БОГОСЛОВСЬКІ НАУКИ

УДК:159.9.019.4

Doi: 10.55315/graphe.2.2021.6-15 Тематична рубрика: **теологія.**

PANDEMICS: MEDICAL-BIBLICAL AND HISTORICAL ASPECTS

Aleksey Oparin doctor of medical sciences, professor

Kharkiv Medical Academy of Post-graduate Education Kharkiv, Ukraine EMail: oparinaa@ukr.net ORCID: https://orcid.org/0000-0002-5501-3891

Valentyna Kuryliak PhD, postdoctoral student in the philosophy and cultural studies department

National University «Ostroh Academy»
Ostroh, Ukraine
EMail: v.kuryliak@ugi.edu.ua
ORCID: https://orcid.org/0000-0001-5245-9700

Abstract. In this article, we consider pandemics in medical-biblical and historical aspects, through medical, social, and biblical-philosophical prisms. We analyze the level of health literacy of the population, the quarantine system, and disease warnings in the biblical text. It is stated that thanks to the rules of personal hygiene and the developed quarantine system, the ancient Israelites avoided mass diseases. A brief history of world pandemics, the medieval trio: Justinian's plague, "Black Death", syphilis and leprosy, as a result of which the population of Europe and the world has decreased by almost 50%, is considered. We have established that global pandemics usually broke out at a time when the state church abused its powers and led an anti-Christian lifestyle. It is shown that in the Middle Ages, the state church blamed the emergence and spread of diseases of the Jews, whose neighborhoods suffered less from pandemics due to the fact that they followed the biblical quarantine regulations. We briefly reviewed the Spanish flu and Covid-19 pandemics, with the result that they also erupted during crisis moments in human history. It is concluded that there is a causal relationship between pandemics and the moral level of society and its attitude to basic biblical values.

Key words: pandemic, biblical quarantine measures, medieval epidemics, medico-biblical aspect, historical aspect.

ПАНДЕМІЇ: МЕДИКО-БІБЛІЙНИЙ ТА ІСТОРИЧНИЙ АСПЕКТИ

Олексій Опарін доктор медичних наук, професор

Харківська медична академія післядипломної освіти Харків, Україна EMail: oparinaa@ukr.net ORCID: https://orcid.org/0000-0002-5501-3891

Валентина Куриляк доктор філософії, аспірант кафедри філософії та культурології

Національний університет «Острозька академія» м. Острог, Україна EMail: v.kuryliak@ugi.edu.ua

ORCID: https://orcid.org/0000-0001-5245-9700

Анотація. У статті подано огляд пандемій у медико-біблейському та історичному аспектах, а явища епідемій розглянуті через медичну, соціальну та біблійно-філософську призми. Проаналізовано рівень санітарної грамотності населення, систему карантину та попередження про захворювання у біблійному тексті. Констатовано, що завдяки правилам особистої гігієни та розробленій системі карантину стародавні ізраїльтяни уникали масових захворювань. Розглянуто коротку історію світових пандемій, середньовічне тріо: Юстиніанова чума, «Чорна смерть», сифіліс та проказа, внаслідок яких населення Європи та світу скоротилося майже на 50%. Встановлено, що світові пандемії зазвичай спалахували тоді, коли державна церква зловживала своїми повноваженнями і вела антихристиянський спосіб життя. Показано, що в епоху Середньовіччя державна церква звинувачувала у появі та поширенні хвороб євреїв, чиї квартали менше страждали від пандемій через те, що вони дотримувалися біблійних карантинних приписів. Коротко розглянуто пандемії іспанського грипу та Ковіда-19, внаслідок чого констатовано, що вони також спалахнули під час кризових моментів історії розвитку людства. Зроблено висновок про те, що існує причинно-наслідковий зв'язок між пандеміями та моральним рівнем суспільства та його ставленням до базових біблійних цінностей.

Ключові слова: пандемія, біблійні карантинні заходи, середньовічні епідемії, медико-біблейський аспект, історичний аспект.

