

1 Black Death

The disease commonly known as the Black Death, or simply as 'the plague', has been recently identified as a haemorrhagic viral infection, transmitted from one person to another by airborne droplets. Scott and Duncan (2004) have presented comprehensive evidence to support this theory. They give credit to Dr Graham Twigg, a zoologist, who recognised in 1984 that the facts known about the plague were incompatible with the widely accepted view that it was bubonic plague, transmitted by rats and fleas. An example of the evidence is that the advance of plague was effectively stopped by strict forty-day quarantine, a restriction which would not be a barrier to rats. Indeed, where there were outbreaks of bubonic plague, in the warmer Mediterranean countries, such quarantine was ineffective.

Outbreaks of Black Death occurred throughout Europe in the 300 years from the mid-fourteenth century. The disease was always fatal, and spread rapidly, causing panic and despair among the population. Its rapid spread can be understood by looking at the characteristics of the disease. Following an initial latent period of about ten days, there was an infectious period of about 20 days before the appearance of symptoms. Once symptoms appeared, death followed within five days. The infectious period before any symptoms appear is much longer than for most diseases, and explains why the plague spread so relentlessly. A traveller might cover a considerable distance, even on foot, in the four weeks between picking up the infection and displaying symptoms. In a town, with large numbers of people in close contact with each other, the three week infectious period before symptoms ensured that virtually the whole population would be exposed to infection. The spread of the disease was accelerated by people, unaware that they were already infected, fleeing from outbreaks.

A typical pattern of the epidemic in a town would be increasing deaths for four months, a plateau of six weeks, and a declining period of three months. Total deaths could be at least 50% of the population; some people had a natural immunity. In the countryside, especially away from trade routes, the disease was less virulent. Country villages, especially if away from a main trade route, were less susceptible to outbreaks. If an outbreak occurred, preventing the movement of people in and out of the village was an effective means of control, as famously happened at Eyam in Derbyshire.

2 Black Death in England and the North East

Possibly the most comprehensive work on the 'Great Pestilence' is by Shrewsbury (1970). Although he accepts the old theory of rat and flea transmission of the disease, this does not compromise his extensive data from contemporary records and twentieth century studies. The 'Great Pestilence' or plague, only later known as the Black Death, first visited England in the mid-fourteenth century. Beginning in Sicily in the summer of 1347, the epidemic spread rapidly across Europe to reach as far as the Baltic in the summer of 1350. The English Channel offered no protection, and an unknown carrier of the Black Death landed at a Dorset port in the summer of 1348. It was spread along trade routes, reaching York in May 1349, and thence to Newcastle-upon-Tyne. The north had already been weakened by incursions from marauding Scots, culminating in the Battle of the Standard in 1346.

Ecclesiastical records for the diocese of York, analysed by Thompson (1914) show that across the 535 parishes about 45% of the parish clergy died in the 1349 epidemic. This data shows up the differences between population centres on trade routes, and the open countryside: the death rate in Doncaster was almost 60%, but virtually nil in the parishes between Doncaster and the Humber. This is not to say that all rural communities were safe. At Wharram Percy the population was so reduced that the side aisles of the church were pulled down and never rebuilt.

After this first epidemic, plague appeared at intervals for the next 300 years (Zeigler, 1969; Shrewsbury, 1970; Scott and Duncan, 2004). Arrival points for travellers from abroad were vulnerable, and there were regular visitations at Newcastle, York and Hull. The second national epidemic was in 1360-1361, when it moved up from London to York. London was struck in 1499-1500, and again in 1531. In 1538 plague broke out in York and, despite efforts to isolate the city, spread to Durham and Newcastle. York again suffered in 1550-1551, probably losing half its population.

In 1543 the 40-day quarantine period was officially adopted. There were outbreaks in 1563-1564. In 1597 plague broke out in Newcastle, no doubt brought in by an arrival from mainland Europe, and spread down the Great North Road to Durham and beyond. It had appeared in Darlington and Richmond by August 1597.

Plague struck Newcastle-upon-Tyne in 1603 and spread south towards York, where it took many lives in the following year. In 1625 the Quarter Sessions due to be held at Thirsk were transferred to Allerton because of plague at Sowerby. There was an outbreak in Lancashire and Yorkshire in 1631. In 1636 there was another outbreak at Newcastle. At its height there were 350 deaths per week, with an estimated total death toll of over 4000.

The best-known occurrence of the plague in England was the Great Plague of London, vividly described by Samuel Pepys and others. It began in 1665 and continued into the following year.

3 Plague in Cleveland

The 1349 outbreak in York certainly affected Cleveland. Thompson (1914) lists the new chapels and churchyards which were dedicated to the burial of plague-dead in the period June to August of that year. They included Wilton, Seamer, Brotton, and Guisborough, where the existing churchyard was extended. He also quotes the mortality among the beneficed clergy in three deaneries in the Archdeaconry of Cleveland: approximately 21% in Cleveland, 28% in Ryedale and 52% in Bulmer (the area immediately to the north of York).

