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University of Mostaghanem

Faculty of Letters and Languages

Department of English



THE Dance of Death

The Black Death in England from 1348 to 1352

This Extended Dissertation is submitted to the English Department as a partial fulfillment for the requirement of “the Master Degree” in British civilization.

Board of Examiners:

Chairwoman: M.s Rezgga Fatima Zahra

Examiner: M.s Ouali Farida

Supervisor: M.s AissatDjamila

prepared by:

Ouadah Selma

Year: 2016/2017

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Dedication

I dedicate my thesis work to my family and many friends. A special feeling of gratitude to my loving parents, Larbi and Djamila Ouadah whose words of encouragement and push for tenacity ring in my ears. My sisters Ahlem, Nessrine and Amira and my only brother Yassine have never left my side and are very special. I also dedicate this thesis to my many friends who have supported me throughout the process. I will always appreciate all they have done, especially Asma and Khaira for helping me develop my skills.

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Abstract

In the fourteenth Century, England suffered numerous catastrophes to occur following on increase in population. The plague's doctors had not sufficient medical knowledge to prevent the disease's causes or cure and because of the contact between European cities and surrounding villages the epidemic spread easily taking a short period; therefore, they had not enough time to recognize what were happening or what was the disease. Moreover, the historians said that the Black Death marks barriers between the high and late Middle Ages, making great changes in English society. The plague opened more closed for British people to ameliorate their miserable lives, in other side, it was the source of inspiration for many famous writers of the medieval literature; and for them the plague was a turning point in the thought movement. Freedom of thought, end of feudalism, and development of medicine were themes chosen to write their different works. This thesis paper needs for the argumentative method to persuade the reader by using proofs which answer about the problematic of the topic. This method facilitates to move the plague from its scientific analysis to real problem that faced the English medieval society. In addition, It helps the seeker to recognize his aims, for instance proving that the plague was a blessing for England, and also the western doctors benefited a lot from the prophetic medicine to cure their patients from the disease.

At the end of this thesis, the reader informed that the plague was a blessing, and the Islamic medicine is the best cure for any disease, even it is spiritual or physical diseases, and the western doctors were clever to adopt the Islamic medical tools to treat the plague. So both hypotheses were correct because the Black Death changed the British situation from worse to better one, and the second hypothesis about making difference by using the Islamic tools from

centuries until now in Europe it was also correct. the whole work is summarized in this simple proverb, the misfortune of some people are advantages of others, in other words English people sacrifices a lot by losing their families, but these sacrifices enabled them to live a comfortable life.

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General Introduction

The disastrous mortal disease known as the Black Death spread across Europe in year 1346's, sweeping toward England in 1348 until 1352's during the Middle Ages. The illness is a kind of bacteria named as *Yersinia pestis* which was carried in the blood of wild black rats. This epidemic came into four major forms, the Bubonic, Pneumonic, Septicemic, and the Abortive plagues. Additionally, many famous writers of the medieval era inspired by the plague and they wrote a great works about it like the Great Mortality for John Kelly.

This topic contains both scientific and medical terminologies of the disease. At the beginning, the thesis paper talks about the plague as a pandemic that needs for scientific terms as bacteria, pestilence, and bubonic to describe and understand it well, but the real core behind this scientific cover are the society and religion of the middle era in England.

Any disaster or even a small problem threatens the world the holy book Quran can find the best solution to solve it, and when the western physicians followed the Islamic scientist's achievements and their successful works like sanitation project, they used indirect way the Prophetic Medicine. Although they cured the plague's victims by using these Islamic tools from centuries until now, they did not admit that those successful methods were from Quran and Hadith. This thesis is based on two main questions, the first one was the Black Death a curse or bless in England during the fourteenth century? And the second question did the western scientists use the Prophetic Medicine to treat the plague's victims?

There are many hypotheses which suggest answers for the two question for example the plague might have positives more than the negatives for English society. And the western doctors were intelligent enough to benefit from the professional Islamic tools to cure their patients.

The thesis paper divided into three chapters, the first chapter enables the reader to understand the plague, the second chapter makes him to know about the English population sufferance during the curse, and the final one proves that this life is ambiguous to change the person's destiny and how the plague moved from a curse to blessing event in the medieval period. to get the information necessary for this investigation, a variety of sources will be consulted, including books academic websites, online resources including articles from journals.

In short, the Black plague a disease that it changed the destiny of big country like England and killed the half of its population is deserved to read about.

1. Introduction

There was a huge event that moved the English society from its worst situation to better one which known as the Black Death. It was the most dangerous disease that occurred in Europe in the fourteenth century.

The first chapter of this paper deals with etymology, scientific meaning of the concept plague, it kind of an overview about the epidemic in general. It sheds light on several points such as the origin and the spread of this disease, what was the epidemic, its medical and prophetic description, and finally how people of England dealt with it.

When any seeker reads this chapter, he will understand what the plague, its nature, forms and influence on human's body in its symptoms. And also it makes him to know how the medieval society was during the plague.

Taking England as an example of European country which suffered a lot from the disease. In this chapter they could find how people lived during the catastrophe and how they contacted with each other in the medieval society. Did they resist, escape, or stay to face their destiny.

The plague was not just an epidemic; it was also a challenge for English population, challenge for themselves to break their fear and challenge against the Catholic Church to finish their unfair rule during the fourteenth century.

2-The origin of the concept plague

The Black Death or the plague is an ancient term, derived from the Latin word *plaga* which means, "affliction, calamity, evil and scourge". The disease was the greatest catastrophe ever that swept to Europe during the fourteenth century.

The disease happened twice before the fourteenth century, the first plague was the Justinian's plague, He was actually a Byzantine emperor who tried to unite the Eastern and Western Roman empires after the Western had been overrun by the Germanic tribes and others. He became emperor in 527 AD, after the death of the Emperor Justin, and served for more than 38 years until his death in 565. During his reign, a plague began to affect the people, so historically it has been called The Plague of Justinian. The seat of Byzantium power resided in Constantinople now called Istanbul and located in modern Turkey. Since the city had a large population they had to import most of their grain from lands around the empire and much of this was gathered from ports in Egypt.

Rats and other rodents traveled with the grain to Constantinople and brought fleas infected with the plague bacteria, while famine was ending in Arabia, many districts in Syria and Palestine. Were devastated by plague. The second one happened during the khalifa Umar Bin Al-Khattab and in the winter of 638-639 virulent plague broke out in Syria, Egypt and Iraq. The plague exacted its heaviest toll in Syria, particularly Amwas, and the plague came to be known as the Amwas plague. And the final one was the Black Death in European content during the fourteenth century. When the plague entered to any great or even a small country, it left behind a negative impact.

The history shows the plague as a monster that people should scare, but these about the first and the second plagues (Justinian and Amwas plagues) both diseases lead to the disappearance of great empires such as the Byzantine Empire. Finally, The English people lived harsh experiences because of the Black Death They suffered from poverty, starvation, ignorance, and also the Great mortality or the Plague.

3. History of the Black Death

The middle ages era were plenty of events between good and bad, the Black Death was one of the most catastrophes that threatened the increase of population of Europe at that time from 1000 to 1300s. the European population grew from thirty eight to seventy four millions in the fourteenth century. Europe seemed to be in the state of growth in both agriculture and structure in society.

Cities of England rose due to the variety of works done by their people from artisans, farmers, and other crafts to develop the British economy the daily life contact between British people in cities and surrounding villages facilitated the expand of this disease. English people were not aware and intellectual enough to know where pandemic came from or its way of spread between them. And the old concept of medicine was all what they knew in that period.

They were using herbs to cure patients and to stop their different pains. English catholic people were conservatives followed the Bible and its regulations and one of its regulations was praying for their patients before and after death asking for salvation. The conditions in cities also set the stage for disease. Houses were crowded next to each other. One could not use rivers for drinking water because of pollution. And all these difficult living conditions helped in the spread of disease.

The name of the disease can express how much was dangerous on people's lives. The plague is believed to be reached England in summer of 1348 via trade ships from other European countries, and by the fall of 1348, It has spread throughout the island nation. The first case known in England was a seaman who arrived at Weymouth, Dorset, Gascony on June 1348. By summer 1349, it covered the entire country.

Many Europeans had heard rumors about the Great Mortality or Death ships when pulled into port at Messina. The disease touched other countries starting with Asia in China, transmitting to Europe in England and after that to the Middle East in Syria and Egypt. The Plague affected both sex men and women and even children. It was horrible reality for English people to be accepted.

4. Definition of the Black Death

Both Islamic and western historians agreed that the Black Death had a same general definition from ages. And according to them the Black Death was an epidemic outbreak of bubonic plague in Europe around 1348 that killed third of its population in a short period. The pandemic disease moved from China to England and arrived in North Africa taking the Silk Road and other trade routes. England had overturned due to the Plague in the middle ages.

4.1 Different names of the Black Death

The plague was not the only name for the disease, but it was varied from one period to another. About the naming of the disease there were two types of names: the general or the historical names and the scientific names according to the historians.

