Death and disease in the Community, 1400–2010

The LPSS Autumn conference 2011 was held at The University of Leicester’s Centre for English Local History on Saturday 12 November 2011. The organisers, Dr Samantha Williams of Cambridge and Dr Graham Butler, Newcastle, both officers of LPSS, welcomed more than 60 delegates and speakers.

Panel one: Disease and mortality before 1750

‘A plague on both your houses: college insights into medieval mortality’, Dr Rebecca Oakes, Cambridge University.

Dr Oakes used the extensive records kept by Winchester Grammar School and New College, Oxford, both founded by William of Wykeham in the second half of the fourteenth century. The Black Death of 1348–1350 had profound economic and demographic consequence, leading to a drop in population between one-third and one-half. The population failed to recover to early fourteenth century levels until the 1750s and the reasons for this constitute a major historical problem, but lack of documentation makes it difficult to discover why this is so. Manorial court and other civil records are difficult to assess because the base population is unknown. The records of monastic communities have proved more useful in studying mortality, because they are closed communities, as are Winchester Grammar School and New College, Oxford.

These institutions hold detailed and unbroken record, of the 70 pupils at Winchester, and the same number of students at Oxford. Pupils at Winchester replaced students at New College as they left to go into the wider world, usually within two weeks, as places became available. The Winchester admissions register includes place of birth, age and reason for leaving. Hall books list students who are present from day to day, so that it is clear who has just arrived and who has left or died.

Conditions at Winchester were far from ideal. There was a lack of physical space, with 12 to a room and under 14-year-olds sharing beds. Scholars were not allowed to leave the school precincts, giving them little chance of breathing fresh air. The water supply was polluted and the dietary allowance of 8p. a week together with half a pound of bread and a pint of beer compares poorly with a typical monk’s provision of 4s. a week. Some scholars went home at Christmas or Easter and may have brought illness back with them. In Oxford things were better: there was more space; the college had its own well and toilet
block; there was also an infirmary. When a contagious illness was present the entire foundation rusticated, Winchester as a whole, New College separated into different faculties to go to different locations.

Winchester experienced mortality peaks in 1401, 1430, 1456 and 1470, New College in 1435 and 1464 with rates of over 150 deaths per 1,000 members. Comparison with the monks of Canterbury, Durham and Westminster Abbey show different patterns with more severe death rates in the later period in Canterbury and Durham, while Westminster and Winchester both had high death rates in the earlier period. These differences indicate that mortality rates were influenced by region, however communal living could lead to exceptional spikes in mortality, in contrast to a less pronounced pattern in the general community.

‘From plague to pox: mortality in London between 1550 and 1750’, Ms Gill Newton, Cambridge University

The speaker acknowledged that it is difficult to distinguish cause of death from parish registers and Bills of Mortality because the art of diagnosis was not well developed. Four categories ‘plague’, ‘consumption’, ‘pyning’ and ‘ague’ account for 90 per cent of cases in the sixteenth century, these categories reflecting a concern to identify infectious diseases. However, age is almost universally recorded, with some accuracy up to 25, but with ‘age heaping’, ages clustering at ‘round’ numbers, for older people. The areas studied were Clerkenwell, Cheapside and Aldgate. In the period 1558 to 1708, the population of Cheapside was small and static, while that of Clerkenwell and Aldgate grew rapidly after 1580. This increase was due to migration as burials outstripped baptisms throughout the period. It is significant that migrants were particularly susceptible to disease as they lack resistance.

A graph of London burials 1560 to 1760 showed a noticeable volatility in burials before 1665, with a decrease of year-on-year variation in mortality in subsequent years. In contrast, Ipswich mortality rates were much more consistent, spikes were much lower in ‘plague years’, but volatility continued after 1665. In plague years, 90 per cent of all deaths could be due to plague. (There were several years with high mortality by illness identified as plague, which were not designated as plague years.) Smallpox deaths were more predictable at around 20 per cent of deaths from 1630 to 1750, with 90 per cent of victims under ten years old. Although dropsy was sometimes confused with ‘plague’, identification of plague is more secure than that of ‘smallpox’, the ‘pock-less’ version of which might be missed and other ‘spotty diseases’ might be mistakenly included.

