

Characteristics of sole registered births and the mothers who register them

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This article explores the characteristics of live births where no father was present on the birth certificate (sole registrations) using registration data. It then uses data from the ONS Longitudinal Study to examine some characteristics of mothers who have ever experienced a sole registered live birth. It shows that as a proportion of all births, sole registrations have remained fairly constant over the last two decades, although since 1998 there is some evidence of a fall in the proportion. For mothers born between 1955 and 1962 around nine per cent experienced a sole registration. Those who ever experienced a sole registration were around four years younger when they began their childbearing. These women also had larger families and were more likely to come from a lower social class background.

INTRODUCTION

Births outside marriage can take place in a number of different partnership contexts (see Box one). One indicator of the partnership context at birth is the information about the father recorded at the birth registration. Many, but not all, mothers who register a birth where a father is not present on the birth certificate are lone mothers. Therefore, mothers who experience a sole registration are highly likely to have the characteristics of lone mothers and the possible consequences associated with lone motherhood.

The main aims of this study are: to help understand sole registrations in the context of non-marital childbearing; to look at the characteristics of mothers who ever experience a sole registration; and, to look at the lifetime childbearing of women who ever sole register a birth.

Up until recently, the presence of a father on the birth certificate for a birth that occurred outside marriage gave the father no rights or responsibilities towards the child. From 1 December 2003, under section 111 of the Adoption and Children Act 2002, an unmarried father automatically acquires parental responsibility if his particulars are recorded in the entry of a birth registered (or re-registered) on the joint information of both parents or on the information of one parent with a statutory declaration acknowledging paternity from the other parent.

Only a limited amount of information is available on the family situation of a child at birth. The absence of a father on the birth certificate might be thought to indicate that the mother would not have the close involvement of the father and entry into (or continuation of) lone parenthood in the care of the child. A number of studies have used sole registration as a proxy for lone parenthood.^{1,2,3} Recent work from the

Millennium Cohort Study⁴ by Kiernan and Smith, indicates that although lone parenthood is highly likely at the time of a sole registration, in a large minority of cases, just under a third, the father is likely to be closely involved or living with the mother. Table 1, which is based on data from the work by Kiernan and Smith, indicates that for over half of the sole registrations in the study (54 per cent) there was either no relationship or a separation/divorce. For around 14 per cent the father was 'just a friend'. However, for nearly a third of sole registered births there is likely to be involvement with the father; for 23 per cent of all sole registered births the woman described the father as being closely involved and in 8 per cent of all sole registered births the woman was cohabiting with the father.

Table 1 Distribution of sole registered births by partnership status with biological father at the time of birth

United Kingdom	
Partnership status at birth	percentage
Not in relationship	51
Separated/Divorced	4
Friends	14
closely involved (but not cohabiting)	23
Cohabiting	8

Source: Millennium Cohort Study, author's own calculations from figures provided by Kath Keirnan from data set used in Keirnan and Smith (2003)⁴

Having a sole registration is just one of the pathways into lone parenthood and the disadvantages that lone parents face compared with couple mothers.⁵ There have been relatively few studies in the UK analysing specifically the outcome of having a sole registered birth. Haskey⁶ has looked at the subsequent marriage patterns of women who experienced a birth outside marriage in 1998. He found from a sample of 2,500 births outside marriage in 1988 that for mothers of sole registered births only one in six had married in the following eight years compared with one in four for all women in the sample. Ermisch and Francesconi⁷ using life table methods applied to British Household Panel Study data estimated that the median duration of lone motherhood was less than two years for mothers who began their motherhood with no resident partner. For women who were lone mothers through separation from marriage or cohabitation they found a median duration of four years. However, both groups will include mothers where the father appears on the birth certificate but at a different address.

SOLE REGISTRATIONS IN ANNUAL BIRTHS REGISTRATION DATA

Live births

Since the 1970s the proportion of births occurring within marriage has fallen (see Figure 1). In England and Wales the percentage of births occurring outside marriage has risen from under one in ten in the mid 1970s to just over four in ten births (41.4 per cent in 2003). For just over a quarter of all births (26.3 per cent of births in 2003) the father on the birth certificate was living at the same address as the mother and this can be taken as an indication that the mother and father are cohabiting.⁷ Of the remaining births outside marriage, just over half had the father appearing on the birth certificate but living at a different address and just under half had no father appearing on the birth certificate.

