

What did medieval people think caused the Black Death, and how did they respond accordingly?

The Black Death has been cited as the greatest human disaster prior to the twentieth century.¹ The disease swept across Europe, arriving in the East at Constantinople in 1347, reaching the far West, Iceland and Greenland, by 1350, then completing virtually full revolution, arriving in Russia by 1352. Few regions escaped: most lost a quarter to a third of their population, some as many as half.² This essay will argue that as medieval medicine did not understand the pestilence, contemporaries acknowledged three main causes: divine, natural and human. Firstly, the divine view thought the pestilence was a punishment from God. Secondly, looking to nature identified causes like planetary movement or miasmas. Thirdly, there was a belief that this disease was manufactured and caused by poison. Moreover, medieval people had an understanding of contagion and therefore viewed human transmission as a secondary cause of the disease. People responded to these perceived causes in three ways: violence, pursuit of protection or fear, and isolation.

The pestilence was a new and unknown disease,³ described by contemporaries as ‘unheard of’ and ‘unprecedented’.⁴ It was not until the nineteenth century that we began to understand the cause of the Black Death. During the Third Pandemic, Alexandre Yersin became the first person to accurately describe the plague pathogen, later coined *Yersinia pestis*. The pathogen was then proved to cause three variants of plague: bubonic, pneumonic and septicaemic.⁵ At the dawn of the twentieth century, Paul-Louis Simond identified that the black rat, *Rattus rattus*, and rat flea, *Xenopsylla cheopis*, were the vectors of the plague.

¹ John Kelly, *The Great Mortality* (London and New York: Fourth Estate, 2005), p. 9.

² David Nicholas, *The Evolution of the Medieval World* (Essex: Longman, 1992), p. 404-405.

³ Nigel Saul ed. *The Oxford Illustrated History of Medieval England* (Oxford: Oxford University Press, 1997), p. 160.

⁴ Kelly, p. 97.

⁵ Barney, pp. 172-173.

Robert Kock encapsulated the plague as ‘a disease of rats in which men participate’.⁶ Despite this, since 1980 some academics have disrupted the previously accepted position by proposing that the Black Death was not plague.⁷ They highlight that there is no observation of rat deaths from the chroniclers. However, this argument is not without fault. The claim that the Black Death could not have been plague due to the absence of *Rattus rattus* fails to consider that *Xenopsylla cheopis* can survive for six weeks without a host, therefore could travel in grain or cloth shipments. This illustrates that the deceased host may be hundreds of miles away from the region of the subsequent outbreaks.⁸ Furthermore, Wendy Orent stated that the human flea, *Pulex irritans*, could carry *Yersinia pestis*⁹ and consequently human-to-human transfer of the plague would be possible. This would make the absence of *Rattus rattus* irrelevant. Nevertheless, alternative causes of the Black Death have still been advocated: anthrax, an Ebola-like illness called haemorrhagic fever, typhus,¹⁰ and even an unknown or an extinct disease.¹¹ In 2001, it was acknowledged that ‘historians are less clear about what caused the Black Death than they were 30 years ago’.¹² In addition, Mike Baillie added climate change and possible comet strikes to the debate as a potential cause in 2006. He believes the disease was air-borne and caused by biological pathogens released into the earth’s atmosphere by comets.¹³

On the other hand, the view of plague as the disease of the Black Death has received recent support due to the discovery of *Yersinia pestis* DNA in several burial sites of medieval plague victims.¹⁴ Despite this, tests on other plague cemeteries proved negative and the

⁶ Kelly, p. 42.

⁷ Kelly, p. 113.

⁸ Kelly, pp. 19-20.

⁹ Kelly, pp. 35-36.

¹⁰ Barney, pp. 172-175.

¹¹ Kelly, p. 296.

¹² Daniel Waley and Peter Denley, *Later Medieval Europe 1250-1520*, 3rd edn (Harlow, Pearson Education Ltd, 2001), p. 100.

¹³ Barney, pp. 172-173.

