

Birth Attendants and Midwifery Practice in Early Twentieth-century Derbyshire

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Summary. The 1902 Midwives Act introduced training and supervision for midwives in England and Wales, outlawing uncertified-and-untrained midwives (handywomen) and phasing out certified-but-untrained (*bona fide*) midwives. This paper compares the numbers and practices of these two different types of birth attendant with each other, with qualified and certified midwives and with doctors in early twentieth-century Derbyshire during this period of change, and examines the spatial and social factors influencing women's choice of birth attendant. It finds that the new legislation did not entirely eliminate continuity in traditional practices and allegiance, and that both social and spatial factors governed the choice of delivery attendant, with fewer midwives available in rural areas and a surviving network of untrained *bona fide* midwives in mining communities. Within this spatial pattern, however, although wealthier women were more likely to have chosen a doctor or a qualified midwife, familiarity and loyalty allowed *bona fide* midwives to maintain their case loads.

Keywords: Midwives; doctors; 1902 Midwives Act; *bona fide* midwives; childbirth

While there has been much written about the professionalisation of midwifery and the milestone of the 1902 Midwives Act which introduced training and supervision for midwives, there have been few assessments of the relative quality of care provided by different sorts of midwives and by doctors during the initial years of training and supervision, nor of variations in practice and women's choice of birth attendant.¹ Those assessments of the effect of the 1902 Act that do exist, although excellent within their remit, have tended to be either for large towns or cities or based on legislation and official reports designed to investigate problematic areas.² The former are not able to consider the effects of the Act on urban–rural disparities in provision, and the latter run the risk of overemphasising extremes of good or bad practice, thus failing to give a representative view of practice and standards for the majority of women.

Comparisons of trained-and-regulated (qualified), untrained-but-regulated (*bona fide*), untrained-and-unregulated midwives (handywomen) and doctors are particularly lacking. Measures of the standard of midwifery care, such as neonatal and maternal mortality,

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¹For a rare assessment of the quality of maternal care in the UK see Loudon 1997. ²Dale and Fisher 2009; Mottram 1997.

might be influenced by social and demographic factors which themselves are connected to the choice of delivery attendant. Thus before examining the standards of care between different birth attendants, it is important to assess the availability of different types of attendant, and the factors influencing women's choices. This paper therefore uses the individual records of over 50,000 confinements in Derbyshire between 1917 and 1922 to examine variations in practice between different sorts of birth attendant and the constraints and choices in midwifery care available to expectant women.³

The 1902 Midwives Act was the culmination of a struggle between those who wanted midwives to focus only on normal births, and those who wanted autonomous midwives with responsibility for all births, both normal and abnormal.⁴ The former triumphed, resulting in newly registered midwives who were required to have a mere three months, training (increased to six months in 1916 and to a year in 1926), and who had to call in a doctor in dangerous or difficult cases. Established midwives without qualifications were allowed to continue in practice, as long as they showed themselves to be of good character and obtained registration with the Central Midwives' Board (CMB) by 1 January 1910: some such *bona fide* midwives continued to deliver infants until 1947.⁵ It was recognised that occasionally, in the absence of a midwife or doctor, someone else would have to deliver an infant and this was not prohibited, but the Act made it clear that from 1905 only women certified under the Act would be entitled to 'take or use the name or title of midwife' and to 'recover any fee or charge for attendance as a midwife'.⁶

After 1910, therefore, all women should have been attended in childbirth by a qualified medical practitioner or by a state registered and supervised midwife, increasingly one with formal training. Uncertified midwives (handywomen) were forbidden to attend women in childbirth except under the direction of a medical practitioner, and could be prosecuted for doing so, but it is thought that a significant proportion of births nominally delivered by doctors continued to be largely or wholly managed by such women.⁷ The proportion of births attended by qualified midwives increased steadily over the early years of the century and by the 1930s, almost all practising midwives had received training.⁸ Over the same period, the proportion of births delivered by doctors decreased, partly due to the growth in trained midwives, but the absence of doctors in the First World War has also been suggested as a cause, as has the 1911 Insurance Act which increased the security of doctors' incomes, reducing the importance of maternity work as a staple of general practice.⁹

The Midwives Act of 1902 was part of a series of legislative measures relating to public health, and more specifically infant and maternal health, which gathered steam towards the end of the nineteenth century. The maternal and child health movement was fuelled by the combination of stubbornly high infant mortality rates and declining fertility, and

³An examination of the standard of midwifery care of different birth attendants is forthcoming in a further paper.

⁴Donnison 1977, p. 80, 159–75, Towler and Bramall 1986.

⁵Donnison 1977, p. 194.

⁶Midwives Act 1902, as reproduced in the Midwives Roll for 1922.

⁷Towler and Bramall 1986, pp. 192, 203, 207; Leap and Hunter 1993, p. 7; Robinson in Garcia *et al.* (eds) 1990, p. 65; McIntosh 1998, pp. 413–4.

⁸Lewis 1980, p. 142.

⁹Donnison 1977, p. 185.

poor standards of education and hygiene among the working classes were blamed.¹⁰ Contemporaries viewed untrained midwives as illiterate and wedded to dangerous and unsanitary practices, and reformers saw the engendering of middle-class values of self-reliance and bourgeois respectability among the working classes as the solution to the evils of poverty and ill health. The Midwives Act has consequently been seen as a chance to shape working-class life by creating a new breed of professional, middle-class midwife to replace those whose position as part of working-class communities could only perpetuate working-class traditions and values.¹¹

In keeping with this agenda of social control, it has been suggested that midwifery examinations were pitched to prevent all but the most educated from passing them, and that this attracted younger, single women into the profession.¹² *Bona fide* midwives bypassed this examination filter, but Heagerty has argued that the inspection or supervision system, generally agreed to be oppressive and overly harsh with its focus on the need to call medical aid for any but the most normal birth, was a further tool to transform midwifery from an 'occupation of working-class women enmeshed in a working-class community to aloof midwives in step with the medical profession'.¹³ However Fox has suggested that the degree of real change in their character and social position is debatable, as many trained midwives did not take up regular practice, instead using their qualification as a stepping-stone to a more remunerative occupation.¹⁴ Despite showing that the proportion of midwives who were unmarried increased from 16 to 47 per cent between 1911 and 1931, McIntosh has suggested that the social profile of practising midwives changed little in the first three decades of the century, with the 1902 Act having 'more of an impact on doctors' impressions of midwives than on the way midwifery was actually practised or the type of women undertaking it'.¹⁵

