

THE SARS-COV-2: BIOLOGICAL WARFARE AND THE RESPONSE OF THE HEALTH COMMUNITY

فيروس كورونا: الحرب البيولوجية واستجابة المجتمع الصحي

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الملخص:

إن في ظل صراع البشرية مع جائحة كوفيد-19، تطرح العديد من الإشكاليات حول الفيروس ومصدره وهل تعتبر الجائحة حرب بيولوجية، ومادى استجابة المجتمع الصحي. تهدف هذه الدراسة إلى معرفة جميع جوانب نظرية الحرب البيولوجية وذكر أبرز ردود المجتمع الصحي. بعد الاطلاع على جميع الدراسات والتجارب التي تؤيد أو تعارض النظرية يمكننا بعد ذلك الرؤية بوضوح صحة النظرية، ومعرفة مجال صناعة اللقاحات ومنطق التفكير في هذا المجال. سنخلص إلى المصدر المخبري للفيروس وبوادر الحرب البيولوجية، أما من الناحية الأبيستيمولوجية فقد تغير الكثير من المفاهيم حول الحرب البيولوجية والمفاهيم الانسانية خاصة في مجال صناعة اللقاحات والأدوية.

الكلمات المفتاحية: الأسلحة البيولوجية، المجتمع الصحي، اللقاح.

Abstract:

In humanity's struggle with the Covid-19 pandemic, the current situation poses many problems about the virus and its source, and is the pandemic a biological warfare? And how much the health community responds. This study aims to learn about all aspects of biological warfare theory and to mention the most prominent responses of the health community. After looking at all the studies and experiments that support or oppose the theory, we can then clearly see the validity of the theory, know the field of vaccine industry and the logic of thinking in this area. We will conclude with the laboratory source of the virus and the signs of biological warfare, but from an epistemological point of view, many concepts about biological warfare and humanitarian concepts have changed, especially in the vaccine and pharmaceutical industry.

Keywords: Bioweapons, Public health, vaccine.

INTRODUCTION

The race toward weapons and gaining the balance of power imposed the creation and development of weapons of mass destruction, not only government's organization but also some non-governmental organization that seek to threaten and terrorize groups of humans, societies, governments, armies (Greub V. B., 2014), destabilize the public health ... Or for economic interests. Biological weapons have become a concern for the public health. In the 10 April 1972, Convention was signed and entered into force in 26 March 1975 to ban all types of biological weapons, which have been signed by 183 so far. The BW has been defined as the use of microorganisms like bacteria and viruses, which cause death and disease among humans, animals and plants (CDC, 2018).

The security tension between the world's power poles and efforts to create a security defense system that will be the health system, including the production of medicines and vaccines, is an important criterion for the forces that will form after the pandemic.

Dr. Moulay Abdel Nasser's statement that countries do not think about the logic of passion)Dr Moulay(2021 , and the statement of lawyer Clayton Halonen that said it was all a trick to get the money (Halonen, 2020). Raises questions about the source of the virus and puts some parties in the dock? In order to answer these problems, this study will be divided into axes, the first axis:

HISTORICAL BACKGROUNDER

From an epistemological perspective, Knowing history is part of the perception of reality, as it leads to giving logical explanations that help in understanding the present and answering the problems at hand, and this is

through studying and analyzing the expected and unexpected results. If we want to know the truth of these wars, we must review the historical aspect of them in order to get a part of the truth and be the basis for research in this study. It is worth noting that the historical analysis of events involves many obstacles that we will face, which is the scarcity of accurate information for the recent emergence of microbiology and the time difference that may affect the facts. As for the obstacle that played an important role in distorting the facts and still is the political reasons, especially in the issue of sensitive like this)Greub V(2014 ‘.. Through previous studies, we can divide the history of biological warfare into two parts:

THE ANCIENT ERA

The scarcity of information has made it difficult for historians to determine an exact date for the first appearance of BW. Some historians trace its appearance to the 14th century BC in the Hittite state, where tularemia (*Francisella tularensis*) spread through the carcasses of animals they threw on their enemies, causing an epidemic that swept the region from Iraq to Cyprus and Palestine to Syria (SI, 2007). Some researchers have questioned the method of infection, as the dumping of corpses could not have had this effect on the spread of the epidemic. In the second century BC, There were other methods as indicated by the Greek historian Herodianus (MD, 1979), the method of dipping arrows in poison and contaminated blood by Scythian archers, and with reference to modern science, this mixture may be the presence of *Clostridium perfringens* and *Clostridium tetani*, and this is what we will adopt later on in knowing some of the causes of diseases used in BW. In the third century BC, some anthropologists documented the human use of pathogenic animal and plant compounds in attacking the enemy. For example, Italian archaeologists found in an ancient Roman villa a bowl containing remains since 79 AD. In 2007, a study was issued on analyzes

conducted on those remains, indicating the presence of a mixture of poisonous and narcotic medicinal plants (opium and poppy seeds) with remains of reptiles. (A, 2008)

In the middle Ages, biological weapons were not limited to wars only, as they were also used to protect important documents in the state. It was also used in defense as well, and this is what happened in the siege of Atra in Mesopotamia by the forces of Septimius Severus (around 200 AD) (MD, 1979). In 1155, Barbarossa was poisoned water with contaminated corpses in Toronto, Italy (TUMBARSKI, 2020). History isn't just what we mentioned, but there are a lot of epidemics caused by biological weapons.

TABLE 1: Examples of biological warfare in the ancient era (Prepared by the researcher)

Year	Events	Disease	Pathogen	reference
14 th century BC	The Hittite state spread through the carcasses of animals they threw on their enemies	Tularemia	<i>Francisella tularensis</i>	Clinical Microbiology and Infection, 2007
2 nd century BC	the method of dipping arrows in poison and contaminated blood by Scythian archers	Tetanus Epsilon toxin	<i>Clostridium tetani</i> <i>Clostridium perfringens</i>	US National Library of Medicine National Institutes of Health, 2008
Around 200 AD	The siege of Atra in Mesopotamia by the forces of Septimius Severus	Neurological diseases	<i>Snake toxins</i>	Revue des Études Grecques, 1979

Year	Events	Disease	Pathogen	reference
1155	Barbarossa was poisoned water with contaminated corpses in Toronto, Italy	Probably Cholera	<i>Vibrio cholerae</i>	
1346	Mongols dump the bodies of plague victims on cava walls	Plague	<i>Yersinia pestis</i>	CDC, Emerging infectious disease, 2002
1650	The Polish army used rabid dogs to attack the enemy.	Rabies	<i>Rabies lyssavirus</i>	CDC. Bioterrorism Agents 2018
1710	Russian army throws plague-infected bodies at Swedish army	Plague	<i>Yersinia pestis</i>	CDC, Emerging infectious disease, 2002
1763	British officers distribute blankets containing smallpox to Native Americans	Smallpox	<i>Variola major</i>	Mayor, The Nessus shirt in the new world, 1995 G W Christopher, NIH 1997
1797	Napoleon's army spreads malaria around the plains of Mantua (Italy) to infect the enemy.	Malaria	<i>Plasmodium malariae</i>	US National Library of Medicine National Institutes of Health, 2008

THE MODERN ERA

The establishment of cell theory (Churchill, 1991), and the emergence of modern microbiology during the 19th century (Barnett, 2003), BW began to be developed and technically controlled, and diseases separated,

monitored and identified their causes. In parallel, with the advent of the media, propaganda and misleading public opinion became the main obstacle to knowing the parties involved in the biological crime, and directing the attack to a specific group with the power of influence became easy.

Among the most prominent examples in the modern era are the First and Second World Wars, in which they used many biological and chemical weapons. The Geneva Protocol in 1925 (1925 Geneva Protocol) did not succeed, and the treaty in 1972 under pressure from the World Health Organization was somewhat successful. But then terrorist attacks appeared, attributed to non-governmental terrorist groups, such as what happened in 1984 by the Rajneesh cult, where 751 people were infected with salmonella in many restaurants in Dalles, Oregon. In 1995, the Aum Shinrikyo (religious cult) poisoned the Tokyo metro with sarin gaz. (Carus, August 1998 (February 2001 Revision))

In the 21st century, the World Trade Center incident, September 2001, was one of the most prominent examples of biological terrorism. A month later, anonymous messages containing anthrax were sent to journalists and important persons in the country. 22 people were infected, 5 of whom caused complications. (Greub K. J., 2014)

