Langcliffe Parish Register Notes: St John the Evangelist

Langcliffe Parish was created in 1851 (consecrated September in that year) resulting from the division of the Ancient Parish of Giggleswick into five parts. With appropriate permissions, the Langcliffe Parish registers for baptisms, banns, marriages and burials in book form have been copied as digital images to ensure preservation of the information. The full set of images is not available to the public.

Baptisms 1851-2000; Banns 1851-2018; Marriages 1851-1990; Burials 1851-2003.

Analysis has been carried out for the period 1851-1951 with no mention of names. There is a vast amount of literature on the subject of population studies in this period; some population-dependent conclusions from this study are somewhat simplistic and must be treated with caution. Nevertheless, aspects of ordinary life with respect to life expectancy, social behaviour and general health are revealed by this study and put into the national context.

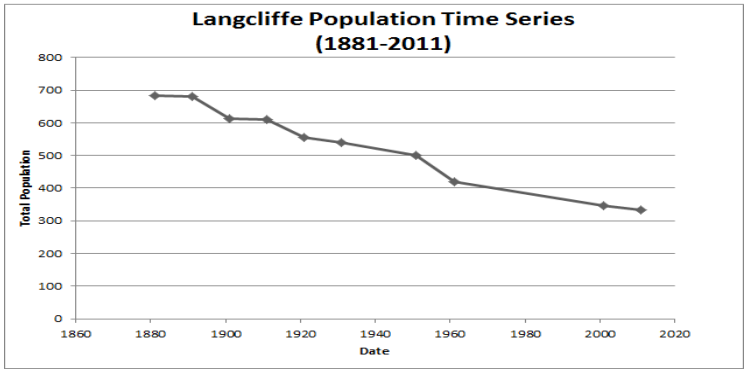
Population

It is necessary to consider the number of inhabitants in the village to put the parish register data into context. Population data are available over this period of 100 years. In 1855 Langcliffe cotton mills, where many villagers were employed, closed and the village became severely depopulated. Many inhabitants left the village and moved to Accrington. Matters improved in the 1860s but workers had then to be brought in from elsewhere. This has implications for some conclusions reached since not all those born in the village were baptised, married in the church and eventually buried there. Only by the technique of family reconstruction, following individuals through birth, marriage and death, can exact values of many statistics be obtained, but this requires enormous effort and in the case of Langcliffe is unlikely to be successful.

The early Langcliffe census data and information from the Medical Officer's Report of 1897 are as follows.

1801	260
1811	332
1821	420
1831	550
1841	664
1851	601
1861	376
1871	665
1881	683
1891	681

Data for later times are also available. Immigration and emigration numbers were considerable so a stable population cannot be assumed as shown by the large variation in numbers.



commons.wikimedia.org/wik/ File: Langcliffe Population Time Series

Baptisms

The records for the first year 1851 are partial so analysis is confined to the 100 year period 1852-1951. Some baptisms may have been carried out elsewhere, by the Methodists for example. Methodists perhaps represented about 10% of the Langcliffe population. After 1837 all births had to be notified to the General Register Office so total numbers for the village could be determined but only with some considerable extra study. The data in the parish register are therefore a sample and do not present a completely accurate picture for the village.

In early times baptism followed birth within days or weeks because of the high mortality rate for infants. In the Langcliffe register there are a few cases of several children in one family being baptised on the same day – some of whom may not have been infants. The baptisms of children of a particular couple are therefore not always in the same year as their birth.

Period	No. of male baptisms	No. of female baptisms	Total baptisms	male/female number ratio	Illegitimate: numbers of baptisms	% Illeg./ baptisms
1852-1876	169	155	324	1.09	27	8.0
1877-1901	154	127	281	1.21	17	5.8
1902-1926	149	146	305	1.02	8	2.6
1927-1951	71	87	158	0.82	2	1.3
				avge. 1.04		

The ratio of numbers of male births to numbers of female births for the UK population is about 1.05. There is quarterly variation of the baptism numbers ratio for Langcliffe but the average of 1.04 over 100 years for about 1000 baptisms is in agreement with the national value for births as expected.