Nevertheless, the number of trained midwives increased, but the growth in their availability was not spatially uniform. Most midwives were self-employed and it was widely recognised that there were rarely enough births to generate more than a part-time income.¹⁶ Local authorities in sparsely populated rural areas began to introduce subsidies for midwives employed under midwifery schemes, or to support joint nursing and midwifery associations, but many places were still unable to produce enough births to provide a reasonable salary and were shunned by trained midwives. In 1923 only 63 per cent of rural parishes had a trained midwife, with most of the remainder having no registered midwife at all.¹⁷ Thus the advent of trained midwives may in fact have temporarily increased disparities in the standard of care offered at birth as trained midwives congregated in urban and wealthier areas.

The availability of different birth attendants therefore varied considerably over different parts of the country, and particularly between urban and rural areas. Figures published by Medical Officers of Health and under other surveys provide some information on the numbers of different types of midwife and the numbers of births they delivered, but it

¹⁰Davin 1978; Lewis 1980; Dwork 1987; Heagerty in Kirkham and Perkins (eds) 1997.

¹¹Heagerty in Kirkham and Perkins (eds) 1997; Beier 2008.

¹²Lewis 1980, pp. 143–45; Leap and Hunter 1993, p. 4; Fox 1991, pp. 338–39.

¹³Heagerty in Kirkham (ed.) 1996, p. 25. See also Fox 1991, p. 338; Fox 1993, p. 246.

¹⁴Fox 1991, p. 339.

¹⁵McIntosh 1998, pp. 413–20.

¹⁶Lane-Clayton 1915, pp. 243–9; Fox 1991, p. 342.

¹⁷Loudon 1992, p. 214.

is rarely possible to compare individual case loads for midwives or doctors, particularly between different types of delivery attendant.¹⁸ Some women may not have had a choice of delivery attendant, and the choices of others may have been constrained by price. For some a perception of safety may have governed their choice, and loyalty or familiarity may have influenced others. Oral histories provide some indications of these motives, but it is extremely rare to find data which will allow the analysis of the choices made by a large group of all women giving birth in a particular place.¹⁹ The dataset used here consists of individual records of all births in a large spatial area, permitting assessment of the distribution of delivery attendants, the extent of choice of attendant by expectant mothers, and the constraints on those choices.

The Data

Concerns about the physical deterioration of the population were raised by the report in 1902 that only two out of five recruits for the Boer War were fit to become effective soldiers, adding impetus to the maternal and child health movement to which the Midwives Act was allied.²⁰ Both the number and condition of Britain's next generation were a subject of intense anxiety and the 1907 Notification of Birth Act was born of this concern.²¹ This permissive Act allowed local Medical Officers of Health to require that all births (both live and still) be notified within 36 hours of birth to enable prompt visiting by trained, local authority employed health visitors, who could then advise on the care and the health of the infants and thereby promote better health and higher levels of survival. A second Act in 1915 made notification compulsory, and health visiting was established throughout England and Wales, although provision varied greatly between local authority areas.²²

The survival of records created by health visitors under the Notification of Birth Act is rare, but this paper uses one such dataset. It consists of copies of the notification of birth registers for Derbyshire between 1917 and 1922, covering all notified births in the participating areas. All the information which was required for notification is therefore available: surname and address, the sex of the child and whether it was still-born, and the name of the midwife or doctor (or both) who delivered the child. The ledgers in which this information was written also include information about the infants gathered by the health visitors at their visits, including the dates and causes of any infant or child death, the occupations of parents, the number of rooms in the house, the number of children previously born to the mother and the number of those who had died. The resulting dataset is thus a rich longitudinal source allowing infants to be traced over the first five or so years of their lives.

The dataset covers the rural areas and most towns of Derbyshire, and includes 51,376 births over the six-year period. The County Borough of Derby, and the Municipal Boroughs of Chesterfield, Glossop, Ilkeston and Buxton were administered separately and have left no records. The remaining area, however, covered a diverse geographical

¹⁸Some hospital based studies (eg Nuttall 2007) allow the assessment of case loads, but not for different types of attendant.

¹⁹Beier 2004; Roberts 1984, pp. 104–110.

²⁰Dwork 1987, p. 16; Davin 1978; Lewis 1980; Heagerty in Kirkham and Perkins (eds) 1997.

²¹Dwork 1987; McCleary 1933.

²²Peretz 1992.

and economic spectrum: the eastern side of the county was dominated by coal mining, with cotton manufacture in the central band around Cromford and Matlock, and silk manufacture on the Nottinghamshire border. There was a sizeable pottery industry in the south-west, with arable land and the more rugged areas of the peak district in the north-west, where the spa towns of Ashbourne, Matlock Bath and Buxton acted as attractions for the middle-classes.²³ The Medical Officer of Health (MOH) for the county between 1891 and 1925 was Dr Sidney Barwise whose obituary describes him as particularly active in the spheres of public health and preventive medicine.²⁴ Despite the energy of Dr Barwise, Derbyshire was not a pioneer in public health terms. In 1915 the county health visiting service made a higher than average number of visits to infants (2.5 per birth compared to an average of 1.4) but its infant mortality was only slightly better (with 98 deaths per thousand births) than England and Wales as a whole (110 per thousand).²⁵ Although the serendipitous survival of the records governed the choice of area for this research, Derbyshire's economic diversity and urban-rural mix renders it suitable to represent and compare a variety of contexts, and its unexceptional achievements in terms of health allows it to serve as a reasonably representative example of early twentieth-century England.

The vast majority of births in Derbyshire at this time took place at home: less than 1 per cent of the births in the dataset occurred in hospitals and nursing homes outside the districts covered (mainly in Derby and Sheffield), and fewer than 100 (0.2 per cent) in the small nursing homes and poor law Unions within the districts. Midwives' and doctors' names are usually provided for the latter, more rarely for the former.

