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Death and the Parish: Mortality in Eighteenth-Century Wales

Angela Muir (Cardiff University)

Introduction

Death, like illness, is not merely biological but also social, and the language of death and

dying is a lens through which we can understand past societies. This article seeks to

examine how one eighteenth-century Welsh community made sense of death. From

1759, parish officials in Llanrhaeadr-ym-Mochnant (henceforth Llanrhaeadr) recorded a

cause of death for every burial in their registers.<sup>2</sup> Similar records exist for London,

Norwich and parts of south-east England, but in Wales this practise of recording the

cause of death with such frequency was uncommon.3 Unique in both detail and

consistency, each of the burial entries in this register lists the name of the deceased,

dates of death and of burial, age, place of residence, and in most instances a cause of

death. The occupation or status of adult men, the marital status and affiliation of women,

and the parental affiliation of children is also listed. If a child has been identified as

illegitimate this information is also typically given. These records can be analysed not

only to understand how people in this community died, but also how they lived.

Furthermore, the ways in which parish officials made sense of the various causes of

death amongst their parishioners provides a tantalising glimpse of the impact on this

small community of advances in medical knowledge that were being made in Britain and

Europe during the eighteenth century.

<sup>1</sup> Roy Porter, The Greatest Benefit to Man Kind: A Medical History of Humanity from Antiquity to the Present (London, 1999), pp. 35-36.

<sup>&</sup>lt;sup>2</sup> Powis Records Office (PRO) M/EP/34/R/A/10; Clwyd Family History Society parish register transcriptions Llanrhaeadr-ym-Mochnant Parish Register, Vol. 2-3 (CLD-21809)

<sup>&</sup>lt;sup>3</sup> Mary J. Dobson, Contours of Death and Disease in Early Modern England (Cambridge, 2002)

Despite the detailed nature of this record, as a single-parish case study over a forty-year period, the sample of data is too small to form the basis of a detailed demographic analysis. Although quantitative analysis is used throughout, this is taken as indicative of general patterns which are then examined qualitatively, and are not presumed to be representative of demographic trends. The aim of this paper is thus not historical demography, but to use this singular parish record to examine how death, disease, morbidity, and mortality were understood, and to consider what this evidence can reveal about living conditions within this parish. Thus, corrections for errors or omissions in the original registers have not been made.<sup>4</sup>

It is evident that not all burials in Llanrhaeadr were recorded, which was a problem across Wales and in all parishes throughout Britain.<sup>5</sup> Poor law records, which survive for the parish from 1796 onwards, reveal that several parishioners were in receipt of support up to the time of their death; however no corresponding burial entries can be found. Furthermore, poor law expenditure for items such as shrouds, coffins and burial expenses for certain individuals can, at times, appear with no corresponding burial record. For example, Gwen Lloyd was in receipt of parish support on more than one occasion in 1798, with a final entry of £1 15d 7½p made for her "in illness and for tending her till death", but no subsequent burial record exists for her in that or the following year.<sup>6</sup> In 1797 Edward Morris received support during his wife's illness, as well as for the cost of her burial, and in 1798 Thomas Bynion was in receipt of the same for his wife, but no burial record exists for either of these women.<sup>7</sup> It is possible that the deceased were buried in neighbouring parishes, as was common in London.<sup>8</sup> Morris Hughes was buried

<sup>&</sup>lt;sup>4</sup> E. A. Wrigley and R. S. Schofield, *The Population History of England 1541-1871: A Reconstruction* (London, 1981), p. 89

<sup>&</sup>lt;sup>5</sup> Ibid. p. 15.

<sup>&</sup>lt;sup>6</sup> PRO M/EP/34/O/RT/1 1798

<sup>&</sup>lt;sup>7</sup> PRO M/EP/34/O/RT/1 1797 & 1798

<sup>&</sup>lt;sup>8</sup> Jeremy Boulton and Leonard Schwarz, "Yet another inquiry into the trustworthiness of eighteenth-century London's Bills of Mortality", *Local Population Studies*, 85 (2010), 28-45.

in the parish of Llangynog in 1799 at the expense of the parish of Llanrhaeadr. Similarly, the body of Dorothy Gabriel was taken by hearse in 1798 from Llanrhaeadr to the parish of Llangedwyn for burial, also at the expense of Llanrhaeadr. A total of £1 11d was spent on her funeral, which included the cost of cleaning and shrouding her corpse, cleaning the hearse, providing ale for the wake before her body was removed from her house, and for the parish clerk and helpers. However, such evidence is rare, and in most cases when a burial record is missing in Llanrhaeadr a corresponding burial cannot be found in surrounding parish records either.

Another problem with records such as these is that, although parish officials had some degree of education, they were not trained medical professionals, and therefore the causes of death they identified cannot be seen as conclusive diagnoses. However, these records can be used for more than a statistical analysis of how people died. How people understood death and the additional information included or excluded from official records can be just as revealing as the actual causes of death. The purpose here is not to forensically reinterpret and retrospectively diagnose how people died, but to understand the experience of mortality and the ways in which parish officials made sense of death within their community. An awareness of death and the endeavour to make sense of it is a uniquely human trait. Furthermore, the obsession with measuring, recording and quantifying observable phenomena is a fashion which gained considerable momentum in the eighteenth-century.9 Thus, the records of how these laymen made sense of death, disease and the body in the eighteenth century can, on the one hand, provide a snapshot of the patterns of morbidity in one location over a period of time, and, on the other, provide an insight into the ways in which medical understandings trickled down through networks of knowledge into the Celtic fringe of Britain.

<sup>&</sup>lt;sup>9</sup> Roy Porter, English Society in the Eighteenth Century (Harmondsworth, 1990), p. 4

## Llanrhaeadr-ym-Mochnant in the Late Eighteenth Century

The parish of Llanrhaeadr spans the border between Denbighshire and what was then Montgomeryshire (now part of modern-day Powys). Although Llanrhaeadr was relatively remote, it was by no means isolated. Situated approximately twelve miles west of Oswestry and thirty miles northwest of Shrewsbury, it was in close proximity to the border with England. Llanrhaeadr was well connected to these towns, and parish officials regularly noted travel between their community and these centres for parish business. Apprenticeship papers reveal the extent of the connections with larger towns such as Oswestry. In 1752, a child named Thomas Williams was apprenticed to David Evans, a carpenter in Oswestry. 10 In 1764 David Thomas was apprenticed to Edward Morris, a tailor in Oswestry, and in 1789 twelve-year-old Elizabeth Roberts was apprenticed to her father, Robert Owen, who was a mantua maker in Whittington near Oswestry. 11 Similar connections can be found in removal orders and settlement certificates. In 1812, a labourer and former resident of Llanrhaeadr named Richard Nixon applied for settlement in Oswestry after serving time in employment there. 12 And in 1817 Evan Jones, his wife Elizabeth and their nine-year-old son were removed to Llanrhaeadr from the parish of Holy Cross and St Giles in Shrewsbury. In 1786, a Quarter Session order removed Catherine Thomas, a single woman, to Llanrhaeadr from her last place of settlement, which was in Oswestry. 13 Both people and goods would have moved regularly between these centres and other regional locations for economic and personal reasons and, with

<sup>&</sup>lt;sup>10</sup> PRO M/EP/34/O/AP/13

<sup>&</sup>lt;sup>11</sup> PRO M/EP/34/O/AP/73; M/EP/34/O/AP/164. Given that Elizabeth's father lived in a different town and had a different surname it is possible that she was illegitimate; however no baptism record or bastardy bond exists in the parish papers for Llanrhaeadr-ym-Mochnant.