The proportion of all births that were sole registered dropped in the late 1960s to early 1970s, which was the time of the introduction of legalised abortion. It remained fairly constant through the 1970s, but the rose to five per cent in 1980 and to around eight per cent at the end of that decade. Since then, the proportion has fluctuated around seven

to eight per cent. In the second half of the 1990s there is some evidence of sole registration decreasing as a percentage of all births, falling from around 7.9 per cent in 1998 to 7.2 per cent in 2003. Sole registrations have become a much smaller proportion of births taking place outside marriage. In the mid-1960s over 60 per cent of births outside marriage were sole registrations, this has now fallen to 17 per cent in 2003.

The age pattern of sole registered births is different from that of other births and therefore the changing age distribution of the population will affect the trend. Figure 2 shows the percentage of live-births that have been sole registrations for each year in the last 30 years and compares

Figure 1 Live births outside marriage and sole registrations as a percentage of all live births

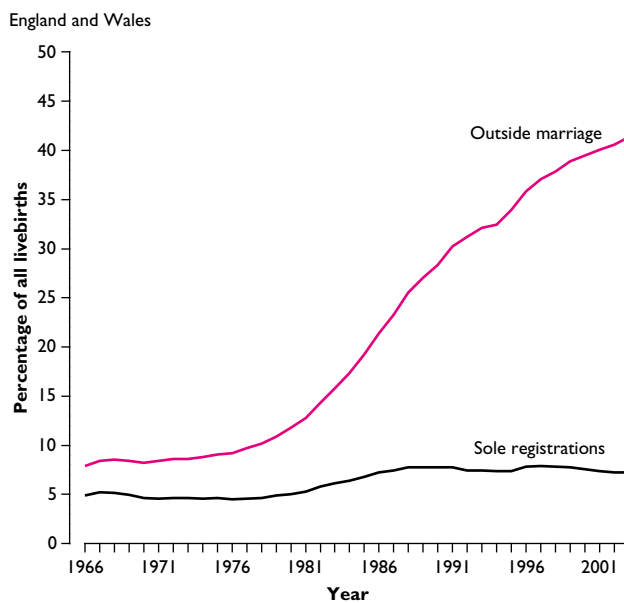
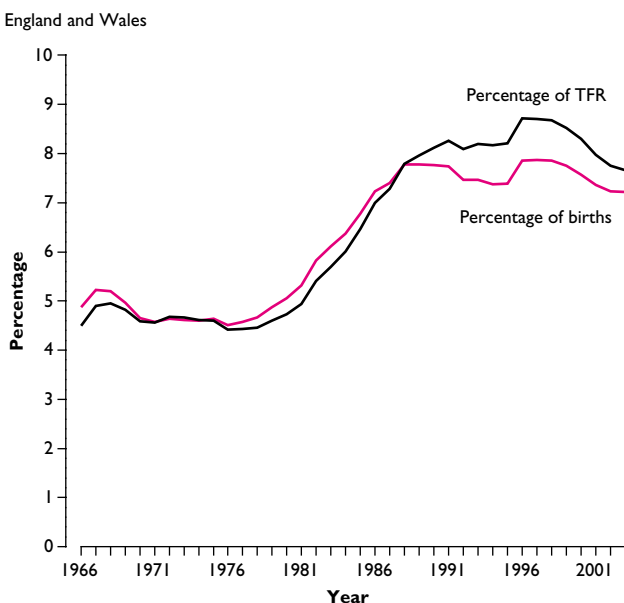


Figure 2 Percentage of live births that are sole registrations, and percentage contribution of sole registrations to the total fertility rate (TFR), 1966–2003



it with the percentage contribution of sole registered births to the total fertility rate (TFR), which controls for the changing age distribution of the population. The slight decline from the mid-1980s to the mid-1990s in the proportion of all births is not reflected in the proportional contribution to the TFR and the proportional contribution to the TFR continues to increase. However, sole registered births have been falling as a proportion of the TFR since the mid-1990s.

Figure 3 shows the mean age of mothers of sole registered births and the mean age for all births. Looking at the unstandardised mean age, sole registrations occur, on average, to mothers around four years younger than the average age for all births. This difference has varied over time with the largest difference being over 4.5 years in the mid-1970s. This fell to less than 3.5 years at the beginning of the 1990s before rising back to around 4.2 years at the beginning of the century. This increase has occurred as the rise in the mean age of sole registered births has slowed since the mid-1990s while the rise in mean age of all births has not.

