

SURELY THEY MADE A DIFFERENCE? HEALTH VISITORS AND
INFANT MORTALITY IN THE 1900s

Michael Drake

In number 73 of *Local Population Studies*, Chris Galley discussed the sharp secular decline in infant mortality that commenced 'at or around 1900¹ ... almost simultaneously in every English and Welsh Registration District',² and the role played in it by social intervention, especially through the appointment of health visitors. He concluded that 'social intervention by itself was not responsible for the turning point in the national infant mortality series'.³ He is probably right, if only because we have been taught that mono-causal explanations of demographic phenomena are highly suspect. I feel, however, that by not providing quantitative evidence of the nature and enormous amount of work carried out by the relatively small number of health visitors—the word Stakhanovite springs to mind—his argument lacks depth. This note is an attempt to redress that balance.

There is little doubt that in the course of the opening decade of the twentieth century there was a dramatic increase in the amount of attention paid to the problem of infant mortality and in the nature of that attention. Previously a macro-level approach (general improvements in sewerage, water supply, diminution of 'nuisances' etc.) had succeeded—some, but not all would argue—in dramatically reducing the mortality rates of other age groups from c.1870. Now this effort was to be supplemented by a micro-level one: the creation of a one-to-one relationship between an infant's mother and a health visitor. To assess the effectiveness of this form of social intervention, several questions need to be addressed. First, what changes in behaviour were being attempted; second, how speedily could such changes be effected; third, were the number of health visitors sufficient for the task.

As to the first of these questions we can confine ourselves to the experience of Sheffield, one of two towns (the other being Birmingham) that provide the empirical material for Galley's article. In 1906 the town conducted an inquiry into 'infantile mortality'.⁴ Table 1 shows the findings of the visits paid in 1905 and 1906 by the six female sanitary inspectors who in addition to their normal duties had, from 1900, taken on a health visitor role.⁵ From this table it would appear that the matters to which attention was being paid and, one assumes, those that might be the object of social intervention, were: the health of the child at the time of the visit (surprisingly good, it would seem); how it was being fed (82 per cent 'breast-fed entirely' in both 1905 and 1906 suggests the

Table 1 Particulars with regard to visits paid with respect to births during 1905 and 1906

Activity	1905	1906
No. of babies visited	6,673	9,458
No. above who were: first children	1,302	1,857
“ healthy	6,338	8,824
“ puny	335	634
“ breast-fed entirely	5,450	7,809
“ breast-fed partly	658	812
“ bottle-fed entirely	531	781
“ fed otherwise, e.g. spoon-fed etc.	34	56
Type of feeding bottle used: boat-shaped	383	761
long-tubed	257	310
Children put out to nurse (usually day time only)	40	63
Cases in which mother engaged in some other occupation	167	251
Cases where house was dirty	250	269
Cases where separate cot used	-	721
No. of cases where – midwives attended	-	4,506
– doctors attended	-	3,037

Note: The information on attendance by doctors and midwives was not obtained until after February, 1906.

Source: City of Sheffield, *Special committee as to infantile mortality: reports submitted to and summary of evidence given before the committee* (Sheffield 1907), 11.

visits were made early in a child's life); if a feeding bottle was used was it a safe one; whether a child was being put out to nurse (negligible); whether a mother had an occupation (a common complaint by the 'chattering classes' but seen here to be negligible too); whether a house was dirty (again commonly supposed, but seen to be negligible); and whether a separate cot was being used. This last mentioned factor was a matter of frequent comment—children were dying from overlaying by parents and, presumably, siblings. Finally, a high proportion of births appear to have been attended by 'professionals' (65 per cent), although there is some ambiguity here: was it an either-or situation or did midwives and doctors attend a birth together. These features can be seen to be the ones that impacted directly on the infant, so the fact that such attention was being paid can only have been of benefit to the child.