<sup>&</sup>lt;sup>12</sup> PRO M/EP/34/O/SC/20

<sup>&</sup>lt;sup>13</sup> PRO M/QS/86/E/29 1786

them, socio-medical knowledge and information would be transmitted in the form of books, letters and verbal communication.<sup>14</sup>

In the 1801 census the parish recorded 1,869 people living in the village and surrounding settlements, the majority of whom spoke Welsh, but given the proximity to the border, and the exchange of business, there would have been many English speakers as well. 15 As was the case with most rural communities in Wales, the population would have been spread out over a sparsely-populated rural area rather than within a nucleated settlement. 16 The ratio of burials to baptisms suggests that over the forty years prior to the first census the population grew slowly but steadily (figure 1). Baptisms outnumbered burials for significant portions of this period with 2,031 baptisms recorded overall with an average of fifty-one baptisms per year compared to 1,496 burials overall with an average of thirty-seven per year. However, there were seven years during this period when the parish experienced crisis mortality in which the number of burials outnumbered baptisms by at least ten per cent. These years were 1763, 1764, 1766, 1767, 1772, 1784 and 1795, which correspond to years of crisis mortality identified across thirteen other parishes in Montgomeryshire. 17 1766-67, 1772, 1784 and 1795 saw the ratio of burials surpass baptisms by 20 per cent, and 1763 saw the worst ratio with over 50 per cent more burials than baptisms recorded that year. The most common causes of death recorded in these years were general decay and fever, which may be indicative of poor harvests resulting in malnutrition and reduced immunity, and/or an outbreak of a contagious disease such as typhoid fever or influenza. 18 An outbreak of

<sup>&</sup>lt;sup>14</sup> Alun Withey, *Physick and the Family: Health, Medicine and Care in Wales, 1600-1750* (Manchester, 2011), pp. 86-94.

<sup>&</sup>lt;sup>15</sup> Geraint H. Jenkins, *The Foundations of Modern Wales*, 1642-1780 (Oxford 1993), p. 398.

<sup>&</sup>lt;sup>16</sup> Ibid. p. 88; Geraint H. Jenkins, A Concise History of Wales (Cambridge, 2007), p. 36.

<sup>&</sup>lt;sup>17</sup> Melvin Humphreys, *The Crisis of Community: Montgomeryshire 1680-1815* (Cardiff, 1996), pp. 72-73. Corresponding crisis mortality years include: 1763, 1764, 1769, 1771, 1769, 1785 and 1795. The ratio of burials to baptisms in all of these years exceeded baptisms by at least 20 per cent.

<sup>&</sup>lt;sup>18</sup> J. N. Hays, *The Burden of Disease: Epidemics and human response in western history* (New Brunswick, 2009), p. 109.

smallpox contributed to an increase in deaths in 1784 with twelve out of fifty-seven deaths (20 per cent) attributed to the disease, although this was by no means the highest number of deaths per year from smallpox during this period. An unfortunate combination of smallpox, flux, chin cough and dropsy contributed to the significant increase in deaths in 1763. Two of these diseases – flux and smallpox – were endemic in the parish throughout this period.

# **Leading Causes of Death**

Overall forty-four different causes of death were listed between 1759 and 1798 (table 1). These include some common killers of the early modern period such as accidents, smallpox, and childbirth. Many of the causes attributed are unfortunately quite vague, such as decay, wasting or fever, and some causes are not as precise as they may appear. For instance, diseases such as cancer may cause symptoms of wasting which may be the more obvious symptom to an observer than the actual cause of death. Pneumonia, asthma, bronchitis or any other respiratory illness could be attributed to consumption or chin cough. Furthermore, more recognisable diseases like smallpox could sometimes kill before characteristic pustules could form. One of the council sometimes will before characteristic pustules could form.

<sup>&</sup>lt;sup>19</sup> Anne Hardy, "Diagnosis, Death and Diet: The case of London 1750-1909" in Robert I. Rotberg (ed.), *Health and Disease in Human History* (London, 2000), pp. 50-52.

<sup>&</sup>lt;sup>20</sup> Allan Kellehear, *A Social History of Dying* (Cambridge, 2007), p. 87; John Landers and Anastasia Mouzas, "Burial Seasonality and Causes of Death in London 1670-1819", *Population Studies*, 42 (1988), 61.

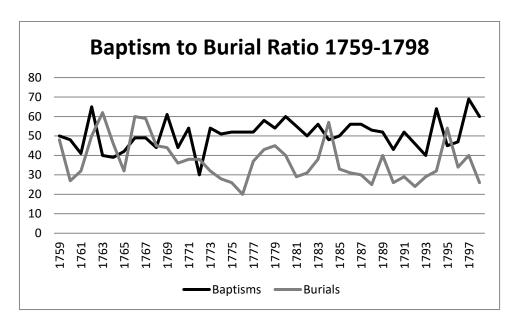


Figure 1 Comparison of burial and baptism ratios, Llanrhaeadr-ym-Mochnant, 1759-1798

Causes of Death Recorded 1759-1798				
Accident (killed, burnt, fall	Dropsy (oedema)	Rash		
from horse, frozen,	Fevers (typhus,	Rheumatic Fever		
drowned)	influenza)	Rheumatism		
Ague (fever,	Flux (dysentery)	Rickets		
chills/shivering)	Iliac passion (intestinal	Shot		
Apoplexy (cerebral	obstruction/hernia)	Smallpox		
haemorrhage or stroke)	Imposthume (abscess)	Stone of Gravel/Gravel		
Asthma	Infirmity	(kidney/bladder stone)		
Bilious complaint	Inflammation of the	Strangury		
Broken leg	bowels	(inflammation/blockage of		
Cancers	Jaundice	the bladder)		
Childbed	Killed	Suddenly		

Chin cough (whooping	King's evil/scrofula	Weakness
cough)	Mad/Lunacy	White Swelling (joint
Colic/gripes	Measles	inflammation, typically the
Consumption/phthisis	No cause	knee)
(Tuberculosis)	Old age	Worms
Convulsion/fits	Palsy/paralytic	
Decay/waste	Pleurisy	
Diabetes	Quinsy (throat infection)	

Table 1 Recorded causes of death, Llanrhaeadr-ym-Mochnant, 1759-1798

These diagnoses were far from clinical or accurate. Parish officials were by no means experts, as evidenced by the continued recording of "decay" as the leading cause of death. Decay appears consistently across all age groups, so it was likely not associated with a set of symptoms relating to a specific disease, but was a description of a general, non-specific decline in health. Although not as common as decay, the cause of death of "suddenly" appears occasionally for both children and adults. This is likely indicative of symptomless diseases which may or may not result from chronic conditions, such as stroke, cardiac arrest, blood clots, or congenital vascular problems. Despite this persistent ambiguity, it does appear that parish officials did make an increasing effort to identify a cause of death, which is evident in the decline after 1765 of leaving the cause of death for adults blank, which suggests an increasing level of certainty, or a desire to classify as specifically as possible in spite of uncertainty. Unless there was an obvious cause of death, such as an injury, or an illness which presented in a very particular way that allowed for classification, most diagnoses appear to have been based on the most apparent, observable symptom at time of death. The classification of diseases based on symptoms or supposed cause rather than a pathological cause was typical for this

period, especially when diagnoses were being made by church officials rather than trained medical professionals.<sup>21</sup>