4.1.1 The Historical names

The first type is the historical names, and these names which used by historians to describe the disease, and even people of that period used to use these names because of its deeply negative impact.

a. The Justinian plague: A great disease that destroyed the Byzantine Empire from 541 to 542, in one year a huge Empire became a ruins. So the disease took its name from the period that it happened in (the Justinian period).

b. The Amwas plague: It was known as the Plague of Amwas, was an outbreak of [plague](#), that occurred in 639 in the town of [Emmaus \(Amwas\)](#) in [Judea](#). The [epidemic](#) is famous in [Muslim](#) sources because of the death of many prominent companions of [Muhammad](#). It is estimated that 25,000 people died in this outbreak, which is considered part of the outbreaks of plague in the 6th, 7th, and 8th centuries that followed the major pandemic of the 6th century, the [Plague of Justinian](#). The disease happened in the period of the khalifa Omar Bin Al-Khattab.

c. The Black Death: In the fourteenth century during the Elizabethan period, exactly from 1347 to 1352, it was called Black Death because of its physical effects on the human bodies and its dark spots in the whole body, as it killed humans without any mercy.

d. The Great Mortality: In 1342 a several English writers wrote about the Black Death and changed its name from Plague to Great Mortality because the disease took a shorter period to vanish everything, especially in England. And also according to the huge number of dead bodies at that time.

4.1.2 The Scientific names

The second type is the scientific names, these names used in field of medicine by the doctors or scientists.

a. *Yersinia Pestis*: *Yersinia* is named in honor of Alexander Yersin, who successfully isolated the bacteria in 1894 during the pandemic that began in China in the 1860s.

5. The Medical description of the disease

The Black Death like any other epidemic has reasons to spread and to affect on people bodies, and according to scientists the disease is a kind of virus that could kill human being very quick in short period.

5.1 The Prophetic medicine (medicine of the Prophet peace be upon him)

The prophetic medicine is collections of herbs from nature. They are connected to proper eating habits of nutritious and lawful foods. It guides people to how preserve one's health free from pollution and malnutrition. Thus, it protects them from destruction. In the contemporary medicine; doctors advice their patients with those mixtures of herbs for better health. The prophet (pbuh) made specific statements on sixty five medicinal plants and herbs, out of which black cumin is the most important. A much quoted Hadith regarding over-indulgence in eating is that one should never fill up one's stomach with food. The proportion recommended was one-third for food, one-third for water and one-third left empty for air or breathing. This makes perfect sense in modern day society, where obesity has become a pandemic.

In the Sahihain, it is narrated that Sa'ad bin Abi Waqas Radi Allahu Anh asked Usamah bin Zayd about what he heard Prophet Muhammad Sallallahu Alaihe Wasallam say concerning the plague. Usamah said that the Messenger of Allah said:

"A gland that is similar to the camel's gland
and which appears in the tender parts
Of the abdomen and under the arms".

Islamic doctors say that when a septic infection occurs in the soft flesh, such as under the arms or behind the ears, it is called the plague. The plague is caused by spoiled, septic blood infected by a bug that carried the disease from infected rodents. The infected blood spoils the part of the body that it strikes, sometimes causing blood hemorrhaging and pus. In this case, the inflicted organ sends the infected blood to the heart, thus causing vomit, unconsciousness and rapid heartbeat. This was the prophetic description for the plague.

5.2 The Western medicine

The medieval era was the most difficult, and terrifying period for the English society, The English people lived in hard conditions because of Black Death. There was also a growing dislike of the organized Church because of its ostentatious richness. The western medicine influenced by Christianity and church rules during the fourteenth century.

Medical knowledge in the middle ages must have appeared to have stood still. While the Ancient Romans, Greeks and Egyptians had pushed forward medical knowledge. In Britain, as an example, most things linked to the Romans were destroyed – villas were covered up as the

Ancient Britons believed that they contained ghosts and evil spirits. With this approach, it is not surprising that anything medical linked to the Romans fell into disuse in Britain.

By the 14th Century, universities had developed in Western Europe that could be classed as medical schools where students could study under a master physician. The University of Montpellier was one such university. Dissections of human bodies were carried out in these universities so anyone wanting to study medicine in the middle ages was not totally ignorant of facts about the human body.

The medicine became steeped in superstition and the Roman Catholic Church effectively dominated what direction the medical world took. Any views different from the established Roman Catholic Church view could veer towards heresy with the punishments that entailed. Therefore, when the Roman Catholic Church stated that illnesses were punishments from God and that those who were ill were so because they were sinners, few argued otherwise.

5.2.1 Scientific definition of the Black Death

Today, scientists understand that the Black Death, now known as the plague, is spread by a bacillus called *Yersinia pestis*. (The French biologist Alexandre Yersin discovered this germ at the end of the 19th century.) They know that the bacillus travels from person to person or through the air, as well as through the bite of infected fleas and rats.

Both of these pests could be found almost everywhere in medieval Europe, but they were particularly at home aboard ships of all kinds—which is how the deadly plague made its way through one European port city after another. The disease was inspiration for many writers and poets such as the Italian poet Giovanni Boccaccio, which wrote about the plague symptoms on humans bodies” at the beginning of the malady, certain swellings, either on the groin or under the armpits... waxed to bigness of a common apple, others to the size of an egg, some more and some less, and these the vulgar named plague boils.” It was a specific description for the plague signs. No one knew exactly how the Black Death was transmitted from one patient to another. According to one doctor, for example, “instantaneous death occurs when the aerial spirit escaping from the eyes of the sick man strikes the healthy person standing near and looking at the sick”. Physicians relied on crude and unsophisticated techniques such as bloodletting and boil-lancing (practices that were dangerous as well as unsanitary) and superstitious practices such as burning aromatic herbs and bathing in rosewater or vinegar. Did all they could to avoid the sick? Question had no answer because even doctors refused to see patients; priests refused to administer last rites.

5.2.2 Kind of medicine used in the medieval ages

People in the medieval time were believed on superstitions and wizards works. There was a wise woman called Morgan le Fay used herbs to cure the different pains. This is a medieval recipe for an ointment to cure headaches and pains in the joints:

1. Take equal amounts of radish, bishopwort, garlic, wormwood, selenium, cropleek and hollowleek.
2. Pound them up, and boil them in butter with celandine and red nettle.
3. Keep the mixture in a brass pot until it is a dark red color.
4. Strain it through a cloth and smear on the forehead or aching joints.

Most people in medieval times never saw a doctor. They were treated by the local wise-woman who was skilled in the use of herbs, or by the priest, or the barber, who pulled out teeth, set broken bones and performed other operations. Their cures were a mixture of superstition (magic stones and charms were very popular). They used their different tools, knowledge, experiences working with herbs. Most people accepted magic and witchcraft (good and bad).

In the 14th and 15th Centuries, they were told that witches were servants of the devil. Many 'wise-women' were accused of being witches and put to death. There were doctors too, of course - although they treated only the rich. Some of these had even received medical qualifications from the first European medical school at Salerno in Italy, or from those set up later at Bologna (Italy) or Montpellier in France. Through these medical schools, the doctors of Europe began to learn about the ideas of Arabic and ancient Greek medicine. Compared to the knowledge of the Arabs, for example, European medicine was not very advanced.

A Syrian writer of the time describes how an Arab doctor and a European one argued about how to treat an abscess, an infected lump on a knight's leg. The Arab prepared a dressing with ointment to open the lump and draw out the infection. The European insisted the only thing to do was to cut off the leg.

5.2.3 Creepy costume

In the medieval ages, death came quick due to the Black Death, the rest of survivors were waiting every day for death. They were praying and asking God for salvation, and most of them stayed in the church because they thought that plague was work of the devil; and the devil could not enter to holy place like the church. The doctors were powerless to resist the disease. Although, they made hard efforts to treat people but the infected patient was waiting for his hour.

The plague's doctors due to the panic discovered a weird costume and wore it to protect themselves from the pandemic. Only the doctors could use it to help their patients. The costume were covered the three main parts of the human's body. Starting with the head, they putted on their heads a hat made from the leather with strange mask. The mask was like the birds beak as it held in the front of the doctor's nose by straps. There were holes in the mask which filled with glass, so that the doctors could see their patients. And others two small holes at the end of the beak for breathing. The mask was full of special perfume made from a mixture of herbs such as mint, flowers such as roses and carnations and spices like camphor. The mask was supposed to keep the bad smells of the dead bodies away. The second part was the body which was protected by wearing a wide brimmed leather hood. They used wooden cans to move and turn the dead bodies or when they touched their patients to avoid infection. And the final part was the feet, so they used to wear a leather boots to preserve themselves.

Was the creepy costume effective to protect them from infection of Plague?

According to scientists the plague doctors were the most infected people by the disease more than the others, because the costume helped the bacterium transition from one infected patient to another healthy. Besides they thought that any bad work is the devil work. However, they believed on the superstition said that herbs could stop the devil's work. The mixture of herbs, flowers and spices was not effective to expel the plague. The plague doctors called with different name at that time. The so called Medico Della Peste, helped the spread of disease more than the others and died with plague so quick. Doctors of the medieval ages were still without the skills needed to effectively treat the illness. So they decided to stay away from their patients.

(This popular 17th-century poem describes the plague doctor's costume.)

As may be seen on picture here,
In Rome the doctors do appear,
When to their patients they are called,
In places by the plague appalled,
Their hats and cloaks, of fashion new,
Are made of oilcloth, dark of hue,
Their caps with glasses are designed,
Their bills with antidotes all lined,
That fulsome air may do no harm,
Nor cause the doctor man alarm,
The staff in hand must serve to show
Their noble trade where're they go ([Jean-Jacques Magnet](#)).

The poem above describes the creepy and weird costume that was wear by the plague doctors as protection from the epidemic, the idea of the plague costume created by Charles de Lorme.



Figure01: the plague doctors costume.

