?

7. Research objective

• To study the 2020's deadliest pandemic: COVID-19.

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- To investigate the reasons for appearance COVID-19.
- To understand the role of International Law and State Law in the condition of international health emergency.

8. Research methodology

The current research is written during the pandemic of 2020 where the world's governments declared curfew and lockdown. Therefore, the most appropriate method to be undertaken is the secondary research method. This method enables researchers to collect a wide range of sources while staying home; to elicit that the technology of the Internet has made the entire world on your hand. Nowadays, by writing one specific word that you need to look for, millions of results will confront you. In this regard, the research benefited from the availability of secondary data on the Internet. For example, massive data about the COVID-19 is available on the Homepage of the World Health Organization (WHO). Google also established an Information and Resources Online Center related to COVID-19 in collaboration with the Governments. YouTube channels have tremendous numbers of videos explaining all that is need about the virology and their history, etc. In addition to all these online data, journals also have information in depths on the Corona Virus.

9. What does the word "Virus" mean?

Viruses are too tiny survivors living with us, but they are so hard to be seen via bare eyes. Therefore, we need a microscope to see them closely. Viruses can be defined as "....biological entities because they possess genomes and are able to adapt to particular" Van Regenmortel et al. (2013).

10. From where did the viruses come from?

The virologist Ed Rybicki, at the University of Cape Town in South Africa, said "Tracing the origins
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make copies of themselves within the cells they have invaded" Scientific American (2008) Thereof, scientists have not identified the origin of the viruses. Based on what Rybicki explained; they existed for so long time. They can invade our cells and create copies of themselves to conquer the human body.

Another answer to this question was given by Dr. David R. Wessner who has a Ph.D. in Biology. In his research article entitled "How did viruses evolve? Are they a streamlined form of something that existed long ago or an ultimate culmination of smaller genetic elements joined together?" Wessner elicited that there is nothing certain about the origin of viruses. On the contrary, he added that virologists have provided three main hypotheses in order to trace the origin of viruses. These three hypotheses are as follows: "1. The progressive, or escape, hypothesis states that viruses arose from genetic elements that gained the ability to move between cells; 2. the regressive, or reduction, hypothesis asserts that viruses are remnants of cellular organisms; and 3. the virus-first hypothesis states that viruses predate or coevolved with their current cellular hosts" Nature News (2020).

11. Definition of Coronavirus

According to the World Health Organization (WHO), Coronavirus can be defined as "A large family of viruses which may cause illness in animals or humans. In humans, several coronaviruses are known to cause respiratory infections ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). The most recently discovered coronavirus causes coronavirus disease COVID-19" Ibid. From the definition of the WHO, it is obvious that the current coronavirus is not a new virus *i.e.*, two coronaviruses happened in the last two decades; the first was known as SARS that came from China. It was the new discovery of coronavirus. The second coronavirus occurred in Saudi Arabia which later on identified as MERS. All of these coronaviruses make damage to the respiratory system of human body.

12. What does COVID-19 mean?

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Disease 2019 Tosh and M.D.COVID-19 (2020) The name was declared by the Chinese Government in January 2020. The former part of the acronym indicates to the lineage of the virus, the last part tells the year of discovering the outbreak of the virus. It is also scientifically called as Severe Acute Respiratory Syndrome-2 (SARS-2) Ibid. As explained above, this type of virus invades the human body's lungs and makes its copies inside them in order to rupture the *alveolis* over there. The results of that shortness of breathing occur to the victim and other complications.

13. How did COVID-19 begin and explode to the world?

In the previous paragraphs, a brief discussion was undertaken on the story of COVID-19. In this paragraph, the full story will be told. On Friday 13 March 2020, the Guardian News Website published an article written by Helen Davidson who demonstrated the incident of the first unpublished, unreported COVID-19 confirmed case in Wuhan City, Hubei Province, China. The article title was "First COVID-19 case happened in November, [Chinese] Government records show-report" Davidson (2020) Thereof, media reports showed that on 17 November 2020, a first patient, who apparently had the symptoms of COVID-19, was admitted to be hospitalized. Then, an increase in the number of cases happened to 266 patients by the next month (December). A Chinese doctor, who discovered the virus, was crack downed because he and his colleagues tried to warn others about the virus. As a result of that, the Chinese authority declared the national health emergency and started to implement the social distancing, lockdown policy. International flights continued from/to Chinese land even after the declaration of the national emergency. Later on, the virus, due to the international passengers traveling became an international pandemic. The World Health Organization after intensive meetings with the Chinese delegates, who visited the headquarter of the organization in Switzerland to discuss the situation in China, declared on 31st of January a Public Health Emergency of International Concern (PHEIC). In the statement of the emergency committee, the Secretariat of WHO overviewed the international situation of the current virus by stating that "There are now 83 cases in 18 countries. Of these, only 7 had no history of travel in China. There has been humanto-human transmission in 3 countries outside China. One of these cases is severe and there have been no deaths" Ibid.