¹⁴ Waley and Denley, p. 100.

arguments against plague have been published as late as 2011. There is a view the detection of *Yersinia Pestis* DNA only verifies that bacillus was present, not that it caused it the Black Death. ‘Plague Deniers’ would be more convinced if the DNA was found in all victims of the Black Death and in none of the skeletons from before the outbreak.¹⁵

As even modern scholars are in disagreement over the cause of the Black Death predictably medieval medicine was helpless. In 1350, Montpellier doctor, Simon de Couvain confessed that ‘the art of Hippocrates was lost’¹⁶ and papal physician, Guy de Chauliac, believed ‘the disease was most humiliating for the physicians, who were unable to render any assistance’.¹⁷ Some Italian chroniclers also express that there was limited faith in medicine; they alleged that doctors either ran off with your money or made you die quicker.¹⁸

As medieval medicine was at a loss, people turned to God. The Black Death was seen by many to be caused by the fury of God upon an errant people.¹⁹ This may seem peculiar to a modern mind; however, it is important to note the medieval belief that most sickness was due to sinfulness.²⁰ It was understood in the East that God was inflicting the disease upon individual sinners, whereas, in Western Christianity, the interpretation was that the pestilence was imposed on society as a whole to collectively pay for sinfulness.²¹ People reacted to this apparent cause in two ways: violence or turning to God for prevention. The first means of violent act was self-inflicted. The Flagellants referred to as ‘Brotherhood of Flagellants’ or ‘Brethren of the Cross’ were well organised and arose in spring 1349. Their aim was to imitate Christ’s suffering for thirty-three and a half days, a day for each year of his life, in order to repent for the sins of the people. In fact, the Flagellants pre-dated the Black Death

¹⁵ Barney, pp. 173-174.

¹⁶ Samuel K. Cohn Jr. ‘Past & Present’, *The Black Death and the Burning of Jews*, No. 196 (Aug., 2007), p. 10.

¹⁷ Johannes Nohl, *The Black Death* (London: Unwin Books, 1961), p. 45.

¹⁸ Cohn, p. 10.

¹⁹ Sean Martin, *The Black Death* (Harpenden: Pocket Essentials, 2001), pp. 19-22.

²⁰ Nohl, p. 46.

²¹ Karen Jillings, *Scotland’s Black Death* (Stroud: Tempus, 2003), pp. 113-114.

and were banned in 1262; despite this they reappeared with this crisis.²² They were thought to be appointed by God; the chroniclers explain that the Flagellants referred to a letter written by Jesus that had fallen from the sky. This was a violent movement as when they marched, they whipped their half-naked bodies with a stick that had three tails with large knots and ‘iron spikes as sharp as needles’. This caused participants to become bruised, swollen and bloody, and the spike was sometimes imbedded in the skin so deeply that it was not easily removed.²³ In spite of initial support from the Church, Pope Clement VI prohibited the movement in October 1349.²⁴ The second form of violent response prompted by the belief that the Black Death was caused by God’s punishment of sinfulness²⁵ embodied, attempted violence towards others. An example of this is that the Scottish thought the Black Death was ‘the horrible vengeance of God... on the English’ and they planned to invade England.²⁶ In summer 1349, the Scottish, trusting that the Black Death was ‘God’s dreadful judgement’ on the English gathered forces at Selkirk, although they caught the pestilence before they were able to massacre the English.²⁷ The use of violence in response to a belief that the Black Death was a punishment from God was not just seen among Christians. Grenadian physician, Ibn al-Khatib, was murdered by a Muslim mob for stating that contagion spread the pestilence; according to Islamic teaching God decided who lived and died in an epidemic. Christian writers were free to express the idea of contagion;²⁸ however, as in the case of the ill-fated Scots, religion, and violence sometimes took precedence.

The belief of divine intervention as the cause of the Black Death did not comprehensively manifest violent reactions; people also reacted by turning to God for

²² Kelly, p. 265.

²³ George Deaux, *The Black Death 1347* (London: Hamish Hamilton Ltd, 1969), pp. 180-182.

²⁴ Rosemary Horrox (transl. and ed.), *The Black Death* (Manchester: Manchester University Press, 1994), p. 96.

²⁵ Kelly, p. 18.

²⁶ Deaux, pp. 140-141.

²⁷ Jillings, pp. 23-24.