The names of delivery attendants, as written in the dataset, distinguish between doctors and midwives but do not usually specify whether each midwife was qualified, *bona fide* or un-certified. However this has been ascertained by identifying the midwives in the Midwives Rolls which were published biennially by the CMB, and which listed all midwives who held a certificate, giving their names, addresses, unique number, qualifications (if any), the date they entered onto the roll and whether or not they intended to practise in the coming year. Doctors were identified in the Medical Directory to ascertain the date of their first medical qualification. This information was added to the dataset of 51,376 births to enable rigorous statistical analyses of the distribution of births by different types of delivery attendant. Contextual information on the midwifery service in Derbyshire is provided by MOH reports and the minutes of various Derbyshire County Council (DCC) committees engaged in midwifery and maternal and child health work.

Midwifery in Derbyshire 1917–22

Both before and after 1902, the majority of midwives were independent and self-employed, although some enjoyed salaried positions with Poor Law or training institutions, or philanthropic district nursing associations. However shortly before the First World War the Local Government Board started to provide 50 per cent of the funding for local authority schemes for salaried or subsidised midwifery services.²⁶ Derbyshire's need was great: it was generally accepted that two and a half to three miles was the

²³See also Reid 2001a, 2002.

²⁴*British Medical Journal* 1925, p. 244.

²⁵Calculated from Hope 1917, pp. 113–427.

²⁶Donnison 1977, p. 186; Marks 1996, p. 208.

largest distance a midwife should be called upon to travel to any patient, and in 1916 Derbyshire had 29 areas with no trained midwife within three or four miles.²⁷ Many councils preferred to give grants to district nursing associations but in 1916 Derbyshire County Council introduced a County Midwifery Scheme 'for subsidising midwives in sparsely populated parts of the County'.²⁸ Under the scheme, the Council employed midwives to work in districts with fewer than 70 births, granting the midwife a subsidy of 15–30 shillings per birth on a sliding scale according to the average number of births in the previous two years, and also a lump sum payment of £20–50 per annum.²⁹ Fees paid to county midwives on a salary were forwarded to the Maternal and Child Welfare Committee.³⁰ The service was carefully monitored paying attention to changing needs in the different sub-districts and only a handful of midwives were subsidised under the county scheme at any one time: eight in 1918, four in 1919, and 14 by the end of 1920.³¹

County-subsidised midwives were not the only midwives practising regularly in Derbyshire. According to Derbyshire MOH reports there was an average of 361 practising midwives per year between 1918 and 1921.³² The same reports indicate that in 1909 only 25 per cent of Derbyshire midwives were trained, rising to 50 per cent in 1918 and 72 per cent in 1925. The balance of midwives was changing rapidly over this period in favour of qualified midwives as *bona fide* midwives died, retired or were 'struck off' the roll and every new midwife had to possess a qualification.

The coverage of midwives in the notification of birth registers is not identical to the county roll as the midwives counted in the MOH reports included those midwives living and practising in the more densely populated county and municipal boroughs, and omitted those who had not registered their intention to practice in the coming year (these were included in the CMB rolls if they were certified and will be in the database if they delivered at least one birth). It should also be remembered that these are derived from births in a geographical area and not from midwives' case books, so deliveries to women outside the areas covered by the dataset will not appear, and thus numbers of deliveries for midwives whose practice overlapped with a municipal borough or a different county might be underestimated.

A total of 744 individual midwives and 467 doctors were identified in the notification of birth registers. This includes several pairs of midwives who were probably related to each other, such as Esther Brunt of the Red House, Heath, who received certification in 1904 as a *bona-fide* midwife by virtue of established practice, and Mary Elizabeth Brunt, resident at the same address and possibly Esther's daughter, who gained certification 14 years later following an approved qualification. Leap and Hunter suggest that it was 'impossible for all but the highly educated' to pass the new midwifery examinations, and this may be largely true given that only two of the 172 *bona fide* midwives found in this dataset subsequently gained a qualification despite efforts to encourage this.³³ However such examples show that at least some of the daughters of *bona fide* midwives had gained

²⁷Lane-Clayton 1915, p. 95.

²⁸Derbyshire County Council (DCC), MOH Report, 1916.

²⁹DCC MOH Report 1916; DCC Public Health Committee Minutes (1914–27).

³⁰DCC Maternal and Child Welfare Committee, 9 February 1920.

³¹DCC MOH Reports 1919 and 1920.

³²DCC MOH Reports, 1918–1921.

³³Leap and Hunter 1993, p. 4.

enough education to pass the examinations. Thus the Act does not appear to have entirely eliminated family traditions of midwifery.

Of the 744 distinct midwives, 486 were found in the annual rolls of the CMB or County Rolls. Only 38 were marked in the notification of birth registers or council minutes as being uncertified, leaving 221 women of unknown status. Given the stringency of the CMB rules and the fact that only two of the 38 were reported to the CMB for uncertified practice, it is likely that the majority of these women were not practising habitually or for monetary gain, the definition prohibited under the Midwives Act, but were simply the only person available at the time.³⁴ Others may have been certified midwives temporarily in Derbyshire. Of those found in the CMB rolls, 172 were *bona fide* midwives and 316 were qualified (including the two who had been originally certified as *bona fides*).

Thus, out of the certified midwives delivering infants in the area covered by the notifications of birth between 1917 and 1922, 64 per cent were qualified, a higher figure than the 55 per cent for the entire county of Derbyshire detailed in MOH reports, implying a higher proportion of *bona fide* midwives in the large urban areas of Derbyshire not covered by this dataset. This suggests that assertions that newly qualified midwives congregated in towns may be misleading. Larger towns may have been more attractive to qualified midwives, but they were more likely than the small towns and rural areas to have had an established network of midwives before the 1902 Act, providing a legacy of *bona fide* midwives in the early years of the new century. An improving service for the small towns and rural areas had to be manned by newly qualified women.

