London Before and After the Plague

Eilis Mattoon

Research Paper

Senior Division

1,938 Words
London wasn't always a clean, compelling city; actually, it was filthy.¹ When the plague came, the people of London were prone to contract illness due to the overwhelming amount of pollution.² The pestilence that spread like wildfire impacted every aspect of society from: religious standards to farming lifestyle, law and order, industry, including the economic and political stability.³ The epidemic, which killed thousands a week,⁴ forced London to 'clean' up their act by enforcing sanitary laws.⁵ While the plague was a tragedy, through recovery London was able to better itself as a city.

**London Before the Plague**

Before the epidemic of the plagues spread, there was already a sickness that hung over the city.⁶ The streets were layered with mud, manure, animal entrails, rotting food, and human excrement just to be walked on by the population of London every day. There were deadly pathogens such as E. Coli and Salmonella in all the roads that half a million people, and even more animals, walked over.⁷

---

didn't help that the living standard for Londoners during that time was extremely poor. A select amount of dealers would sell cattle found, instead of fresh meat because the idea of fresh food was scarce.\(^8\) A diet during this time was not healthy and weakened the immune system.\(^9\) \(^10\) People in London were frequently dying, and every Thursday of the week\(^11\) a 'Bill of Mortality' was posted to inform everyone of the death toll. Before the plague, this Bill of Mortality showed common ailments that people died of during the Dark Ages. Fevers and other diseases were documented each week along with the number of females and males were buried.\(^12\) When the plague came, the Bill of Mortality needed a separate section just to document the deaths and burials, which was growing each week.\(^13\) The plague death rate outgrew the other ailments on the list.\(^14\)

**The Plague**

During the 14th century, not everyone had understood where the pestilence originated.\(^15\)

---


“AND for what concerns that Pestilence now under Enquiry, this we have as to its Origin, from the most irrefragable Authority, that it first came into this Island by Contagion, and was imported to us from Holland, in Packs of Merchandice; and if any one pleases to trace it further, he may be satisfied by common Fame, it came thither from Turkey in Bails of Cotton or Silk, which is a strange Preserver of the pestilential Steams.”

-Nath. Hodges, M.D. - Loimologia-
Great Plague and targeted humans, making them the host of the strain of bacteria. The other way people had contracted the plague from Asian Ship Rats was mishandling any infected tissue or fluids from their remains.

Of course, it's unreasonable to say that rats were the sole reason for the fast spread of the plague, as it was apparent people were infecting each other. It came to a point where pubs were shut down to prevent the sick mingling with the healthy.

The plague, which was fatal enough to panic the common people through a rumor, had three classes of infection. Other forms of a bacillus were more violent than others during the hot summers of 1347-1352. The more commonly referenced and most gruesome class of Yersinia Pestis is the Bubonic Plague. Symptoms consisted of high fevers, delirious actions, and fatigue. Within days, black, walnut-sized blisters infected the armpits, neck, thighs, and groin before killing the patient. These swollen lymph nodes were called “Buboes” giving the Bubonic Plague its name. The symptoms usually lasted about three days, and by

---

the end of the fourth day the patient was dead or the infection spread and
developed into a septicemic plague. The septicemic form of the plague usually
occurred when Y. Pestis spread into the bloodstream and caused an infection called
septicemia. Symptoms worsened with this form via nausea and vomiting. Severe
bleeding problems like blood in the urine, sudden bleeding beneath the skin, and
abnormal blood loss from the nose, mouth, and rectum would follow. The
pneumonic plague transpired when the infective organism settled into the lungs, usually from contagious droplets in the air, giving the host pneumonia-like
symptoms. Over a four to five day period, the lungs liquify, just to be coughed up
and kill the carrier.