5.2.4 Kinds of plague

There are four different types of plague: bubonic plague, septicemic plague, and pneumonic plague. The most common type is bubonic plague. Septicemic plague occurs when the *Yersinia pestis* bacteria (the organism responsible for the disease) multiply in the blood. Pneumonic plague is the most serious of the three types of plague. It occurs when plague bacteria infect the lungs, causing pneumonia, and Abortive plague.

a. **The Bubonic Plague:** The taint with the bubonic plague happens by the bite of a flea which carries the pathogen as an intermediate host. The bacterium multiplies within the flea before it is transferred to the victim. Due to the fact that the fleas were spread by rats which had also been infected by the pest great rat extinctions happen before the Great Plague spread amongst the human beings.

b. **The Septicemic Plague :** The septicemic plague is created by the entrance of bacteria from their multiplying place into the blood vessels. The infection happens from outside, for example from open wounds or the bursting of pest boils. The pathogens in the blood spread all over the whole body within the blood stream.

c. **Pneumonic Plague :**

There are two different forms of pneumonic pest. The primary pneumonic plague infects people by droplet infection from human being to human being. The secondary pneumonic plague develops out of a bubonic plague. The pathogens enter the lungs via blood vessels and provoke there a septicemic plague.

d. **Abortive Plague :**

The abortive plague is the harmless variant of the pest. It often shows itself with light fever and a little swelling of the lymph nodes. After getting over of the infection the body produces specific antibodies which guarantee a long lasting immunity against all forms of the disease.

5.2.5 Symptoms of the Black Death

People infected with the plague will usually develop flu-like symptoms two to six days after infection. There are other symptoms that can distinguish between the three forms of the plague:

Bubonic Plague Symptoms

Symptoms of bubonic plague generally appear within two to six days. They include:

1. Fever and chills
2. Headache
3. Muscle pain
4. General weakness

5. Seizures

The incubation period lies between few hours and seven days. The symptoms are fever, head ache, pain in the limbs, indisposition and presyncope. Later there is impaired consciousness. The name bubonic plague refers to the enormously swollen and sore lumps located at the neck, in the axilla and in the groin. Those swellings are developed by the infection of the lymph nodes and the lymphatic vessels around the flea bite. Those lumps can have a diameter up to 10 cm. Their colour is blue-black due to the inner haemorrhage within the lymph nodes. The boils disintegrate after they have been diminished by losing pus. The bubonic plague itself is not lethal and the boils heal themselves. However, due to the fact that the bacteria are spread around the whole body by the blood way, the bubonic plague can lead to a secondary pest form such as the septicemic pest or the pneumonic plague. These forms lead in 90 - 100 per cent of the cases to death.

The spreading of bubonic plague also depends on the season. In winter the transferring flea can only infest a host at temperatures above 12° C. Otherwise it is paralysed (hibernation). The epidemic peak was reached in autumn because in this season the fleas reproduce.

You may also experience painful, swollen lymph glands, called buboes. These typically appear in the groin, armpits, neck, or site of the insect bite or scratch. The buboes are what give bubonic plague its name.

Pneumonic Plague Symptoms

Pneumonic plague symptoms may appear as quickly as one day after exposure to the bacteria.

These symptoms include:

1. Trouble breathing
2. Chest pain
3. Cough
4. Fever
5. Headache
6. Overall weakness
7. Bloody sputum (saliva and mucus or pus from the lungs)

The pneumonic plague is a more severe pest form than for example the bubonic plague because it avoids the immune barriers, such as the lymph nodes due to direct infection in the lungs. It begins with difficulty in breathing, blueness of the lips and bloody sputum, which has to be coughed out in an enormously painful way. Out of it a lung oedema can develop which leads to circulatory

collapse. Untreated this infection causes death after 2 to 5 days. The incubation period lasts only 1 to 2 days and the lethality rate is extremely high with 95 per cent.

Septicemic Plague Symptoms

Septicemic plague symptoms usually start within two to seven days after exposure, but septicemic plague can lead to death before symptoms even appear. Symptoms can include:

- 1.abdominal pain
- 2.Diarrhea
- 3.Nausea and vomiting
- 4.Fever and chills
- 5.Extreme weakness
- 6.Bleeding (blood may not be able to clot)
- 7.Shock
- 8.Skin turning black (gangrene)

The infection causes high fever, shivering fit, headache and general indisposition. Later there are extensive skin and organ haemorrhages, too.

The septicemic plague always leads to death within 36 hours, if it is not treated.

Today, lethality can be drastically decreased due to good medicine.

6. Places of spread

The European relations of trade between Europe and East facilitated the spread of plague from Asia in 1330s to Europe. From central Asia sweeping through trade routes, and passing to Turkistan and the Black sea region. In October of 1347 trading ships arrived on port of Messina. These ships were full of infected sailors as well as rats. As soon as the citizens of Messina realized that a horrible sickness had come abroad within these ships, they expelled them from the port but it was too late because the plague was raged through the city.

Their neighboring islands of Corsica and Sardinia by November infected for the same reason.

The summer of 1348 was abnormally wet. Grain lay rotting in the fields due to the nearly constant rains. With the harvest so adversely affected it seemed certain that there would be food shortages. But a far worse enemy was set to appear. It isn't clear exactly when or where the Black Death reached England. Some reports at the time pointed to Bristol, others to Dorset. The disease may have appeared as early as late June or as late as August 4. In mid-summer the Channel Islands were reeling under an outbreak of the plague. From this simple

beginning the disease spread throughout England with dizzying speed and fatal consequences.

In an effort to assuage the wrath of God, many people turned to public acts of penitence. Processions lasting as long as three days were authorized by the Pope to mollify God, but the only real effect of these public acts were to spread the disease further.

By the end of 1350 the Black Death had subsided, but it never really died out in England for the next several hundred years. There were further outbreaks in 1361-62, 1369, 1379-83, 1389-93, and throughout the first half of the 15th century. It was not until the late 17th century that England became largely free of serious plague epidemics.

The Black Death entered south-western England in summer 1348 and by all accounts struck Bristol with shocking force.

“In this year, 1348, in Melcombe in the county of Dorset,
A little before the feast of St John the Baptist, two ships,
One of them from Bristol came alongside.
One of the sailors had brought with him from
Gascony the seeds of the terrible pestilence, and
Through him the men of that town of Melcombe were
The first in England to be infected.”
Grey Friar's Chronicle, Lynn

Rumors of a terrible plague sweeping like wildfire across Europe had been rumbling for some time, and it is not surprising that the vibrant trading port of Bristol was the first major town in Britain to be affected, for it had close connections with the continent.



Figure02: map of the plague places of spread



Figure 03: The plague in England.

7. Dealing with the disease

For more than five years the English society lived struggling against the Plague without any accurate knowledge about what was the disease and the way it was spread. The main question asked by English people was what could they do to survive from the Black Death? And how did they deal with the pandemic in the medieval ages?

English people panicked when the pandemic first reached to Europe. However, they tried with several ways to stay away from the infection. Their first solution was to travel from town to town escaping from the plague. In hopes of survival, many began to abandon what they had and moved to villages and country sides in hope of feeling from the disease. "Children abandoned the father, husband abandoned the wife and even wife with her husband. Some of them fled to villas and villages to change the air. The disease first spread in cities; and when the city citizens left their homes moving to country sides .they carried the disease with them. Christians of Europe felt that they needed to blame someone for causing the disease. So their suggestion was the Jews. Their second solution was going back to religion. The pope invited the English people to pray and devote asking for indulgence from God. Most Christian's priests and nuns played role of doctors and nurses to decrease the patient's pain.

Artists such as painters of that time became dark and seemingly depressed. Before the plague the art was entertained people and made them happy but, the plague influenced negatively on the artist's life. Their spiritual draws altered from desire, love, happiness and replaced with strange paintings; these paintings were full of frustrating topics such as death, sadness, afraid and hatred during the catastrophe. Although those artists were surrounded by the horrific nature of the Black Death, some of them never gave up and tried to translate the terror and people's sadness to happiness. Like the baker, who baked bread for people also the artists worked to reduce the English's population sufferance by giving them hope to struggle against their fears.

The Black Death turned the English society upside down. Many of them believed that was the end of the world due to the huge number of dead bodies in England. The children in plague infested towns had premature exposures which allowed for disease to affect them physically and mentally. Once infected, the parents of the children would abandon them on the streets instead because many could not bear to watch them die. The females who contracted the plague were especially disregarded because they could not carry of their families. The middle ages were a so hard and difficult period for every one lived in.

8. Conclusion

The first part general idea is a historical background about the concept Black Death; this catastrophe took a short period leaving behind a big mass in Europe in general and England in specific.

English population took a long period to forget the terror of the disease. This chapter facilitated for any reader to know what was the epidemic, how the disease influenced the patient's body, the different tools of plague doctors to face the disease especially the creepy costume of that time. They will discover the reality of the western doctors and how much they were failed in medicine by using the old methods to cure their patients.

The purpose of this chapter is showing the English society and how they lived by appeared each part in the pyramid of society from the upper to the lower classes. They could see the English' people way of thinking, if they were free to express for themselves and if they satisfied with their lives or they were obliged to live as it was.

Even the writer of this thesis will understand more than he wrote in this paper, and discover new important things, so this the main purpose of any writer and finally in dealing with illness he will find some of the plague's negatives.

1. Introduction

During the fourteenth century English population spent their days thinking of death all the time because the disease controlled their lives. They were praying days and nights asking for salvation from God.

