

HISTORICAL ARTICLE

Aberdeen's Plague Epidemic of 1647-48

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Abstract

This article discusses the plague epidemic that broke out in Scotland in the mid 1640s, particularly its effects on the city of Aberdeen where it remained virulent from April 1647 until the end of the following year. Prevailing medical understandings of disease causation and transmission will be discussed, and it will be shown that governments attempted to restrict outbreaks in accordance with these beliefs. The spread of plague throughout Scotland from 1644 will be summarised, with the focus on the impact of the disease on Aberdeen in 1647-48. The surviving council registers and other primary sources will be used to show how the city's governors responded to the dual threat of miasma and contagion in well-established ways.

Key words/short phrases

Plague, epidemic, outbreak, Aberdeen, history

Medical beliefs about plague transmission

In the seventeenth century medical understanding of disease causation, the subject of a large number of treatises written in either the vernacular or in Latin, was still based largely on ideas first expressed by classical writers such as Hippocrates and Galen. Though it remained debatable precisely *what* was transmitted during the process of infection (with Galen having advanced the notion of 'seeds of disease' entering the body through its pores),¹ it was generally accepted amongst the medical writers of the day that disease could be spread in two theoretically distinct (but in practice interchangeable) ways. The first of these was miasma, that is, the spread of plague through a corruption of the air, while the second, contagion, entailed contact with sources of infection, be they people, animals or inanimate objects such as cloth. Empirical observation taught contemporaries that the air could become corrupted through foul odours and unclean environmental conditions, which then generated a miasma. Contagion occurred through contact with infection though, unlike our modern understanding of the principle, in the early modern period this could entail both direct and indirect contact with the perceived source of contamination. Both miasma and contagion had the ability to infect any person within the locality, taking into account a number of other considerations which influenced an individual's susceptibility to

plague. One such consideration was his or her particular physiological make-up, which took into account both specific factors such as age and sex as well as general factors such as the time of year or juxtaposition of the planets in order to determine the likelihood of becoming infected. This was further influenced by the Galenic doctrine of the humours, which maintained that all illness resulted from an imbalance in the four humours (phlegm, blood, yellow bile and black bile) of which the body was composed. The particular humour linked to plague was blood, as both shared the characteristics of being hot and wet (conditions which were themselves ideal for generating corruption). This allowed physicians to explain why certain individuals could apparently recover from plague or escape it completely despite sharing a common (polluted) environment with those who did succumb to infection.

Bureaucratic responses to plague epidemics

Governments throughout Europe at both the local and the national level implemented legislation designed to prevent or eliminate plague in accordance with prevailing medical beliefs about its transmission. Authorities in Scotland took their lead from continental Europe and had imposed preventative measures since the early fifteenth century, decades ahead of their counterparts in England. Throughout the sixteenth and first half of the seventeenth centuries these were decreed to varying extents in Scottish urban centres during times of plague. Since potential or actual sources of infection were best avoided, magistrates monitored their town's official entrances for anyone wishing to enter or leave it, all of whom had to be licensed. In order to remove the possibility of infection arising from a polluted environment, efforts were made to clean up communal water supplies, limit the movements of domesticated animals including pigs, cats and dogs, and remove the everyday rubbish that habitually piled up in the streets. Those residents who did succumb to plague were segregated from healthy inhabitants by being forcibly enclosed within their houses or removed to purpose-built plague huts outside the town boundaries, with a strict regime for the limiting of contact to be adhered to by clerics and physicians whose duty it remained to visit the sick. Goods suspected of harbouring plague were subjected to disinfection through burning or boiling by specially-appointed workers (known as cleansers), and incoming ships could have their crews quarantined and their cargoes impounded. Each of these measures was designed to limit the spread of infection by either contagion or miasma and, as will be shown, many of them were implemented in Aberdeen during the mid-seventeenth century.

The spread of plague throughout Scotland: 1644-47

In the middle of the seventeenth century the affluent north-east port of Aberdeen had escaped plague outbreaks for almost a century. When it did strike in 1647 the city was already in the grip of political and social upheaval as a result of its centrality to the civil wars of the mid 1640s. The wars caused the spread of plague to Scotland around the end of 1644, when infected soldiers returning from the siege of Newcastle unwittingly carried it through the Border shires of Berwickshire and Roxburghshire to Edinburgh's port of Leith.² Here the virulence of the outbreak prompted the local authorities to declare in August 1645 that 'the number of the dead exceeds the number of the living', necessitating the appointment of additional gravediggers and cleansers.³ Infection also raged within the city of Edinburgh itself and did not abate until December of that year,⁴ forcing both local and national government bodies to hold their meetings at nearby Linlithgow and Burntisland instead.⁵

In spite of these precautions the disease spread slowly northwards and to the west, infecting settlements along the southern coast of Fife, Perthshire (including Perth in August 1646)⁶ and Stirlingshire.⁷ Two residents of Dundee died in October 1646 and 'there was found some blue spots on their corpses', an ominous but unmistakable sign of plague.⁸ The disease also spread westwards, with Govan and Paisley hit before the city of Glasgow succumbed by the end of 1646.⁹