The percentages of baptisms recorded for single (unmarried) women (8.0% falling to 1.3%) appear large but the numbers are in line with national values. Not all illegitimate children might have been baptised. A few of the then single women were married a few years later.

Year	National % illegitimate births
1850	7
1900	4
1950	5.5

The number of baptisms is roughly proportional to the population in the first three quarters but falls significantly in the last quarter.

Period	Approx. population	No. baptisms
1852-1876	550	324
1877-1901	660	281
1902-1926	580	305
1927-1951	520	158

The effect of the first and second World Wars bringing about changes in religious attitudes to baptism may be the reason. Many children died in their first few years of life (10 to 20%), with great improvement in survival rates in the last quarter so the actual numbers of surviving children would indicate a slightly less notable decline in the final quarter.

Marriages

Period	Marriages	Baptisms	Baptisms/Marriages	Population (averaged)
1852-1876	96	324	3.4	550
1877-1901	98	281	3.0	660
1902-1926	106	305	2.9	580
1927-1951	73	158	2.2	520

The numbers of marriages seem unremarkable as a proportion of the population but the number of children baptised in each family does appear to decline slowly. In earlier centuries average family size was about 4.5 persons, i.e. 2.5 surviving children per family. A trend to smaller family size is seen in Langcliffe, although family numbers are probably smaller than the Baptisms/Marriages ratio would suggest because of child mortality. It seems likely that the baptisms are properly associated with the marriages, so little affected by emigration and immigration. Some immigrants married elsewhere could have had their children baptised in Langcliffe. Some emigrants married in Langcliffe could have taken their children to be baptised elsewhere than Langcliffe. These numbers therefore have to be treated as approximate.

Burials

Period	Burials, male	Burials, female	Total Burials	Burials, male 0-1 years old	Burials, female 0-1 years old	Population (averaged)	No. of Burials/ year/ 1000 population	% child 0-1years burials
1852-1876	89	128	217	16	27	550	16	20
1877-1901	128	173	301	31	23	660	18	18
1902-1926	100	85	185	20	14	580	13	18
1927-1951	74	88	162	6	2	520	12	5
Totals	391	474	865	73	66			

The marked differences in the numbers of male and female burials are linked to life expectancy differences and the different numbers of males and females in the population.

The most notable statistics are the large percentages of burials of children less than one year old. In earlier centuries typically 30% of children failed to survive their first year. In Victorian times there was some improvement but only after the first World War did sanitary conditions and health practice improve markedly and child mortality decrease substantially. The numbers of deaths per year per 1000 of population also show a gradual decline due to health improvements. These rates are very similar to Scottish rates, varying from about 21 to 12 deaths per year per 1000 population in this period (ons.gov.uk). Some inhabitants of course may have chosen to be buried elsewhere.

Life expectancy at birth

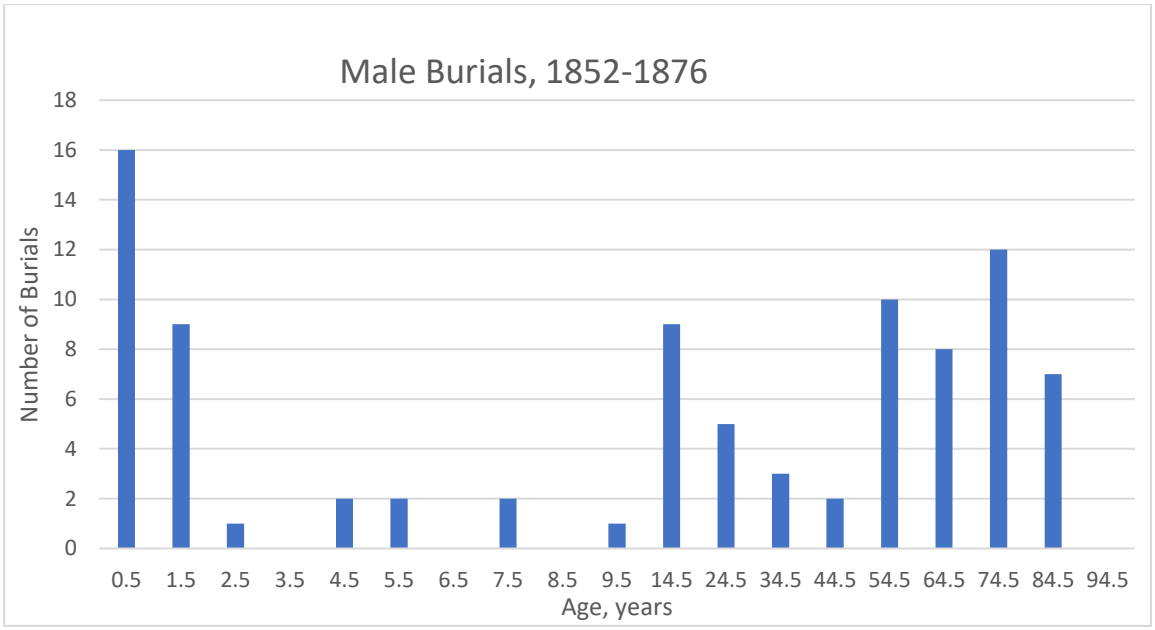
The register records age at death which is very helpful in considering life expectancy at birth and social factors affecting health at this time. However, the persons recorded may not have been born in Langcliffe so we are dealing with a sample of the national population. We know that recruitment of labour from the west country and Norfolk happened in the 1850s – 1860s. An assessment just for