The second chapter deals with Black Death as a problem faced England during the fourteenth century. The second part appears the main causes of the plague in England, Christians blamed Jewish for the plague, and scientists blamed the miasma or climate change and also the rodents such as black rats. The plague had many negatives on religion, economy, policy, and society of medieval ages. The disease like any other catastrophe had a lot of damages on people's bodies and their wealth.

They could see the church role in facing the disease especially the priest's efforts to help people by asking salvation for them and burying their bodies after death. And finally the different reactions of Christians and Muslims and shedding light on the Christian's negative attitudes during the plague.

2. Causes of the Black Death

There were different theories about the Black Death causes of emerging and spread, and according to European scientists there was not a specific reason for the pandemic.

2.1 Jewish blamed for Black Death

From centuries Jewish people blamed for the catastrophe of Black Death in Europe and according to the historians there was a ship came from Crimea and docked in Messina, the ship was charged not only with sailors but also rats. So much scary news heard by English people of Plague and its spread in Asia in 1300's and how hundreds of population had died there in a short period. The Middle Ages was a time wracked with religious fanaticism, ignorance and superstition. A mysterious plague such as this took on much more awesome proportions simply because it was unknown.

The Jewish sailors came from Asia place where the disease first spread. Rats shared the same food, water and even bed with sailors during the sea trip from Asia to Europe. Christians were thought that Jewish were fortified from Plague.

Question asked and answered by European people why should God be angry at Christians? Some pointed to the corruption of the church. They hid the truth of English society, and their unethical works within conservative environment, others said God's anger came as a result of the divisiveness that existed within Christian Europe. Indeed, there were a lot of conflicts between the European countries such as England and France; however people thought that it was punishment from God for their bad behaviors.

Others said that Plague was a curse for Christians not pursuing the crusades to the utmost, destroying the Muslims and evicting them from the Holy Land in the fourteenth century.

After a short while, there arose a new idea among the European Christian masses why Black Death was ravaging their land because they allowed the Jewish to live in their midst as Jews. This reason became widely accepted. Therefore, in many communities Christians persecuted and executed Jewish population to save the community from the Plague.

From 1349 until about 1390, the Jewish communities such as France, Germany and England almost disappeared completely and the rest of them escaped from Europe to west. The rumors of Jews were less affected by the Plague was false because according to historians twenty per cent 20% of Jewish population who died from Black Death.

2.2 Scientists blamed the Climate and Rodents

European scientists seek to find hundred of time for reasons behind the disease. Their first researches begun with English people who died from centuries of Plague. And after that corpse dissection to examine the bacterium of Black Death, but they found that people were not the main reason of disease, despite the fact that they helped its spread in a short period.

Their second observations were about the European climate change from the fourteenth century until now. New evidence shows that the disease did not hide out in rats for centuries, as many have long thought. Instead, it's possible the disease was reintroduced to Europe multiple times following Asian climate events.

The Plague was not naturally existed in Europe that's what pushes scientists to make researches on the Asian atmosphere and examine its different changes. The disease is endemic to Asia, where the bacterium (*Yersinia Pestis*) is found among small animals and their fleas. Nils Stenseth of the University of Oslo said "could have been spread by people and transmitted by droplets. It could also have been spread by dormant fleas in cloths of people." In other words people not the cause behind the appearance of Black Death but they made it expand so quickly.

Nils Stenseth theories suggest that Asia was blamed the climate conditions when it became warmer and wetter, rodents numbers drops, so fleas seek out alternate hosts like animals and humans to living in their skin. Micro organism such as *Yersinia Pestis* escapes from the difficult atmosphere conditions from warming to wetting air, as it finds the best reproduction conditions to continue. From nature to animals and humans, the bacterium could not kill animals such as rats or gerbils but could kill humans, why? Many scientist find that rats or gerbils can not died easily such as humans because they resist the dangerous fleas in their bodies. "To control a disease outbreak, it doest not always help to kill its agent." This is a new theory for Matthew Keeling, a Cambridge university mathematician who made researches about the causes of Black Death in Europe.

Despite the fact that rats can spread the bubonic Plague to people, killing infected rats can actually make the Plague bacterium seek for another victim to feed on. However its only victim after animals was humans bodies, these invisible creatures can swim in the human's blood as virus and kill them in a week. Plague infects humans mainly through flea's bites not

nips from the rodents they live on. Fleas live in the fur of infected rodents such as rats, mice, squirrels, chipmunks, prairie dogs and others.

3. The negative impact of the Black Death

The Plague like any other disease or epidemic left behind millions of dead bodies as well as mental damages on English people lives. The Black Death changes many things in the economy, religion, society and even policy in Britain in the middle ages.

3.1 Religious effects

The Jews were blamed for every illegal and unethical behavior done during the middle ages. Christians believed that Jews were associated with the evil and were out to eliminate Christianity. As they thought that Jews were guilty of all the ills of the world, regardless of how preposterous and irrational the claims. Jewish accused of poisoning wells and also brought the Black Death to Europe.

Where Jews guilty for the Black Death? Question asked by many historians “first the Jews killed or burnt (...). The stronger of them dashed out the brains of those trying to creep out of the fire, and thus compelled (...) to descent to hell. And the curse seemed to be fulfilled: his blood be upon us and upon our children” this quote shows how much Christians hate Jews. These negative feelings towards Jewish because they were perceived to destroy the Christian world.

According to studies the relations between both religions were very sensitive and full of violence and persecution. Christians of England like the others had used very harsh tools to revenge from Jews. As they work to make them disappear wide of Britain. The middle ages were a grim tale of persecutions, arrests, false, accusations, imprisonments and executions.

The English’s populations were afraid from the curse of Black Death, and killing Jews was as an expression for their regret because they thought that Muslims did not deserve to be evicting from the Holy Land. So they should accept God punishment for their bad attitudes or works.

As conclusion, Muslims had no choice because they were powerlessto face the European’s unfairness. And their only solution was been patient and faithful to finish what Christians started. So they prayed days and nights to God asking for salvation and safety. God never accepts injustice on his slaves; Abu Dhār (May Allah be pleased with him) said: The Prophet (PBUH) said,”Allah, The Exalted, and Glorious, said; “O my slaves, I have prohibited Myself

injustice; and have made oppression unlawful for you, so do not oppress one another. O my slaves, all of you are liable to err except the one whom I guide on the right path, so seek guidance from me so that I will guide you to the right path". The result was huge anger felt on Christians heads. However, He changed the relations from aliens to deep hatred and massacres for centuries.

3.2 Economical effects

The plague was the biggest disaster in European history. It was a battle between human and his body, every part of his body was struggling death. Moreover, it covered the Europe generally and England specifically, culture, society, economy and even policy.

"The plague did not lead to the European economical collapse. Rather, Europe's currency. Driven economic collapse lead to the plague."(Economists were disagreed with Douglas Rushkoff quote). And their final result was that the plague was the main reason behind the European economical crisis during the fourteenth century. The economy of England was based on two parts; the first part was the commercial relationships between England and its neighbors such as Italy. The trade ships came from Italy to England which were full of infected sailors, merchants and even dangerous black rats caused the plague's spread.

The spread of bacterium affected negatively on people works. They were afraid of the infection from those sailors, so they shot them to stop the disease spread. The trade relations were disappeared. People were benefited from trade, because they were exchanging goods such as leather, wood, cotton, and also silk. People in England were asking for food, clean water to drink, and to feed their animals. They needed for secure places to hide, treatments to cure. The plague turned the economy up side down and changed England from powerful country to weak and broken one.

Many cities were destroyed by the plague, and in those cities a great number of dead bodies. So much works without workers that what caused the imbalance between the demand and supply and pushed the economy to the ruins. The second part was agriculture, so much lands without peasants and owners that what made conflicts between farmers for lands. The government decided to stop a lot of projects which were being built at that time because of financial problems and debts for their neighbors.

In short, scholars thought that the Black Death was virus that killed economy before killing people. Starvation, diseases, lack of safety, ignorance corruption, conflicts and orphanage all these were results of the pandemic. Was the English society deserved to taste all these sadness?

3.3 Political effects

The sickness touched the English's political system and caused a political uprising. At that time the Roman Catholic Church was the first and the last governor which was controlled over all the country. Additionally, the pope was more powerful than kings and the government.

The Black Death washed English's population brains; in other words the illness affected on all the categories in British society from young to old people, as it changed their vision to life. Firstly, they thought that the plague was a punishment from God; so only unreligious people could die with it, but they surprised by infected people from the church itself. People worked as priests, nuns, bishops and so on. However, they got that the disease did not differentiate between religious and unreligious people.

That what made someone like the pope lost his position and his reputation between citizens. Secondly, the churchservants such as the pope also were thought that he was fortified against the disease, because God will protect who is Christian. So he was collecting money from the plague's survivors, and gave it forindulgence to the church. They were praying and asking forgiveness from God to protect their loved ones. Those people were supposed to be close with God, but they were corrupted by doing unethical works to control people.

Most political figures or governors and officials were either dead. During that time, there was no stable government. Governors lived in fear due to the plague; however, they left their families to save them from infection. The British society lived in big mass without rulers or wise governors. Even officials were from bishops, so the church was every where in England.

In conclusion, the middle ages political system passed with gloomy days, people were uneducated, poor, and powerless to face the church's corruption. So they were just obeyed the church's rules, and the one who did not obey, he killed or in jailed. Finally the question asked by the historians was, did the Black Death help people to return their real life or not?