Our second question—how speedily could change be effected?—can also be answered, in part, by Table 1. In 1906, 2,785 more babies were visited than in

1905, an increase of 42 per cent. This is both a substantial increase in absolute terms and relative to the number of births. For in 1905 the number of babies visited per 1,000 births was 490, whilst in 1906, it was 678.⁶ On the question of feeding methods (breast *versus* bottle) there is little change between the two years. However, what the figures could well hide is the impact of the visit itself. Did some mothers breast-feed their children for longer after the visit (even an additional few weeks could be a matter of life or death) and if they were already bottle-feeding—or intending to do so?⁷—did they shift to the boat-shaped bottle from the lethal long-tubed one? It is interesting in this latter regard that the number of babies who were fed by the safer boat-shaped bottle rose by 99 per cent between 1905 and 1906, while those being fed by the long-tubed one rose by only 22 per cent. The evidence from Table 1, then, does suggest that important changes affecting infants could be brought about quickly.⁸

Our third question—were the number of health visitors sufficient for the task?—cannot be answered fully from the information provided by Table 1, for it does not tell us how many infants were visited more than once, or the impact of those visits. There were six female sanitary inspectors in 1905 (two of whom had been appointed in 1899 and four in 1901), with a further two being added in 1906.⁹ If the babies were visited only once, then, on average, each sanitary inspector visited 1,112 in 1905 and 1,182 in 1906. Evidence from other towns suggests this was a relatively small number of visits. This may have been because, in Sheffield, the visitors were sanitary inspectors first and health visitors second. Thus, if they had to carry out duties they shared with their male colleagues, they would have less time for what came to be called health visiting. The productivity rate of Birmingham's health visitors was much higher. For by 1900, the upwards of eight visitors 'paid 23,504 visits and 8,538 re-visits to the homes of the poor', or 4,000 per visitor.¹⁰ In the woollen textile town of Batley (West Riding of Yorkshire), a health visitor was appointed in 1906, but she was paid by voluntary subscriptions and assisted by voluntary lady visitors. Her work was immediately welcomed by the town's Medical Officer of Health: 'I can vouch for an important fact viz. that there are more people suckling their children than did so before she began her labours'. We do not know how many visits she made, but her successor in 1910 (a fully-trained nurse with certificates from the Royal Sanitary Institute and the Central Mid-Wives Board) aimed to visit every baby born, with re-visits where necessary. By 1913 she was recorded as making 4,000 visits a year.¹¹ In 1907, a health visitor was appointed in Ipswich. In 1909 she paid 1,770 visits. There were in that year 1,820 births in the town. The Medical Officer of Health was loud in her praise, noting that her arrival coincided with the beginning of the secular decline in the infant mortality rate, it being 'evident that general sanitary improvements exerted no influence upon the infant mortality rate up to the end of 1906.'¹²

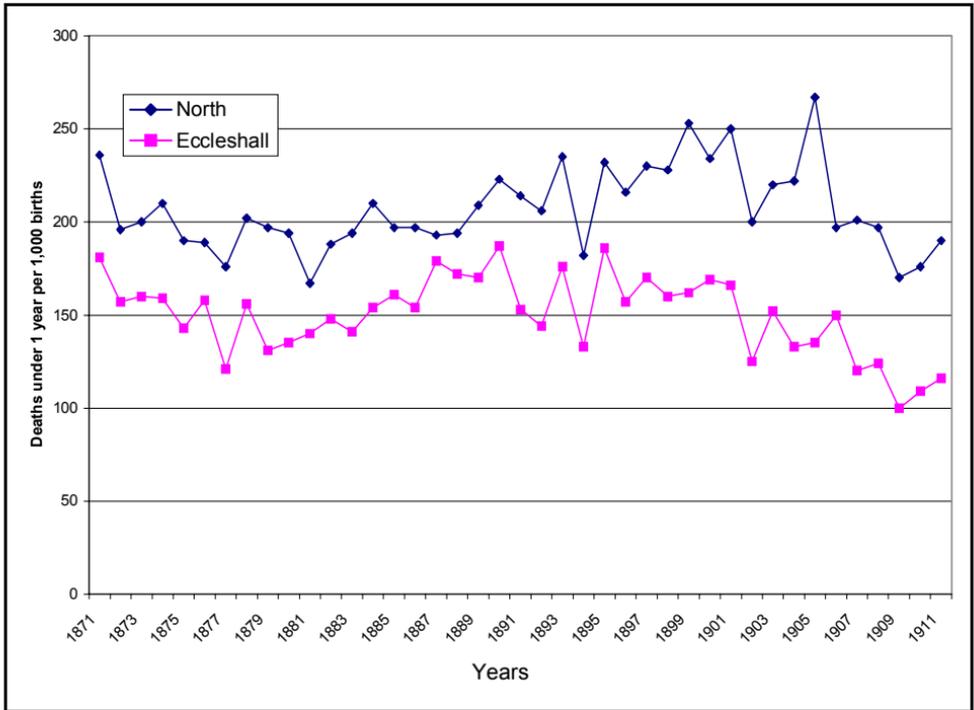
A hypothetical question, but perhaps worth putting, is how many health visitors would have been required in the country as a whole to visit every newborn child, given that a single visitor could make between 2,000 and 4,000 visits