Delivery Practices of Different types of Midwife

Qualified midwives delivered 54 per cent of those births where a midwife was present, *bona fide* midwives delivered 41 per cent, and non-certified women (including both handywomen and those with unknown status) delivered 4 per cent. Certified birth attendants in general delivered more births each than non-certified women, and it might be thought that qualified midwives would have been able to attract more business than *bona fide*, but in fact, taking account of the length of time each woman was practising, qualified midwives delivered 12 births per year and *bona fide* midwives delivered 15. These averages, however, still disguise a wide and skewed spectrum of individual delivery practices.

The busiest midwife, Mrs Pleasence Amelia Redfern, who gained certification by virtue of an approved qualification in 1907, delivered 840 of the births in the dataset, amounting to 120 births per year. One other averaged over 100 births a year, and only 31 delivered more than 50 births a year. In 1915 Janet Lane-Clayton considered that 150 cases a year was 'as many as one midwife can reasonably undertake', with 40 or 50 being a fair number for rural areas.³⁵ In practice it seems that Derbyshire midwives were not unusual in delivering fewer: McIntosh reports that midwives in the city of Sheffield averaged 73 births per year and Newsholme's 1913 survey found an average of 40 for city midwives and 17 for those in rural and small town areas.³⁶ Curtis notes that 120 births per year

³⁴In 1922 four women were reported for unauthorised practice as a midwife (DCC Public Health Committee minutes).

³⁵Lane-Clayton 1915, p. 87.

³⁶McIntosh 1998, p. 406. McIntosh reports that in the mid-1930s the Midwives' Institute took at least 100 cases annually as a definition of full-time midwifery (McIntosh 1998, p. 412). Newsholme 1914–15, pp. 133–9.

in a rural area of Sweden would have required a substantial effort by the midwife, given the demands of travel, and the same is surely true of rural Derbyshire where some roads were reported to be impassable in winter.³⁷ The prolific Mrs Redfern, however, delivered most of her births in the urban district of Swadlincote, and all the other busy midwives were also based in either urban districts or rural mining areas where population density was higher. Within urban and rural areas, however, there was likely to have been considerable variation. Some midwives may have been working full time, and others to supplement other sources of family income or other nursing work. The Derbyshire MOH noted that women to be trained as midwives 'would not be wholly dependent on midwives fees' suggesting that he was fully aware that there were not enough births to keep rural midwives busy more than part time.³⁸ Other sources also suggest that midwifery rarely brought in enough money to live on: for example most of the Sheffield midwives in McIntosh's study were mature married or widowed women with older, wage-earning children, and frequently took in lodgers.³⁹

Figure 1 shows, for the different types of birth attendant, the percentages delivering small (fewer than two), medium (two to 25) and large (over 25) numbers of births per year, and their share of all births. The upper panel shows that nearly 80 per cent of 'other midwives' (uncertified and of unknown status) delivered fewer than two births per year. Over 20 per cent of certified midwives also delivered on such an extremely occasional basis, supporting Fox's suggestion that many qualified midwives did not practise regularly.⁴⁰ The bottom panel, however, shows that such occasional deliverers accounted for only a tiny percentage of births. Only among 'other midwives', who themselves accounted for a very small number of births, was the percentage more than one. At the other end of the scale another 20–25 per cent of qualified and *bona fide* midwives delivered over 25 births a year (top panel), and these more prolific birth attendants were responsible for delivering the majority of the county's infants (bottom panel); in other words 60–70 per cent of infants were delivered by such midwives. The majority of certified midwives delivered between two and 25 infants a year (top panel), but accounted for only around 30 per cent of births (bottom panel). This confirms a picture of a few very busy midwives epitomised by Mrs Redfern, possibly earning enough to support themselves; some fairly busy midwives, working as combined nurse-midwives or supplementing the family income through delivering one or two infants per month; with a large number of even more part-time but regular practitioners and many occasional delivery attendants stepping in as and when they were needed.

Given the other tasks performed by doctors it is unsurprising that fewer than 10 per cent delivered more than 25 infants a year (roughly one a fortnight—upper panel of Figure 1). Over half the doctors in the dataset delivered fewer than two births a year: obstetric work was clearly not a routine part of such doctors' practices.

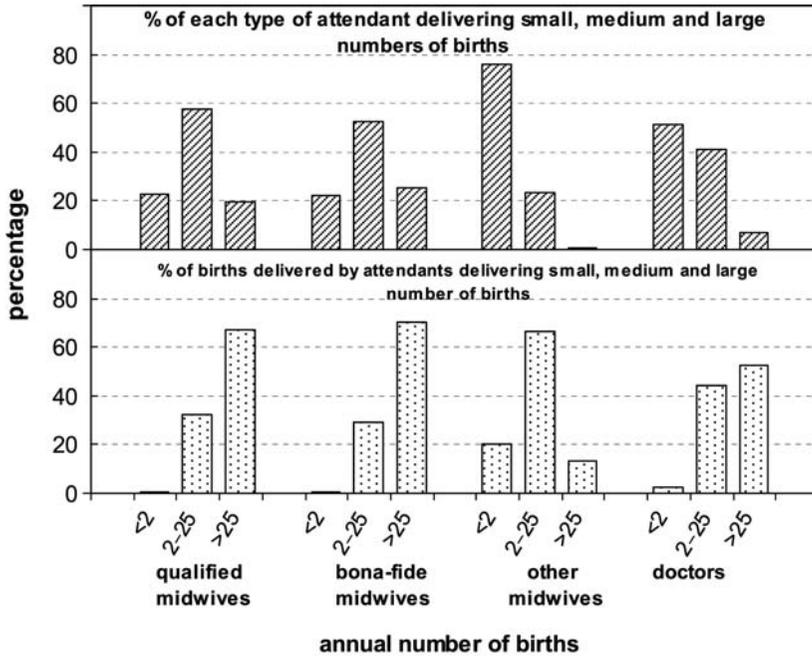
Both a doctor and a midwife were in attendance at a significant minority of births: 23 per cent of deliveries were attended by only a doctor, 62 per cent by only a midwife, and

³⁷Curtis 2005, p. 338. Hope 1917, p. 133.

³⁸DCC Maternal and Child Welfare Committee minutes, 25 March 1919.

³⁹McIntosh 1998, pp. 408–12.

⁴⁰Fox 1991, p. 339.