3.4 Social effects

Who lived in England during the medieval era between 1346 to 1352s, he witnessed one of the worst natural disasters to hit Europe “the Black Plague” it was incurable illness swept through towns and villages. They said that English people suffered a lot in this period. So what was the social impact of the Black Death in England?

English people thought that it was the end of the world because of the pandemic’s social effects on their daily lives. The major short term effects of the plague was shock, losing half of their families, seeing their neighbors healthy one day then dead the next morning created an atmosphere of fear. People isolated themselves in their homes to avoid infection, whereas, others tried to forget the pain of death by drinking, dancing, and singing in the streets. In addition, lack of confidence not only between people but also between the one and him-self. The plague survivors lost interest in their appearance and neglected doing daily works such as feeding their animals or tilling the land.

Scholars shed light on the medicine before the Black Death; when they said that the western medicine was a mixture of superstitions, which done by group of ignored and uneducated people like witches and wizards. Living conditions were very difficult on both rich and poor classes and what added insult to injury was the plague, because the doctors were not ready to treat the plague victims. And instead of made the situation better, they made it worst by using their weird costume.

The catastrophe led to the division of English society into two different groups. The first one was called Becchini, they were out of law, and criminals would ride into town ready to drink and to steal houses of the plague’s victims. They were not like the second group, the so called Flagellants. They were ethical, believed that the illness was a direct punishment from God. he Flagellants were religious zealots of the Middle Ages in Europe who demonstrated their religious fervor and sought atonement for their sins by vigorously whipping themselves in public displays of penance. This approach to achieving redemption was most popular during times of crisis. Prolonged plague, hunger, drought and other natural maladies would motivate thousands to resort to this extreme method of seeking relief.

As conclusion, the plague divided society in the lying. It tore away friends from each other, millers from bakers and parents from their children. The sickness did not care about old and young, rich or poor, and religious or unreligious. It happened that whole families felt in their houses to die, no one noticed their death because of smell rotting of their bodies.

4. The Damages of the Plague

The Black Plague was the end not only humans being, but animals and harvest too. As men died from the illness, no one was there to take care of their animals and lands. Many documentaries showed the huge damages of the plague between 1348 to 1352s in Britain. These documentaries appeared real statistics about the plague effects on people and their lives. So what were the damages of the plague during the fourteenth century in England?

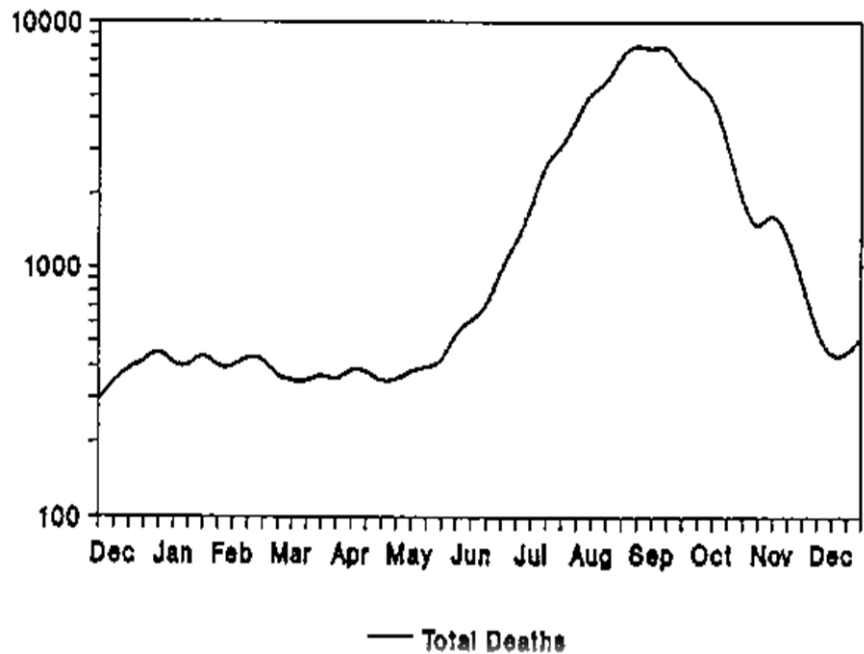
4.1 Statistics of dead bodies

The table below shows numbers of victims of the Plague in Britain from 1348 to 1352s.

year	city	Number of victims	Quotes about victims
June 1348	England	30-45%	“If people who fall sick cannot find a priest, then they should make a confession to each other.”
August 1348	Bristol	10,000 victims	“Nearly the whole town was wiped out. It was as if sudden death had marked them down beforehand. Few lay sick for more than two or three days, or even for half a day. Cruel death took just two days to burst out all over a town.”
September 1348	London	60-100,000 victims	/
October 1348	Winchester	/	
January-February 1349	East Anglia	/	“Men and women carried their own children on their shoulders to the church and threw them into a common pit. From these pits an appalling stench was given off. Scarcely anyone dared even to walk beside the cemeteries.”
April 1349	Wales	/	/
July 1349	Ireland	/	/

The table above shows how the plague influenced all British's cities in only two years(1348and 1349). It killed the half of English's population in one year; scientists valued this high number by 30-45%.

Figure04:
victims of plague
in two years



This graph appears the numbers of victims between 1348 and 1349 years and its personages in British's cities, starting with England in June 1348 until Ireland in 1349. The disease decreased the British's population in only two years.

4.2 Famous people who died with the plague

The plague struck people and took its victims from every walks of society. It started with the king's Edward the third daughter. Joan travelled from England to France and died there with the disease. It killed Thomas Bradwardine, the English's mathematician in Canterbury church 1349. And also one of the most powerful and wealthiest women in United Kingdom, Blanche of Lancaster which was a member of the English royal House of Plantagenet.

4.3 Domestic animals

It's not just humans that have attacked by the disease, also the pets or the domestic animals such as sheep, cats, and dogs dealt with the epidemic. It hit the British's economy by killed thousand of animals very quickly. These animals were the second resource of the British commercial development. It threatened a lot of rare species of animals.

Scientists who are interest with the science of animals say that the plague made imbalance in the life's chain. The animals like horses, sheep, cats, and dogs connected with humans so it could influence their health. When the plague controlled the British's life and made him weak to resist the virus in his body; he forgot to take care of his animals or to check of his crops. However, he got his wealthy gone with wind because animals were powerful to resist the disease, but not strong enough to face starvation and thirsty. Christianity allowed people to eat died animals, and those animals were poisoning with the plague. For people there were no enough chances to be alive just to eat those poisoning pets, and the end were affecting by the illness and died with it so harsh.

Animals as rats, mice, and squirrels; or rodents in general could carry the plague bacteria in its fur. So people lived in danger all the time because of close rodents in their houses. These small animals could spread the epidemic easily by touching people's food or drinking their water. Other, less frequent sources of plague include wild rabbits that pick up their infectious from wild rodents outbreak.

There was question answered by the scientists of plague, how does Black Plague survive if it kills all animals? They mean by plague survive itsbacteria; these bacteria are able to survive for several months if it finds a better conditions such as food and air. In addition, the bacteria are believed to circulate within population of certain species of rodents without causing excessive death. Scientists found that the bacteria of plague affected on both rodents and other animals especially pets like horses, dogs and cat.It kills pets in a short period while; rodents are taken a long time to die.



Figure05: hundreds of sheeps died with the plague in England.

5. The church efforts to face the disease

The Catholic Church was the main responsible of British's lives. So its servants were obliged to protect the citizens and control their lives in the medieval ages. In this period very often priests, who would have been called to visit people near death in order to hear the confessions of people.

Scholars said that the church failed to avoid the disease, because they were ignored of what was the illness and the why it spread between them. Some rumors said that the church fell in sin. Although people stopped trusting in the church, they had no solutions just to follow it. During the Great Mortality of 1348, priests were faced with task of stepping into sickrooms. Knowing that they faced an unseen enemy that very likely would kill them shortly. That thousands of priests sacrificed with their lives just to give hope to those in pain and fear. Priests played an important role in British's live. Therefore, any bad reputation might destroy the Christian's faith and confidence. The church had no answers for the citizen's questions, but this did not stop vast amounts of local priests from doing all they could to give their parishioners spiritual solace as they faced their deaths.

In the Great Mortality, John Kelly says that the death of priests was forty two to forty five percent. It was a high number than the general population of Britain. This huge number opened the British's eyes for real truth of religious men and women, who were supposed to be ethical, legitimate and careful to their attitudes. People could not trust with someone lived in corruption.

As conclusion, the history of Britain never forgets those people who were paying with their lives to help the plague's victims. Despite the fact that it's easy to be cynical of medieval Christianity, people like priests or layman, man and woman deserved respect for their hard efforts in order to bring others comfort.



Figure06: priests and the plague

6. The Christians and Muslims reactions

The commonly known as the Black Death was the main subject of the medieval era. This phenomenon attracted many famous writers and poets from the western and eastern worlds. As it affected on other's life such as the well known fourteenth century Muslim historian, IbnKhalidun, who lost his parents and number of his teacher during the plague.

The epidemic spread throughout the Middle East, North Africa, and Europe. Some physicians said that the pandemic occurred for the same reasons when they compared between the two worlds, Islamic and Christian societies in the fourteenth century, and they limited these causes in one thing miasma or the corruption of the air. The plague created different reactions from Christianity and Islam. Starting with Christian's responses, European's Empire experienced the Black Death and believed it was a punishment from God for their sins, and blaming Jews was their only explanation for the disease'scauses. It blinded their eyes, and that's what made them could not see just its negative side.