This is almost entirely due to the changing age distribution of the population. Sole registered births occur predominately among younger women and cohorts who were young in the 1990s were smaller than the large generations of women born in the 1960s who reached their 30s in the 1990s. Standardising for the population age structure shows that the rise in mean age for all births and sole registered births is fairly similar and the difference remained constant at around four years.

Stillbirths

Compared with live births, sole registrations are a greater proportion of stillbirths. Figure 4 shows that the percentage of stillbirths that were sole registered rose from under 10 per cent in the 1970s to around 14 per cent by 1990. Since then the proportion has dropped back to around 10 per cent, but this is still nearly three percentage points higher than the proportion of livebirths. The mean age of the mother for a sole registered still birth is on average around one year higher than that for a sole registered live birth, but the trends are similar to live births.

Multiple births

Sole registrations are less prevalent amongst multiple births. The rate of multiple births per 1,000 sole registered maternities was 12 per 1,000 in 2003, whereas overall the rate for all maternities was 15 multiple maternities per 1,000 maternities. This differential has increased over the last decade or so, in 1991 the equivalent figures for multiple maternities were 11 per 1,000 sole registrations and 12 per 1,000 for all births. Increases in the differential are likely to have resulted from changes in population age structure and in part because multiple maternities may result from fertility treatments, which in turn are more likely to be to couples where a resulting birth is less likely to be sole registered.

Country of birth

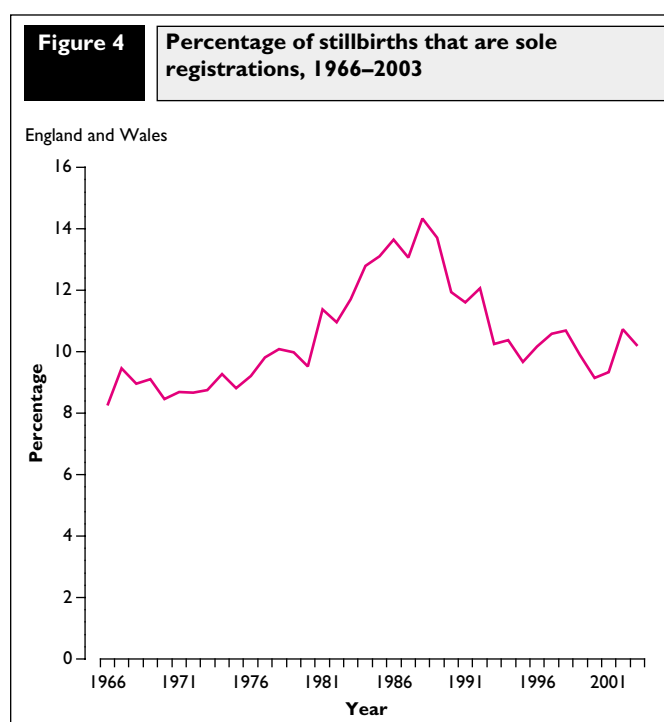
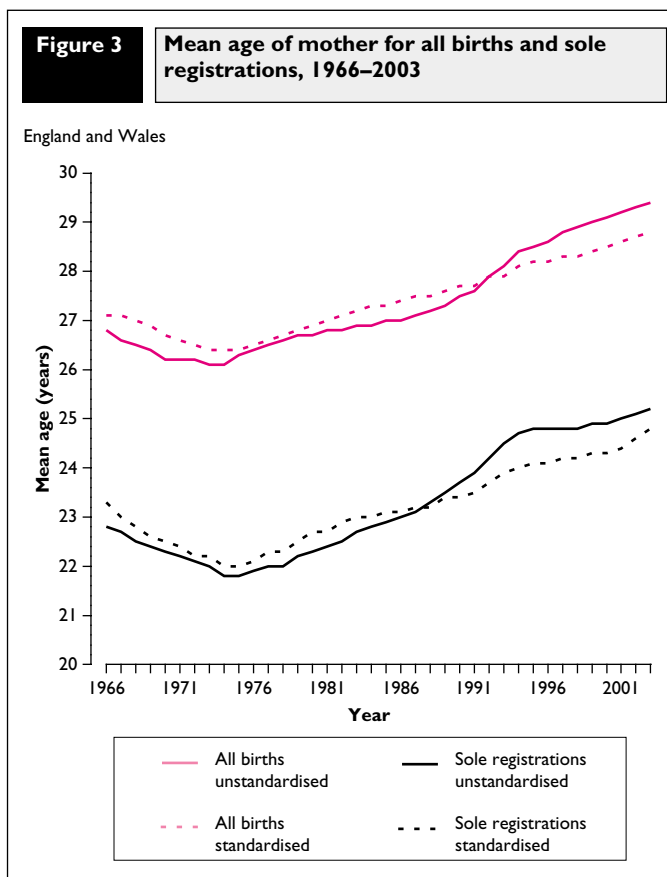
A recent study by Collingwood Bakeo⁸ found the highest average incidence of sole registration for births in 1999–2001 among Caribbean-born women (one in five births) and then West African-born women (one in eight births). Conversely sole registered births are least prevalent amongst Indian, Pakistani and Bangladeshi born women where, in the period 1991–2000, well under one per cent of births were sole registrations. For UK born women just under eight per cent of births were sole registrations.