Introduction. Since the end of 2019, humanity at the individual, state, and global levels has been confronting the consequences resulting from the coronavirus infection, which provoked global changes in almost all spheres of human life. The Covid-19 pandemic not only caused damage to the global economic and public order but also put medical and scientific staff in a difficult position, who, despite the available modern discoveries and technologies, could not quickly cope with the crisis situation. A huge number of articles and publications have been published on the topic of the Covid-19 pandemic, however, there is still no comprehensive philosophical analysis of the coronavirus problem, since most of the published works on the Covid-19 infection are mainly of a narrowly substantive nature. Therefore, we propose to consider the problems of pandemics that shook humanity over the past two millennia from a philosophical, biblical, medical, social perspective. Examining the issue of pandemics in a complex, we will try to determine the possible causes of their occurrence, as well as to trace the moral and ethical level of society when these pandemics broke out. Therefore, the main goal of our research is to study the problem of a pandemic in the context of the history of medicine, world history, religious studies, and the Bible.

Bible about pandemics (epidemics). In the biblical text, the concepts of epidemics and pandemics are encountered directly and indirectly several times. The mass death of the Egyptians from natural disasters and phenomena, where the culmination of Egyptian executions was the death of babies (Book of Exodus, chapters 7-12). Various diseases as a tool for punishing the Israeli people for violating the commandments of God Yahweh (book, Deuteronomy, chapter 28). The fact of the extermination of the troops of the Assyrian king Sennacherib under the walls of Jerusalem (2 Kings, chapter 19). New Testament prophecies of Christ about diseases that will become a sign of His soon Coming (Gospel of Matthew, chapters 24: 7-8) and the seven last plagues described in the book of the Apocalypse (Book of Revelation, chapter 16). It is interesting to note that in each of the above cases, there is a connection between the cause of the epidemic and the sins or apostasy of people from God. However, along with the description of various pandemics in the biblical text, we come across a number of recommendations and preventive measures that need to be taken in case of infections. It is important to emphasize that these epidemiological measures were an integral part of the legislation of Ancient Israel. Among them we can highlight the following:

The level of health literacy of the population. According to biblical laws, which in ancient Israel had the status of the state, priests were the most literate part of society and, as a rule, possessed medical knowledge and taught the people that at the slightest suspicion of a physical illness, one should turn to a priest for help. In the book of Leviticus, it is indicated that «When someone has on the skin of his body a swelling, or a scab, or a bright spot, and it becomes an infection of leprosy on the skin of his body, then he shall be brought to Aaron the priest or to one of his sons the priests» (Leviticus 13:2). Also, among the people of Israel, educational activities were regularly carried out, during which the population was provided with information about the first symptoms of the disease so that they could take the necessary measures in time. This is what we call today

the health literacy of the population, which in the days of ancient Israel was realized in the form of a kind of lectures. But the fact that the people, whose population at that time did not exceed 1 million, were at a high level aware of these laws, testifies to a well-established system of preventive medicine and educational work.

Also, the Bible strictly defines the rules of personal hygiene of a person, which prescribed to clean up their feces to ensure a level of personal cleanliness and eliminate a possible source of infection: «You shall also have a place allocated outside the camp, so that you may go out there to relieve yourself, and you shall have a spade among your tools, and it shall be when you sit down outside, you shall dig with it and shall turn and cover up your excrement». (Deuteronomy 23: 12-13).

Biblical quarantine system. According to biblical medical laws, a person who was diagnosed with a suspicion of a contagious disease, in particular leprosy, was isolated for a certain period from others, to whom he could pose a potential danger. «If, however, the spot on his skin is white and does not appear to be deeper than the skin, and the hair in it has not turned white, the priest shall isolate the infected person for seven days» (Leviticus 13: 4). Official medicine finally came to such methods of preventing the spread of infectious diseases only by the end of the 19th century. Therefore, we can state with confidence that the biblical sanitary laws prescribed the isolation of a person who could become infected with infectious diseases, in particular, by contact with the bodies of dead animals. «Also, if one of the animals dies which you have for food, the one who touches its carcass becomes unclean until evening. He, too, who eats some of its carcass shall wash his clothes and be unclean until evening». (Leviticus 11:39-40). Thanks to biblical sanitary laws and regulations, for the first time in the world, the concept of dynamic observation of the patient was established. So, during the entire time of quarantine, if a diagnosis of leprosy was made, the patient was under observation, and after a certain number of days, he was examined by a priest who served as a doctor, as already mentioned above. Moreover, the priest determined the further tactics of patient management.