However, parish officials likely did have some exposure to medical learning. The wide range and occasional specificity of some diagnoses, and changes in terminology used over the period does indicate that parish officials had, at the very least, an interest in medical knowledge and a means of acquiring it. "Kings evil" as a cause of death appears only in the earlier part of this period and changes to "scrofula" in later years. In 1777 "consumption" was replaced with "phthisis", the medical name for pulmonary tuberculosis; however in later records consumption is again used. Evidence of a humoral understanding of disease and the body, which were in decline but still prevalent in the late eighteenth century across Britain and Europe, can be seen in diagnoses such as a "bilious complaint" recorded in 1797.22 By the late eighteenth century several medical texts which were written for a lay audience were readily available, and several had been translated into Welsh including John Wesley's Primitive Physick (1749), Dr William Buchan's Domestic Medicine (1769), and Dr Richard Reece's Domestic Medical Guide (1780), and it is possible that parish officials had come across these or similar works.<sup>23</sup> Furthermore, even if officials had little access to works such as these, they could consult with medical practitioners living and working in the parish, such as a doctor named John Randal who had three children baptised in the Llanrhaeadr in the 1770s.<sup>24</sup> Little other information about Dr Randal exists, but numerous poor law records for payments to

<sup>&</sup>lt;sup>21</sup> Dobson, *Contours of Death*, p. 240. For a discussion of the development of the nosology of death and disease in the nineteenth century see, Edward Higgs, "The Linguistic Construction of Social and Medical Categories in the Work of the English General Register Office, 1837-1950", in Simon Szreter, Hania Sholkamy, and A Dharmalingam, *Categories and Contexts: Anthropological and Historical Studies in Critical Demography* (Oxford, 2004), pp. 86-103.

<sup>&</sup>lt;sup>22</sup> E. C. Spray, "Health and Medicine in the Enlightenment", in Mark Jackson (ed.), *The Oxford Handbook of the History of Medicine* (Oxford, 2011), p. 86.

<sup>&</sup>lt;sup>23</sup> Edward Davies, "Llanrhaeadr-ym-Mochnant: Disease and mortality in a Welsh rural parish in the eighteenth Century", *Denbighshire Historical Society Transactions*, 55 (2007), 70-71.

<sup>&</sup>lt;sup>24</sup> Llanrhaeadr-ym-Mochnant Parish Register Transcripts 1759-1812, pp. 40, 43 & 48.

doctors, surgeons, and for the curing of wounds and setting of bones indicate that parish officials had access to medical professionals and their expertise.

# Age Related Mortality - The Young

Not surprisingly, the age group which experienced the largest proportion of deaths were children under the age of ten. Many of these deaths were in the first year of life; however for many entries a child's age was substituted with "infant", which makes calculating mortality rates in the first year of life based on given age impossible. Data pertaining to age-related mortality has been organised in two different ways to reflect this (figure 2 and table 2). The first graph represents cumulative ages by decade up to the age of seventy which provides a broader perspective on age-related mortality. The second graph is broken down into age brackets which correspond to age-related morbidity. This is based on the assumption that children under two years of age faced similar risks from disease and congenital defects. Children between the ages of two and twelve would have faced different risks due to their increased mobility and activity within the home. From the age of twelve onwards many children would have been apprenticed or involved in some sort of labour, and would therefore have faced similar risks and exposures to young adults. The age categories for infants and children used here are novel, and differ to those established by the Cambridge Group.<sup>25</sup> This decision was based on the fact that the term "infant" was often used to describe older children and adolescents too. These categories are by no means perfect, but they do serve as an effective, alternative means of classifying deaths by age group. The lower cut off for the oldest age group is seventy, based on parish officials' use of the term 'old age', which will be discussed in further

<sup>&</sup>lt;sup>25</sup> Wrigley and Schofield, *The Population History of England*, pp. 249-252.

detail below. For purposes here, children identified as "infants" have been included in the youngest age group given the similarity in causes of death listed.

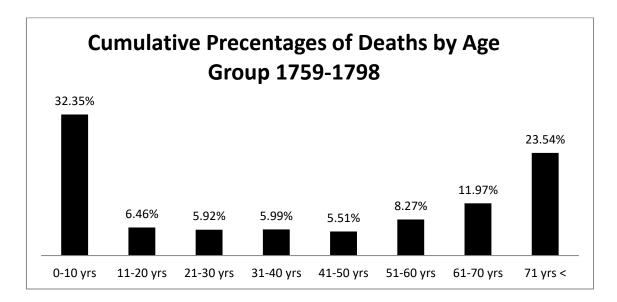


Figure 2 Cumulative percentages of deaths by age group, 1759-1798, Llanrhaeadrym-Mochnant

Common Causes of Death by Age Group					
>/= 1 year	2-12 years	13-25 years	26-69 years	< 70 years	
Convulsion 38%	Fever 36%	Decay 28.5%	Decay 26%	Decay 40%	
No cause 31.5%	Smallpox 19%	Smallpox 27%	Fever 25.5%	Fever 5%	
Decay 9%	Decay 9%	Fever 12 %	Dropsy 20%	Old age 25%	

Table 2 Common causes of death by age group, 1759-1798, Llanrhaeadr-ym-Mochnant

Crisis Mortality	Deaths 10 years	Deaths 61 years	Total deaths – all
Year	of age and under	of age and over	vulnerable age
(total number of	# (%)	# (%)	groups # (%)
deaths per year)			
1763 (62)	23 (37.1)	21 (33.9)	44 (71)
1764 (46)	9 (19.6)	23 (50)	32 (69.6)
1766 (50)	14 (28)	18 (36)	32 (64)
1767 (59)	8 (13.6)	35 (59.3)	43 (72.9)
1772 (38)	11 (29)	12 (31.6)	23 (60.5)
1784 (57)	23 (40.4)	18 (31.6)	41 (71.9)
1795 (54)	19 (35.2)	21 (38.9)	40 (74)

Table 3 Proportion of deaths in crisis mortality years attributable to most vulnerable age groups

In the youngest age group the most common cause of death listed were convulsions or fits. This is a category which must be viewed sceptically, as many neonatal and infant medical conditions ranging from a high fever to hydrocephalus can result in convulsions.<sup>26</sup> This broad category does provide further support for the argument that the identified cause of death was typically determined by the most obvious observable peri-mortem symptom. However, what is perhaps most telling is that after convulsions the next largest category, accounting for almost one third of recorded infant burials, is that in which no cause of death at all was given. In the more detailed burial registers in Britain which do provide the cause of death, it was still uncommon to list the

<sup>&</sup>lt;sup>26</sup> Hardy, "Diagnosis, Death and Diet", pp. 46-48.

cause of death for the very young and very old.<sup>27</sup> Although levels of infant mortality dropped throughout the eighteenth-century, infant death in Britain was still relatively common, and the fact that the cause of death was so frequently left blank is tragic evidence of the harsh reality that prior to the early twentieth century simply being young and vulnerable was cause enough for death.<sup>28</sup> As Richard Schofield has argued in relation to maternal mortality, even if the actual risk of death was statistically low, the death of an infant would still have been a common-enough occurrence that the perceived risk was undoubtedly high.<sup>29</sup> Despite this, these lives were still valued and their deaths significant, as can be inferred from the provision of coffins, shrouds, ale and other burial expenses for the very young children of the poorest parishioners, such as the unbaptised child of Robert Salmon who died in 1797, or the stillborn illegitimate children of Jane Evans in 1798, and Jane Davies in 1799.<sup>30</sup>

The disproportionate numbers of deaths in the youngest and oldest age categories are even more exaggerated during years of crisis mortality (table 3). The increased risks associated with malnutrition which lowered resistance to disease and increased susceptibility to contagious disease such as smallpox tended to pose the greatest threat to the most vulnerable groups, which include those under the age of ten and over the age of sixty-one.<sup>31</sup> On average, throughout the forty-year period covered by this study, the proportion of deaths attributed to the youngest and oldest age groups

<sup>&</sup>lt;sup>27</sup> Dobson, Contours of Death, p. 230.