Plague deaths were concentrated in childhood and early adulthood, deaths among those aged 2 to 20 were a major component of deaths in plague years but hardly registered in normal years. There was a marked decline in deaths of those aged five to nine years after 1665. The higher mortality was due to a lack of immunity but may also indicate that plague was endemic in the city throughout the study period up to 1665. Smallpox deaths
clustered at an earlier age, for example in the sample for 1586 to 1594 68 per cent of deaths were under five and 23 per cent between five and nine years. Figures from other Parishes confirm the rate for under fives but not for later childhood: in Quaker records and those for St Martin in the Fields, the number of deaths due to smallpox in this age group are much lower.

A lively question and answer session ended panel one. The first question concerned the reliability of records, particularly in relation to under registration due to the traffic in corpses. Ms Newton had considered this but had found no pattern, so concluded that this had no discernible effect on the volatility of mortality. A delegate queried the ‘closed’ nature of Winchester College. Dr Oakes agreed that the college received many visitors, particularly from New College, but thought that the boys would not have come into contact with them. Dr Oakes was asked whether she had been able to compare her figures with the mortality of the general population. The reply was that while this is problematic in the early period the data set will be extended into the sixteenth century to allow such a comparison.

Panel two: Death, disease and dissection in the Metropolis, c. 1700–1930

‘Undertakers to the poor? Westminster workhouse, 1725–1824’, Professor Jeremy Boulton University of Newcastle and Dr Leonard Schwartz, University of Birmingham

Professor Boulton emphasised that workhouses were dangerous environments. They were overcrowded, the healthy and the sick intermingled, conditions and diet were poor and they lacked that Victorian obsession, good ventilation. Rules and regulations of some workhouses show a desire for cleanliness: fumigation of beds, good ventilation, separation of the diseased and the well. However, it is not certain that these regulations were followed. John Howlett has shown that mortality of the under 15-year-olds in Houses of Industry was five times that of the equivalent general population. On the face of it death rates for London workhouses 1772–1774 were catastrophically high, but this is deceptive. Rates are elevated for a number of reasons: there was a steady throughput of inmates and a large proportion was already ill, dying or even already dead.

The Westminster workhouse has a good range of documents that shed a useful light on mortality. There were about 400 people living in the workhouse from 1725 to 1775. It was rebuilt in the late 1770s, numbers reached a peak of 900 in 1780s then steadily declined during the Napoleonic War. It was a large building with multiple stories and built round a churchyard.

During the first month of admission a high proportion died probably because they were already ill. The admission and discharge records were examined and showed a dramatic improvement in survival rates with increasing length of stay. (For the purpose of analysis, only the inmates who were healthy on discharge were included, those in ill health were screened out.) Genuine improvements in survival rates were seen from 1725 to 1749 and
1800 to 1824 in those who were ill on admission and the young. Death rates decreased from birth to 15 years, particularly infant mortality. A peak of deaths at 8–10 days may have been due to neo-natal tetanus, which is still a major threat in the Third World. After 1783 there was a change in the way still-births were recorded. Until that date, neonatal deaths, in the first few days of life, were regarded as still births.

Professor Boulton concluded that while workhouses were not desirable places, entry into the ‘house’ was not necessarily the death sentence it was sometimes seen to be.

‘The diseases of the destitute and dissection at St Bartholomew’s Hospital, London 1832 to 1930’, Dr Elizabeth Hurren, Oxford Brookes University

Our next speaker, Dr Elizabeth Hurren of Oxford Brookes University, changed the focus from how many people died to what may have happened to their bodies. Her title was ‘The diseases of the destitute, and dissection at St. Bartholomew’s Hospital, London, 1832 to 1930,’ but while talking she ranged more widely to mention other medical schools, for her topic was how medical schools got bodies for their students to dissect.

After the scandals of recently buried bodies being stolen from their graves, medical schools found it difficult to obtain bodies, particularly those of younger people, and especially women, and getting body parts was as difficult as getting whole bodies. Dr Hurren talked about how students ‘anatomised’ bodies, and about how the science of dissection moved on in the nineteenth century. Most of the bodies used at Barts, and other London medical schools, were those of the destitute, the poorest of the poor, found on the streets or in cheap lodging houses—people who either had no one who cared if they were buried or no one who could afford the cost. The majority of the younger female corpses had been prostitutes or street sellers. Dr Hurren has studied what the individuals had died from, and found that around 43 per cent of those at Barts had died of a respiratory disease. Her research shows that London medical schools were able to obtain much younger dead bodies, and a higher proportion of female corpses, than the provincial medical schools. Some corpses were brought by their friends to the gates of the hospital but there was an industry of “undertakers”, who were in fact people who procured bodies for dissection. They often had business arrangements with workhouses, poor law infirmaries, prisons and hospital wards, all of which at times sold their dead bodies. Outside London workhouses also had agreements with nearby medical schools to supply corpses.