Disease warning system. When healthy people appeared next to him, a leper had to let him know about his illness. «As for the person who has the leprous infection, his clothes shall be torn and the hair of his head shall be uncovered, and he shall cover his mustache and call out, 'Unclean! Unclean!» (Leviticus 13:45). This contributed to the prevention and non-spread of infection. Moreover, the leper himself, while observing this system, did not receive various airborne infections from other people, which, with his already reduced immunity, could become fatal for him. However, it is important to emphasize that the biblical quarantine system represented isolation, not alienation. A patient diagnosed with leprosy had to live outside the camp. «He shall remain unclean all the days during which he has the infection; he is unclean. He shall live alone; he shall live outside the camp». (Leviticus 13:45). But at the same time, we note that the infected person was not killed, as was the case with other peoples, was not expelled into the deserts or mountains, being doomed to death. He lived outside the camp, but not far from it. That is, he was protected, relatives knew about his location, and they could leave food and everything necessary for life for him. And finally, after being cured, he again became a full member of society (Leviticus 13:46). When he returned to society, those around him should not have avoided him, as today it is noted in relation to AIDS patients (although in everyday life, at work, in transport, they are not contagious) and a number of other diseases.

Disinfection system for clothing and residence. When the fact of infection of a person was established, it was imperative to destroy objects with which the patient came in contact, since they could become a potential focus of infection for others. «As for any earthenware vessel into which one of them may fall, whatever is in it becomes unclean and you shall break the vessel. Any of the food which may be eaten, on which water comes, shall become unclean, and any liquid which may be drunk in every vessel shall become unclean. Moreover, everything on which part of their carcass may fall becomes unclean; an oven or a stove shall be smashed; they are unclean and shall continue as unclean to you» (Leviticus 11: 33 35). The clothes of a person who had contact with potentially infected objects were more processed. «He, too, who eats some of its carcass shall wash his clothes and be unclean until evening, and the one who picks up its carcass shall wash his clothes and be unclean until evening, the Israelis, not knowing that the source of infection was actually infectious bacteria, saved themselves and their families from local and massive infections and pandemics that often shook the peoples around them.

Diet system. A ban on eating unclean animals, which are reservoirs (or hosts, as infectious disease specialists say) for infections, for example, pork – the source of trichinosis, oysters – polioviruses, etc. A ban on the consumption of dead animals, since the death of an animal, could be due to an infectious disease, or pathogenic microbes could be in its dead carcass. «Also, if one of the animals dies which you have for food, the one who touches its carcass becomes unclean until evening» (Leviticus 11:39).

System for diagnosing infectious diseases. Ancient Israel was given clear diagnostic criteria by which a diagnosis could be made (Leviticus 13: 3-7,12-13, etc.). Moreover, the main signs of various forms of leprosy are very accurately noticed. If we compare the description of the symptoms of leprosy in the Bible with modern ones, we see the following:

Table 1. Comparison of symptoms of leprosy disease

Description of leprosy in the Bible [24]	Bible Description of Leprosy Modern Symptoms of Leprosy [26]
The priest, seeing that the lichens are spreading over the skin, will declare him unclean: this is leprosy. Papules can coalesce and form plaques that grow over the skin and form areas of atrophy.	The priest, seeing that the lichens are spreading over the skin, will declare him unclean: this is leprosy. Papules can coalesce and form plaques that grow over the skin and form areas of atrophy.
And if on the skin of his body his spot is white, but it does not turn out to be deepened into the skin, and the hair on it has not changed into white, then the priest must confine him who has an ulcer for seven days.	Symmetrical skin lesions with blurred borders of rashes, in some places the skin is thickened. Skin lesions are represented by pale depigmented spots with bright papules and clear red borders;

In other words, the priests had prescriptions, thanks to which they could determine exactly whether a person was sick with leprosy or deprivation. And this was done with the help of quarantine measures. It is noteworthy that in none of the legislation of the Ancient World and even the Middle Ages, up to the Reformation, we do not find such a clearly developed system of diagnostics.

Thus, the Bible contains a balanced approach to understanding the problem of a pandemic. On the one hand, speaking of the need to comply with anti-epidemiological measures, which indicates the absence of fanaticism in the text, which sometimes manifests itself today in the activities of some confessions, which say that if you pray to God, then you do not need to observe any quarantine restrictions, because in this they see, allegedly signs of distrust of God, and on the other hand, the Bible encourages a person to look deeper at the causes of the epidemic and their relationship with the moral decline of society and people's deviation from the Law of God.

