

User Guide

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Burial Registers for Kingston upon Thames Parishes, 1850-1901 and Banner Hill Cemetery 1855-1901

General Introduction

The research supported by British Academy funding has been undertaken successfully. We have been able to complete our Kingston burials database; to check and correct all burial data inputting; and to complete the record linkage stage by which we have linked individuals from our burials database to our census database. Analysis of the data is now underway to highlight: (1) trends in mortality in Kingston between 1850 and 1911; (2) some of the interlinked social, geographical and environmental influences on mortality during that period. The importance of this research is that it makes comprehensive use of a source - local authority cemetery burial records - which has yet to be fully exploited by historians. Additionally, local burial records (both municipal and parish) record information on named individuals enabling the historian to "...move beyond the collection of the G.R.O.'s statistical information towards locally-based micro-level studies." (Williams and Galley (1995), p.420). Such local sources can not only be used to help test conclusions reached from an analysis of the established national sources, but can also help highlight local variations in, for example, the mortality decline of the late nineteenth century and the reasons for this, and in infant mortality.

Research Design, Data Analysis and Findings

The first stage of the research was to create a database from the Kingston Bonner Hill Cemetery Records, from Parish Registers and from adjacent (to Kingston) cemetery records. This was an amendment to the original research proposal (see my letter of 13th March 2000) since we had already received funding from the Nuffield Foundation to create the main part of the Bonner Hill database (21,500 records). With the British Academy grant we have been able to add substantially to the main database - 8,000 additional records from Bonner Hill covering the early years of the 20th century; a number of records gleaned from the registers of neighbouring cemeteries in Putney, Teddington and Twickenham; and over 3,500 records from the Kingston parish churches still using church graveyards after 1850 and from the local Catholic church. As a result we now have a burial database of some 33,000 records available for analysis. [Copies of the data from Bonner Hill and Parish Registers indicating how the data can be categorised are attached to this report]. A final amendment to our original proposal (outlined in my letter of 15th March 2001) allowed us to photocopy a number of the Kingston Field Books (held in the PRO under classification IR 58) compiled as part of Lloyd George's so-called "New Domesday" survey of 1909 onwards. These contain valuable information on, for example, housing conditions which were an important influence on mortality - especially infant mortality - during the 19th and early 20th centuries. This information will add significantly to our analysis at the micro level by allowing us to link infant deaths to housing characteristics and even to individual houses.

The next stage of the research was to analyse the data and this analysis has been carried out in two stages - analysis of the data as it stands, and analysis of the mortality data when linked in to other of our datasets including the census enumerators' returns for 1851 to 1891, and to other sources such as the Kingston Medical Officer of Health Reports.

Analysis : Stage 1. The type of information contained in the burial database (name, address, year and month of death, age at death, for example) has enabled us to build up a complete

profile of mortality in Kingston after 1850 and to identify trends over time by considering such questions as the age-profile of mortality; the seasonality of mortality; and infant and early childhood mortality. For example:

- one-fifth of all burials were of infants under the age of one, and one-third was of children under the age of five. The proportion of infant burials to total burials increased during the second half of the 19th century but began to drop during the early years of the 20th century;
- infants were particularly vulnerable during the first six months of their lives. The burial records provide details on the age of death (in days, weeks, months etc) of the majority of those who died during the first year of their life. In the Bonner Hill Registers and the parish burial registers this information is provided for 6,721 infants who died before reaching their first birthday, indicating that 14.9% of all infant deaths occurred during the first week after birth; 55.9% during the first three months after birth; and three-quarters of all infant deaths occurred during the first six months after birth.
- comparing the 1860s with the 1900s, all other age groups between 5 and 49 experienced a relative decline in the level of burials, whereas for those above 50 the reverse was the case. This indicates that after 1850 Kingston, in line with what was happening elsewhere, was experiencing improvements in housing, public health, diet etc which not only reduced the threat of death among the 5 to 49 year olds, but also helped to insure that more Kingstonians survived into old age.