The plague changed their behaviors, therefore, they begun to rejecting their religion by abandoning God, and whipped themselves to appease him. One of historians said that the plague appeared due to the Christians sins. They blamed themselves and punishment was fair enough to clean their souls. While, Muslims did not blame others for the plague, and said that it was a gift from God.

According to Muhammedal_Manbiji, who believed that praying to extinguish the plague was unnecessary due to the belief it was a donation from God. Although the illness caused the population's decreased, it still a gift that they should be appreciatefor. And finally decided not to leave their land even it infected by the disease to protect the others.

In short, the plague appeared the reality of both Christians and Muslims societies during the fourteenth century. It showed how much Muslims were patients and they never lost their confidence in God, while the Christians who preferred to abandoning God and blaming others for their sins.

7. Conclusion

The English people were controlled by the Catholic Church at first, but when the plague heated England, it became their main problem before the church's injustice.

The second chapter shows just the negative side of the disease, pains of people and their real relationship with God. It examined feelings of people, and their different reactions during the plague. Losing their calm lives, their beloved persons, their health and wealth was not easy for them. Moving from better situation to worst one in a short period was very difficult for both upper and lower classes of medieval society. It was hard to face something had no sense; they were totally ignored of what was the disease, and the place it came from.

This chapter appears the plague as a curse of the English society with high light on its negatives, but this does not mean that the plague had no positives.

1. Introduction

The plague was a nightmare of English population in the fourteenth century, the weird disease made deep changes in England, starting with killing people so quickly in short period by influencing in society, economy, policy and in religion also.

This chapter will explain how the plague moved from a curse to blessing event in the English society during the fourteenth century, how the disease made people more aware about their rights, and how it learnt them to differentiate between the right and wrong under the rule of the Catholic church.

The catastrophe had positives more than the negatives, because it made people healthier, led to the creation of perfume industry, it changed the old meaning of hospitals by new one, it enabled people to build more functional homes, it made English language well known by replacing the Latin language by the vernacular or old language, led to the end of feudalism, the appearance of the middle class from poor people, freedom of thought and finally humanism. Moreover, the Black Death led to the development of medicine and agriculture of medieval period. The second part of the third chapter deals with the impact of Islamic civilization achievements on the western medicine, technology after the plague, and how the western scientists benefited from the prophetic medicine to cure the plague.

As conclusion, In this chapter the reader could find two objectives, the first aim is changing his idea about the plague, and will understand why it was bless, and the second one is toknow the truth behind the western achievements from the fourteenth century until the renaissance.

2. Positives of the Black Death

The disease had two sides, the negative side which appeared in the second chapter and the positive one. The misfortunes of some people are advantages to others. In other words, Even the Black Death had killed the half of English's population in a short period during the fourteenth century, it was beneficial for them.

2.1 The End of the Church's power

England in the Medieval Era had been governed by the Catholic Church for centuries. But when the country destroyed due to the Plague everything had changed. So what happened to the Church after the Black Death?

The disease removed the blinders from people's life. As it made them strong enough to face their destiny, which they were working together to stop the church's corruption or unfair. In addition, during the Black Death people of England were afraid from death, therefore, they had to believed on the church's superstitions because they thought that it was powerful to protect them from the epidemic by asking salvation and forgiveness for their sins.

Most of people were dispersed and poor to resist or struggle the church, but when the church could not save itself from the pandemic, the citizens lost their faith in these men who asserted much, and offered a little. The church hypocrisy, which had been growing for years, this disgust and disappointed in the catholic led to destruction of people's relationship with God.

The church lost its position and became weak to rule the country, because people due to the disease became more aware of their attitudes and each one of them thought for his benefits, family and future, and the best solution to realize these dreams was stopping to follow the corrupted church.

In short, the illness vanished the half of the country's population, and had birth the second half. Scholars said that it was a starting point to reconstruct England and moved it from the darkness to enlightenment.

2.2 Healthier people

What does not kill you makes you stronger, starting with this proverb; scientists observed that the plague had sustained the victim's body when they did experiments on the plague's survivors. But how was that if they said that who had attacked by the disease die so quickly?

People who infected by the disease, their genes would die and replaced with new strong ones. These new genes could evolve their immune system when confronted with new diseases. Gene's variants help certain people to fight against different infections better than those who do not have those variants. In addition, people tend to bear more children due to those variants in genes. They called this process as positive selection.

Recent studies have found that the plague's survivors had altered genes which made them healthier to resist the disease. Therefore, when they analyzed their bodies they got new explanation to support their theories, one of those theories said that English people respond differently from others to certain sicknesses and body disorders. More specifically, an experience of three immune system genes code proteins that attacked with a harmful bacteria, they found that people who lived in plague's places of spread have a triggering defensive response.

Scientists say that the plague may have been a gigantic laboratory for natural selection weed out the weak and frail from population. An analysis of skeletal remains in London churchyard proved that people after the plague had a much lower risk of dying at any age. Number of survivors after the Black Death was higher than during in it which was a twenty percent.

As conclusion, British people knew how to benefit from the catastrophe, and changed it from a curse to blessing event. As it gave them hope to restart and rebuild their lives. Working with God's words in Sura al-Baqara "But perhaps you hate a thing and it good for you"

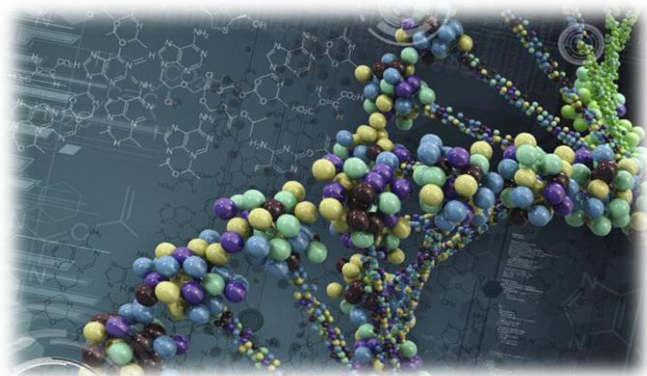


Figure07: Gene's variants of plague's

survivors.

2.3 The Perfume Industry

Since the beginning of recorded history, humans have tried to keep the dirty smells away by using mixture of natural perfumes. They used these different perfumes to apply to the skin and clothing, because of differences in the body chemistry, temperature, and body odors. No perfume will smell exactly the same on any two people.

During the Black Death the perfume had another meaning with the same function. English people used those various perfumes to avoid the death's bad smell. Additionally, plague's doctors were the first users of those perfumes during the fourteenth century in England. They believed on many things that caused the disease, the Miasma or poisonous vapor was one of those reasons. So they made a big collection of perfumes by using natural materials such as flowers, grasses, spices, fruits, wood, roots, resins, balsams, leaves and also animal secretions. These aromatic herbs to purify the air.

In this period, people were made by extracting natural oils from plants through pressing and steaming processes. In the aftermath of the catastrophe, people created this simple work and changed it to successful trade as they made it advanced to become a perfume industry. And that's what makes places like France, and England are famous with high quality perfumes. One of the most popular perfumes was orange mixed with dry cloves. This trade expanded due to the great demand for aromatic water such as concoction of rosemary, lavender, and alcohol known as Eau de la Reine de l' Hungrier or the water of Hungarian Queen.

In short, the plague opened many closed doors for English people, making perfumes was not only for doctors of plague or for people to keep bad smells away, it also a progressive trade to solve the British's government financial problems, new jobs, and eradicate unemployment.

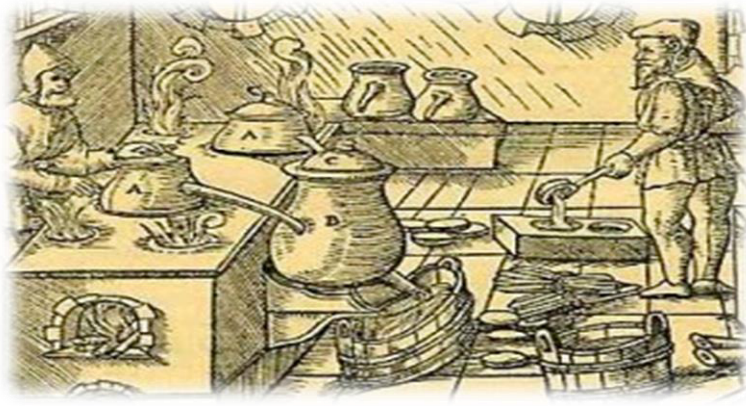


Figure08: process of making perfume in the middle ages.

2.4Hospitals

The Catholic Church was controlled over hospitals in the medieval ages; it refers to the place where people purified their souls. Before the plague people were sick and died isolated in hospitals, because the church took more care of one's soul than one's body. Since the sickness was regarded as punishment for sin. Therefore, hospitals were the second religious institution after the church.

When the disease had attacked England, the medieval hospitals had no professional doctors or nurses. There were only monks and nuns to take care of patients. They used mixture of plants and herbs to cure them. Hospitals also functioned as almshouses and pensionaries, taking in widows, orphans, guests and travelers.

During the Black Death the meaning of hospital was changed from a charity purpose to place where ill people go for treatment. Doctors were concentrated on patient's health in the sick and dying. Knowing that there were important changes in medical practice by pushing away the old method of medicine to arrest the plague, and replaced them by new effective ideas.

After the pestilence there were four types of hospitals, for lepers, for poor pilgrims, for the poor and infirm and the last one bedehouses. Additionally, in the medieval hospitals physicians were supposed to work as doctors to save people, because of lack in doctors and surgeons becoming more central to a hospital's operations, medical services were specialized and there arose words devoted to different sicknesses.