Panel Three: Child mortality, smallpox and burial practices in Britain, 1550–2010

‘Residential mobility and child mortality in early twentieth century Belfast’, Dr Alice Reid, University of Cambridge

Dr Reid of the History of Population and Social Structure research group started the session talking about ‘Residential mobility and child mortality in early twentieth century
Belfast. She and Dr Eilidh Garrett have been studying the influence of housing on early age mortality, using data from Belfast from the 1901 and 1911 censuses combined with information from street directories for the intervening years. This has enabled them to look at people’s residential location from year to year. They took samples from three contrasting areas of Belfast and found that overall only 15 per cent of their sample did not move between the two censuses. Labourers were the most likely occupational group to have moved, and people were, not surprisingly, more likely to have moved at marriage or in the early years of marriage. Those in larger houses were less likely to move, but child mortality appears to relate more to the degree of overcrowding than to the actual number of rooms in the house. Dr Reid pointed out that studying early child mortality from one census is difficult, as the factors which may have led to the mortality will often relate to where the family were living when the child was born, rather than when they die. More mobile families suffered higher levels of infant mortality. The research is also showing how some streets appear to be more or less popular with families of varying sizes, although the houses were of the same size.

‘Smallpox and its impact on mortality in the parish register period’, Dr Peter Razzell

Dr Razzell summarised the history of smallpox in Great Britain and its impact on mortality in the parish register period. Dr Razzell outlined the difficulties in establishing smallpox mortality levels:

1. other disease classifications under which smallpox was registered, including fulminating smallpox and convulsions, occurring particularly among young infants

2. age variations, with mortality from smallpox varying very significantly by age, with children under one dying probably four or five times more frequently than those above the age of five, but with mortality rising significantly after the age of about 30

3. geographical differences, with smallpox in the South of England—outside of London—appearing to have been a disease of both adults and children, whereas in the North and in Scotland it was confined almost entirely to young children

4. increasing virulence of the disease, with, for example, about 4 to 5 per cent of children dying from it in London in the later sixteenth century, increasing to about 45 per cent in London hospitals amongst unvaccinated children in the late nineteenth century.

Safer forms of smallpox inoculation were introduced into England in the 1760s, and became very popular in southern England after that period. This was partly the result of the epidemiology of the disease, where there was a mix of vulnerable adults and children in the south, leading to a panic response when smallpox was introduced into a parish. This
was not the case in areas where the disease was endemic which mainly affected young children—such as in London and the north of England—where a more fatalistic reaction often occurred. It was in these areas where vaccination became popular in the early nineteenth century. Inoculation and vaccination probably did make a significant contribution to combating mortality, although this may have been mainly in the form of preventing massive outbreaks of mortality resulting from an increasingly fatal disease, avoiding the spectacular mortality associated with diseases like the bubonic plague.

‘Churchyard closures, rural cemeteries and the village community in Leicestershire and Rutland, 1800–2010,’ Professor Keith Snell, University of Leicester.

Professor Snell started by saying that most of the existing history of cemeteries in the UK focuses on the big urban cemeteries, not the much more numerous, smaller, rural ones. Over the past century and a half many communities have seen extensions to an existing churchyard, but rural churchyard burial grounds have been closing in larger numbers, to be replaced by new cemeteries. There seems to be very little information available nationally or locally about the continuing closure of churchyard burial grounds. In Leicestershire and Rutland churchyard closures peaked in the 1880s then fell until the 1970s–90s, when the rate increased dramatically; the last few decades have also seen particularly high rates of closure of nonconformist burial grounds. Burial in the centre of the community has often been replaced by burial in a new cemetery on the outskirts, the dead have been taken further away from the living. Burial Acts, needed to close a churchyard burial ground, allowed parish vestries to establish Burial Boards of local ratepayers who could raise funds for new cemeteries; these of course would serve both Anglican and nonconformist communities. In addition to churchyard closures, the nineteenth century saw considerable numbers of new parishes, and many new churches did not have attached burial grounds.

Like all our speakers, Professor Snell covered his topic in far more detail than is possible to report in these summaries, but we hope we have given you a flavour of the very varied, and very interesting, contributions to the day conference. Many thanks to them all!

Lyn Boothman
Mary Cook