Documents known as Inquisitions 'Post Mortem' are investigations what lands had been held by the individual, by what rents and services they were held, and details of the heir to the land holding. As such they contain information in the 'extents' of valuations of land and rents. Harrison (1983) has studied unpublished 'extents' for manors in Langbaugh Wapentake between 1307 and 1399. He says that the Black Death was held responsible for the desertion of Castle Levington in 1350; while the low income from Great Ayton in 1353 is blamed on a dearth of tenants which may well have arisen from the same cause. Other post-1349 'extents' in places like Greenhow and Whorlton point to a severe contraction with many tofts and bovates of land described as waste.

4 Plague in Ayton

Professor Pollard has shown how Ayton was in a poor condition to withstand the first appearance of the plague in 1349 (2007). In the fourteenth-century, before the appearance of the plague, Ayton had been impoverished by a decade of appalling harvests, made worse by the impact of Scottish raids. Its ecclesiastical tax burden was reduced by 50%. There is evidence that the first occurrence of the plague in England did affect Ayton in 1349. O'Sullivan (1996) quotes the value of the two mills in Ayton as shown in an Inquisition made at the death of John, Earl of Kent, in 1353, four years later. The mills then were only worth about 10% of their value in 1282. The document commented 'and not more, on account of the lack of tenants and the weakness of the soil'. There is also mention of 14 bovates of land 'which lie waste and are worth nothing in herbage or in any other profit'. It can be assumed that this devastation was the result of plague in Ayton.

After this first epidemic, plague could have come to Ayton at any time via a traveller from one of the larger towns where an outbreak had occurred. The possible dates, extracted from Shrewsbury (1970), are:

1361 Plague at York

1538 Plague at York, Durham and Newcastle

1550-51 Plague at York

1597 Plague at Newcastle, Durham, Darlington and Richmond

1626 Plague in North Riding parishes

1631 Plague in Lancashire and Yorkshire

1635-36 Plague started at Hull, Yarmouth and London. Some 28% of the population of Newcastle-upon-Tyne died in 1636.

1645 Plague in numerous places in Lancashire and Yorkshire

Unfortunately there are no records available to us prior to 1600, but the Great Ayton Parish Registers for burials exist for the period between 1631 and 1636 (Kaye, 1931). It should be noted that until 1752 the Julian calendar, with March being the first month, was in use.

1631 Oct (1), Dec (1), Jan (2), Feb (3)

1632 Apr (1), Jun (1), Aug (1), Sep (1), Nov (1), Dec (4)

1633 Mar (4), Apr (1), May (2), Jun (3), Aug (1), Sep (2), Nov (2), Jan (2), Feb (3)

1634 Mar (3), May (1), Jun (1), Jul (1), Aug (1), Sep (1), Oct (1), Nov (2), Dec (3), Jan (1)

1635 Mar (3), Apr (3), May (3), Jul (2), Aug (1), Oct (2), Nov (3), Dec (3), Jan (5), Feb (2)

1636 Mar (3), Apr (5), Jul (1), Aug (3), Sep (1), Nov (2), Feb (2)

1637 no records for this year

1638 Apr (2), May (1), Jun (2), Jul (3), Sep (2), Oct (1), Dec (1), Feb (5)

1639 Mar (3), Jul (3), Aug (2), Sep (2), Oct (2), Dec (1), Jan (1), Feb (1)

1640 Apr (1), Jul (1), Aug (1), Nov (2), Jan (3), Feb (2)

It looks as if Ayton escaped the Yorkshire outbreak of 1631, but there is almost a doubling of the usual death rate over the winter of 1635-36. At this time the population of the village was perhaps about 400. For each year, the number of deaths and the corresponding death rates were as shown below:

1631 7 2%

1632 9 2%

1633 20 5%

1634 15 4%

1635 27 7%

1636 17 4%

1637 no records for this year

1638 17 4%

1639 15 4%

1640 10 3%

For the total period 1631-1640, the average number of deaths was 15, equivalent to a 4% death rate

One of the starting points of the 1635 outbreak was Hull, with the disease reaching Newcastle in May 1636 (Shrewsbury, 1970). Therefore it is possible that this increased death rate in Ayton, situated between Hull and Newcastle, was due to the plague.

Thus it can be inferred from the available evidence that there were at least two occasions when plague affected the village. In 1349, when the first country-wide outbreak reached Yorkshire, the village must have been devastated. A third of the population of York died during this outbreak, and the death rate in Ayton may have been similar. Almost 300 years later, in the winter of 1635-36, the toll was much reduced. By this time understanding of the nature of the disease had developed, and effective precautions available.

5 References

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