Treating the Plague

Treating the illness was a different story; many people fled the city, so as to
not to catch the plague themselves- including doctors. The remaining few left,
including nurses, would tend to the sick. Other times, locals without any medical

---

education were left to help the ill. There were multiple approaches to treating the plague. Bloodletting was very common and supported the belief that ridding the body of any tainted blood would cure the patient, which was not the case. Bleeding the patient with leeches was an approach usually used by the individuals who had no medical training. This left the ill set people turning towards apothecaries, physicians, and nurses who had enough courage to treat infected homes. It was assumed that the Black Death was caused by ‘foul smelling air’, and that polluted air was the only necessity that caused a person to catch the plague. It was an obsolete medical theory called the Miasma Theory. This theory being the reason why apothecaries and physicians wore special outfits to keep from contracting the disease. It consisted of heavily waxed leather garments and beaked masks stuffed with herbs to ward off any infection. Due to a lack of technology, physicians had to take a more medicinal approach to the plague. A method recommended by the Royal College of Physicians was to burn the bubo. An onion was hollowed out, roasted in ashes, then filled with treacle, soap, and scorpion oil.
or olive oil. The hallowed onion was then pressed against the bubo in hopes to burn it off.\textsuperscript{45} Alas, all methods ended in failure.

Nathaniel Hodges M.D. was one of the few remaining physicians that helped during the plague. He was one to discover that bloodletting never helped the patient, but only weakened or killed them.\textsuperscript{46} And, according to him, nurses who were assigned to shut up houses used wicked practices on patients.

"\textit{and I verily believe that many who were lost might have now been alive, had not the tragical Mark upon their Door drove proper Assistances from them.}\textsuperscript{47}

-Nath. Hodges, M.D. - Loimologia-

Nurses would do a number of cruel acts on the sick. Their intent usually to loot the bodies. Nath. Hodges was an eye-witness to multiple of these accounts, even saying that he watched nurses strangle a man.\textsuperscript{48}

"\textit{the plague making us cruel, as doggs, one to another.}\textsuperscript{48}"

\textsuperscript{45} Documentaries, Timeline - World History, director. The Great Plague (Black Death Documentary). YouTube, YouTube, 1 Apr. 2017, www.youtube.com/watch?v=HPe6BgzHWY0.
\textsuperscript{47} Hodges, Nath. “Figure 2f from: Irimia R, Gottschling M (2016) Taxonomic Revision of Rochefortia Sw. (Ehretiaceae, Boraginales). Biodiversity Data Journal 4: e7720. Https://Doi.org/10.3897/BDJ.4.e7720.” Loimologia, 1672, doi:10.3897/bdj.4.e7720.figure2f.
Impact of the Plague

The impact of the plague was absolutely devastating. Society was undeniably changed when the pestilence hit London. The churches had lost their authority and other aspects of culture were dismissed. The Catholic church was especially hit hard, and because people during the time were so heavily relying on their faith many blamed the church. Most believed the plague was the by hand of God. The mass of people shut themselves behind locked doors shunning themselves from others. A collective amount of people concluded that minority groups were the cause and religious cults rose against the church’s jurisdiction. Cults hunted down and murdered these innocent people, saying that their sins caused the pestilence. One group, the Jewish race, was blamed harshly in 1349. 200 Jews were burned alive.

With the disaster of the plague and loss of faith in many people, astrologers looked to the conjunction of stars and appearances of comets for an answer. Many others followed in their beliefs considering the church’s authority was weakened.
Nath. Hodges, however, was one to stand his ground in his beliefs and tried to speak out against the groups who thought the plague came from stars.

“The Mischief was much more in the predictions of star gaters. Than in the stars themselves.”

-Nath. Hodges, M.D. - Loimologia- 53

With the number of people dying each day, the epidemic was now figuring out where to bury those bodies. Pits were made so multiple burials could be made at once, compactly. 54 Not only that but holding funerals was important to Londoners. With over 200 bodies being buried every day the church simply could not keep up. 53

Farming in Europe had changed forever during the plague. With hundreds of deaths a week, there was a labor shortage and the grain farms fell. The remaining workers pressed for a raise and the farming economy turned to raising livestock, such as sheep and cattle, because they were much less labor intensive. With that, the overall price of stock dropped to an all-time low 55 along with the population of London.