<sup>&</sup>lt;sup>28</sup> R. E. Jones has argued the infant mortality in rural North Shropshire in the latter half of the eighteenth century as between approximately 103 and 120 per 1,000. R. E. Jones, "Further Evidence on the Decline in Infant Mortality in Pre-Industrial England: North Shropshire", *Population Studies*, 34 (1980), 239-250; R E Jones, "Infant Mortality in Rural North Shropshire, 1561-1810", *Population Studies*, 30 (1976), 305-317. See also: Jona Schellekens, "Economic Change and Infant Mortality in England, 1580-1837", *The Journal of Interdisciplinary History*, 32 (2001), 1-13.

<sup>&</sup>lt;sup>29</sup> Roger Schofield, "Did the Mothers Really Die? Three Centuries of Maternal Mortality in 'the World We Have Lost'" in Lloyd Bonfield, Richard M. Smith and Keith Wrightson (eds) *The World We Have Gained: Histories of Population and Social Structure* (Oxford, 1986), pp. 258-259 <sup>30</sup> PRO M/EP/34/O/RT/1 1797, 1798 & 1799.

<sup>&</sup>lt;sup>31</sup> Nick Woodward, "Crisis Mortality in a Welsh Market Town: Carmarthen, 1675-1799", *Welsh History Review,* 22 (2005), 433-434.

account for approximately 55 per cent of all deaths; however during the seven years of crisis mortality this increased to anywhere from 60 to 74 per cent of deaths (table 2). As mortality crises typically affect the most vulnerable, years of crisis mortality are frequently followed by periods of lower incidents of endemic mortality. This appears to have been the case in some of the years following periods of crisis mortality in Llanrhaeadr, particularly immediately after the crisis years of the 1760s, which saw no reported fatalities from smallpox.<sup>32</sup> 1784, a crisis year, saw twelve deaths from smallpox, followed by two smallpox deaths in 1785, one in 1789 and none in the subsequent two years.

## **Smallpox**

Smallpox was a significant risk for both children and young adults. It was the second greatest cause of death for both age groups, and the majority of smallpox deaths occurred in those aged two to twenty-five. Smallpox was endemic across Britain throughout the eighteenth century, including in Wales, and frequently became epidemic. However, it was not always fatal, killing anywhere from 10 to 50 per cent, with an average mortality rate of 20 to 25 per cent.<sup>33</sup> An outbreak in Chester in 1774 saw 1,200 cases reported with 202 deaths in a population of 14,700, which is a mortality rate of approximately 17 per cent.<sup>34</sup> It is likely that the survival rate in Llanrhaeadr was similar, and therefore many more people would have been afflicted but survived. It is noteworthy that no one in Llanrhaeadr over the age of seventy, and only five adults aged between

<sup>&</sup>lt;sup>32</sup> Woodward, "Crisis Mortality", p. 433.

<sup>&</sup>lt;sup>33</sup> Withey, *Physick and the Family*, p. 21; Gareth Williams, *Angel of Death: The Story of Smallpox* (Basingstoke, 2010), p. 24; Mary Leidemann, *Medicine and Society in Early Modern Europe* (Cambridge, 1999), pp. 48-49; see also: Peter Razzell, *The Conquest of Smallpox: the Impact of Inoculation on Smallpox Mortality in Eighteenth-Century Britain* (Sussex, 1977); J. R. Smith, *The Speckled Monster: Smallpox in England, 1670-1970, With Particular Reference to Essex* (Chelmsford, 1987); S. R. Duncan, Susan Scott and C. J. Duncan, "Smallpox Epidemics in Cities in Britain", *The Journal of Interdisciplinary History*, 25 (1994), 255-271.

<sup>&</sup>lt;sup>34</sup> Hays, *The Burden of Disease*, p. 120.

twenty-five and sixty-nine succumbed to the disease, which probably means many had developed a natural immunity from having suffered from the disease, or a related disease such as cowpox, earlier in life. Smallpox targeted the young, and because of their vulnerable immune systems it hit them particularly hard, as is evident in the German name for the disease *Kinderpocken*.<sup>35</sup> Those under ten were more likely to die from the disease, and this age group accounted for 80 to 98 per cent of smallpox deaths in the eighteenth century.<sup>36</sup> People would have lived in fear of smallpox, especially those with young family members who had yet to be exposed to the disease. Advertisements for servants reveal this anxiety, as they often state that applicants must have already had the disease.<sup>37</sup> This pragmatic prerequisite would prevent servants from carrying the disease into the home, and ensure they could continue working should another member of the household fall ill with the disease.<sup>38</sup>

#### Age Related Mortality - The Old

Given the vulnerability associated with early life, it is not entirely unexpected to see burial records for so many children and young people. What is surprising, however, is the proportion of deaths which occurred after the age of seventy. Wrigley and Schofield have estimated that in the late eighteenth century life expectancy at age thirty was thirty-two years for both men and women, so many of those who survived childhood could expect to live to at least sixty.<sup>39</sup> Other studies have suggested that 60 per cent of those who lived to fifteen could expect to live to fifty-five, and of those approximately one third to

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<sup>&</sup>lt;sup>35</sup> Williams, *Angel of Death*, p. 2. Smallpox was also a prevalent childhood disease in London, particularly in the third quarter of the eighteenth century. See Landers and Mouzas, "Burial Seasonality and Causes of Death in London", p. 61

<sup>&</sup>lt;sup>36</sup> Williams, Angel of Death, p. 32.

<sup>&</sup>lt;sup>37</sup> Jenkins, Foundations of Modern Wales, p. 89.

<sup>&</sup>lt;sup>38</sup> Williams, Angel of Death, p. 34.

<sup>&</sup>lt;sup>39</sup> Wrigley and Schofield, *The Population History of England*, p. 250

live to seventy-five. 40 Moreover, Wrigley and Schofield have estimated that in the latter half of the eighteenth century, an average of only eight to ten per cent of the population were over the age of sixty. 41 A more detailed analysis is needed, but a preliminary assessment suggests that life expectancy in this parish may have been greater than the estimates suggested by demographic historians. Longevity in Llanrhaeadr was clearly not rare, as 350, or nearly one quarter of all burials recorded were for individuals older than seventy, many of whom lived well into their eighties, nineties and two surpassed one hundred. It is possible that some of these ages were "rounded up" or exaggerated, or were estimated if the actual year of birth was not known. 42 However, in a parish such as this with officials who favoured methodical recordkeeping, it is possible that at least some of these were accurate. 43 Many of the ailments listed as causes of death can be considered age-related, such as cancer, apoplexy, and palsies. However, non-descript causes of death such as decay, fever, and old age were the most common.