Source: Derbyshire Notifications of Birth, 1917-22

Fig. 1. Percentages of birth attendants delivering different numbers of births per year, by type of attendant, and their share of births.

nearly 10 per cent by both.⁴¹ Some of the latter may have been booked as joint deliveries, and some may have been circumstances where a midwife was booked, but summoned a doctor for medical help as stipulated under the rules of the CMB. In such cases, midwives were duty bound to report the name of the doctor and reason for medical help when they notified the birth. The notification registers do not distinguish one of these circumstances from the other.

Table 1 helps to shed light on this issue: the upper panel gives the numbers of births delivered by doctors and midwives for the registration county of Derbyshire, gleaned from the annual MOH reports for years where data is available both from MOH reports and the notification of birth registers. There is no mention of joint deliveries in the MOH reports, and the total of the midwife and doctor deliveries matches the number of registered births published in the Registrar General's official publications, so each birth must have been assigned to either a doctor or a midwife. From the second panel, we can see that 76–79 per cent of births were 'delivered by midwife' and 21–24 per cent 'delivered by doctor'. The MOH reports also provide the number of calls for medical help by a midwife, and these are shown as a percentage of all deliveries. The lower two panels show the number of births in the dataset with a known birth attendant,

⁴¹The remaining 5 per cent had no delivery attendant recorded because they were born elsewhere.

Table 1. Doctor and midwife deliveries in Derbyshire, 1920–22

	1920	1921	1922
<i>Registration County of Derbyshire*</i>			
All births	15,572	14,426	13,089
Births attended by midwives	12,222	10,963	10,162
Births attended by doctors	3,350	3,463	2,927
Summons for medical help	1,252	1,249	1,229
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% attended by midwives	78.49	75.99	77.64
% attended by doctors	21.51	24.01	22.36
% of births needing medical help	8.04	8.66	9.39
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<i>Dataset**</i>			
All births with known birth attendant	12,830	11,178	10,214
Births attended by midwife (including joint deliveries)	9,723	8,511	7,802
Births attended by both midwife and doctor	1,069	1,058	979
Births attended by doctor only	3,107	2,667	2,412
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% attended by midwife (including joint deliveries)	75.78	76.14	76.39
% attended by doctor only	24.22	23.86	23.61
% attended by both doctor and midwife	8.33	9.47	9.58

* Source: Derbyshire Medical Officer of Health Reports.

** Source: Derbyshire Notifications of Birth. Two per cent of births in the notifications register did not have the birth attendant noted because they were born elsewhere, these are not included in this table.

and the numbers and percentages 'delivered by midwife' (including joint deliveries by both midwife and doctor), by 'doctor only', and by 'both'. The percentages of deliveries by 'doctor only' in the dataset and 'by doctor' in the county show great similarity, as do the percentage of deliveries in the dataset attended by both doctor and midwife and the percentages of births where medical help was summoned, strongly suggesting that the majority of cases with a joint delivery were those where medical help was requested, and that these were classified in the MOH reports as midwife deliveries.

Although *bona fide* midwives might be supposed to be less proficient, qualified midwives were more likely to call for medical help, and this has been interpreted as a sign of a higher level of proficiency on the part of the midwife, rather than less.⁴² Table 2 shows, for those areas of the county with notifications for the whole period, both a shift in the balance of midwife deliveries from *bona fide* to qualified midwives and a marked contrast between the two types of midwife in the proportion of joint deliveries.⁴³ There was no difference in the rules regarding summoning medical help for the two types of midwife, but it seems that *bona fide* midwives did not immediately follow them with such alacrity as qualified midwives.⁴⁴

⁴²Fox 1991, p. 341.

⁴³The areas around Chesterfield did not adopt the notification of birth act until midway through 1919. A higher proportion of *bona-fide* deliveries in this

area obscures trends in medical help calls and also explains differences between Tables 1 and 2.

⁴⁴This pattern is also found elsewhere: Newsholme 1914–15, p. 81.

Table 2. Trends in deliveries by type of midwife, and joint deliveries, Derbyshire 1917–22

	1917	1918	1919	1920	1921	1922
Number of births attended by any midwife	2,508	2,655	3,019	4,732	4,397	4,173
% attended by qualified midwife	52.59	54.58	54.69	56.89	64.25	71.56
% of which also attended by doctor	22.06	20.36	25.14	23.51	25.49	24.28
% attended by bona fide midwife	42.30	37.89	40.48	37.13	31.70	24.75
% of which also attended by doctor	12.25	13.92	13.09	15.25	16.07	17.33

Source: Derbyshire Notifications of Birth, excluding urban and rural areas around Chesterfield.

Newsholme wrote that ‘She [the midwife] will be helped to discriminate cases for which aid will be sought by the discussion of her cases with the inspector of midwives’.⁴⁵ Regular inspection or supervision of midwives was mandated by the CMB, and contemporary health officials clearly saw such inspection as vital to the improvement in midwives’ practices, especially regarding when to call for medical help, and felt that this was particularly valuable for *bona fide* midwives.⁴⁶ Certainly the Derbyshire inspectors of midwives appear to have taken their responsibilities very seriously, making between 750 and 800 inspections every year for which data is available between 1916 and 1924, and 858 in 1925, amounting to over two inspections per midwife on the county roll each year.⁴⁷ The inspectors rated the midwives good, satisfactory, indifferent or bad, and between 1916 and 1925 there was a steady rise in the percentage deemed good, from around 40 to around 60 per cent.⁴⁸ Heagerty argues that *bona fide* midwives riled against these rules but came to accept them as inevitable.⁴⁹ Derbyshire inspection information is not broken down by type of midwife, but it is clear from Table 2 that *bona fide* midwives became more likely to call for medical help over the time period, allowing speculation that inspections both encouraged *bona fide* midwives to make more medical help calls, and improved their performance in the eyes of the inspectors.

While it seems that most joint deliveries were likely to have been the result of a midwife summoning a doctor for medical help, there is also the possibility of both a doctor and a midwife being booked. This would have been an expensive business for most women, and such midwives would probably have been unqualified handywomen who could be present for most of the labour and engaged to help with housework and childcare for a week or two after the birth, while the doctor attended simply for the delivery itself.