---


In the urban areas, the plague was virtually unavoidable. With housing so
crammed together and the famine of the cities rising, the heat of the summer
caused the plague to thrive. Illness was so contagious, if anyone in a family was
catcht with symptoms the whole house was shut in. Even if the other members of
the family didn’t have the plague, the risk of spreading the disease was too high.
The doors were locked and painted with a red cross \[56\], a sign meaning there was no
hope for the family inside and nobody was to go in unless it was to gather the
corpses. Those who didn’t have the red cross of death on their door decided to
spend their last days the way that they wanted. Whether it was atoning for their
sins or drinking till sunrise. \[57\]

Art and literature was also impacted. Artists were greatly inspired by the
epidemic. The figure of death was commonly found in the Arts, featured in
paintings, drawings, and a large theme in medieval literature. \[58\] \[59\] With the plague
came the introduction to the *Danse Macabre*: the *Dance of Death*. An idea where
skeletons escort humans to their grave in a lively dance. This was presented in a lot
of art during the Black Death to represent the mortality rate that was continually
rising. \[60\]

---

58 “Danse Macabre.” *Danse Macabre*, ipfs.io/ipfs/QmXoypizjW3WknFijgLwHCl72vedxjQkDDP1mXWo6uco/wiki/Danse_macabre.html.
Preventing the Epidemic

No one could see an end to this monstrous disaster. With a lower population, the filth in the city reduced\(^\text{61}\) and authorities decided to enforce laws in order to keep London clean. Leaders also thought it best to rid the street population of cats and dogs. They held a massacre and destroyed over 40,000 dogs and twice as many cats,\(^\text{62}\) all in hopes to cleanse the city's filth. Hiring proper servants tripled after the plague with higher pay, to which they kept London overall cleaner.\(^\text{63}\) The idea was- if the filth of the city went away so would the famine.

London's Triumph

London, susceptible to pestilence and a filthy city\(^\text{64}\), faced the Black Death with blood and tears. London today is considered one of the greatest cities in the world, their tragedy being the mass destruction that the plague caused. Millions of people died. Nations were completely wiped out, and even religions fell.\(^\text{65}\) Yet, through the worst of it, London pulled through with an eye-opening view. London became one of the greatest cities on earth. A place where people could to look for work, a prosperous city with large trading ports and harbours. To infer, Black Death


shaped what is the great city of London today.
This official document shows the front of what was the Bill of Mortality. The saying *Memento Mori* located at the top means *Remember you will die.*

This official document represents the casualties and burials each week. Here you can see the plague has a separate section counting casualties of 7165.
This official document represents a general bill of mortality with many misdiagnosed ailments and a separate section for the plague. With a rate of 68,596 deaths and 97,306 burials.
Annotated Bibliography

MLA8

PRIMARY SOURCES

Blackmore, Richard. *A Discourse upon the Plague, with a Preparatory Account of Malignant Fevers*. LONDON.

This direct excerpt from 1721 was written by Richard Blackmore M.D.. Written for the people of London during the time and sold for one shilling a copy. This piece is a little more biased than other given the sentiment on the popular subject- the plague. I used this fragment of history to better understand the medical, political, and emotional effects of the 17th century plague.


This guest posted translation of an introduction to 'The Decameron' focused on only a fragment of Giovanni’s work. It was a direct segment about the symptoms and what was considered fatal during the time. I used this segment to better understand detailed symptoms of the bubonic plague and the impact the epidemic had on the public.


This website contains scans believed to be written around 1314-1351, close to the years that the plague had hit London. The excerpt named, ‘Chronicle of Black Death’, describes the mortality from the plague and the shortage of agricultural workers. I used this to better understand the impact on workers, and the burials that they had to attend.


This documentary directed by World History walks through the lives of real people during the 17th-century plague. I classified this source as primary due to the quotes and because the film itself is grounded around Samuel Pepys daily journaling and Henry Dorsett's documenting of ‘every penny perish spent’. This documentary focused on a very specific alley area of London. I gained plenty of information and insight on a lifestyle during the plague.

Considering Nathaniel Hodges and Samuel Pepys were associated with RCP, the Royal College of Physicians, I’ve considered this source as primary. This article guest posted from Discover Medical London, Nathaniel Hodges helped medical historians understand what happened during the recurrence of Black Death. He had journaled his theories and studies which he performed on patients. RCP London kept these documents in hoped to educate others and grasp onto a piece of history.