Historical overview of world pandemics. Pandemics of the Middle Ages. It is noteworthy that in the history of the Ancient World there are concepts of an epidemic, but not a pandemic, since this term entered the life of society in the Middle Ages, along with several of the greatest pandemics that shook all spheres of society at that time to their foundations [18, т. I C. 18; C. 12, 71, 178]. First of all, these were pandemics of plague, leprosy, and syphilis. Let's consider each of them in a medical, social, and biblical-philosophical context.

The Middle Ages were marked by two global plague pandemics, the so-called Justinian plague, and the «black death». The first plague pandemic, or Justinian's plague, began in AD 541. e. in Ethiopia or Egypt and then along the trade routes reached Constantinople, from which it spread in masse throughout Europe, up to Ireland, Central, and South Asia, Arabia, and North Africa. The duration of this pandemic was more than a hundred years and ended around 654 AD [6]. Historians describe the events of those years in the following words: «A terrible calamity visited Constantinople in 542, it was a plague that bypassed the entire empire for three years. Everywhere she made terrible devastation, but certain data were preserved only for Constantinople, Alexandria, and partly Syria. Having devastated Alexandria, the epidemic penetrated Constantinople and first affected the lower classes of the population.

The terrible mortality and variety of manifestations of the disease caused panic and worsened the disaster. Many fell into madness, and the medical art of that time turned out to be powerless and completely helpless in the fight against the epidemic. At the height of the epidemic, between five and ten thousand people died a day. People died out in whole families, there was no one to go after the sick and bury the dead. Patients left without a patron, often struck by madness, crawled out into the street, died in terrible agony, or, languishing with thirst,



Fig. 1. Black Death in London. Copy of M. Solomonov from medieval English engraving [18, p.185]

crawled to the sea and drowned. Trade and handicraft life stopped. The corpses lying in multitudes in the streets spread a terrible stench that made it difficult to live in many neighborhoods» [11, p. 258-259].

This plague pandemic killed about 100 million people in the east and about 25 million in Europe. From a historical and religious point of view, the era of the Justinian plague, was just the time of the formation of the institution of papal power, on the one hand, the era of church councils, proclaiming dogmas about the doctrine of saints, veneration of icons, the cult of the Virgin Mary, the right of priests to forgive sins, and on the other, an attempt Byzantine Emperor Justinian to recreate the Roman Empire based on the principles of violence and anti-Gospel teachings within its former borders. So, the time of the first plague pandemic came in the era of secularization and pagination of the Christian church.

The second plague pandemic occurred in the XIV century and went down in history under the name «Black Death». Although contemporaries called her «the great plague», «great danger», «great mortality» [17, p.136]. The pandemic began in 1320, when this terrible disease hit China, claiming tens of thousands of lives. With merchant caravans, the plague reaches

about 1335 in India, from there it spreads to Central Asia, reaching Samarkand by 1342, by 1346 - the capital of the Golden Horde, Saray, located in the lower reaches of the Volga. In 1346, the troops of the Golden Horde Khan Dzhanibek besieged the Genoese city of Kafu (modern Feodosia) in the Crimea, and during the siege, a plague broke out in the army of Dzhanibek, and then the Golden Horde Khan, seeing that the siege would have to be lifted, ordered by catapults to throw the corpses of those who died from the disease into Cafu. An epidemic breaks out in the Cafe, which, through the Genoese who were leaving for their homeland, is first transferred to Constantinople, and then to Italy, and from there spreads throughout Europe [8, p. 104].

According to the chroniclers of that time and data from archaeological excavations, in particular ancient cemeteries, in virtually every city in Europe over the next few years, according to the Cambridge Encyclopedia of Paleopathology, about 25% of the world population, and up to 25 million Europeans, which amounted to 31% of all European population [4, p. 91, 98].