Analysis : Stage 2. Neither the cemetery records nor the parish burial registers recorded **causes** of death. However, by analysing the available information in our database, by relating this information to other sources such as maps, MOH Reports and the “New Domesday” survey, and, finally, by linking the burial records to the census enumerators’ returns, it is possible to highlight some of the interlinked local, geographical, social, medical and environmental **influences** on mortality - especially infant mortality (death before the age of one) and child mortality (death between the ages of one and four inclusive). For example, analysis of the “abode” details in the registers indicates that certain areas of Kingston witnessed disproportionate numbers of infant deaths. One such area identified by the MOH was the “Canbury Group” which, although it only consisted of nine roads, was responsible for 19.5% of all infant burials between 1855 and 1911 and 19.2% of all child burials over the same period. Similarly, the “Norbiton Group” of only four roads was responsible for 5.4% of all infant deaths and 6.4% of all child deaths. Housing and environmental conditions in these areas had an important impact on infant mortality during this period and by turning to the housing conditions outlined in the “New Domesday” survey we can now highlight this connection at the micro level. For example, Asylum Road, part of the Norbiton Group, suffered 53 infant deaths before the age of one between 1890 and 1911 and the survey indicates that the houses were small (typical frontage being between 12 and 15 feet), rents were low (7/6d or 8/6d per week), whilst descriptions included: “poor structure”; “disgusting and filthy”; “the state of repair and the filth is simply disgusting”; “repair bad”. [This is just a small example of the analysis which is now possible into the relationship between housing (conditions, density, overcrowding, location etc) and mortality at the local (ward, street or even house) level].

Analysis of our data has also confirmed the seasonality of infant mortality. The most vulnerable time for infants was during the hot months of August and September (see diagram with attached tables) when the August heat precipitated bouts of infant diarrhoea which often proved fatal.

Finally, by linking the burial records to the census database it is possible to provide insights into mortality in Kingston which could not be deduced from the burial records alone. For example, from our linked data it is now possible to assess the impact of what is claimed to be an important influence on the levels of infant and child mortality – that is father’s occupation/social class. We were able to identify 287 children who died before reaching their fifth birthday in our census database where their fathers’ occupations were recorded. Using the 1951 Registrar General’s *Classification of Occupations* these occupations were translated into social classes I to V resulting in the following class profile of these 287 fathers: 31 in Classes I and II; 153 in Class III; 58 in Class IV; and 44 in Class V. In other words, the vast

majority of child deaths where the father's occupation is known were concentrated in social classes III, IV and V (89.1%). To provide these figures with context, in 1891, for example, preliminary research into Kingston's overall class profile indicates that these three classes made up 75% of the population of Kingston as a whole. The numbers here are not large but the influence of father's occupation (and class) on mortality is confirmed by a MOH Report of 1899 which analysed 43 infant deaths caused by diarrhoea and showed that 90% of fathers (or in 3 cases mothers where the father was absent) came from social classes III, IV, and V. This report highlights the influence of many factors on Kingston's relatively high levels of infant mortality - parents' occupations, location, housing and sanitary conditions, feeding practices etc. These are exactly those factors which we are considering in our research since, as Williams has shown in her study of the Sheffield burial registers, "...no single factor can be identified to account for the variability in the level or pattern on infant mortality. Monocausal explanations simply will not work." (Williams (1992), p.94).

The significance of this research for the future is: (1) having linked all of the 5 censuses from 1851 to 1891 and traced thousands of individuals through a number of censuses (from just two to all five), by linking in the burial records, we can now identify many individuals who died between census years and therefore ceased to appear in the census records; (2) consequently, we now have a large number of partial life-cycles for further analysis and future research will enable us to create full life-cycles by linking the available baptism and marriage material to the census and burial database; (3) the next stage - now the burial database has been created and linked to the census database - is to extend the analysis of mortality to a closer examination of all 7,581 individuals who appeared in both the burial registers and the CEBs in order to provide more insight into the influence of geographical location, housing, family size and occupations on mortality - in particular infant mortality - in Kingston after 1850.