a year. There were in the first decade of the twentieth century between 830,000 and 930,000 births per year in England and Wales. If then we take the lower figure (2,000 visits per year) then only between 415 and 465 visitors would have been needed. With the higher figure (4,000 visits per year) then only between 208 and 233 visitors would be needed—tiny numbers, one must admit, and giving an indication that the problem of providing a one-to-one relationship (albeit, in this example, fleeting) was far from insuperable.¹³

Most of the evidence on health visiting is of the state-sponsored variety. This is not surprising as official records tend to be better preserved than private ones. But there are indications that the state got in on the act after the private sector had paved the way. In this regard, then, health visiting was like elementary education, giant strides in which had been made long before the Education Act of 1870. I have already referred to the first health visitor in Batley paid for from voluntary subscriptions. In Manchester, the Ladies Branch of the Manchester and Salford Sanitary Association started the health visiting process.¹⁴ Another example comes from Chesterfield, a small industrial town (population 26,000 in 1900) close to Sheffield. A Miss Ashwell remarked in 1899 that as the officer of the Chesterfield Infant Life Protection Society, she visited 'each house where a birth had taken place.' Her visits, she said, were 'appreciated, expected and sought after' and 'wherever possible repeat visits made' and [she] 'always found that some attempt [had] been made to carry out teaching given ... teaching ... frequently passed on to neighbours and friends'.¹⁵ Miss Ashwell's work was greatly facilitated because she was supplied with 'monthly lists of births and deaths under one year of age'.¹⁶ Note that this was eight years before the Notification of Births Act came into force; yet another case of the state entering the arena after a private initiative had paved the way. A local manufacturer also produced the 'Chesterfield Health Bottle', a cheap (3½d.) tubeless feeding bottle which, as Miss Ashwell pointed out, was a 'practical difficulty overcome'.¹⁷ What role she or the Society she worked for had in getting this made is not stated.

Galley argues that because in Birmingham the IMR fell between 1904 and 1908 faster in its outer wards 'where little intervention appears to have taken place' than in its inner wards, where it had (by 40 as against 27 per cent) 'intervention can provide, at best, only a partial explanation of Birmingham's declining IMR'.¹⁸ This can be interpreted in several ways. Either Galley believes that social intervention brought about, in part, the decline in the IMR in the inner wards, but that something else accounted for its decline in the outer ones; or that what brought about the decline in the IMR in the outer wards also applied, although, with less force, in the inner wards, with social intervention in the form of health visiting having only a subsidiary role in the latter. I would suggest an alternative, although equally unquantifiable, hypothesis, namely that in both areas the same factors applied—improvements in child-care, especially in feeding, together with better personal hygiene. The middle classes and upper working classes of the outer wards embraced these without benefit of health visitors. They got their information from other sources—doctors, newspapers, books, the manufacturers of baby foods and

Figure 1 Deaths under 1 year per 1,000 births in the North and Eccleshall sub-registration districts of Sheffield, 1870-1911



Source: Medical Officer of Health Reports, Sheffield. Data courtesy of former Open University research student Valerie Dodgson.

feeding bottles. The lower classes of the inner wards need chivvying, and this was done by health visitors. We see the same thing today, with the middle classes far more adept at exploiting, without social intervention, the benefits offered by education and health care than are the working classes for whom various programmes of positive discrimination are put in place.