Unlike infant burials, age alone does not appear to have been reason enough for death, as the cause of "old age" accounted for fewer than 25 per cent of burials of those older than seventy. Moreover, fewer than 2 per cent of deaths in this age group listed no cause. The fact that a cause other than age was given so frequently suggests that age alone was not seen as an indicator of morbidity. This raises the question of who was considered "old". The concept of old age is fluid and can be understood in terms of function, culture or chronology.<sup>44</sup> A fifty-five-year-old person with declining physical or mental abilities could be seen as older than an active sixty-five-year-old. How an individual conforms to socially acceptable concepts of "old age" is also a relevant factor,

<sup>&</sup>lt;sup>40</sup> James E. Smith, "Widowhood and Ageing in Traditional English Society", *Ageing and Society*, 4 (1984) cited in Susannah R. Ottaway, *The Decline of Life: Old age in eighteenth-century England* (Cambridge, 2007), *Decline of Life*, p. 22.

<sup>&</sup>lt;sup>41</sup> Wrigley and Schofield, *The Population History of England*, 216

<sup>&</sup>lt;sup>42</sup> Ibid. pp. 45-46.

<sup>&</sup>lt;sup>43</sup> Ibid. pp. 52-53.

<sup>&</sup>lt;sup>44</sup> Ibid. p. 17.

as is actual calendar age. Several English sources point to sixty being the chronological point at which old age began, although it could be younger for widows, and this is by no means a strict delineation. With the exception of two widows who died at sixty-one and sixty-three years, old age as a primary cause of death was only applied to individuals older than seventy. Although most other causes of death were age-related, it appears that "old age" in this parish may have been determined more by functionality than by calendar age, and that many of those over seventy may have retained a diminished but significant degree of health and independence. Poor law records reveal that some older people depended on regular parish relief, but typically only for a short period prior to their death, and a considerable number did not require this support at all.

This evidence of longevity is surprising in light of contemporary accounts which describe living conditions throughout rural Wales as poor. Welsh cottages were described by some travellers as no more than a "dunghill modelled in the shape of a cottage", which contained only one room that housed large families and their animals. 46 These crowded homes would have had clay floors covered with straw which would easily become contaminated with human and animal effluvia. People seldom bathed or washed their clothing and lived in close quarters, which meant diseases could easily spread through lice, fleas, and person to person contact. 47 Once people reached a certain age they would have built up a certain amount of immunity which would have allowed them to withstand unsanitary living conditions to some degree; however such resilience would have had limitations. 48 Furthermore, the diet of many in this region was limited, and consisted predominantly of oats and other cereal crops, root vegetables, cheese, and milk. 49 Under these conditions, it is striking that so many people lived to such an old age,

<sup>&</sup>lt;sup>45</sup> Ibid. p. 54.

<sup>&</sup>lt;sup>46</sup> Withey, *Physick and the Family*, pp. 17-18.

<sup>&</sup>lt;sup>47</sup> Ibid. p. 18.

<sup>&</sup>lt;sup>48</sup> Ibid. p. 18; Alun Withey, "Health, Medicine and the Family in Wales, c. 1600 – c. 1750" (unpublished PhD Thesis, Swansea, 2009), p. 21

<sup>&</sup>lt;sup>49</sup> Humphreys, *Crisis of Community*, pp. 16-20; Jenkins, *Concise History*, pp. 10-11.

which suggests that our understanding of pre-industrial living conditions in Wales warrants further investigation.

#### Death in Childbed

One cause of death which does not account for a significant proportion of burials is those resulting from complications during childbirth. Deaths in childbed account for a very small proportion of deaths, but are worth considering nonetheless. Prior to the advent of sulphonamides and antibiotics in the twentieth century, childbirth was one of the leading causes of death for women of childbearing age. However, it has been argued that, statistically speaking, women were at no greater risk of dying during childbirth than they were of dying from a common infectious disease. The evidence from Llanrhaeadr supports this. Causes of maternal mortality fall into two categories: accidents of childbirth, such as pelvic obstructions, which in the eighteenth century could commonly be caused by bone deformations resulting from rickets and puerperal infections which can lead to fatal sepsis. Burial records from Llanrhaeadr do not provide details which indicate the precise circumstances surrounding each death in childbed, but a comparison with baptism records, and a closer analysis of the information that is available, would suggest that the majority of maternal mortality can be attributed to accidents in childbirth.

Over the forty-year period covered by this study, eighteen women were listed as having died in childbirth, twelve of whom, or 67 per cent, have no corresponding baptism record for a child, so it is likely that their child was either stillborn, was not successfully delivered, or perished shortly after birth (table 4). For the burials which can be linked to a baptism record, the interval between birth and death ranged from four to forty days,

<sup>50</sup>Schofield, "Did the Mothers Really Die?", p. 260; Irvine Louden, "Deaths in childbed from the eighteenth century to 1935", *Medical History,* 30 (1986), 6.

<sup>&</sup>lt;sup>51</sup> Schofield, "Did the Mothers Really Die?", 231-232; Louden, "Deaths in childbed", 23.

making it likely that these women died from infection.<sup>52</sup> Of the six live births recorded, five survived their first year of life, including one illegitimate child. For the purposes here, only entries which list the cause of death as "childbed" or "childbirth" have been counted. This does present the possibility of excluding women who died of a puerperal fever and were recorded as dying of fever rather than childbed. However, if we include women who died of fever within forty days of the birth of their child, only one additional woman would be counted.<sup>53</sup>

Parturient women would have been assisted by a midwife, such as Hannah Thomas who was buried at the age of seventy-three in 1787. She would not have received formal training, but likely had years of on-the-job experience, and would have witnessed a range of birth complications. Although male midwifes were gaining popularity in the late eighteenth century, there is limited evidence to suggest they were active in any significant way in rural Wales at this time. Overseers' accounts from the parish do show payments being made for the laying in and delivery of poor women by midwives or other women from the community. Poor law entries either explicitly state that midwives were paid or imply that midwives or other women were employed through the comparable amounts paid to them, which were typically in the range of 5d. Medical men, who were more likely to be employed by wealthy families, would have charged more. In 1773 in the parish of Meifod, which is approximately twelve miles south of Llanrhaeadr, a landlord appealed to the overseers of the poor on behalf of his tenant, David Thomas, who had employed a man midwife and surgeon when his wife had experienced a complicated labour, and as a result he could not pay his half year's rent.<sup>54</sup>

<sup>&</sup>lt;sup>52</sup> These intervals refer to the number of days between birth and death rather than baptism and burial as both registers include details about the dates of births and deaths.

<sup>&</sup>lt;sup>53</sup> Elin Jones, a married woman who died of a fever on 10 April 1777, eighteen days after her son, Thomas, was born.