Plague breaks out within Aberdeen: 1647-48

By 1647 plague encircled Aberdeen, having spread north to Peterhead and much of the city's rural hinterland.¹⁰ The local magistrates responded with a number of standard precautionary measures including monitoring visitors to the city and prohibiting citizens from trading with those in the countryside.¹¹ But their actions failed to prevent the disease encroaching on the city itself. It broke out in Pitmixon, on the southern outskirts of the city, and was said to have been spread there by a woman who had travelled from Brechin, where plague was rife. She had conversed with local children, leading to the deaths of two members of their family.¹²

Once infection was acknowledged to have broken out within the town itself, the authorities took immediate action in accordance with contemporary medical views about how plague was spread. Because of the perceived link between infection, dirt and foul odours, dung heaps were to be removed from the streets. Since animals were believed to have the ability to transmit infection, dogs and cats were ordered to be killed, and poison was to be laid 'for destroying mice and rats', the first such regulation of its kind. It was also considered important to limit contact with potentially infected people and places, so the entrances to the city were to be watched, 'stranger beggars' were to leave town, and all members of any infected household were to be enclosed.¹³

Despite these regulations plague continued to spread throughout the city, prompting the council in nearby Old Aberdeen to forbid anyone entering the burgh without a licence and to clamp down on sermons taking place (since they were communal gatherings).¹⁴ The Aberdeen authorities in particular fell victim to the ravages of the epidemic, with council meetings frequently held in alternative locations or cancelled altogether, as happened between May and August 1647.¹⁵ When they were able to convene once more they immediately appointed an official cleanser and ordered another resident to return confiscated items of infected clothing 'to the right owners'.¹⁶ Sickness was to be reported and goods were to be forfeited

and cleansed.¹⁷ It was also necessary to petition parliament for a loan of £1,500 to support those who had fallen victim to plague.¹⁸

These funds were desperately required as the epidemic continued to rage into the new year, prompting the employment of cleansers from both within¹⁹ and outside of the burgh.²⁰ Another local was paid handsomely 'for his good service, excessive pains and travel' during the outbreak,²¹ while another received £20 for his provision of some vinegar used to cleanse the town of infection.²² By the summer of 1648 a further two residents had to be employed as cleansers and those suffering from plague were given the financial support of a one-off payment.²³ In recognition of his services in 'visiting and curing the poor people during the time of the infection' James Leslie, 'doctor of phisick', was later granted exemption from all taxation by the council.²⁴

The effects of the outbreak

By the end of 1648 the epidemic had abated, leaving residents and magistrates to count the cost of the devastation. It is impossible to disentangle the economic and demographic damage caused by plague from the similar effects of the concurrent civil wars and the council itself remarked in May 1649 on 'the great losses of men this town has had by the war and pestilence'.²⁵ The likely high fatalities due to plague were mirrored throughout Scotland as a whole, with a suggested one urban dweller in five dying from the disease. Leith lost well over half its residents, Edinburgh at least a quarter and Brechin as much as two thirds.²⁶ In Aberdeen itself residents were not so badly affected, with the total number of recorded inhabitants immediately before the outbreak dropping by 8.5% in the early 1650s. The north-east as a whole experienced a dramatic rise in the number of burials almost certainly as a result of the epidemic, with the mortality index in 1649 (99) nearly twice that of the previous year (51).²⁷ Fewer people entailed fewer births, with a decline in the number of registered baptisms in Aberdeen's parish of St Nicholas during the late 1640s that did not recover until five years later and stabilised only in the 1660s.²⁸

Aside from the human cost the plague resulted in a high financial cost too due largely to the outlay required to deal with severe mortality, with the council in 1654 estimating the total in/direct losses from the two-year epidemic to be £30,000.²⁹ Graves had to be dug and re-covered,³⁰ and corpses buried and covered in lime.³¹ Much manpower was also required to build and guard the plague huts that housed the infected during the outbreak, and to build, carry and erect gibbets for executing any resident who contravened plague statutes (though there is no definite record of them ever being put to use). A cleanser had to be summoned from Leith at considerable expense, two massive locks were purchased to secure the Bridge of Dee and letters were sent to numerous barons on Deeside, instructing them to keep watch for those coming from places where plague was believed to have broken out.³² This financial outlay, required on a similar scale in Scotland's other major urban centres, was made worse by the economic disruption caused by trade restrictions imposed during the epidemic, which pushed prices up due to a scarcity of commodities.³³ A nationwide tax assessment in the 1650s found that at least six of the country's nine wealthiest towns had been seriously affected by plague.³⁴ The financial cost necessitated by the bureaucratic implementation of plague legislation gives an accurate indication of the seriousness with which urban authorities regarded the outbreak. It also shows their

recognition of prevailing medical understandings of miasma and contagion, and the steps they were prepared to take to safeguard communal public health during the nation's worst, yet final, plague epidemic.

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