Note on Record Linkage

The technique of record linkage used is based on running algorithms to create computer-identified linkages which are then checked by a research assistant. For this exercise, we used two algorithms to link the census database with the burial database. These algorithms suggested c.26,000 possible linkages. All of these were checked and identified as being true, false or in need of a second opinion. Eventually we had 7,581 valid linkages. This was marginally under 30% of all potential matches suggested by the algorithms, and was similar to our experience in linking the census records. Of the 7,581 individuals who could be linked from the burial records to the census returns 4,215 of them appeared in more than one census as follows:

Number of Links Between Burial Records and Consecutive Census Returns

Combination	Number of Links	Cumulative
5 censuses + burial	207	(207)
4 censuses + burial	643	(850)
3 censuses + burial	1,204	(2,054)
2 censuses + burial	1,962	(4,016)
2 + censuses* + burial	199	(4,215)
1 census + burial	3,366	(7,581)

* These 199 links were between the burial records and more than one census but these censuses were not consecutive.

The significance of linking the burial records to the CEBs is (1) we now have a large number of partial life-cycles for further analysis and are closer to creating full life-cycles;ⁱ (2) such an exercise provides insights into mortality in Kingston which could not be deduced from the burial records themselves. For example, from our linked data it is now possible to assess the impact of what is claimed to be an important influence on the levels of infant and child mortality - that is father's occupation/social class. We were able to identify 287 children who died before reaching their fifth birthday in our census database where their fathers' occupations were recorded. Using the 1951 Registrar General's *Classification of Occupations*

these occupations were translated into social classes I to V resulting in the following class profile of these 287 fathers: 31 in Classes I and II; 153 in Class III; 58 in Class IV; and 44 in Class V. In other words, the vast majority of child deaths where the father's occupation is known were concentrated in social classes III, IV and V (89.1%) whereas in 1891, for example, preliminary research into Kingston's overall class profile indicates that these three classes made up only 75% of the population of Kingston as a whole.

The next stage – now the burial database has been created and linked to the census database - is to extend the analysis to a closer examination of all 5,610 individuals who appeared in both the burial registers and the CEBs in order to provide more insight into the influence of geographical location, housing, family size and occupations on mortality in Kingston in the second half of the nineteenth century.

Data Files Content and Description

1. Bonner Hill Burial Registers

Details of every individual buried in Bonner Hill Cemetery, Kingston upon Thames, from its opening in June 1855 until December 1911

No. of Records: 29,551

2. Kingston Parish Burial Registers

Details of every individual buried in one of the Kingston Parish Church graveyards between 1850 and December 1901 (plus 367 burials outside of these dates)

No. of Records: 3,514

Bonner Hill Data Field Definitions

Name	Description
UID	Unique Identification Number
RegNo	Registration Number (as per original document)
RegNo1	Suffix for Duplicate Registration Numbers
DDDeath	Day of Death Date
MMDeath	Month of Death Date
YYDeath	Year of Death Date
Surname	Deceased's Surname
Forename	Deceased's Forename
Abode	Deceased's Address (few details until 1873)
Age	Deceased's Age
Parish	Parish Deceased Came From
C/Uc	Buried in Consecrated or Unconsecrated Ground
GraveNo	Number of Grave and Place of Burial
PrivateVault	Private Vaults and Graves
DDBurial	Day of Burial Date
MMBurial	Month of Burial Date
YYBurial	Year of Burial Date
Comments	Contemporary Comments plus some Comments made by data in-putter's highlighting specific problems

Kingston upon Thames Burial Database : Bibliography

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ⁱ This will involve linking the available baptism and marriage material to the census and burial database.