<sup>&</sup>lt;sup>54</sup> PRO M/EP/41/W/AC/4 (unsorted loose documents)

It is not surprising that the majority of women who died in childbed in Llanrhaeadr either died along with their child during labour, or were delivered of a stillborn, as women were at approximately five times greater risk of dying while giving birth to a stillborn.<sup>55</sup> Five of the twelve women whose labour did not result in a live birth were in their twenties, and thus it is likely that these were their first and only full-term pregnancies, and unfortunately complications such as pelvic deformities meant that neither they nor their unborn child stood any chance of surviving labour.56 The remaining seven women were aged between thirty-three and forty-five, meaning that many of them would have had previous pregnancies. Although previous successful live births did reduce a woman's chance of dying during childbirth, it did not completely mitigate the danger.<sup>57</sup> Studies of eighteenth-century Swedish data demonstrate the risk of mothers dying on the day of birth increased slightly with the age of the mother, and this is supported by the data from Llanrhaeadr, as 58 per cent of the women who appear to have died on the day of labour were over thirty.<sup>58</sup> However, not all stillbirths resulted in the death of the mother. Both Jane Evans and Jane Davies survived the delivery of their stillborn illegitimate children in 1798 and 1799. However, the risks for women were still great.

Mother's	Age	Date of	Corresponding	Interval	Child burial
Name		Death	birth details	between birth	within 1 year
				and death	
Catherine	31	12 Apr 1759	Mary, born 3	40 days	No
Humphrey			Mar		

<sup>&</sup>lt;sup>55</sup> Schofield, "Did the Mothers Really Die?", p. 241.

<sup>&</sup>lt;sup>56</sup> For age of marriage and its correlation with age of first birth in Britain see: Wrigley and Schofield, *The Population History of England*, p. 254-255.

<sup>&</sup>lt;sup>57</sup> Schofield, "Did the Mothers Really Die?", p. 255.

<sup>&</sup>lt;sup>58</sup> Ibid. p. 242-243.

Jane	30	21 Mar 1762	Anne, born 12	13 days	No
Roberts			Mar		
Margaret	29	21 Mar 1762	Elizabeth, born	4 days	No
Owen			25 Mar		
Mary	27	7 Sept 1765	Sinah, born 3	4 days	9 Sept 1765
Pierce			Sept		
Ursula	25	18 Jan 1769	No	N/A	N/A
Roberts					
Mary	27	22 Feb 1769	Griffith (Morris),	11 days	No
Parry			born 11 Feb		
(single					
woman)					
Elizabeth	20	26 Feb 1769	No	N/A	N/A
Vaughan					
Catherine	42	24 Mar 1769	No	N/A	N/A
Jones					
Jane	32	9 Jan 1771	No	N/A	N/A
Evans					
Anne	23	20 May	No	N/A	N/A
Davies		1775			
Jane	28	28 Sept	No	N/A	N/A
Arthur		1776			
Catherine	34	10 Aug	No	N/A	N/A
Lloyd		1779			
Elizabeth	34	10 Aug	No	N/A	N/A
Nichols		1782			

Mary	44	13 Nov 1784	No	N/A	N/A
Evans					
Catherine	33	12 Apr 1792	No	N/A	N/A
Jones					
Anne	28	24 Sept	Anne, born 16	8 days	No
Edwards		1792	Sept		
Margaret	26	14 Jan 1795	No	N/A	N/A
Jones					

Table 4 Recorded instances of maternal mortality in Llanrhaeadr-ym-Mochnant when the cause of death is identified as "childbed" or "childbirth"

Overall, only eighteen women over this period were identified as having died as a direct result of childbirth, which averages out to one woman dying approximately every 2.2 years. During the same period 2,031 baptisms were recorded. If we take baptisms to reflect the total number of live births, then the maternal morbidity rate in Llanrhaeadr in the last half of the eighteenth century was approximately 9 per 1,000 live births.<sup>59</sup> This may appear low, but it is higher than Schofield's estimates of one death per three years in a village of roughly 1,000 inhabitants.<sup>60</sup> Despite this, the actual risk of maternal mortality was still relatively low considering the potential risk of complications. However, it is likely that the majority of women in Llanrhaeadr would have known of someone who

<sup>&</sup>lt;sup>59</sup> The maternal mortality rate is typically calculated as the number of deaths per 1,000 women of childbearing age, but it is not possible to calculate this accurately here. See Louden, "Deaths in Childbed", p. 1; Schofield, "Did the Mothers Really Die?", p. 258-259.

<sup>60</sup> Schofield, "Did the Mothers Really Die?", p. 258-259.

had died during or shortly after labour. Women and their families would have been acutely aware of the risks associated with childbirth.<sup>61</sup>

## **Illegitimate Mortality**

Another interesting feature of the Llanrhaeadr burial register is the low incidence of illegitimate infant mortality. For the majority of the period in question, it does not appear that illegitimate children were at greater risk of dying in the first year of life than their legitimate counterparts, and based on the data in table 4, their mothers appear to have fared better than expected as well. Few studies of illegitimate infant mortality in eighteenth-century Britain have been carried out, with the exception of studies of infant mortality at institutions such as London's workhouses and Foundling Hospital, which did see significantly elevated levels of illegitimate infant mortality. Wrigley, Schofield et al. have estimated that the level of illegitimate infant mortality in Britain prior to the twentieth century was approximately twice that of legitimate children; however the evidence from Llanrhaeadr suggests this may not have been the case. 63

By calculating the illegitimate baptism ratio and applying a similar technique to the burial register, it is possible to gauge whether illegitimate children faced a greater risk of dying. The illegitimacy ratio is calculated by dividing the number of illegitimate children recorded in the baptism register over a ten-year period by the total number of baptisms over the same period. The illegitimacy burial ratio has been calculated in a similar manner; however it is slightly more complicated in that it has been necessary to

<sup>&</sup>lt;sup>61</sup> Linda A. Pollock, "Embarking on a rough passage: the experience of pregnancy in early modern society" in Valerie Fildes (ed.) *Women as Mothers in Pre-Industrial England* (London, 2013), p. 49; Schofield, "Did the Mothers Really Die?", p. 258-259.

<sup>&</sup>lt;sup>62</sup> Alysa Levene, "The Mortality Penalty of illegitimate Children: Foundlings and Poor Children in Eighteenth-Century England" in Alysa Levene, Thomas Nutt and Samantha Williams (eds.), *Illegitimacy in Britain, 1700-1920* (Basingstoke, 2005), pp. 38-39.

<sup>&</sup>lt;sup>63</sup> E. A. Wrigley, R. S. Davies, J. E. Oeppen, R. S. Schofield, *English Population History from Family Reconstitution 1580-1837* (Cambridge, 1997), p. 95.

link legitimate and illegitimate baptisms to burials which took place within one year of birth. In the last four decades of the eighteenth century the illegitimacy ratio in Lllanrhaeadr ranged between 5 and 7 per cent (figure 3). Other than a slight increase in the 1780s the overall illegitimate burial ratio was virtually identical. When the overall ratios are averaged across the forty-year period, the illegitimate baptism ratio is 6.05 per cent, and the illegitimate burial ratio is 6.64 per cent, which suggests that illegitimate children in Llanrhaeadr did not face the heightened mortality risk predicted by Wrigley and Schofield, and experienced by illegitimate infants in London. Parish poor law accounts in Llanrhaeadr do show regular expenditure on the care of illegitimate children and their mothers at the time of birth and afterwards. Parishes were legally required to provide support to those with a legal right of settlement, and thus even the poorest unmarried mothers could expect support in childbirth if they found themselves in their parish of settlement at the time of their delivery. 64 It is highly likely that this provision of care improved the prospects of illegitimate children considerably. Even in the one instance when the mother of an illegitimate child, Mary Parry, died after giving birth, her son Griffith appears to have survived his precarious first year of life. Evidence from Llanrhaeadr indicates that, at least in rural parishes, poor law provision could give illegitimate children the same chance of survival as their legitimate peers.