Turning to Sheffield we find a rather different situation as regards both the level and trajectory of infant mortality between inner and outer areas. My comparison is not as nuanced as that carried out by Galley on Birmingham, being based on just two sub-registration districts rather than 18 wards, although I cover a longer period. North is the inner city sub-registration district and Eccleshall, the outer one. As Figure 1 indicates, the IMR in North was consistently higher than in Eccleshall and its secular decline began later, 1905 as against 1897. We also notice that the rate of decline in the IMR in North was lower than in Birmingham's inner city wards. The latter experienced a fall of 27 per cent between 1904 and 1910. In North the reduction was 21 per cent

(from 222 to 176 deaths under one year per 1,000 births). Galley's view that 'Birmingham was far more active than Sheffield in implementing interventionist policies' might suggest the reason for this if, as I have argued, social intervention was important in bringing down the IMR.

Galley both starts and ends his article by urging a greater use of Medical Officer of Health Reports to cast light on the matters he discusses. To this I would add a plea for greater use of Parliamentary Papers, although these are more difficult to access (a micro-fiche edition is, however, available) and local newspapers. Both these sources provide more information on private initiatives in the care of infants, as opposed to public initiatives which are the main concern of the Medical Officer of Health Reports.¹⁹

NOTES

1. C. Galley, 'Social intervention and the decline of infant mortality: Birmingham and Sheffield c.1870-1910', *Local Population Studies*, 73 (2004), 29-50.
2. Galley, 'Social intervention', 29.
3. Galley, 'Social intervention', 46.
4. City of Sheffield, *Special committee as to infantile mortality: reports submitted to and summary of evidence given before the committee* (Sheffield 1907). I am grateful to former Open University Research Student, Valerie Dodgson, for drawing my attention to this source.
5. Galley, 'Social intervention', 39.
6. The totals of births are taken from the Sixty-eighth report of the Registrar General of Birth, Marriages and Deaths, *British Parliamentary Papers*, XX, 177; and the Sixty-ninth Report of the Registrar General of Births, Marriages and Deaths, *British Parliamentary Papers*, XVII, 179.
7. In 1906 an analysis of the amount of cow's milk drunk by 204 families with a recent birth, 174 of which had 'lost one or more children by death under the age of 12 months', was carried out in Sheffield. The families were taken from four precisely delineated districts. It was found that the consumption varied from 1.1 to 1.8 pints (1.2 to 2 litres) per head per week. Taking adults out of the calculation we find the consumption per child would have been from 1.7 to 3.3 pints (1.9 to 3.6 litres) per week. City of Sheffield, 'Special committee', 12.
8. In Norwich, the use of the long-tubed bottle to provide supplementary food fell from 72.4 per cent of all new-borns to 5.7 per cent between 1905 and 1916. Also the number of infants receiving sterilised dried milk (Glaxo's) rose from 1.7 per cent in 1906 to 46.4 per cent in 1919, V. Fildes, 'Infant feeding practices and infant mortality in England, 1900-1919', *Continuity and Change*, 13 (1998), 26. As often in historical demography, evidence is fuller in the Nordic countries. Three examples of rapid change in feeding practices come from northern Sweden where Carl Josua Wrotholm, the first physician to arrive in the small town of Haparanda managed to get its mothers to breast feed their new born children (a practise previously resorted to only when no other food was available) between 1836 and 1851. He did so by appointing a 'licensed mid-wife' to make one-to-one visits. The IMR fell from 400 to 200 per 1,000 between these dates. On a somewhat larger scale, again involving trained mid-wives not only to visit but to stay with mothers for some days after they had given birth, the IMR in Iceland fell in four decades from 'being higher than in most European societies to being among the lowest'. Finally, in Norway, only 30 per cent of mothers were still breast feeding at three months in the late 1930s. By the late 1980s this had risen to 80 per cent, which is what it had been from 1860-1920. G. Rostrom, A. Brändström and L-Å. Persson, 'The impact of breastfeeding patterns on infant mortality in 19th century Swedish parish, (Umeå, n.d.)', 12; Ö. Gardardsdóttir, *Saving the child: regional, cultural and social aspects of the infant mortality decline in Iceland, 1770-1920*, (Umeå, 2002); K. Liestøl, M. Rosenberg and L. Walløe, 'Breast-feeding practice in Norway, 1860-1984', *Journal of Biosocial Science*, 20 (1988), 49.
9. C. Shaw, 'Aspects of public health' in *The history of the city of Sheffield 1843-1993*, Vol II. *Society* (Sheffield, 1993), 112.