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14. Explosion of COVID-19 to the world

The World Health Organization (WHO) has updated the status of the confirmed cases and fatalities on 13 April 2020; it shows that there is an incremental increase in cases worldwide. Cases jumped up during the last two weeks unexpectedly from half-million confirmed cases to 1699595 and 106138 deaths with a slight decrease in mortality rate to 16%. The tragedy journey of the COVID-19 began from China on 31 December 2020. Chinese Government sent its first report to WHO; in the report stated that "a cluster of cases of pneumonia in Wuhan, Hubei Province. A novel coronavirus was eventually identified" Ibid Internationally, the first country reported to the WHO was Thailand on 13 January 2020. A Public Health Emergency of International Concern (PHEIC) was declared by WHO on 31 January 2020. Regionally, Europe reported three confirmed cases on 25 January 2020 and an explosion in cases happened in March. In the Americas, the first case was reported on 21 January 2020. Western Pacific region, 41 confirmed cases were reported on 11 January 2020. In the Eastern Mediterranean region, four COVID-19 patients were tested positive on 30 January 2020. On 9 January 2020, one case reported from South-East Asia. The African continent, there were no cases until 26 February 2020. Currently, the highest reported country in the world is the United States of America, where 524514 cases have been confirmed, Spain with 166019 confirmed cases, and in third place Italy with 156363 confirmed cases. 9

15. Prevention and protection against COVID-19

Unlike other coronavirus lineages (i.e., SARS, MERS), COVID-19 has the ability to spread faster than its siblings. In this regard, the rapid explosion of the COVID-19 to the world occurred in a very short time. The previous coronaviruses were prevented through stopping consuming the source of the pathogens that are the main cause of the virus such as pigs and camels. In the opposite side, COVID-19 initially spilled over from the pangolins to humans, then, human to human. But how does it transmit amongst people? Recent research on COVID-19 has shown that the new virus jumps from human to human through droplets resulted from coughing or sneezing. As explained above, this type of virus tackles the respiratory system in order to defeat it and control it overall. Droplets of the virus holders are the arrows directed to other human

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eyes, nose, or mouth, they will be new victims and virus holders. The catastrophe of this virus is that it stays on the air for hours which means passengers through the air will be infected.

After understanding how the virus transmitted among human beings, now, it is vitally important to discuss the recommended methods to prevent the spread of the virus widely. In the following paragraphs, there are some recommended ways to avoid being infected by the virus. Therefore, WHO recommended some instructions to be undertaken by Governments and their citizens as the below:

- 1. Clean the surfaces regularly; the virus stays on the surfaces for a long time (it is not proven yet for how long the pathogen of the virus can stay on the surfaces).
- 2. The virus can invade your body through eyes, nose, mouth, and blood in rare cases (mosquitoes carry blood from virus holder to another person). Hence, avoid touching your nose, eyes, and mouth with your hand.
- 3. When you cough or sneeze, cover your mouth with the bend of your elbow or use a tissue (immediately throw it to the dustbin).
- 4. It is recommended to wear a mask whether you are sick or not; mask is good to stop you from touching your mouth and nose.
- 5. In regard of Governments, the WHO recommended cancellation of public events, e.g.,, festivals, parties, celebrations, sports matches (the 2020's Olympic was canceled due to the spread of the virus globally). Schools and Universities also have to be shut down to prevent the crow and close conduct amongst students.
- 6. Additionally, Curfew (Stay at home) is to be implemented by the Governments to keep a social distancing policy to stop the spread of the epidemic.
- 7. In respect of businesses and work, Governments should execute the lockdown policy (work/order from home).
- 8. Some countries such as Japan, South Korea, and the United Arab Emirates have implemented a "test-drive" policy to test individuals.
- O For the individuals who feel sick guarantine vourself and do not communicate with others.

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distance of at least 1 m between you and the other person; the droplets are heavy to travel for more than 1-m Desai and Patel (2020).

10. We use hands to do too many tasks in our daily life. Therefore, it is crucial to wash your hands by soap or sanitizer contained not less than 60% alcohol regularly for more than 20 s^{10} ; especially, if you have been outside of your house.