<sup>&</sup>lt;sup>64</sup> Jean Donnison, *Midwives and Medical Men: A History of the Struggle for the Control of Childbirth* (London 1988), p. 38; K. D. M. Snell, *Parish and Belonging: Community, Identity and Welfare in England and Wales, 1700–1950* (Cambridge, 2006), pp. 81-161.

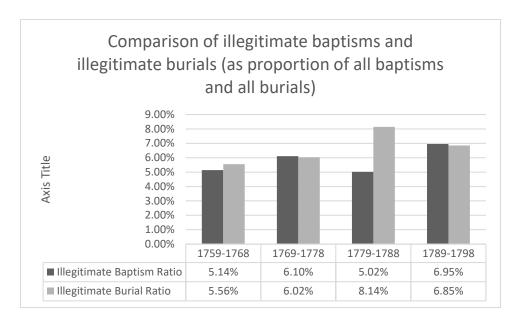


Figure 3 Illegitimate baptism and burial ratio, as proportion of all baptisms and burials. Llanrhaeadr-ym-Mochnant, 1759-1798

Absence of evidence: violence and stigma

Some key observations of information provided in the burial record of Llanrhaeadr have been discussed, but equally noteworthy are the causes of death which do not appear. Of nearly 1,500 burials over a forty-year period, only one can clearly be attributed to an act of violence. In 1763 Margaret Oliver, an eighteen-year-old woman, was shot and killed. Fortunately, the Court of Great Session records relating to the incident survive, and from this we know that she was a servant of Morris Ellis of the same parish, who, according to the trial records, shot her in the leg. The coroner's inquest recorded her death as manslaughter and Ellis was charged with murder; however at trial he was found not guilty. Margaret's death was likely not a sudden one, and limited attempts were made to save her life. A report from the surgeon considered at trial stated that Margaret was in "too bad a habit of body to undergo an amputation", and she therefore probably died as a result of infection or excessive blood loss.<sup>65</sup> There was one other individual

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<sup>65</sup> NLW Gaol Files 4/187/5/29.

whose cause of death listed in the burial register was "killed". However, given that no other records about this death exist, it is quite possible that this was an accident. No other records exist for murders in Llanrhaeadr during this period. Beyond these two burials, the fifteen burials resulting from accidents and three teenagers who froze to death on 8 January 1768, the majority of deaths appear to have been "natural". Quarter session and Court of Great Session records do hold evidence of violent acts, such as riot, robbery and assault committed within the parish, but these were infrequent, and few of these resulted in death. Although noteworthy, these patterns are in line with Peter King's analysis of homicide and indictment levels in England and Wales in the eighteenth and nineteenth-century. King remarks that not only were indictments for murder and manslaughter in the decline during this period, but by the nineteenth century the counties of Montgomeryshire and Denbighshire, which Llanrhaeadr straddled, had some of the lowest levels of homicide in Britain. The same accident is quite possible that this was an accident. No other was an accident was an accident. No other was an accident was an accident. No other was an accident was an acc

Also, few if any causes of death appear to have been moralised in any way. There are no mentions of suicides, deaths under suspicious circumstances or deaths due to illnesses which could be stigmatised, such as syphilis. This may be because these types of death did not occur, or they were lumped together with general "fevers" or "decay". It could also be that people who died in less socially acceptable ways were excluded from formal burial, or inclusion in the register, or both. This could explain why burial expenses were incurred by the parish for some individuals, such as the unbaptised infant of Robert Salmon, or the illegitimate stillborn of Jane Evans, who then did not appear in the burial register, but this is purely speculative. It is plausible that omissions from the register may represent some form of post mortem punishment or excommunication. However, the register does include burials for individuals who appear to meet what would presumably

 $<sup>^{66}</sup>$  M/QS/97/T/3, 16, 19, 21, 64; M/QS/97/M/SO/3/20, Edward Roberts against John Lloyd, carpenter

<sup>&</sup>lt;sup>67</sup> Peter King, "The Impact of Urbanization on Murder Rates and on the Geography of Homicide in England and Wales", *The Historical Journal*, 53 (2010), 671-698.

be criteria for exclusion, which would suggest otherwise. This includes the unbaptised, illegitimate infant of Jenkin Thomas and Mary Jones who died of "decay" and was buried on 3rd September 1787.68 Even if a death was the result of suicide, the burial may still be recorded in parish registers, although the body may not be placed in consecrated ground. For example, in Breconshire in 1688, the body of William David, or "y Quaker côch", "was found dead on wy side in a place called Groescegir (it is reported ythe made himself away upon discontent because he shd not marry his maide...his body is in Glasbury churchyard near ye way as goes to Aberllynvi where noe good Xtians are buried)".<sup>69</sup> The burial of Catherine Morris in 1781, whose cause of death was given as "mad", could also be evidence of moral lenience on the part of parish officials; however no other details about her exist, so the circumstances of her illness and death cannot be known. Overall, it does appear that parish officials in Llanrhaeadr were not excessively moralistic in their record keeping. The omission of less socially acceptable causes of death may therefore be the absence of these causes in general, or it may reflect clerical leniency. Exclusion of individuals from the burial register may have been for practical reasons such as burial in another parish, or simply may simply have been a result of clerical oversight.

In addition, it does not appear that the causes of death given were gendered in any significant way. With the exception of deaths in childbed, there were no ailments which appear to have afflicted men more than women, and vice versa. The one instance of death as a result of madness was an unmarried woman in her 50s, but frustratingly no other evidence exists which can tell us more about her life, treatment and death, and therefore no reliable conclusions can be reached. When it came to causes of death, parish officials did not appear to view male and female bodies and the diseases they

Llanrhaeadr-ym-Mochnant Burial Register Transcript, p. 53. No corresponding baptism record exists for this child, and no first name was listed, which suggests he or she was not yet christened.
Thomas Wood (trans), *The Registers of Glasbury, Breconshire 1660-1836* (London, 1904), p. 13

were prone to differently. This is despite the widely-held belief amongst medical practitioners in the eighteenth century that diseases manifested themselves differently, and required different treatment regimes in male and female bodies.<sup>70</sup> The treatment of diseases may have varied based on sex, but death itself was perhaps somewhat more neutral.

#### Conclusion

The parish of Llanrhaeadr was in many ways a typical eighteenth-century rural British community, particularly in relation to endemic and epidemic diseases. Comparative analysis of seasonal patterns of disease-related mortality in the parish in relation to patterns found in other British parishes could provide further insight into this particular region's experience of infectious diseases. However, in many ways, mortality patterns in Llanrhaeadr may also have been unique, particularly with regards to increased longevity and lower illegitimate infant mortality, which may be important indicators of overall health and provision of care within the parish. This requires much closer analysis of available records, but offers intriguing potential to challenge current scholarly understandings of the poor quality of life in most rural Welsh parishes.<sup>71</sup> As with most parishes in Britain. parish officials were not medical experts, and likely based their diagnoses on the most obvious observable symptom at time of death. Access to lay and professional medical texts was available in both English and Welsh, and although there is no definitive evidence that such texts were in the possession of officials in Llanrhaeadr, it is likely that they had access to, and utilised some of this information in order to record as accurate a cause of death as possible. The question of how parish officials acquired their medical

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<sup>&</sup>lt;sup>70</sup> Wendy D. Churchill, "The Medical Practice of the Sexed Body: Women, Men and Disease in Britain, circa 1600-1740", *Social History of Medicine*, 18 (2005), 17.