Considering Nathaniel Hodges and Samuel Pepys were associated with RCP, the Royal College of Physicians, I’ve considered this source as primary. This article gives descriptions and graphs of infectious diseases that invaded England.


Considering Nathaniel Hodges and Samuel Pepys were associated with RCP, the Royal College of Physicians, I’ve considered this source as primary. This article shares segments from physicians about remedies and different quarantine measures taken.


This essay was written by Nath. Hodges M.D. who is a historical account of the plague in London. Nath. Hodges wrote statistics of the plague, collected data, and described current events. In ‘Loimologia’ I was able to learn about the rise and progress of the plague, what was thought to be the cause of the plague, treatments and possible cures, the raw experience of being around the plague, public opinion and its impact on society. I used Dr Nathaniel’s writings to better understand the plague and the society it reshaped.

This site contains paintings of Macabre. Including a painting called ‘Dance of Death’ by Michael Wolgemu in 1493. There are paintings ranging from the 1400s-2000s, which really emphasizes on the point that the plague had really impacted society for centuries.


This national archive gives multiple letters and documentations from the 17th century recurrence of the plague. Fragments from personal accounts such as: Henry Muddiman, Thomas Povey, Samuel Pepys, Joseph Williamson, Lord Chiefe Justice, and Daniel Defoe. I used these documents to better understand the form of communication, and politics behind the plague.


This Website is completely based around the ‘Diary of Samuel Pepys’. His diary, letters, family tree, any maps or discussions on Samuel Pepys is here. I used this to find specific journal entries and an easier-to-understand translation.

**Pepys, Samuel. The Diary of Samuel Pepys 1666, 1666, doi:2009.**

The Diary of Samuel Pepys. In his work I found he would mainly document on the ‘Bill of Mortality’ or the rate that the plague would spread each day. I noticed that the plague, while it spread quickly, also had a very sporadic rate. The numbers of death would go up and down every other week. He was one of the many who left London during the heat of the plague. I used his work to better understand a day in the life during an epidemic.


This oil painting represents part of the ‘Danse Macabre’ with an army of skeletons taking the lives of many people. Rich or poor. Young or old. Man or women. They were all taken and this painting clearly shows it. Bruegel paints this work in warm red and brown tones, setting a scene that gives an infernal aspect appropriate for the subject at hand. I used this painting to better understand how the plague impacted art on the 14th and 17th century artists.

Considering Nathaniel Hodges and Samuel Pepys were associated with RCP, the Royal College of Physicians, I've considered this source as primary. This article shares the herbs physicians of the college would have grown and used during the 1665 plague.


These are excerpts from personal accounts in France. The plague didn’t just hit London and I used these descriptions to better understand other places and impacts where the plague hit.


Considering Nathaniel Hodges and Samuel Pepys were associated with RCP, the Royal College of Physicians, I’ve considered this source as primary. Samuel Pepys actually had surgery during the plague. This made me understand that there were other things going on other than the plague, he had kidney stones. I also got a good understanding of the technology physicians had during the time.

SECONDARY SOURCES

Anders, Jessica. 

This thesis written by Jessica Anders focuses on the Dance of Death or Danse Macabre. I only used this to get a better understanding of the concept of Danse Macabre.


This website contains information about Bernt Notke, an artist in the 16th century. Compared to other artist during the time, he had over 50 saved documents on his Danse Macabre art work. I used his work to better understand the dance of death, mainly in his paintings.


Dr Elizabethanne Boran uses resources from the Edward Worth Library to compile a website about infectious diseases. She used them to create an article about the symptoms of the plague. I used this to better understand what type of symptoms a person might come in contact with during the medieval times.


This encyclopaedia informs about the dance of death. I used this site to completely understand the history of Danse Macabre and different paintings from the dance of death phase.

This book written by Joseph Byrne in 2004, gave me a better understanding about the modern medicine and medieval medicine used to fight of the disease. Along with the effects and reactions of society.


This website contains history of The ‘Bill of Mortality’ which was a way for every citizen to understand the situation of the death toll. The numbers and specifics of illness taking people. It tried to help everyone prevent any upcoming high death toll illnesses.