In Naples alone, about 50 thousand people died, in Genoa – 40 thousand, which was about 50% of the population of these cities. In Venice, 100 thousand people died from the plague, that is, 70% of the city's population [4, p. 99]. In London, 100 thousand people died from the plague, in Paris – 50 thousand, in Strasbourg – 16 thousand, in Narbonne – 30 thousand, in Marseille – 56 thousand. In Avignon, 150 thousand died in seven months, and the number of the dead was so great that their corpses were simply thrown into the Rhone [10, p. 506]. The chronicler left the following testimony: «The patient left by all lay alone with his torments. Relatives were afraid to approach him, the doctor was afraid to enter his home. With groans breaking the heart, children called – parents, fathers, and mothers – sons and daughters, one spouse – the other. But in vain. The rulings about the plague were truly barbaric and inhuman: «the healthy and sick with the whole family, without distinction, locked themselves in the house, and a red cross was drawn on the gate with the inscription: God, have mercy on us!» ... There was a constant guard at the gates of this home concentration camp until the prisoners died out or recovered [10, p. 508]. The latter has almost never been observed. It is interesting to emphasize that for every epidemic, the state church, in order not to incur the anger of the population, turned its gaze to two reasons that allegedly explained all these troubles and deaths: insufficient religious zeal and

Jews [10, p. 509]. For this, during the period of the plague, religious penitential processions begin to be arranged. So, only in 1349, similar processions took place throughout Germany, France, the Netherlands, Switzerland, Denmark, England. They consisted of hundreds of people and were, in fact, one bloody mess, where people mercilessly scourged themselves to blood, believing that in this way they would be heard by God.

At the same time, it was widely reported that the Jews were to blame. The reason for the accusations was that the Jewish ghetto in Strasbourg was cleared of dirt and parasites, which to a greater extent filled the cities of Europe. But when the «black death» reached Strasbourg, it claimed the lives of thousands of people in the city districts. Thanks to the quarantine measures of Jewish doctors (Balavignus and Maimonides), the city and houses were cleared of dirt and rats. As a result, the rodents sought shelter elsewhere outside the ghetto. As a result, the death rate among Jews was 5%. However, the Parisian college of doctors expelled the Jewish physician Balavignus from its ranks and called him a charlatan. Since the Jews almost did not suffer from the plague, the Christians accused them of bringing this disease to the inhabitants of the city. As a result, suspicion and hatred of these people increased, and they were



Fig. 2. Patients with black death – plague.



Fig. 3. Funeral of the victims of the Black Death in Tournai. Miniature from the manuscript of Gilles Le Muisi «Antiquitates Flandriae» 1349-1352 [29]

burned. And only centuries later, Balavignus's sanitary reforms were officially recognized by science and society [30]. The first Jewish trials were carried out in Chignon in 1348.

The convicts, after brutal torture, were forced to confess to the allegedly committed actions that brought on the epidemic. In Bern, Freiburg, Speer, Halle, Jews were massively driven into wooden buildings and burned without distinction of age or sex [10, p. 510].

Against the background of all this, the desperate population, between religious processions and pogroms of Jews, accompanied by the most heinous acts, indulged in irrepressible drunkenness and debauchery, acting on the principle: let us eat and drink, for tomorrow we die! [8, p. 104]. After both pandemics, a terrible



Fig. 4. Burning Jews during the plague. Miniature from the manuscript of Gilles Le Muisi «Antiquitates Flandriae» 1349-1352 [27]

famine reigned for decades, which killed hundreds of thousands more. Crime, theft, robbery flourished. Moreover, the clergy took an active part in robbing the dead [10, p. 509].

It is noteworthy that the spread of plague was greatly facilitated by the mass extermination of cats in the Middle Ages, as a result of which the carriers of the plague – mice and rats – multiplied incredibly. The extermination of cats was due to the popular superstition, supported by the state church, that cats were supposedly the servants of the devil [17, p. 135]. Moreover, «there was a belief that the devil willingly takes the form of any animal to harm, and also turns into animals the people in which he settled or who entered into a relationship with him» [9, p. 52].

Francesca Petrarca (1304-1374), one of the most famous poets of the Middle Ages, described the state of the scientific community of that time and their attempts to explain the cause of the plague pandemic. «You ask historians – they are mute, you ask doctors – they are in a stupor, you turn to philosophers – they shrug their shoulders, wrinkle their foreheads, and bring their fingers to their lips in eloquent silence» [3, p. 82].