16. Future pandemic prevention

When the virus was discovered by the Chinese doctor Dr. Li Wenliang at the end of December, his matter was not taken seriously. Further, he was warned by the Wuhan's local authority. In his message, which was shared to a group of his medical school classmates, Dr. Li told them to take cautions against the reemerged contagious disease that started to take place in Wuhan city. He said, "A new coronavirus infection has been confirmed and its type is being identified. Inform all family and relatives to be on guard" Leung (2020) this message was dated on 30th December. Dr. Li Weliang now is considered as the pioneer warner about the COVID-19. The Chinese Health Bureau of Wuhan city reported that "there is no evidence of spread [the new emerged virus] between humans" Ibid They added that doctor Li is a spreader of untrue comment and distractor of the social order Ibid The local authorities of Wuhan had hindered the prevention measures in order to stop the virus from spreading all over China in specific and the world in general. Therefore, they could have taken firm measures to cease the virus in its first place. However, what we can learn from the current pandemic for future is that in case of discovering any contagious, infectious pathogens anywhere, serious steps have to occur initially, not saying there is no evidence to spread the virus from human to human, which caused the world pandemic.

Sometimes we have to give up eating the animals that well known as the store of viruses such as bats and pigs. What happened in Wuhan is the result of eating this store of viruses' animals. Throughout the history of the pandemic, as it was discussed previously, certain types of animals are the main cause of infectious diseases. Therefore, it is important to ban consuming these animals in order to prevent a future pandemic.

2020 nandamic has occurred fortunately in the era of year, advanced technology (Artificial In this article

Workforce) to save their lives in some countries. As we have seen in UAE, South Korea, and Japan, Artificial Intelligence also has contributed to fastening the process of developing the new vaccine and therapeutic to defeat the COVID-19. 2020's pandemic has ignited the engines of more than a hundred pharmaceutical companies worldwide. All of them work 24/7 in order to invent the ending pandemic vaccine and therapeutic. These efforts have to carry on for preventing such a future epidemic. Luckily, COVID-19 is a new virus confronting humankind; it had happened twice during the two decades in the shape of SARS and MERS. But, the problem is that we did not learn any lesson from these two coronaviruses. This pandemic of COVID-19 has taught us a lot. Therefore, the world has learned a great lesson for future. Now, we have more than enough information about the current emerged virus (COVID-19). Keeping developing vaccines for deadliest viruses such as Ebola, Dengue is crucially significant to save the human being from them. In this context, as for current advancement in technology, we are capable to find the vaccine. Hence, it is the most crucial way to prevent such a future pandemic. Hence, it is the most crucial way to prevent such a future pandemic.

In a few words, the future pandemic is inevitable, but, it is unknown when it will happen. Therefore, we have to be prepared for it. As it was discussed above about the possible ways in order to prevent the next pandemic, we must keep our eyes open from now. The more we are cautious about it, the faster we can cease it. However, people, who eat such virus storage (i.e., bats) have to surrender their habit permanently; if they do so, they would save their lives, families, and the world as a whole. Eating wild animals must be prohibited forever. Rapid report about any viral diseases has to be taken seriously by the nations' authorities. If an infectious disease was found in any part of the world, it is vital to report it immediately to the World Health Organization (WHO). Most importantly, with proper information, the report has to include.

17. Treatment of COVID-19

Until the moment, there is no effective vaccine or therapeutic to fight against COVID-19. The reason is due to the major research gaps in regard to the current virus, leading to ambiguity in understanding the virus nature. WHO's Blueprint R&D team is working 24/7 to invent the vaccine and therapeutic to cure of the virus. In the WHO O&A section, this question was asked?

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alleviate symptoms of COVID-19, there is no evidence that current medicine can prevent or cure the disease. WHO does not recommend self-medication with any medicines, including antibiotics, as a prevention or cure for COVID-19. However, there are several ongoing clinical trials that include both western and traditional medicines. WHO will continue to provide updated information as soon as clinical findings are available" Ibid Moreover, the rules provide certain public health measures which can be implied at the time of outbreaks internationally especially traveling amongst countries. The main aim of these maximum health measures is to protect countries from getting infected by the epidemic.

18. 2020's pandemic end

2020's population is looking for the end of this pandemic. COVID-19 has changed our lives unexpectedly; from normal to abnormal, from the moving to stop moving, and from social conduct to social distance. Therefore, this question is the most common amongst all of us nowadays which needs to be answered.