One of the hot issues in the modern era is the immunity of America to the Japanese unit 731 specialized in developing biological weapons, which committed crimes against humanity during World War II, in exchange for presenting the latest findings of the development of biological weapons (Greub V. B., 2014). The emergence of two influential poles on the international scene after World War II and in light of the existing tension, accusations began to be exchanged between the two parties, for example the Sverdlovsk incident (now Ekatarinburg, Russia) in 1979 after the Soviet

Union tried to get rid of a large amount of biological weapons and infected the city. (Carus, August 1998 (February 2001 Revision))

THE SARS-CoV-2 ORIGINS

In the late 19th century, some researchers doubted, after the Russian flu epidemic between 1889 and 1890, that the oc43 virus, a member of the Corona family, was the cause. In the 1960s a new type HCoV 229E appeared. Then NL 63 in 2004 and HKU1 in 2005, but among the types that cause severe complications are SARS-CoV, which caused epidemics in 2002, and MERS-CoV in 2012. Through the figure 1 , we will review the corona family classification.

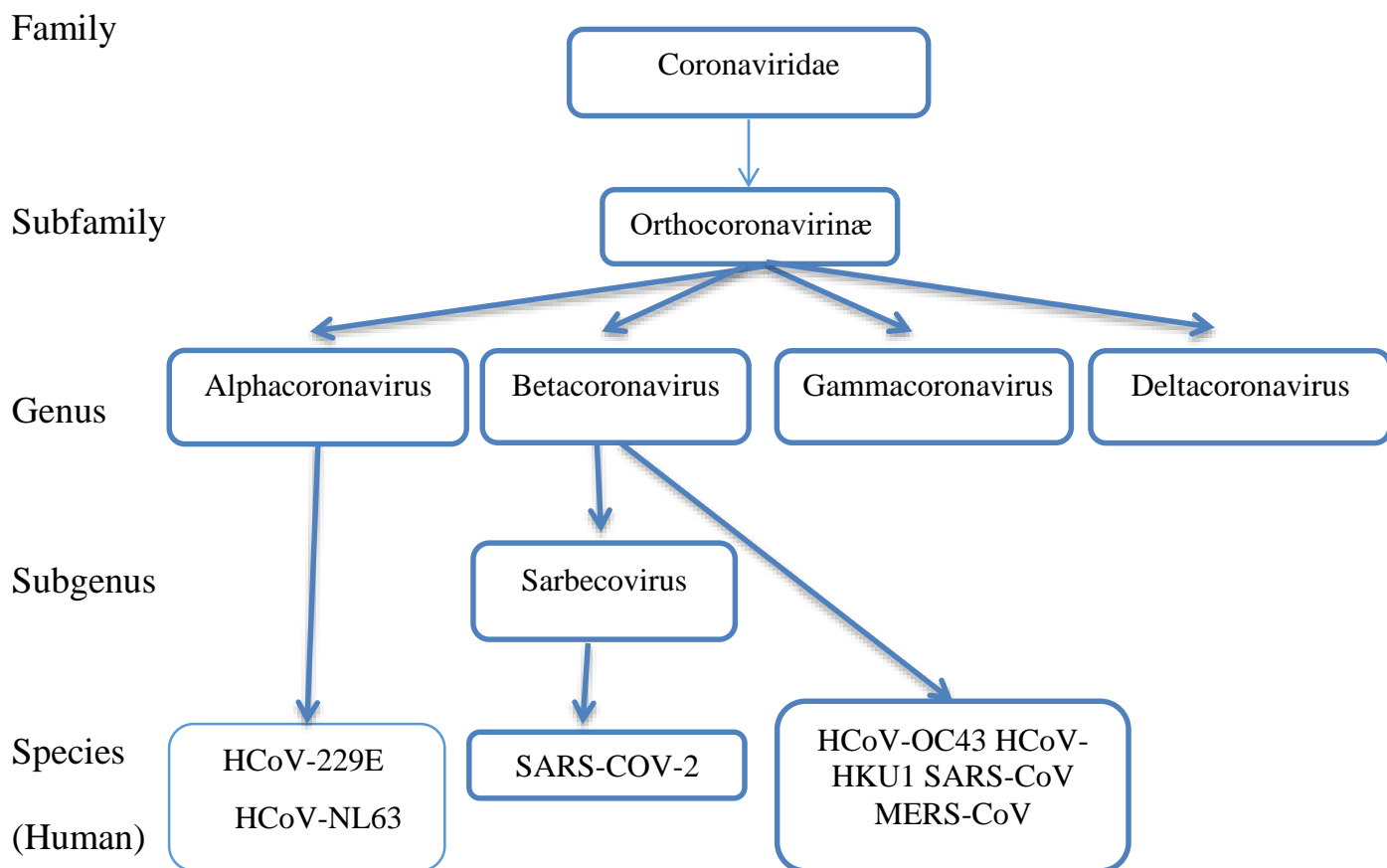


FIGURE 1: Classification of coronaviruses that infect humans

(MALIK, 2020)

After the widespread of the virus in the world and its impact on countries significantly, countries exchanged accusations, some of which were carrying arguments and the other were deaf accusations. We can sum up the accusations in two hypotheses, i) It is that the origins virus is nature, as it evolved in animal host or during zoonotic transfer, ii) that the virus was created and manipulated in a laboratory (whatever that laboratory is).

- I. **The virus origin is natural:** Before we present the content of this hypothese we must know the *The organization of the coronavirus genome is 5'-leader-UTR- replicase-S (Spike)-E (Envelope)-M (Membrane)-N (Nucleocapsid)-3'UTR-poly (A) tail with accessory genes interspersed within the structural genes at the 3' end of the genome.* (MALIK, 2020)

There are two notable features of SARS-CoV-2 virus: 1) *Mutations in the receptor-binding domain of SARS-CoV-2:* so that his RBD is very similar to ACE2 humans. 2) *polybasic furin cleavage site and O-linked glycans:* has the role of determining viral infectivity and range host.

Genetic analysis of the SARS-CoV-2 virus has shown that there is ~96% identical overall to RaTG13 the Bat virus and other viruses carried by pangolin (*Manis javanica*). Based on the genetic similarity between these viruses, we find three possibilities: i) *Natural selection in an animal host before zoonotic transfer.* ii) *Natural selection in humans following zoonotic transfer.* iii) *Selection during passage.* (Kristian G. Andersen, 2020) We note that getting viral sequences from host animals is the most effective way to prove the origins of the virus.