So, the era of the second plague pandemic was the heyday of the Inquisition. This was the era that rejected the preaching of the great English reformer, educator John Wycliffe and the Waldens who preached the principles of the gospel. At the same time, the then ruling medieval church not only rejected but systematically exterminated everyone who simply wanted to study the Bible and live according to its principles of goodness, peace, and truth. At the same time, the deepest moral fall of Europe takes place, which begins to turn to the cultural and religious heritage of paganism.

However, the most ominous medieval pandemic that was introduced to Europe during the Crusades was leprosy. The following figures indicate the prevalence of leprosy in the Middle Ages: in the 13th century alone, 2,000 leper colonies were opened in France alone, and 19,000 throughout Europe [10, p. 406].

A person who fell ill with leprosy became an outcast of society, they put him in a coffin, then they buried them alive in the church, and then they took them to the cemetery and closed them in a coffin, then they lowered them into the ground, threw several shovels of the earth on him with the words: «You are not alive, you die to us!» After that, he was pulled out of the ground and taken to a leper colony, after which he was considered dead to his entire family and society [5]. He was deprived of the right to inherit anything or earn money [4, p. 71-72]. The leper was obliged to wear bells on his clothes, which warned of his appearance, and on his clothes, he had to attach artificial hands made of white wool, which from a distance spoke of his illness [10, p. 406]. At the city gates, special gatekeepers were set up to inspect those who entered, and they also detained all those suspicious of leprosy [8, p. 106]. To be a leper at that time meant to become a «living dead».

So, the leprosy pandemic broke out during the era of the Crusades, during which people calling themselves Christians systematically exterminated all who did not obey the banner with the cross. These were campaigns that discredited Christianity in the eyes of the peoples of the East, when the thirst for power and profit was hidden behind external piety.

Together with the plague and leprosy, the disease of syphilis raged in the Middle Ages. A kind of medieval trio of pandemics. Syphilis was introduced to Europe by Columbus' sailors from America. One of the first scientists who described this disease and proposed schemes for its treatment, as well as giving it the name syphilis, was Girolamo Fracastoro, who described it as follows: «Let's start with the disease called syphilis... In Italy, it was discovered around the time when the French under King Charles, about ten years before 1500, occupied Naples. In their name, the disease was named French. In my poems, written as fun, I called this disease syphilis» [21, p. 75-76]. As for the initial occurrence of the disease, some expressed the opinion that it was brought to us from the New World, which was discovered by Spanish navigators... Meanwhile, it is known that this disease was observed for a time in Spain, France, Germany, and Italy, and in almost all of Scythia» [21, p. 79-80]. It is noteworthy that the animals of the llama initially suffered from syphilis, from sexual contact with which syphilis was transmitted to humans



Fig. 5. Examination of the leper. Doctors and bath attendants washing away blood clots, 1517 [11, p.231]



Fig. 6. A leper and a cripple at the city gates of Jerusalem, miniature from the manuscript of Vincent of Beauvais Historical mirror, 15th century, Arsenal Library, Paris [32]



Fig. 7. «The head of a youth» of a patient with syphilis, artist Hans Holbein (the Younger), 1523

as a result of bestiality [22, p. 69].

So, the syphilis pandemic coincided with the development of the Renaissance in Europe, which called on the then society to turn from medieval darkness, ignorance, and fanaticism to pagan culture, philosophy, and religion. All this entailed a deep moral crisis in the then European society. And the first appearance of syphilis at the end of the 15th century was the most terrible test that then humanity had to endure [23, p. 174], which until then could not fully cope with the consequences of the disease from the plague.

Influenza pandemics. There are two main pandemics in the history of this disease. Spanish flu – this pandemic shook the world from January 1918 to December 1920. A total of 550 million people, or 29.5% of the world's inhabitants, were infected, the death toll was up to 80 million. The first patients appeared in the United States, but since then this country was at war with Germany and Austria-Hungary, so as not to cause panic in its troops, these messages were hidden, and only Spain, being neutral in the First World War, first reported flu epidemic, from which this pandemic was called the Spanish flu.

Influenza A (H1N1) was found to be the Spanish

disease. The Spanish flu pandemic of 1918-1920 had three waves. The first two waves were in 1918 (the first and second half of the year, respectively), and the third in the first half of 1919. The three waves of the Spanish flu pandemic are clearly shown in Fig. 8 [33].