New York Times newspaper has published an article to answer this question. The article title was "How Pandemics End" Kolata (2020) Two ends of pandemics were provided at the beginning of the article. The first end of the pandemic is called a medical end; it takes place when the rate of mortality disappears. The second end of the pandemic is a social end; this type of endings is deeply linked with the fear of community of the epidemic. To paraphrase that, when the fear against the disease is low among the society that means it is an end to the pandemic socially. The writer added that in the case of COVID-19, the social ending would be possible at first, then the medical end would finally be Ibid Individuals cannot stay grounded indoor for so long, they are used to get outdoor to do their activities. When all activities have to be exercised from home for a long period of time, people absolutely get tired of that. Therefore, the fear against the COVID-19 gradually is waning day by day; this circumstance makes an end to the pandemic as we see today. The medical end requires vaccine and therapeutic to stop the rate of mortality. Thus, when the vaccine and therapeutic are invented, they are going to make an end to the pandemic medically by stopping the rate of death.

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Law is a very effective instrument to protect our public healthcare system Gostin and Wiley (2016) Hence, it is made to promote our life to better health. Throughout history, law intervention has made the greatest change in the public health aspect. With its rules, the law has been assisting the front line fighters to overcome the pandemic. As we have witnessed the role of law during the 2020's pandemic. This role obviously conquered the movement of individuals and limited it based on the rules provided by the government. Certain rules have been imposed on the citizens in order to protect them from getting infected with COVID-19. Law of curfew, law of quarantine, law of travel ban, and international law of Public Health Emergency of International Concern (PHEIC) are laws made to keep people safe from contagious diseases.

International law gives full power to the World Health Organization (WHO) under International Health Regulation (2005) (IHR), Katz and Kornblet (2010) to control such a global pandemic. The main objective of the IHR is to prevent and manage the risks of public health coming from the global spread of contiguous diseases such as the most recent COVID-19. The story of enacting an international health regulation occurred in 1951 when the World Health Organization (WHO) undertook the International Sanitary Regulations. Later on, particularly in 1969, the conferences related to the international sanitary renamed to International Health Regulations (IHR) Aginam (2002) They are set of legal rules concerned with controlling and sharing such information about the epidemiology in order to maximize security against the spread of the epidemic and minimize the interference with nation's traffic Ibid. The intensive enhancement on the International Health Regulations (IHR) was adapted by WHO in the resolution WHA48.7, 1995. The resolution was called (Global Health Security: Economic Alert and Response). It focused on revising the International Health Regulations and added more effectiveness at the international spread of new and re-emerging diseases such as Coronavirus Family. To reduce the impact of pandemics, the World Health Organization adopted a 2001 resolution WHA54.14 named (Global Health Security: Epidemic Alert and Response). The resolution aimed to maximize Global Health Security at the time of discovering a new epidemic and initiate a fast response. Moreover, support to the member states of the organization in order to identify, verify, and respond to the Public Health Emergency of International Concern (PHEIC). To implement the said resolution, the World Health Assembly elaborated the strategies of the implementation through three steps as follows:

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cholera and influenza;

- 2. Detection and response to health emergencies resulting from unexpected circumstances and unknown etiologies; and
- 3. Improving preparedness through strengthening national infrastructures for disease surveillance and control. $\frac{11}{2}$

20. International Health Regulations (2005) (IHR)

IHR aims mainly to control the spread of such pathogens globally. The International Health Regulations (2005) (IHR) was adopted by the World Health Assembly in 2005. WHO's Member Countries are imposed to apply in case of the International pandemic to manage public health emergencies together. Member States of WHO, according to the International Health Regulations (2005) (IHR), have to take into consideration the following requirements in respect of Public Health Emergencies:

- Establishing a National IHR Focal Point in order to enable continuous communication between the county and the WHO.
- Developing and maintaining the capacity to reach health risks limited to the county's borders and to notify the WHO the events which lead to public health emergencies of international concern.
- According to IHR, countries are imposed legally to increase their capability to maintain surveillance and response at local, intermediate, and national levels.
- Following the instructions given by the WHO with the leadership of Director-General who
 may issue some recommendations in the pandemic situation.
- Countries are required to exercise their health powers considering the transparency and non-discrimination principles. They also are obligated to pay full respect to the dignity, human rights, and fundamental freedoms of their citizens.
- Member States should develop a National Emergencies Plan in case of such pandemic In this article

• In order to face the pandemic efficiently, the public health laws may grant temporary licenses to some inactive or retired health professionals (2008).

Now, it is essential to discuss what was declared on 31st of January, 2020 Public Health Emergency of International Concern (PHEIC).

21. Public health emergency of international concern (PHEIC)

Based on the 2005 Regulation of the World Health Organization, the PHEIC obligates the Member State to notify the World Health Organization (WHO) about disease outbreaks. The organization collaborated with the Swedish Institute of Infectious Diseases to define the type of infectious diseases which need to be notified to WHO to declare the PHEIC. Thus, these diseases will be listed and included in the International Health Regulations (IHR). The first Coronavirus was identified and listed in 2003 in the name of Severe Acute Respiratory Syndrome 2003 (SARS).