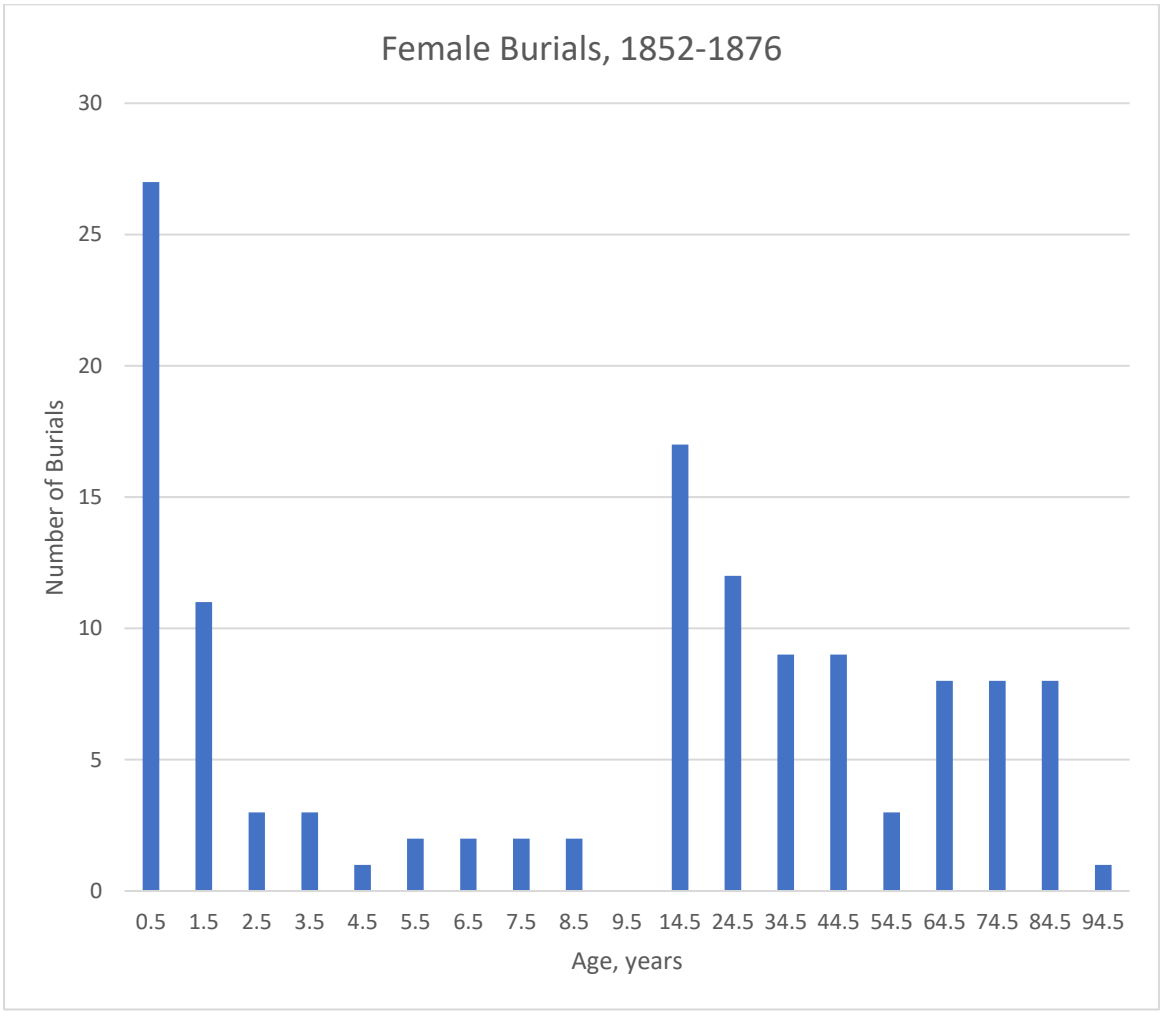
Langcliffe would need family reconstruction to be made – a very tedious process with many fewer families capable of being analysed. The age at death distributionfor those named in the register has been worked out for each quarter. For example, for 1852-1876, the age at death distribution is as follows:

Age, years	Male Burials	Female Burials
0-1	**16**	**27**
1+	**9**	**11**
2+	1	3
3	0	3
4	2	1
5	2	2
6	0	2
7	2	2
8	0	2
9	1	0
10-19	**9**	**17**
20-29	**5**	**12**
30-39	**3**	**9**
40-49	2	9
50-59	10	3
60-69	8	8
70-79	12	8
80-89	7	8
90-99	0	1

There is a notably larger number of female deaths up to 2 years old and in the 10 to 39 age group than for males. The high values for females of child-bearing age may be attributed to childbirth mortality.

The following graphs with the same scale for numbers of burials illustrate the age distribution at death more clearly.


Male Burials, 1852-1876
Number of Burials
0
2
4
6
8
10
12
14
16
18
0.5
1.5
2.5
3.5
4.5
5.5
6.5
7.5
8.5
9.5
14.5
24.5
34.5
44.5
54.5
64.5
74.5
84.5
94.5
Age, years


Female Burials, 1852-1876
Number of Burials
0
5
10
15
20
25
30
0.5
1.5
2.5
3.5
4.5
5.5
6.5
7.5
8.5
9.5
14.5
24.5
34.5
44.5
54.5
64.5
74.5
84.5
94.5
Age, years

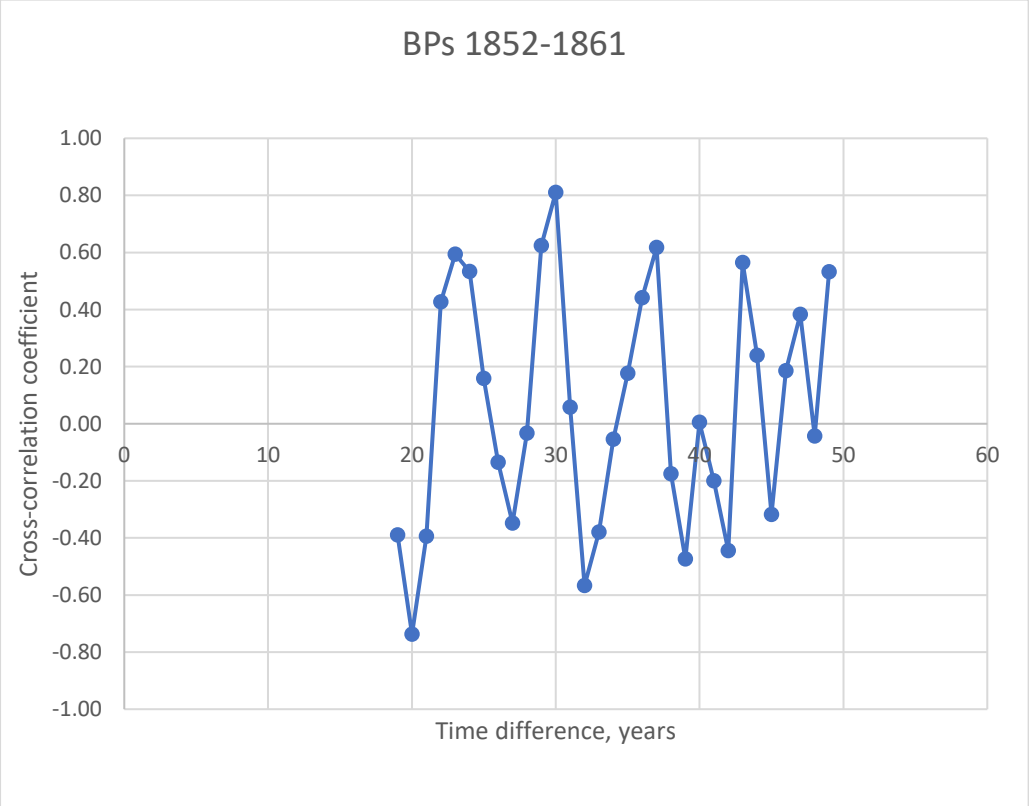
Using the ages at death in each group, the average age (life expectancy at birth) can be calculated for each 25 year period. This is calculated by summing the products of fraction in each age group and the average age in that group. The *caveat* is that the persons recorded were not all born in Langcliffe. The results therefore are for a sample of the national population.