10. A. Hill, 'Women health visitors', *Journal of the Sanitary Institute*, **XVII** (1902), 188.
11. S.M. Archer, *Infant mortality in Batley 1890–1914*. 'Destruction of the Innocents', (unpublished research component for the Diploma in Local History, Trinity and All Saints College, Leeds, 1988), 8–9, 14.
12. A.M.N. Pringle, *Annual report of the medical officer of health and the school medical officer for the year 1909*, County Borough of Ipswich, (Ipswich, 1910), 39–40. I am grateful to Open University Research student Eric Hall for drawing my attention to this source. From figures given in *Medical Officer of Health Report on infant and child mortality: a Supplement to the 42nd Report of the Local Government Board 1912–13*, British Parliamentary Papers (1913), **XXXII**, 118+, it is possible to produce estimates of the number of visits made by health visitors in a large number of towns in the early years of the 1910s. Some examples are: Aberdare, 1,668 plus re-visits; Acton (1912) 1,033 first visits, 258 revisits 'in some cases fortnightly' (75 per cent of all births); Aldershot, 626 first visits (68 per cent of all births) 'average re-visits being 3–4'; Ashton-under-Lyne, 773 first visits (75 per cent of all births) 're-visits being made to all the cases'.
13. By 1930 there were 2,331 full-time equivalent health visitors in England, of whom 1,810 were maintained by local authorities and 521 by voluntary organisations. Earlier, in 1922, some 346 antenatal clinics were maintained by local authorities as against 218 by the voluntary sector. B. Harris, *The origins of the British welfare state: society, state and social welfare in England and Wales 1800–1945* (London, 2004), Table 15.5.
14. C. Davies, 'Making history: the early days of the HVA', *Health Visitor*, **60** (1987), 146.
15. Miss Ashwell, 'Some notes on work as Officer of the Chesterfield Infant Life Protection Society', *Journal of the Sanitary Institute*, **XX** (1900), 86–8.
16. Ashwell, 'Some notes on', 87
17. Ashwell, 'Some notes on', 88. Incidentally, 3½d. was the cost of a quart (2.2 litres) of milk in Sheffield in 1906, City of Sheffield, 'Special Committee', 12.
18. Galley, 'Social intervention', 35–6.
19. See, for instance, *Medical Officer of Health Report 1912–13*, 118+ which gives information on welfare programmes, including those provided by voluntary agencies, in many of the 241 towns of England and Wales covered.

**HEALTH VISITORS:
HOW MUCH DIFFERENCE DID THEY MAKE?
—A REPLY TO MICHAEL DRAKE**

Chris Galley

Anyone who ends the first paragraph of an article by suggesting that, 'a number of tentative conclusions about the nature of infant mortality decline' will be made, 'in an attempt to stimulate further debate' deserves to be challenged, and it is therefore not surprising to discover that Michael Drake disagrees with some of my conclusions.¹ Drake makes the point that by not providing a quantitative assessment of the work done by the health visitors I have failed to give an account of their true worth. Using evidence from Edwardian Sheffield he demonstrates that the amount of work undertaken by the health visitors was indeed impressive and he then proceeds to assess the effectiveness of social intervention by posing three questions: (1) what changes in behaviour were being attempted; (2) how speedily could such changes be effected; (3) were the number of health visitors sufficient for the task? Drake's Table 1 shows that in Sheffield the health visitors were mainly concerned with the health of the child, infant feeding, nursing, mothers' occupation, whether