²⁸ Kelly, p. 172.

prevention. God had sent the pestilence, consequently God could end it. As Magnus II of Sweden believed that the disease was due to an angry God he ordered 'foodless Fridays and shoeless Sundays.'²⁹ In August 1348, the Bishop of Bath and Wells circulated letters ordering processions and stations every Friday in each church to beg for God's protection. He also granted an indulgence of forty days to anyone denoting alms, fasting, or praying to avert God's anger.³⁰

The second medieval explanation for the Black Death was remote or natural causes, such a bad air or movement of the planets. This is another idea which may immediately appear strange to modern medicine; however, does it have any parallels with theory put forward in 2006 by Baillie? Medieval minds adopting the teaching of Roman doctor, Galen, thought that the plague arose from miasmas or dense clouds of infected air. This view was embraced by the eminent Paris medical faculty, who also accepted the view that the pestilence was caused by 'an unusual conjunction of Saturn, Mars and Jupiter' on 20 March 1345. People responded by again seeking methods of prevention, conversely turning to nature rather than God. The 'prince of physicians', Gentile de Foligno, recommended inhaling herbs as an antidote.³¹ Other reactions included burning fragrant woods like juniper, aloe, rosemary or oak, and in the summer months, using flowers sprinkled with rosewater and vinegar and when outdoors, carrying a smelling apple or herb. Bonfires were also thought to be effective and were lit on street-corners. To prevent bad air entering your pores, the advice was to avoid sex, exercise and baths; diet was also central to balance the four humors.³²

Alongside divine and natural causes, the people of the Middle Ages assumed a human cause and blamed one another. The blame fell upon 'Others', people who were seen as different or foreign; someone who is not like you or is outside of your society. In the Black

²⁹ Kelly, p. 27.

³⁰ Deaux, pp. 118-119.

³¹ Kelly, pp. 18-25.

³² Kelly, pp. 172-173.

Death the primary 'Other' was the Jews; however, Catalans, foreign beggars and the poor were all scapegoats accused of poisoning wells, food and streams.³³ In January 1349, Basel burned their Jewish inhabitants on an island in the Rhine. In Strasbourg, they burned Jews in local cemetery in an attempt to stop the pestilence, although the Black Death still came.³⁴ On the other hand, in Barcelona, the Jews were killed for the sin of being Jews, not because they were suspected of poisoning.³⁵ The blaming of Jews was not a view supported by the Church. On 26 September 1348, Pope Clement VI stated that Jews were dying like the Christians, so why would they poison themselves? He also highlighted that the English were dying, where there were no Jews.³⁶

The final reaction commonly seen during the Black Death was one of fear and isolation. This was caused by the knowledge that the pestilence was contagious. Medieval medicine may not have been able to identify the primary cause, however they knew a secondary cause of infection was to contract it from the dead or the dying. Michele da Piazza said 'if anyone so much as spoke with one of them he was infected... and could not avoid death' and he explains that fathers abandoned their infected sons.³⁷ The response to the risk of contamination was to flee; some priests neglected their posts,³⁸ and doctors refused to treat patients. Guy de Chauliac confessed that he did not flee solely due to fear of disgrace.³⁹ In Venice, there was such a mass exodus that the authorities issued an ultimatum to absent civic workers: return or lose their jobs.⁴⁰ When people were unable or unwilling to flee, they ensured that the infected or, the potentially infected, were isolated. For instance, in Milan they reacted by segregating the sick. Additionally, in Venice they impounded all vessels

³³ Cohn, pp. 4-9.

³⁴ Kelly, p. 26.

³⁵ Kelly, pp. 252-253.

³⁶ Cohn, p. 14.

³⁷ Kelly, pp. 83-85.

³⁸ Deaux, p. 120.

³⁹ Nohl, p. 47.

⁴⁰ Kelly, p. 94.

wishing to enter the city for forty ('*quaranta*' in Italian) days, later coining our word quarantine. This shows that people had an understanding of contagion, were fearful of it, and reacted by distancing the threat.⁴¹

In conclusion, this essay has illustrated that the medieval world, quite reasonably based on their connection between sickness and sin, believed in a divine cause. The first response was violence; either towards the people that they believed God was punishing, or self-inflicted to mirror the suffering of Jesus. The next response was to ask God to prevent the disease through prayer and pious works. The second assumed cause was their environment, either miasma or planetary movement. In reaction to this cause medieval people again sort prevention; however they turned to nature instead of God. The third and final perceived cause was a human one, either deliberately instigating the disease with poison or involuntarily contaminating others. Each of these saw a different reaction; the deliberate instigation was met with dreadful violence, whereas the idea of contagion produced a reaction of fear and isolation, such as fleeing from the infected regions or separating infected from the healthy.

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⁴¹ Jillings, p.160.

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