Period	Life expectancy, male, years	Life expectancy, female, years	Overall, years
1852-1876	34	27	31
1877-1901	31	35	33
1902-1926	48	46	47
1927-1951	61	65	63

The gradual improvement is not surprising and continues: life expectancy at birth is currently, in 2021, about 81 years.

Recently a new technique for estimating life expectancy has been developed for small parishes with stable populations with little emigration or immigration (as was the case in Tudor times). This is not true for Langcliffe for Victorian times but the results are of interest. Sets of ten years from 1852 of varying annual numbers of baptisms (should ideally be births) are compared with sets of ten years of varying numbers of burials (unfortunately not necessarily the same persons) sometime later after a number of years. Cross-correlation is used to find the best fit of the two patterns of annual variations, the time difference being taken as the life expectancy when the cross-correlation coefficient shows a definite maximum peak and a value well over 0.5. The calculations are limited to no later than 1901 since population post 1900 is falling significantly.

A typical result of calculations for the first decile shows a reasonable value of 30 years for life expectancy.

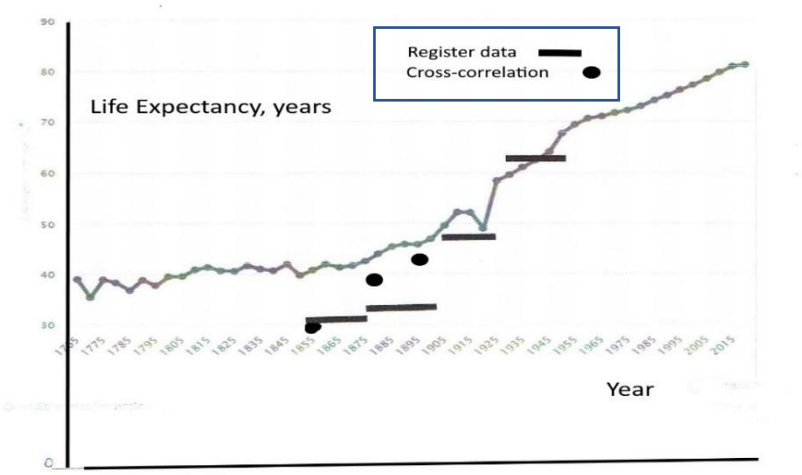


Peak at 30 years when cross-correlation coefficient is 0.81

In summary the results for later deciles are (surprisingly) reasonable.

Period	Life expectancy, years (cross-correlation)
1851-1861	30
1862-1871	-
1872-1881	36
1882-1891	41
1892-1901	39

The life expectancy data for Langcliffe can be compared with national values.



statistica.com/statistics/1040159

The data for Langcliffe in Victorian times seem to show a slightly poorer life expectancy at birth than the national values, probably due to the predominance of labourers in the village population – whether farming or quarrying mainly. However, in the 1900s conditions appear to improve and life in Langcliffe was no worse than elsewhere from the point of view of life expectancy.