<sup>71</sup> See: David W. Howell, *The Rural Poor in Eighteenth-Century Wales* (Cardiff, 2000); Humphreys, *Crisis of Community*; Withey, *Physick and the Family*, pp. 21-22.

information is an important one, and warrants further investigation. It is likely that the consistent recording of a cause of death was due, at least in part, to a basic interest in, and understanding of, medicine and disease. This unique record serves as further evidence of the ways in which communities on the fringe of British society, both geographically and linguistically, were able to engage with wider networks of knowledge and learning.

# **Bibliography**

# **Primary Sources**

Clwyd Family History Society parish register transcriptions Llanrhaeadr-ym-Mochnant Parish Register, Vol. 2-3 (CLD-21809)

National Library of Wales

Gaol Files 4/187/5

Powis Records Office (PRO)

**Apprenticeships** 

M/EP/34/O/AP/13, 73, 164

Churchwarden Accounts

M/EP/41/W/AC/4

Overseers' Accounts

M/EP/34/O/RT/1

Parish Registers

M/EP/34/R/A/10

**Quarter Sessions** 

M/QS/86/E/29

M/QS/97/T/3, 16, 19, 21, 64

M/QS/97/M/SO/3/20

Settlement and Removal Orders

M/EP/34/O/SC/20

Wood, Thomas (trans), The Registers of Glasbury, Breconshire 1660-1836 (London, 1904)

# **Secondary Sources**

Boulton, Jeremy and Leonard Schwarz, "Yet another inquiry into the trustworthiness of eighteenth-century London's Bills of Mortality", *Local Population Studies*, 85 (2010), 28-45

Churchill, Wendy D., "The Medical Practice of the Sexed Body: Women, Men and Disease in Britain, circa 1600-1740", *Social History of Medicine*, 18 (2005), 17.

Davies, Edward, "Llanrhaeadr-ym-Mochnant: Disease and mortality in a Welsh rural parish in the eighteenth Century", *Denbighshire Historical Society Transactions*, 55 (2007), 70-71

Dobson, Mary J., Contours of Death and Disease in Early Modern England (Cambridge, 2002)

Donnison, Jean, *Midwives and Medical Men: A History of the Struggle for the Control of Childbirth* (London 1988)

Duncan, S. R., Susan Scott and C. J. Duncan, "Smallpox Epidemics in Cities in Britain", *The Journal of Interdisciplinary History*, 25 (1994), 255-271.

Hardy, Anne, "Diagnosis, Death and Diet: The case of London 1750-1909" in Robert I. Rotberg (ed.), *Health and Disease in Human History* (London, 2000)

Hays, J. N., *The Burden of Disease: Epidemics and human response in western history* (New Brunswick, 2009)

Higgs, Edward, "The Linguistic Construction of Social and Medical Categories in the Work of the English General Register Office, 1837-1950", in Simon Szreter, Hania Sholkamy, and A Dharmalingam, *Categories and Contexts: Anthropological and Historical Studies in Critical Demography* (Oxford, 2004)

Howell, David W., The Rural Poor in Eighteenth-Century Wales (Cardiff, 2000)

Humphreys, Melvin, *The Crisis of Community: Montgomeryshire 1680-1815* (Cardiff, 1996)

Jenkins, Geraint H., A Concise History of Wales (Cambridge, 2007)

Jenkins, Geraint H., *The Foundations of Modern Wales, 1642-1780* (Oxford: Clarendon, 1993)

Jones, R. E., "Further Evidence on the Decline in Infant Mortality in Pre-Industrial England: North Shropshire", *Population Studies*, 34 (1980), 239-250

Jones, R. E, "Infant Mortality in Rural North Shropshire, 1561-1810", *Population Studies*, 30 (1976), 305-317

Kellehear, Allan, A Social History of Dying (Cambridge, 2007)

King, Peter, "The Impact of Urbanization on Murder Rates and on the Geography of Homicide in England and Wales", *The Historical Journal*, 53 (2010), 671-698

Landers, John and Anastasia Mouzas, "Burial Seasonality and Causes of Death in London 1670-1819", *Population Studies* (42) 1988, 59-83

Leidemann, Mary, Medicine and Society in Early Modern Europe (Cambridge, 1999)

Levene, Alysa, "The Mortality Penalty of illegitimate Children: Foundlings and Poor Children in Eighteenth-Century England" in Alysa Levene, Thomas Nutt and Samantha Williams (eds.), *Illegitimacy in Britain*, 1700-1920 (Basingstoke, 2005)

Louden, Irvine, "Deaths in childbed from the eighteenth century to 1935", *Medical History*, 30 (1986)

Ottaway, Susannah R., *The Decline of Life: Old age in eighteenth-century England* (Cambridge, 2007)

Pollock, Linda A., "Embarking on a rough passage: the experience of pregnancy in early modern society" in Valerie Fildes (ed.) *Women as Mothers in Pre-Industrial England* (London, 2013)

Porter, Roy, The Greatest Benefit to Man Kind: A Medical History of Humanity from Antiquity to the Present (London, 1999)

Porter, Roy, English Society in the Eighteenth Century (Harmondsworth, 1990)

Razzell, Peter, The Conquest of Smallpox: the Impact of Inoculation on Smallpox Mortality in Eighteenth-Century Britain (Sussex, 1977)

Schellekens, Jona, "Economic Change and Infant Mortality in England, 1580-1837", *The Journal of Interdisciplinary History*, 32 (2001), 1-13

Schofield, Roger, "Did the Mothers Really Die? Three Centuries of Maternal Mortality in 'the World We Have Lost" in Lloyd Bonfield, Richard M. Smith and Keith Wrightson (eds) *The World We Have Gained: Histories of Population and Social Structure* (Oxford, 1986)

Smith, James E., "Widowhood and Ageing in Traditional English Society", *Ageing and Society*, 4 (1984), 429-449

Smith, J. R., The Speckled Monster: Smallpox in England, 1670-1970, With Particular Reference to Essex (Chelmsford, 1987)

Snell, K. D. M., *Parish and Belonging: Community, Identity and Welfare in England and Wales, 1700–1950* (Cambridge, 2006)

Spray, E. C., "Health and Medicine in the Enlightenment", in Mark Jackson (ed.), *The Oxford Handbook of the History of Medicine* (Oxford, 2011)

Williams, Gareth, Angel of Death: The Story of Smallpox (Basingstoke, 2010)

Withey, Alun, *Physick and the Family: Health, Medicine and Care in Wales, 1600-1750* (Manchester, 2011)

Withey, Alun. "Health, Medicine and the Family in Wales, c. 1600 – c. 1750" (unpublished PhD Thesis, Swansea, 2009)

Woodward, Nick, "Crisis Mortality in a Welsh Market Town: Carmarthen, 1675-1799", Welsh History Review, 22 (2005), 432-462

Wrigley, E. A. and R. S. Schofield, *The Population History of England 1541-1871: A Reconstruction* (London, 1981)

Wrigley, E. A., R. S. Davies, J. E. Oeppen, R. S. Schofield, *English Population History from Family Reconstitution 1580-1837* (Cambridge, 1997)