Derbyshire midwives known to have been uncertified (mentioned as such either in the notifications of birth or in council committee minutes) were not recorded as delivering many infants, but 65 per cent of their 202 births were delivered in conjunction with a doctor (in contrast to 16 per cent of those delivered by qualified midwives and 8 per cent of those by *bona fide* midwives). Furthermore, such women tended to work in conjunction with certain doctors, for example Mrs Dolman, who delivered 27 out of her 32

⁴⁵*Ibid.*

⁴⁶Campbell 1917, p. 62. See Dale and Fisher 2009 and Mottram 1997 for more detail on inspections.

⁴⁷Not counting those where the midwife was not found at home. DCC MOH Reports.

⁴⁸DCC MOH Reports.

⁴⁹Heagerty in Kirkham and Perkins (eds) 1997, p. 81.

joint births with Dr Cochrane, and Mrs Holloway, who worked exclusively with Dr Allum. It is plausible that these women were also in attendance at other births attributed to doctors, and even that the doctors were not in fact present at all, a practice which is suggested by oral histories of midwifery and by contemporary surveys.⁵⁰ Thus the uncertified midwives operating with doctors may actually have delivered more births than the records reveal, and doctors have delivered fewer.

These records therefore hint that uncertified midwives continued to practise into the 1920s, but cannot conclusively estimate their frequency nor the degree to which they operated alone or with a doctor. However, they were responsible for a very small number of deliveries: by the early 1920s the vast majority of births were attended by a qualified or *bona fide* midwife falling under the regulation of the Central Midwives' Board, or (at least nominally) by a medical practitioner.

Doctors' obstetric training had also changed in the years preceding the 1902 Midwives Act. Although the Medical Act of 1858 had instituted training and regulation for doctors, it was not until the Medical Act of 1886 that all medical training had to include obstetrics, and it is interesting to compare the delivery practices of doctors trained before and after this watershed.⁵¹ Doctors trained before 1886 will have been in practice for over 30 years and are likely to have been at least 50 years old. Nevertheless, there were 37 of them practising in the areas covered by the dataset, delivering 1,669 births between them.⁵² Doctors belonging to the older cohort were less likely to have delivered in conjunction with a midwife: 17 per cent of their deliveries being joint, as opposed to nearly twice that (31 per cent) among the younger cohort. Further, only 55 per cent of older doctors' joint deliveries were with qualified midwives, compared to 69 per cent of those of younger doctors, suggesting that in an emergency qualified midwives might have preferred to call a younger doctor with more obstetric training, but that older doctors might have managed to maintain their individual bookings and relationships built up with *bona fide* midwives. Moreover 21 per cent of older doctors' joint deliveries were with unqualified midwives or women of unknown status, in contrast to only 8 per cent of younger doctors' joint deliveries: it seems to have been predominantly the older generation who delivered with a handywoman.

Clearly, there was a choice of delivery attendant in early twentieth-century Derbyshire, but options for expectant women will have been constrained by a number of factors, among them the availability of local birth attendants, the prices charged by the various attendants and their reputations. The next section examines the distribution of delivery attendants according to characteristics of the mothers' households.

Choice of Delivery Attendant

With the advent of the 1911 Insurance Act and the payment of a 30 shillings maternity benefit to the wives of employed men, it became easier to find the money to pay for attendance at the birth and lying-in, but both doctors and midwives responded by

⁵⁰Leap and Hunter 1993, p. 7; HMSO 1918, p. 9.

⁵¹Roberts 2009; Digby 1994. Some medical schools, however, had instituted compulsory obstetric training prior to 1886, such as Edinburgh in 1833 (Towler and

Bramall 1986, p. 149. King 2007, p. 158; Digby 1994, p. 267).

⁵²The 181 doctors qualifying after 1886 delivered 12,988 births in total.

raising their fees.⁵³ The average fee charged by independent midwives in 1917 was 15 shillings, with a higher charge for primagravidae than multiparous women, slightly lower fees charged by midwives employed by county or nursing associations, and rural midwives charging two or three shillings less per case than those in urban areas of the same counties.⁵⁴ Fifteen shillings is also the amount that was paid to Derbyshire midwives for attending necessitous cases. Unfortunately there is no evidence regarding whether fees differed for qualified and *bona fide* midwives, but handywomen were likely to have been cheaper.⁵⁵ At over £1 per case, even before the 1911 Insurance Act, doctors were definitely a more expensive option for delivery and would not have provided either post-partum nursing and housework (as handywomen did), nor the ten days of post-partum visiting provided by certified midwives.⁵⁶

It is likely that the choice of birth attendant was influenced by a family's income, but the local availability and reputation of midwives and doctors must also have been important. For some expectant mothers these influences will have pulled in the same direction, for example poorer women living in a mining town with a good network of midwives are unlikely to have booked a doctor for their birth. However, better-off people in mining towns might have been more inclined to book a doctor, but had trouble finding one, obscuring the influences of both social status and the availability of attendants. It is possible to isolate the effects of individual influences by performing multivariate logistic regression, as shown in Table 3.

The first set of columns in Table 3 shows the likelihood of an expectant woman booking a doctor as opposed to a midwife: in this analysis it is assumed, as suggested above, that cases of joint delivery were the product of a summons for medical help and were therefore originally booked by a midwife. The first column shows the odds ratio for each variable or set of related variables (e.g. social classes) while controlling for other variables. Odds ratios higher than one indicate a higher likelihood of the event for the variable than for the reference category (shown in italics), and odds ratios lower than one indicate a lower likelihood. The second column shows the probability that the result could have been produced by chance: the smaller the number the more robust the result: a probability smaller than 0.05 indicates that we can be 95 per cent sure that the result is not the product of chance alone. Results significant at the 95 per cent level are shown in bold. The middle set of columns shows the odds ratios and statistical significance for the likelihood of booking an uncertified midwife rather than any certified midwife, and the final set shows them for the likelihood of booking a *bona fide* midwife rather than a qualified one.⁵⁷

Looking first at the likelihood of booking a doctor for delivery, it is clear that this was more common among better-off people: women of higher social standing, with professional husbands and larger houses. Relative availability also figures highly in the choice

⁵³They were also able to recover more of their fees: previously many of the fees to poorer people were written off. Lane-Clayton 1915, pp. 86, 87, 93.