In earlier centuries life expectancy was about 30 to 40 years, even into Victorian times. Of course, not everyone died at the age of life expectancy – many lived to be 80 or 90 years old, even in Langcliffe.

Age distributions at death

Using the age ranges commonly adopted by population studies authors (e.g. Hinde), in rounded percentages, the age distribution at death is suggested for different life expectancies. A comparison can be made using Langcliffe percentage data with life expectancy varying from 31 to 63 years.

Age range, years	1852-1876	1877-1901	*Hinde (30y life expectancy)*
0-4	34	28	*39*
5-19	18	14	*8*
20-39	13	19	*14*
40-59	11	12	*16*
60-69	7	12	*11*
70-79	9	12	*9*
80+	7	4	*3*
Life Exp., years	31	33	*30*

Age range, years	1902-1926	*Hinde (50y life expectancy)*	1927-1951
0-4	23	*18*	7
5-19	4	*5*	2
20-39	9	*10*	4
40-59	17	*16*	15
60-69	17	*16*	21
70-79	20	*20*	31
80+	10	*14*	20
Life Exp., years	47	*50*	63

The values quoted by Hinde are based on a complex mathematical model using European data. If such a model is valid, it appears that in Langcliffe, percentage mortality in all groups is unexceptional apart from 1927-1951 – but the model does not account for social upheavals such as the aftermath of WW1 and then WW2.

Health

Inevitably one looks for evidence about sanitary conditions in the village and there is the Settle Union Medical Report of 1897 which provides this. In 1897 there were 85 houses in the village with 456 people in the village central area (not the larger Langcliffe parish). Thus there were 5.4 persons per household (the Baptisms per Marriage number ratio was 3.0 as noted above). The water supply was from the village fountain (said to be liable to pollution) and some wells. Sewerage was provided in 1879 but before then there were open privy-middens for the most part. The Medical Report lists the causes of deaths:

Per 1,000 persons

Zymotic diseases	0.8	(contagious)
Respiratory diseases	3.1	
Phthisis (TB)	1.1	
Injuries	0.5	
Infant mortality	119	(unspecified) (12%)

The water supply in Langcliffe and health implications have been described by Harold Foxcroft (North Craven Heritage Trust Journal, 2004). A proper water supply was achieved in 1914. Before then, a spring fed the fountain from which water had to be carried. The fountain frequently dried up in summer. The springs at Cowside were used in 1914 to supply a reservoir at Cowside with piping down to Langcliffe. Supply to individual houses followed only later.

Vaccination for smallpox was available from the early 1800s but not for other diseases. A vaccine for tuberculosis (a bacterial disease otherwise known as consumption), encouraged by overcrowding and poor sanitation, was developed only in 2011. Several antibiotics in combination are required for treatment. Pertussis (whooping cough) is very dangerous for infants: in the UK, a vaccine has been routinely offered since the 1950s. Diphtheria was the third leading cause of death of children in the 1930s; effective immunisation started in the 1920s. Measles vaccine became available in 1963.

The antibiotic penicillin was discovered in 1928 and introduced in the 1940s. The sulfonamide anti-bacterial drugs were discovered in 1935 and used in the late 1930s.

The employment in Langcliffe in the 1800s comprised mainly agricultural labouring, cotton spinning, lime burning and stone quarrying. None of these were well-paid jobs or conducive to good health and the absence of effective medical treatment until the mid-20th century helps to explain the data revealed by the registers.

Acknowledgements
Mrs Kate Croll was instrumental in making this project feasible and many thanks are due to the vicar, Revd Stephen Dawson, for his agreement to allow access to the registers and permission to make the analysis available to the public.

Sources of Information

West Riding County Council Report of the County Medical Officer upon the Sanitary Condition of the Settle Union. 1897.

Hinde, A., 2003. *England's population: a History since the Domesday Survey*, Pub. Hodder, London.

Slater, M. J., 2020. *Cross-correlation of numbers of baptisms and burials in sixteenth-century parish registers*. Local Population Studies, Autumn, No. 105, pp120-135.

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