II. The virus was manipulated in a laboratory: This hypothesis was popularized in the form of propaganda, and the pioneers of this theory were seeking to lay charges no more, this hypothesis is political closer than scientific. According to USA Ministry of Foreign Affairs, there's a security report published about the low level of the health security system at Wuhan's virus lab. Minister of Foreign Affairs Mike Pompeo said there was "tremendous" evidence to support the theory that the virus manipulated in Wuhan's lab. (Jones, 2020)

While the French scientist Luc Montagna, who won the Nobel Prize in Medicine in 2008 for the HIV virus, confirms that the virus is manufactured in a laboratory and does not know how it came out. (Montagna, 2020)

Chinese scientists discussed the use of SARS viruses as a biological weapon in 2015. The spread of this document, which has been completely concealed, raised the possibility that the virus was manufactured in one of Wuhan's laboratories. Documents obtained by the U.S. State Department revealed that in 2015, Chinese military scientists discussed the use of coronaviruses as a biological weapon, according to a military document that predicted that biological agents would be the weapon used in a third world war.

Lawrence Slyn, a veteran expert on Covid-19 and the pharmaceutical and medical research industry, told : "The debate is resolved... Indeed, the CORONA virus was created in a laboratory in China, and now the second step is to think about the link between the CORONA virus and China's biological warfare program ... I think it is clear that those who said that the virus was born in nature have not provided any evidence, while there is a huge amount of clear evidence that it was born in a laboratory. "This virus has defects that cannot be derived from a natural developmental process." (Araabi, 2021)

This virus contains a number of imbalances that cannot be interpreted as a natural developmental process, because it is pre-prepared to cause human infection, Chinese scientists have developed this by using animal models of a human nature, and by adopting a method called serial scrolling. However, the virus contains genetically manipulated sections, specifically the location of the polybasic furin cleavage, although it does not need to be present in this site, because this structure does not exist in any of the viruses close to the current SARS-CoV-2, from which it may have evolved, and here I mean thousands of possible viruses among corona's ancestors. None of them specifically included this structure at the said location. The inclusion of this polybasic furin cleavage into the SARS-CoV-2 will make them more infective and more deadly.