Moreover, a surveillance disease system is required at the national level in order to respond, detect, and evaluate to such Public Health Emergency. Under the International Law (IL) and International Health Regulations (IHR), the Chinese Government as Member State in WHO was obligated to notify the World Health Organization about the COVID-19 outbreaks. Hence, the highly respected delegate was sent to the Organization headquarter in Switzerland to notify the WHO about the current public health situation. As the cases of COVID-19 crossed the boundaries of its origin, it has become a Public Health Emergency of International Concern (PHEIC). Preventive measures to stop the spread of the virus started to take place after the WHO declared PHEIC. As a result of the declaration, international flights from/to China (the source of the virus) were banned. For countries which their citizens had traveling history to the source of the virus some preventive measures initiated such as Social Distancing Work, Lockdown, and Curfew.

22. State law and public health emergency

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national law that takes into consideration the international obligations to manage the public health emergencies extracted from the International Health Regulations (2005) (IHR). There are three levels in regard to Public Health Emergencies which the Government measures the size of the disaster; local, intermediate, and national. In regard to COVID-19, the Government takes preventive measures on the national level. COVID-19 is an infectious disease with a rapid spread. Every country, after estimating the situation, has the right to declare a Public Health Emergencies at any said level.

23. Conclusions

23.1. Lessons from COVID-19 for future pandemic

COVID-19 is an invincible creature; it is a pathogen which has paralyzed the mankind. More than two millions are the victims of the evil virus and 140 thousand deaths. These numbers will continue growing until we find the solution (vaccine or therapeutic) to fight the virus face to face. Nowadays, the entire world intensively is researching for the solution. Research and Development Centers (R&D) are racing to invent vaccine/therapeutic in order to cease the pandemic of 2020. The 2020's virus has the ability to spread so rapidly amongst human beings through droplets. When the virus invades the human body, millions of copies will be produced due to its emerging with the body's cells. The main target of COVID-19 inside the human entity is the respiratory system. It will be settled in the lungs to destroy them totally, then, other organs. The invasion of COVID-19 leads to symptoms that happen in the body of the infected person. These symptoms are fever, cough, shortness of breathing, headache, and in some cases diarrhea. Patients of COVID-19 must stay under quarantine to stop spreading the virus to others.

World Health Organization (WHO) is the only international body controlling the situation of international public health emergencies. Therefore, it has power provided by the International Law (IL), International Health Regulations (2005) (IHR) to declare a Public Health Emergency of International Concern (PHEIC). PHEIC was declared by WHO on the 31st of January, 2020. The strategies of stop spreading infectious diseases have implemented by the member states of WHO. For instance, curfew, lockdown, social distance, and quarantine strategies in order to stop

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afterward, to the world. Now, the USA has hit roughly by the virus which put it as the highest country with COVID-19 confirmed cases. The second is Italy, then, Germany. Europe as a region alone has more than a million COVID-19 confirmed cases. In regard to vaccine and therapeutic, the WHO's blueprint R&D has put a tremendous effort to develop them as soon as it is possible.

Law of Public Health Emergencies is the one related to the COVID-19 pandemic. It is given to the State to declare it. WHO's Member States are obligated to implement certain instructions given by the Director-General of the Organization. In regard to the Public Health Emergency of International Concern (PHEIC), it is a power given to WHO by International Law and International Health Regulations (IHR). IHR has a vital role in such global health pandemic to limit such infectious diseases from spreading worldwide.

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Notes

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- 1. World Health Organization, *Coronavirus disease (COVID-19) outbreak situation*, Wно (Last visited Mar.28, 2020, 02:05 PM), https://www.who.int/emergencies/diseases/novel-coronavirus-2019.
- 2. The updated above number was cited at 02:42 GMT+5:30.
- 3. Scientists' way to calculate the mortality's rate of any pandemic disease; it is calculated by dividing the total number of confirmed cases by the deaths number. In case of COVID 19, until today, the total number of confirmed cases is 512701 divided by the number of dead people who died because the virus which is 23495 (WHO's today's update). That results to the mortality rate of Coronavirus 19 which is 22%.
- 4. *Id.*
- 5. *Id* at 532.
- 6. Supra note 1.
- 7. The latest update of the WHO dated 3rd of April, 2020.
- 8. Supra note 12.
- 9. WHO latest update, 13 April 2020 04:00 PM CEST.
- 10. Id at 1516.
- 11. Supra not 21, at 948.

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