In conclusion, without the catastrophe English's doctors were never became famous and professional in the medical world. This was another positive of the disease in fourteenth century.



Figure09: Hospitals after the plague in England

2.5 Functional Homes

During the medieval period, basically two types of building were built, religious medieval buildings such as temples, and churches, and military buildings. House building materials during the fourteenth century were very expensive and only rich people who could pay to have a beautiful house at that time.

Although there were no professional architects before the plague, little number of skilled artisans and builders were responsible for rich's houses. While the poor houses were a disaster, simplest houses were made out of the sticks and straw. They obliged to share one roomed house with the whole family and even animals, because they could not pay for builders. When the disease finished, rich people of England forced architects to build a simpler building designs. For instance the English church moved away from the flamboyant decorated catholic, and it replaced by perpendicular catholic style. The new style allowed for more immense windows, giving stained glass crafts men chance to be creative.

Living conditions of peasants ameliorated and enabled them to build strong beautiful houses. From poor houses could not resist the weather to modern ones from wattle and daub. These kinds of houses were taller and wider with better protection from the storm. By the end of the disaster, the hall was being divided by partition walls on one or both ends. This separated the occupants from servants, animals, and the dirt of streets. These and sections were divided into lower chambers, and upper solarium. Special chambers with specific bathrooms. Private homes became more luxurious and comfortable.

To conclude this, people such as peasants who suffered a lot just to live a better life, they deserved these changes which realized by the plague. So the plague was very beneficial to ameliorate their miserable lives.

2.6 Predominance of English

According to the historians the origin of the English language was the Roman invasion to Britain. They said that the old English was the language spoken by peasants and the French a language of prestige, but this before the plague. So did the plague give life to English language?

After the Black Death English people jumped from ignorance age to enlightenment age. The main cause behind this jump was the death of almost all literate monks who copied manuscripts by hand. Subsequently, English felt the need for a better way to copy books. The printing press machine was the creation of the fourteenth century after the plague. People who seeked for higher education after the end of the catastrophe got reason for establishing local universities.

These universities was increased so many professors who spoke the Latin language had been wiped out, and the lack of professional teachers to work in these new universities. They had to work with their little knowledge of Latin or change the language by another one more understandable. Therefore, they replaced it by the vernacular language or the old English used by English people which was a mixture of English and Latin words, and it was easy and clear for them at that time. This led to the decline of Latin language in England in 1362. And English declared as their first and last official language used to senate courts and for instruction in schools.

In conclusion, the plague developed many things and fixed the rest. And one of those things was the expansion of English language from language of peasants or uneducated people to language of modern society.

2.7 End of Feudalism

Feudalism refers to the system by which a vassal owed lord homage, with loyalty in exchange of the use of his land. The medieval society was divided into three main classes. The first class was clergy or those who prayed. The second one was a collection of nobles and knights to defend for the king safety. And the last class was the labors or serfs; people were always prey for exploitation by powerful landowners. So how did the plague end this unfair system during the fourteenth century?

Historians said that the plague was the main factor in breaking down of feudalism in England. Before the plague this system of obligation and dependence was recognized as a protection for lower class in British society. They thought that it was injustice plan to control poor's lives while rich ones lived very comfortable and secure life.

After the death of huge number of farmers due to the disease, the life of lords turned up side down because who were taken care of their wealth, lands and animals passed away. And the rest few numbers of peasants refused to follow their works. Thence, losing money was unacceptable for them, and obliged to realize the farmer's conditions. Peasants used the lack of labors and demanded higher wages in cash rather than in kind and fairer treatments for their services. And for the first time they dictated their different conditions without fear. Finally, English lords accepted these conditions at the beginning, but they passed laws that tried to bring back pre-plague status. These laws were enforced serfs to take lower wages without any complain.

In short, with the plague rich people admired with the serfs rights for a while, and returned back to their unfair attitudes when they repaired their wealth .despite the fact that they canceled their promises poor serfs lived in happiness for shorts period.

2.8The Middle Class

After the plague the division in the classes of the British society was changed and the lower class or serfs moved to be the middle class in the pyramid of classification during the medieval ages.

English people passed their fear with the end of feudalism, and freedom from obligation and dependence from landowners gave them a glimpse of wider horizons beyond their villages. They became more ambitious to realize their different aims by replacing their natural works with new crafts and trades, as it enabled the successful ones to become wealthy. From countryside lower wages works to new commercial activities that led to the development of the British economy.

Now firmly on cash basis, took off. Competition among individual's manufacturers replaced the guilds; from here the roots of capitalist system had emerged. The so called middle class became rich and powerful to challenge the upper nobility class. The new rich could afford more of luxuries that could be obtained in the East. Their wealth enabled them to make commercial relationships with merchants and traders from the Middle East, which they sold and bought every goods such as leather, silk, gold, and spices. Unfortunately, the upper class refused the competition when they passed law of 1363 that forbade merchants and their families from wearing clothes of gold and silver and even silk.

So they used their wealth to encourage the art, science, literature, and philosophy. Finally the result of their charity was positive to explode the cultural and intellectual creativity and now call the renaissance.

To conclude this, historians said that the plague was the starting point to the renaissance in England like any other European country. As it destroyed many evil plans and realized other good ones.

2.9 Freedom of Thought

In years before the plague, the Catholic Church was ruled over the English's lives, and managed them. They governed all aspects of medieval life, when people were totally unaware of what happening around them especially the church's plans.

The British population lived a gloomy life, fake life full of Christian's superstitions, from the womb to tomb, but their way of thinking was changed due to the plague as it revealed the hidden truth of the Church. For centuries the priests used their knowledge in medicine that had been employed in the context of theology and spirituality to cheat on people. But when those priests who were supposed to protect people and asking salvation for them die like any other normal person with the pandemic, they lost confidence and started asking questions about everything like to why the horror was happening.

Many people who lost faith, they turned to other paths of spirituality, disobeyed the church rules, and most of them left Christianity. At the beginning they started by avoiding the priesthood to search for their own path to God, and it was the phenomenon of Flagellants. This group roamed Europe flogging themselves in the belief that the personal physical suffering could atone for their sins. In England for instance, John Wycliffe began to express the dissent of rebellion against the Catholic Church mentioning the rebellion of Martin Luther verses the Roman church from two hundred years ago.

In short, the Black Death was much more than a disease; it was the solution for every barrier faced by the British population in the fourteenth century.



Figure 10: Flagellants group after the plague.

2.11 Humanism

The high number of deaths due to the plague made the survivors recognized of the individual's worth. The questioning of faith in the face of the disease's terrors led people to focus on their present life and enjoy with its beauty.

Thinking about the present day and living moment by moment rather than promise of a next life was their new principle in life. This led to an appreciation of the arts, physical sciences, and thirst for human-based knowledge. So this new movement of humanism took endeavor and accomplishments, rather than religion. Petrarch (1304-1374) proclaimed a new anthropology that saw humans as rational and sentient beings. As they have the capacity to think by themselves to fix their problems.

The humanist movement was against the Christian doctrine of the fall of man. It emphasized of human dignity. The old explanation of the church's concept was disappeared, and replaced by new one which was the man should rule his life by himself. Reason and logic became more important than faith potential through a liberal arts education; they saw that human has a great capacity and skills which enable him to be creative.

The new middle class helped in the spread of humanism. From merchants and traders to powerful politicians whom inspired by the Roman and Greek way of ruling. In addition, they were interested by literature and art to encourage the medieval writers and artists to be creative. Therefore, artists and authors turned back to traditional medieval styles and created a new culture. It was rebirth a renaissance that laid to the modern secular society.

3. The progression of Medicine

The plague was a catastrophic event in England's history. That what made historians divided into two groups, the first group agreed with the idea said that the plague was a main reason behind the medicine progression, and the second group was disagreed with this idea as they said that the plague made the situation worst. Each of them had his own proves and different point views.

Who were agreed with this idea said that the plague was turning point in the medical world. Patients of medieval era, exactly before the plague were gone to hospitals just to clean there souls and by the end of the day the patient passed away. There were no effective tools, real materials and even professional doctors to cure people but after the epidemic this fear finished due to the medieval physicians and their effective tools to stop the people's pains.

Those physicians who replaced the nonprofessional doctors helped their patients and gave them hope to survive again after the disaster. When surgeons dealt with plague's victims, they gained valuable experience which developed new practical strategies, and produced writings detailing their methods. Sanitation in hospitals changed for better, there where a greater focus on surgery and cleanliness. Those physicians worked as teachers to teach practical examined methods in Medicine College.

At the end, without this terrible pandemic, physicians and scientists of those days would not have made the advancement in science and medicine that occurred at the end of the plague and after. This would come to ultimately affect us because the new discoveries have changed over time in order to build up into the medical knowledge of these days.

4. The advancement of agriculture

In the period known as the medieval warming, the population in Britain exploded and farming sector developed after the plague. “Not only was the demand for food drastically reduced, so was the labour available to cultivate the land.”(Alternative Agriculture, oxford1999).

The population of Britain were demoralized and whittled down over a couple of years; they felt their homes in villages deserted right across the country because the plague did not vanish until around 1480's in Britain. There were many changes occurred to the agricultural field, one of those changes was replacing the old ways of farming with new rich ones. Many farmers turned their land over to grazing; sheep farming was now expanding due to the increase of wool trade. Second way was rabbit farming increased and eaten as a luxury meat after the epidemic.