⁵⁴Lane-Clayton 1915, pp. 85–100. Campbell 1917, pp. 33, 73. See also Marks (1996, p. 199) for a range of London prices.

⁵⁵In 1910 the MOH for Walsall suggested that the trained midwives would not work for fees as low as those charged by untrained midwives, but two

years later the MOH for Lincolnshire maintained that untrained midwives had raised their fees since the 1911 Insurance Act (Lane-Clayton 1915, p. 90). See also Beier 2004, p. 400.

⁵⁶Lewelyn Davies (ed.) 1978; Lane-Clayton 1915, p. 87; Campbell 1917, p. 31; Loudon 1992, p. 209, 214.

⁵⁷At every stage interactions were tested for, and are reported in the text if they were significant.

Table 3. Influences on the likelihood of booking different sorts of births attendants, logistic regressions, Derbyshire 1917–22

	Likelihood of booking a doctor for delivery (as opposed to a midwife)		Likelihood of booking an uncertified midwife for delivery (as opposed to a certified midwife)		Likelihood of booking a bona fide midwife for delivery (as opposed to a qualified midwife)	
	odds ratio	P value	odds ratio	P value	odds ratio	P value
Size of house						
<i>larger house</i>	<i>1.0000</i>		<i>1.0000</i>		<i>1.0000</i>	
smaller house	0.7942	0.000	1.1735	0.042	1.0183	0.580
Legitimacy						
<i>legitimate</i>	<i>1.0000</i>		<i>1.0000</i>		<i>1.0000</i>	
illegitimate	0.7204	0.000	1.3789	0.071	1.6019	0.000
Social class of husband						
class 1 or 2	1.4326	0.000	1.6088	0.000	0.8972	0.067
<i>class 3</i>	<i>1.0000</i>		<i>1.0000</i>		<i>1.0000</i>	
class 4	0.8554	0.000	1.0300	0.773	0.9657	0.411
class 5	0.8197	0.000	0.9189	0.506	1.0673	0.188
class not known	0.7889	0.000	0.9736	0.865	0.8208	0.002
Occupation of husband						
miner	0.9833	0.673	0.8946	0.287	1.3929	0.000
professional	1.4866	0.009	0.8346	0.699	0.5061	0.005
potter/textile	1.0983	0.163	1.2237	0.214	1.1421	0.055
agriculture	0.8193	0.000	1.6639	0.000	0.5315	0.000
metal work	0.8824	0.045	1.0917	0.564	0.7936	0.000
<i>other occupation</i>	<i>1.0000</i>		<i>1.0000</i>		<i>1.0000</i>	
Parity of birth						
parity 1	1.2133	0.000	1.0192	0.802	0.8395	0.000
<i>parity 2 or 3</i>	<i>1.0000</i>		<i>1.0000</i>		<i>1.0000</i>	
parity 4+	0.7109	0.000	0.8990	0.142	1.3501	0.000
Urban or rural area						
<i>rural</i>	<i>1.0000</i>		<i>1.0000</i>		<i>1.0000</i>	
urban	0.6281	0.000	0.7119	0.000	0.8908	0.000
Mining or non-mining area						
<i>non-mining</i>	<i>1.0000</i>		<i>1.0000</i>		<i>1.0000</i>	
mining	0.6932	0.000	0.6580	0.000	1.3166	0.000
Birth year	0.9604	0.000	0.8431	0.000	0.7082	0.000
Number of observations	42,453		32,946		31,793	
Pseudo R ²	0.0213		0.0340		0.0348	

Reference categories in italics. Results significant at the 95 per cent level are shown in bold.

Source: Derbyshire Notifications of Birth, 1917–22.

of attendant, as urban and mining areas where there were higher numbers of practising midwives were associated with a lower propensity to book doctors.⁵⁸ Unmarried women

⁵⁸An interaction effect (not shown) indicates that outside of mining areas, wives of miners were actually more likely to book a doctor.

were 28 per cent less likely to book a doctor than married women, but women expecting their first child were 21 per cent more likely to want a doctor to attend them, with a decline in doctor bookings among higher parities. The odds ratio for birth year indicates a decline in the propensity to book a doctor over the period, consistent with the growth in the number of midwives and improvements in their status.

The likelihood of booking an uncertified midwife, as opposed to a certified one, was in many ways very similar to that for a doctor, favouring the higher social classes and those in rural and non-mining areas, and this supports the theory that in many cases uncertified women were booked in conjunction with a doctor. The wives of those in agriculture were 66 per cent more likely to favour this delivery arrangement than the wives of others; possibly inaccessibility meant they felt more comfortable having someone there in case the doctor did not arrive in time. However, in contrast to the analysis for doctors, the model also shows that people in smaller houses (and also unmarried mothers, although significance for this is marginal) were more likely to have booked an uncertified midwife, suggesting that there may have been two distinct groups of people who were more likely to use a handywoman: the well-off who also booked a doctor, and the more disadvantaged members of society who booked a handywoman on her own. The well-off will have also used her services for housework and child-care after the delivery, but the poor and unmarried will have used them because they were cheaper.

There also appear to have been both spatial and social factors in the choice between a qualified midwife and a *bona fide* one. The wives of professional men were 50 per cent more likely than the wives of others to choose a qualified rather than a *bona fide* midwife. This suggests that either qualified midwives charged more for their services, or that more educated mothers perceived a benefit to the qualification. The wives of miners were 39 per cent more likely to use a *bona fide* midwife, over and above the effect of living in a mining area where *bona fide* midwives were 32 per cent more common: such areas were apparently less attractive to both qualified midwives and doctors, or already well served by an established body of older midwives. However, unlike doctors, qualified midwives were 11 per cent more likely to have been called on to deliver infants in urban areas, a reliance on foot or bicycle confirming a greater tendency to live where they could have a sizeable clientele within easy reach.⁵⁹

It was noted earlier that the municipal and county boroughs had a larger group of established *bona fide* midwives before the 1902 Act, and that an expanding service for small towns and rural areas had to be staffed by newly qualified midwives. However, here we find that the newly qualified midwives were more likely to position themselves in the small towns (where women were 11 per cent more likely to have booked a qualified midwife), leaving the rural hinterlands at a further relative disadvantage, and it may be that the use of handywomen by the wives of those in agriculture was largely dictated by lack of choice. For example, the village of Parwich appears to have had no certified midwife until midway through 1918: all births before that date were delivered by a doctor or a midwife who was known to be uncertified.