It is believed that the Spanish flu pandemic was discovered in Ukraine during the second wave [35, p. 9] and that it was brought to the territory of Ukraine by the occupying German troops. In the United States, where mortality was recorded relatively well, in comparison with warring Europe and even more so with the vastness of the collapsed Russian Empire, during the second wave of the Spanish flu pandemic, mortality from it in September was 1000-1500 per 100,000 population, and in October-November 1918 increased to 6000-6500 per 100,000 population. In the French army, again during the second wave of the Spanish flu, the mortality rate from it was 938 per 100,000 [34, p. 404-405]. It is noteworthy that this flu pandemic coincided with the events of the outbreak of World War, in which, for the first time in history, hostilities were fought

simultaneously on almost all continents, when in the name of the enrichment and spread of the colonies, millions of people were killed and tens of millions were doomed to poverty and hunger.

COVID-19. For the first time, an outbreak of a coronavirus infection pandemic caused by the SARS-CoV-2 coronavirus was recorded in December 2019 in Wuhan, China. As early as January 30, 2020, the World Health Organization declared the outbreak a public health emergency of international concern and March 11 a pandemic. As of February 15, 2021, the pandemic had recorded over 109 million cases worldwide; more than 2.4 million people have died and more than 81.5 million have recovered [31]. A huge number of articles

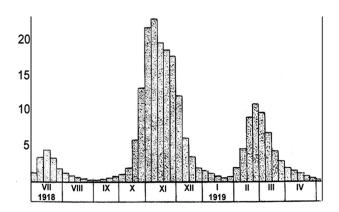


Fig. 8. Mortality from Spanish flu in England in 1918-1919 [34, p. 404-405]



Fig. 9. During the Spanish flu pandemic, huge warehouses were used to house the sick under quarantine [25]



Fig. 10. Photo of COVID-19 deaths in coffins in Italy

have been written about this pandemic in recent months, but even they have not fully disclosed all the issues associated with this infection, in particular, even questions about the causes of its occurrence, the duration of the comorbid period, the age and gender characteristics of this disease, and the main thing is about the methods of its treatment. We only note that the total number of deaths from this disease was about one million people. It is noteworthy that its appearance was also marked by a hitherto unprecedented in history moral fall of modern society and its revision of the basic concepts of family, marriage, morality. On the other hand, the modern world is faced with a hitherto unprecedented artificial impoverishment of the population and unprecedented systematic pollution of the environment.

So, analyzing the pandemics of antiquity and modernity, we can draw the following main conclusions. The emergence of pandemics was associated with crises in society that arose as a result of a decrease in the level of morality and disregard for biblical norms and values. According to biblical philosophy, a pandemic can be caused either by direct sins of people, or be a direct punishment from God, or it can be allowed by God so that a person stops on a path that is disastrous for himself. The ancient Israelites isolated the sick, arranging a kind of quarantine and, thus, ensured their safety against infectious diseases. Although in some cases they did not fully understand the essence of quarantine and how it affects others. As you can see, in ancient times, patients were mostly simply kept at a distance, but they were shunned.

In the modern world, we notice a different picture: people reject those who fall ill, be it AIDS or Covid-19, react aggressively to them as a source of danger, not wanting to enter the situation of the infected. Because of this state of affairs, the sick hides their illnesses from the environment, which is even worse for society, since it cannot, because of this, control all the risks for itself. Thus, in our opinion, it is possible to understand the causes of a particular pandemic and, at the same time, to outline the most effective methods of its treatment and prevention, only taking into account a comprehensive analysis of the medico-biblical and historical aspects.

Список використаної літератури

- 1. Арнаутова Ю.Е. Колдуны и святые. Антропология болезни в средние века. СПб.: Алетейя, 2004. 398 с.
- 2. Барашнев Ю.И. Паломничество в прошлое медицины. М.: Триада-Х, 2013. 296 с.
- 3. Верхратський С.А. Історія медицини. К.: Здоров'я, 2011. 352 с.
- 4. Гезер Г. История повальных болезней. В 2 ч. Спб., 1867. С. 91.
- 5. Горелова Л. Е. Лепру лечили смертью (из истории борьбы с проказой). Perулярные выпуски «РМЖ». 2001. № 23. С. 1049. URL: https://www.rmj.ru/articles/istoriya_meditsiny/Lepru_lechili_smertyyu_iz_istorii boryby s prokazoy/ (дата звернення: 13.07.2021).
- 6. Даниэл М. Тайные тропы носителей смерти. М.: Прогресс, 1990. 416 с.
- 7. Диль Ш. Император Юстиниан и византийская цивилизация в VI веке. Минск: МФЦП, 2010. 656 с.
- 8. История медицины. Материалы к курсу Истории медицины / ред. Б. Петров. Москва: Медгиз, 1954. 280 с.