“Danse Macabre.” *Danse Macabre*, ipfs.io/ipfs/QmXoypizjW3WknFiJnKLwHCnL72vedxjQkDDP1mXWo6uco/wiki/Danse_macabre.html.

This website gave me a grasp on the concept of Danse Macabre. With visual aid such as paintings and translations I was able to better understand ‘Dance of Death.’


This website contains and video and transcript of Shiya Ribowsky, a forensic medical investigator, who discusses the tragedy of the 14th century. He talks about how the Yersinia Pestis spread, the contagion of the plague.


This site gave me a great understanding about the septicemic plague. The idea of blood infections and other cases of septicemia.


This article gave me a brief history of the ‘Danse Macabre’, which is exactly as it sounds. This was mainly used to fat check any misconceptions in the several documentaries I watched.

This site gave me a great understanding about the prevention, treatment, and symptoms of the Bubonic, Septicemic, and Pneumonic plagues. I used this site to better understand the transitions and causes of the different plagues.


This site gave me a better understanding of the impact. I wanted to have better grasp of what regulations might have been put into place and this site gave that to me.


This educational film gives visual aid of the impact the plague gave London, along with the other places Black Death hit. I used this film to give me perspective on the effects of the plague.


This was probably my most used source, Dan Snow who narrated and walked through the documentary film did live demonstrations of everyday life in Medieval London. This BBC series goes through the filthy cities of the world whether its historical or not.


This digital scan of ‘Contagion’ by Russle, Albert Francis Rollo from the Harvard Library specifies on “Epidemics, Plagues and Fevers: Their Causes and Prevention”.

This is a documentary film about the ‘return of the Black Death’, this film really gave a good description between the impacts of bubonic plague and the pneumonic plague.

“Treatment of Plague.” History | infectiousdiseases.edwardworthlibrary.ie/plague/treatment-of-plague/.

I've always known about the bubonic plague and how it kills you, but I never thought about the treatments doctors must have tried during the medieval times. This gave me information on what doctors like Nath. Hodgens, M.D. wrote in his studies.


This site gives a brief description of the plague in a village named Eyam. It also describes how the nursery rhyme ‘Ring around the rosie’ originated from the plague. I used this to better understand the plague overall.


This 1500 word article goes over the origin of the contagion and how it spread so quickly. It also covers that everyone feared the plague, there wasn’t a nation who had an alliance with it. I used this article to overall better understand the plague.


This PDF from the museum of London, gave a good description of London during Black Death. Giving visual aid such as pictures and painting to give me the best idea of what happened in 1348 and 1665.


This website shares little facts about the recurrence of the bubonic plague in 1665. I used this website to give me reassurance that some of the information received from my documentaries wasn’t completely biased or false.

This website describes the newly discovered grave pits that were from burials during the plague. I used this site to better understand the impact of the plague and the people the plague targeted.


This website briefly describes how the plague spread and who its targets were. Along with the reaction of populations whether it was then or now. I used this site to get a better idea of the reactional impact of the plague and why certain people died.


This site shares a history of Sanitary Sewers in multiple nations, including London. I used this site to better understand the impact the plagues had on London.


This website has an article about physicians and apothecaries who wore the heavy leather outfits. I used this site to better understand their experience and why they wore what they wore.


This site shares very descriptive terms for the Miasma Theory. I used this site to figure out what other papers meant by using the term 'Miasma Theory'.


This site describes the public response to the plague, whether it was: health, politics, or religious. I was able to better understand the reaction to the plague in London.

This website article written by Katie Serena touches on the history of medicinal bloodletting. I used this to better understand this form of treatment, why it was still popular, and if it really worked.


This site helped me to better understand symptoms and treatments for the plague.


This thesis written by Paul Theiner touches on the modern aspect of the plague. I used this to better understand how society would react to the plague today and what our approach might be.


This thesis written by Andrew Scott Warren also touches on modern aspects of the plague. I used it to better understand treatments and symptoms through the public health.


This site gives some documents from widowed mothers or children during the plague. Which gave me a better understanding of the personal accounts during the impact of the plague.


This thesis by Wayne A. Rebhorn is another translation of 'The Decameron' which gave me a general understanding and description of the plague.