⁵⁹A few midwives were granted subsidies for the maintenance of a bicycle (eg DCC Maternity and Child

Welfare Committee, 9 February 1920), but applications for car mileage were 'not entertained'.

Unmarried mothers were much more likely (50 per cent) to use a *bona fide* midwife, once other factors were controlled, but women having their first child were 16 per cent more likely to book a qualified midwife than those having their second or third, with *bona fides* more popular among higher order births. It is possible that women about to have their first birth felt they would be in safer hands with a qualified midwife, or were prepared to pay more, but were less worried with subsequent children. However, it is perhaps more plausible that this relationship is the product of the rapid decline in *bona fide* midwives and the short time period of the analysis: women may have developed a relationship with a particular midwife, and used her for all their births, thus women on higher parities will have had their first deliveries some years previously, possibly even before the advent of the 1902 Midwives Act, and the midwives they established relationships with were more likely to have been *bona fide* ones. The continued practice of *bona fide* midwives was thus in part a product of maternal loyalty and demand.

The town of Ashbourne was served by a *bona fide* midwife (Eliza Thacker) from 1917 until 1922 and around half the births delivered by Mrs Thacker were a woman's third or higher order birth. In contrast only one-quarter of the births delivered by the series of qualified midwives who arrived from 1919 onwards were third or higher order. Mrs Thacker, the established *bona fide* midwife who had probably been operating in the village for at least 20 years, had built up trust in local mothers: of the 39 women who had two deliveries between 1917 and 1922, 20 used Mrs Thacker both times but only three used the same qualified midwife and only four changed from Mrs Thacker to a qualified midwife or doctor. There were eight qualified midwives who served Ashbourne between February 1919 and December 1922. Some served for as long as three years, but most came and went and the short-term nature of their placements will have made it difficult to establish familiarity and trust. Where qualified midwives did stay longer, however, they too built up lasting relationships with mothers. In the larger town of Swadlincote there were 16 midwives across the six years of the dataset, four of whom (two qualified, two *bona fide*) were present throughout. Over three-quarters of women having two deliveries used the same midwife for both, whether qualified or *bona fide*, and most of those who used a different midwife appear to have done so because their first midwife left the town.

Doctors were also more likely to be booked for a first birth, despite a clear trend away from doctor deliveries over time. This preference must be related to perceived safety, maybe of greater importance to first-time mothers with no experience of successful delivery behind them and maybe aware that first births were more likely to need medical assistance. Other indications indicate that safety also informed women's choice of attendant in relation to their previous experience. Once other factors were controlled, multiparous women were 10 per cent more likely to book a doctor if they reported a previous stillbirth (not shown), but showed no preference for a qualified midwife over a *bona fide* one, suggesting that although doctors were seen as the experts, there was no clear perception of the superiority of a qualified midwife.

Given, however, that the directions to midwives stipulated that 'whenever illness or abnormality has occurred in the previous pregnancy, and whenever the previous pregnancy has ended in an abortion, a premature labour, or a stillbirth, the midwife ... shall explain that the case is one in which skilled medical advice is required, and shall urge

the patient to seek advice from her medical attendant, or at a hospital or other suitable institution', it is somewhat surprising that more women with a previous stillbirth did not engage a doctor.⁶⁰ Perhaps higher fees were a deterrent to booking a doctor, or the knowledge that if a problem arose medical help would be called for and the fees for necessitous cases would not be recovered by the Council.⁶¹ In 1918 Derbyshire County Council undertook to pay 30 shillings in necessitous cases for doctors called in by midwives, with the Public Health Committee reporting on 12 April 1922 that 29 recent cases had been written off.⁶² Thus, as Curtis found for Sweden, availability and proximity as well as loyalty, price and perceived safety affected the choice of delivery attendant.⁶³

Conclusion

After the passing of the 1902 Midwives Act, a growing proportion of midwives were trained, and the balance of birth attendants shifted from unqualified *bona fide* midwives to those with recognised training. The proportion of births attended by doctors fell as council-subsidised midwifery services were established. A growing proportion of births were attended by both midwife and doctor as supervision of midwives encouraged them to summon medical help more readily. Despite this, the new legislation did not entirely eliminate continuity in traditional practices and allegiances, with older doctors retaining established relationships with handywomen, midwifery continuing to be a tradition in some families, and mothers remaining loyal to the established *bona fide* midwives who had delivered their older children.

While there was clearly some degree of choice in delivery attendant, with better-off women opting for doctors or trained midwives, the availability of attendants constrained this choice. In Derbyshire, mining areas had a larger pre-existing network of *bona fide* midwives, newly qualified midwives were attracted to towns, and some were appointed as county midwives in rural areas, but doctors, who had the means of transport to cover a wider area, continued to be the fall-back position for non-mining rural areas where there were fewer midwives within a reasonable distance. There is some evidence that handywomen continued to deliver better-off women in conjunction with doctors, and provided a resort for the unmarried and poverty-stricken, and it is plausible that doctor deliveries disguise more deliveries by such women.

This is a picture of gradual change in domiciliary midwifery, as council subsidies were slow to reach levels which would attract qualified midwives to rural areas and some old habits persisted until older practitioners retired. It is plausible that in giving birth a relationship with a particular midwife was more important than her qualifications, and although *bona fide* midwives paid at least lip-service to the new procedures by calling for medical help in a wide range of circumstances, their greater stability in an area meant that they were more likely to retain their client base. Significant changes in midwifery therefore had to await the gradual retirement of the old guard of *bona fide* midwives.

⁶⁰Midwives Roll 1922, p. xlii.

⁶¹*British Medical Journal* 1935, p. 862.

⁶²DCC Maternal and Child Welfare Committee Minutes, 19 November 1918, Public Health Committee Minutes, 12 April 1922.

⁶³Curtis 2005.

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