- 9. Канторович Я.А. Процессы против животных в средние века. М.: Ленанд, 2018. 72 с.
- 10. Ковнер С. История средневековой медицины. В 2 ч. К.: Тип. импер. ун-та св. Владимира, 1893-1898. 648 с.
- 11. Мейер-Штейнег Т., Зудгоф К. История медицины. М.: Госполитиздат, 1925. 464 с.
- 12. Мультановский М.П. История медицины. М.: Медицина, 1961. 348 с.
- 13. Опарин А. А. История Древней и Средневековой медицины. Харьков: Факт, 2016. 768 с.
- 14. Опарин А. А. История медицины эпохи Возрождения и Реформации. Харьков: Факт, 2018. 388 с.
- 15. Опарин А. А. Медицина Византийской империи. Харьков: Факт, 2020. 320 с.
- 16. Опарин А. А. Медицина Киевской Руси. Харьков: Факт, 2019. 392 с.
- 17. Склярова Е.К., Жаров Л.В. История медицины. Ростов-на-Дону: Феникс, 2014. 346 с.
- 18. Сорокина Т.С. История медицины. В 2 т. М.: Изд-во Рос. ун-та Дружбы народов, 1992. 560 с.
- 19. Сорочан С.Б. Ромейское царство. В 3 т. Харьков: Майдан, 2018-2020.
- 20. Урланис Б.Ц. Рост населения в Европе. Опыт исчисления. М., 1941. 436 с.
- 21. Фракасторо Дж. О контагии, контагиозных болезнях и лечении. М.: Изд-во Академии наук СССР, 1954. 324 с.
- 22. Фракасторо Дж. О сифилисе. Пер. с латинского. М.: Медгиз, 1956. 100 с.
- 23. Фукс Э. История нравов. Смоленск: Русич, 2003. 543 с.
- 24. Библия. Москва: Российское Библейское Общество, 2020. 1408 с.
- 25.Даулинг С. Коронавирус: уроки «испанки» для тех, кто сегодня борется с распространением Covid-19. BBC. URL: https://www.bbc.com/russian/vert-fut-51723306 (дата звернення: 18.02.2021).
- 26.Проказа (Лепра). DOC.UA. URL: https://doc.ua/bolezn/prokaza-lepra (дата звернення: 12.02.2021).
- 27. Резня в Страсбурге. Википедия. URL: https://ru.wikipedia.org/wiki/Резня_в_Страсбурге (дата звернення: 06.02.2021).
- 28. Черная смерть. Pikabu. URL: https://pikabu.ru/story/chernaya_smert_6285165 (дата звернення: 10.02.2021).
- 29. Чума в европейском искусстве. Wikipedia. URL: https://ru.wikipedia.org/wiki (дата звернення: 10.02.2021).
- 30. Atkinson D. Life sketches of great physicians. New York: Vail-Ballou, 1922. 159 p.
- 31.COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) atJohns Hopkins University (JHU). ArcGIS. URL: https://www.arcgis.com/apps/dashboards/bda7594740fd40299423467b 48e9ecf6 (date of access: 09.02.2021).
- 32. Богданов А. Проклятие живых мертвецов. Чудеса & приключения. URL: https://chudesamag.ru/iz-glubinyi-vekov/proklyatie-zhivyih-mertvetsov.html (дата звернення: 18.02.2021).
- 33. Васильев К. К., Васильева Е. Г. К истории борьбы с пандемией испанки: Киев и Харьков. Східноєвропейський журнал внутрішньої та сімейної медицини. 2020. 2Б (14). С. 31–37.
- 34. Жданов В. М., Соловьев В. Д., Эпштейн Ф. Г. Учение о гриппе. Москва: Медгиз, 1958. 582 с.
- 35. Гамалея Н. Ф. Грипп и борьба с ним. Москва Ленинград : Издательство Академии наук СССР, 1942. 72 с.