We also know that scientists in China demonstrated in 2013 the possibility of including a similar structure into the virus. And he says: « *The Chinese Center for Disease Control was forced to admit that the story of the virus's release from the live meat market made no sense. So they hid data about the virus, and they may have destroyed data about it as well. So obviously their intentions weren't right* ». Lawrence Slyn concluded by saying: « In my opinion, you can describe the CORONA virus as biological warfare. They made it and didn't tell the world it was transferable between humans. They suspended internal air traffic while allowing international air traffic to be completed in order for the virus to spread. China has also concealed documents, destroyed information and continued to disseminate the theory of the birth of the virus in nature, which is wrong from the outset, but continues to do so. So if this virus they created themselves, killed the whole world and claimed millions of victims, is not part of biological warfare, I don't know what it really is. » (Araabi, 2021)

THE PUBLIC HEALTH RESPONSE TO BIOLOGICAL WARFARE

In an article published on Formiki, researcher Paolo Crepa in the Department of Defense and Security at the Center for International Studies in Italy questioned the ability of different countries to deal with threats from biological warfare, the same institute emphasizes that the widespread of the pandemic is an important criterion in assessing countries' responses to biological warfare and bioterrorism. When we speak about biological warfare and epidemics, the main part of the topic, the vaccine and pharmaceutical industry, cannot be ignored. Through the crises that have passed over the world in the last two decades, much has been revealed about that industry, where large companies have been a question mark.

In 2009, after the outbreak of the swine flu epidemic, and after four years, clinical trials of Tamiflu were revealed, where it was found that it was no more effective than Paracetamol, and more than \$ 18 billion was spent in the world as the solution to the problem, which prompted the researcher, Dr. Tom Jefferson, the British epidemiologist, to file a lawsuit against Roche, accusing it of lying and deceit, and saying in the Pandemrix vaccine: «*The experiments they used to claim that it stopped infection from one person to another had severe methodological flaws and the claim was not based on strong evidence.* »)Youtube(2020 ،

In 2014, after the advent of Ebola and the emergence of the vaccine in late 2016, doubts were raised about this delay, says Dr. Amish Adalja, a researcher at the Jones Hazbekens American Center for Health Security: «*There is always concern when we talk about emerging infectious diseases and that companies do not want to invest in them because their market is not attractive ... And it's not profitable, but Corona is the whole world.* »)Youtube(2020 ،

Through these statements, we can clearly see the ambitions of large companies to dominate the economies of nations and not think about the human side, says attorney Clayton Halonen, who is in charge of a case against Roche Pharmaceuticals: «*Tom Jefferson spent a lot of time scrutinizing clinical trial data to find out that it's all a hoax... Why? ... For the money.* ») Youtube(2020 ،

In 2013, LeParisien published an article entitled « A worrying virus created in China », and that such experiences were discontinued in the Netherlands and the USA for fear that some terrorist would use it in Attacks. (LeParisien, 2013)

CONCLUSION

What is happening in the world now is the crisis of the 21st century, the Third World War, that humans are fighting against the epidemic, and despite all the evidence that the source of the virus is the Wuhan virus laboratory, all the evidence almost confirms it's laboratory-modified geometry and the question remains whether it leaked intentionally or unintentionally?

Through our statements, studies and explanations of the evolution of biological warfare over time, we can say that the world is witnessing a new era of biological warfare in two parts: I) strategy: the superpowers no longer rely on biological warfare but manage the crisis in their favor after the emergence of epidemics regardless of the source of natural or manipulated viruses, countries are developing health security systems and the development of laboratories and scientific research to put solutions at the world market. II) The objectives: through the aforementioned definitions of biological warfare as killing and terrorizing individuals and societies, we find them inaccurate as their objectives have become to cripple the world's

economies and dominate the market, especially through the trade in vaccines, medicines and pharmaceuticals.

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