“After the Black Death, when the landowners find themselves with idle grassland or wished to put arable land to grass and make the best profit by the change, the idea of rabbit warrens lay to land as an ideal solution.”(Joan Thirsk, Alternative Agriculture)

All these new tools to end the agricultural crisis in Britain were enough to sustain the British economy and refresh it. People like to believe in a past golden age of `traditional' English countryside, before large farms, machinery, and the destruction of hedgerows changed the landscape forever. However, that countryside may have looked both more and less familiar than they imagine. Take, for example, today's startling yellow fields of rapeseed, seemingly more suited to the landscape of Van Gogh than Constable.

As conclusion, the plague fixed the British economy and changed many people situation from bad to good one. Behind every storm there is new sunny day.

5. The Prophet Muhammedpbuh(Why the plague is a bless)

The doctors could not find the real reasons behind the outbreak of plague, and their only explanation was the climate change or Miasma. This uncertain theory was used to avoid blaming the others like Jewish. But for the Messenger of Allah was easy to know what the real causes of the plague. When he said: “the plague is a punishment that was sent down on some of children of Israel and on those who were before your time.”

From this Hadith, historians suggested that Christians knew that the disease was not like any other illness, but it was a real punishment for their sins. The prophet (pbuh) informed Muslims of the matters of unseen, while doctors dealt just with physical symptoms of the plague.

Although Christians and Muslims worked for the next life, Christians did a lot of mistakes. Christianity prohibited people to kill each other and using their power in evil way. They used it to destroy Muslims in Palestine. So they deserved this harsh punishment. The prophet said that the plague isblessed. Furthermore, in the Sahihain, it is narrated that the prophet (pbuh) “The plague is martyrdom for every Muslim”

In short, people could not separate between religion and society because they work hard in this doing good things just to win the haven.

6. The prophet’s treatment of the plague

The word epidemic is more general than the plague; every plague is an epidemic, while not every epidemic is a plague. Any great doctor could not cure his patient without diagnosis of the disease. The Messenger of Allah said that the outbreak occurred for unseen reasons. So he was the only one who knew the best treatment for the plague when he said:

“If you bear about it (the plague) in a land you are in, do not run away from it, and if you hear that it broke out in a certain land, do not enter that land.”(Bukhari, Muslim, AbuDawood, Tirmizi)

There was a great wisdom behind commanding the people to remain in the plague-infested area, they should avoid harm and paths that might lead to harm, preserving one's health, which is the vehicle that people rely on to acquire life's necessities and to fulfill the requirements of the Hereafter, so that the people do not fall sick upon breathing polluted and contaminated air, avoiding close association with those afflicted with the plague, so as not to catch the plague themselves, and finally preserving the body and soul from contamination and superstition; this only harms those who believe in it.

In short, prohibiting entrance to plague-infested areas is a preventive measure and a type of diet (prophylactic) that leads away from the paths of harm. To prohibit leaving the area where the plague has struck entails submitting to Allah's Will and decisions. The first order teaches and trains, while the second order entails submission and referring all matters to Allah's will.

7. The Western Cures

From centuries the western scientists or physicians followed the Islamic ways of treatment. They might not use the Quran directly, but when they benefited from the Islamic scientists achievements in science and medicine, they used the Quran and the prophetic medicine indirectly.

Doctors believed that they could not divide the person's soul from and his body, because for them the disease was an evil force which was threaten their bodies. So before the development of western medicine they prayed to save themselves from the plague and after the plague they made new effective theories to cure their patients such as the positive energy might help the patient to resist his pains.

They said that all types of motion are prohibited when the plague strikes a land, or the people cannot act as if they were fixed objects. The plague was an epidemic so it was easy to spread between people. There was no reason behind abandoning the plague-infested land and escaping to other land with infectious body. In addition, that being idle and calm is better for the people's heart and bodies in this situation.

In short, western doctors were very intelligent to adopt the prophetic medicine as their own medicine, without the Islamic cures they were never developed, because when the prophet said that the plague is blessing event he was defiantly right.

8. Conclusion

The plague played a dramatic role to change the English society, some historians said that it was punishment for their sins and the others said that they did not deserved all this pain but both of them changed their minds, when the plague ended in England, they could see the reality of the catastrophe from a terrifying disaster to happiness.

Who said that England was in the golden age before the plague was wrong, because without the disease English people had stayed living in darkness, unfairness, cheating and fear under the rule of the Catholic Church, it saved their lives, and ameliorated them.

The friction with Arabs in Islamic world helps the spread of prophetic medicine, and enabled people like plague doctor's search for the treatment of the plague. The Islamic scientists always return to the Quran and Hadith to help people in all fields, therefore, when western scientists used those tools they benefited from the Prophetic medicine indirect way. So when he said that the plague was a blessing, he was totally right. When he said that it was a punishment, they were late to discover this truth but when they blamed the Jews they understand it. Following the prophetic medicine was the best treatment for the plague and other diseases from centuries until now.

General Conclusion

In this investigation, the Black Death is thoroughly analysed attempting the questions, what benefits did the Black Plague yield for the people of England? Did the western doctors benefit from the prophetic medicine?

The scope of this investigation is focused on the economic, social, and medical benefits of the disease and how they contributed in the development of medicine and technology in the medieval era. The period of investigation ranged from the beginning of the plague in 1348 until years after its ending.

English people believed that the plague not a curse when they compared their lives before and after the plague, it gave rise to new and exciting opportunities that presented significant changes to the known structure of society. As it led to the rise and progression in agriculture or alternative agriculture in England. The plague allowed people to realize their shortcomings, made the poor people rich ones, which affected their way of life, the way they thought, and opened up their minds to new ideas that perhaps accelerated the medieval period into the beginning of the Renaissance.

To conclude, this thesis paper summarized the achievements of the plague during the fourteenth century, and enabled the reader to change his negative view about the plague as it made him understand that any curse could be a bless if the person thinks about its bright side.

Bibliography

Books

Charles, River Editors. The Black Death: History and Legacy of Middle Ages. Published on October 8, 2014.print.

IbnQuayem-El, Jozeyah.The Prophetic Medicine. Edited by Dar Al Ghadd 2003.print.

IbnQuayem-El ,Jozeyah. Healing With The Medicine Of The Prophet (New Colour Book). Darussalam edition 2011.print.

[Kent ,Heckenlively](#). Plague: One Scientist's Intrepid Search for the Truth About Human Retroviruses and Chronic Fatigue Syndrome (ME/CFS), Autism, and Other Diseases. Skyhorse Publishing 2014.print.

Professor Masud-ul-Hasan.Hadrat Abu Bakr,Umar,Usman,Ali(ra) Khalifa Umar bin al-Khattab-Expansion of Islam and Military Campaigns).Islamic publications, Lahore Pakistan 1982.print.

Thesis paper

Zentner, McLaurine H. The Black Death and Its Impact on the Church and Popular Religion. Undergraduate thesis.u27- Paolo Malanima.the Economic Consequences of the Black Death.

Articles

[Johnny, Badaluca](#). How did the "Black Death" get its name?,published on March 24,2014.

[Al-Dhahabi](#).Islamic Culture and the Medical Arts.First published on 15 April 1994.

Jackie ,Rosenhek. Doctors of the Black Death.Published on October 2011.

[Molly ,Edmonds](#). How the Black Death worked how stuff works.

[Charlotte, Hodgman](#) .Plague spread .Wednesday 23rd July 2014.

[Kate ,Finger](#). How did people attempt to deal with the disease? Published on Saturday, 9 March 2013.

Berel ,Wein.The Black Death .Free Crash Course in Jewish History. Adapted by Yaakov Astor.

Sarah ,Zielinski.plague pandemic may have been driven by climate, not rats. Smithsonian on February 23,2015.

Jen ,Saunders.what political effects did the Black Death have on the Middle Ages?

Under the direction of Jeffrey Watt from History, The University of Mississippi.2015

Websites

Dr. Mike, Ibeji.BlackDeath.History of Black Death. published on 10 March 2011.

The Black Death of 1348 to 1350.Citation: C N Trueman “The Black Death of 1348 To 1350”. Historylearningsite.co.uk.the History Learning Site 5 Mar 2015. 20 Oct 2016.

Definition of “the Black Death” from the Cambridge Advanced Learner’s Dictionary & Thesaurus,Cambridge University Press.

https://www.nlm.nih.gov/exhibition/islamic_medical/islamic_05.html

Craig ,McCasland.The Black Death.<http://www.austincc.edu>

www.deathblack.wordpress.com/the-different-types-of-the-plague/18/12/2008.com

[Http://www.abdn.ac.uk/sll/disciplines/english/lion/medicine.shtml](http://www.abdn.ac.uk/sll/disciplines/english/lion/medicine.shtml)

www.deathblack.wordpress.com/the-different-types-of-the-plague/18/12/2008.com

[Http://history.howstuffworks.com/historical-events/black-death1.htm](http://history.howstuffworks.com/historical-events/black-death1.htm)

[Http://www.themiddleages.net/life/blackdeath.html](http://www.themiddleages.net/life/blackdeath.html)

[Http://www.middle-ages.org.uk/black-death.htm](http://www.middle-ages.org.uk/black-death.htm)

[Http://www.jewishhistory.org/the-black-death.htm](http://www.jewishhistory.org/the-black-death.htm)

[Http://www.academia.edu/5528016/The_Economic_Consequences_of_the_Black_Death](http://www.academia.edu/5528016/The_Economic_Consequences_of_the_Black_Death)