Birthweight

Collingwood Bakeo⁸ also found that low birthweight babies (under 2,500g) are more prevalent amongst sole registered births. Around one in ten low birthweight children are sole registered, compared with one in thirteen births weighing 2,500 grams or more.

WOMEN WHO EXPERIENCE A SOLE REGISTRATION

In order to examine characteristics of women who have ever experienced a sole registration the ONS Longitudinal Study (LS) was used. The LS contains linked census and event data for one per cent of the population of England and Wales.⁹ The LS sample originally included 1971 Census of Population information, for people born on one of four selected dates of birth. These four dates were used to update the sample at the



1981, 1991 and 2001 Censuses and with routine event registrations. Events include births, deaths, widow(er)hoods, cancer registrations and migration. New LS members enter the study through birth and immigration. The data available means that birth histories for women can be constructed using anonymised datasets from the LS. The principal events examined here were live births to female members of the LS.

Sample design

As a check on the suitability of using the LS to look at sole registrations the proportion of births in the LS that were sole registrations was compared with the proportion of sole registrations among all births. Figure 5 shows that, over time, the pattern of sole registered births in the LS was very similar to that for all registered births. However, prior to 1991 it does appear from the data here that the proportions of births

in the LS that are sole registered were, on average, a little below that in the population (by around 0.4 percentage points). This suggests that until 1991 sole registered births were slightly less likely to be linked into the study than other births.

In order to only include births to those women whose entire birth history is recorded in the LS a sub sample of women was selected. All women who were present in the 1971, 1981 and 1991 Census, and who were not recorded as having died or emigrated were selected. However, it should be noted that, even after this refinement, these birth histories would contain a slight level of bias when compared to true birth histories, as the linkage of registered births in the study is incomplete.¹⁰ Linkage rates of between 83 to 88 per cent have been found for the 1981–1988 period and similar linkage rates have been indicated by more recent work.¹¹ No adjustment has been made for this bias in the analysis here. Also it may be that the fertility of these women and their propensity to have a sole registration varies from the population of women as a whole, where mortality, emigration and immigration may affect the results.

Cohorts born in the years 1955 to 1962 were selected for analysis. The data set contained births up to 2000. For all the women chosen the beginning of their exposure to childbearing was therefore included, the oldest women being 16 in 1971. Women born in the earliest years (1955–57) had effectively completed their childbearing by 2000. Women born in the late 1950s and early 1960s would have been very close to completing their childbearing; any further children are not likely to change either the information at first birth, or have much effect on the composition of the subgroup we are interested in studying.

Those births in the sample that were to the 1,804 women who had ever experienced a sole registration were identified. Tables were then produced for all women in the sample who had experienced a birth and for women who had ever experienced a sole registration.

Making use of the social class of women at time of first birth is difficult for several reasons. Firstly, if the first birth was a sole registration it is less likely that a social class will be allocated, as the woman is less likely to have an occupation recorded at the time of the birth registration. Secondly, until 1986, if the first birth was a joint registration or was within marriage only the occupation of the father was recorded. Thirdly, using social class from registration data is made more complex because there have been changes to the classification over time. For these reasons the decision was taken to base analyses of women's fertility on their

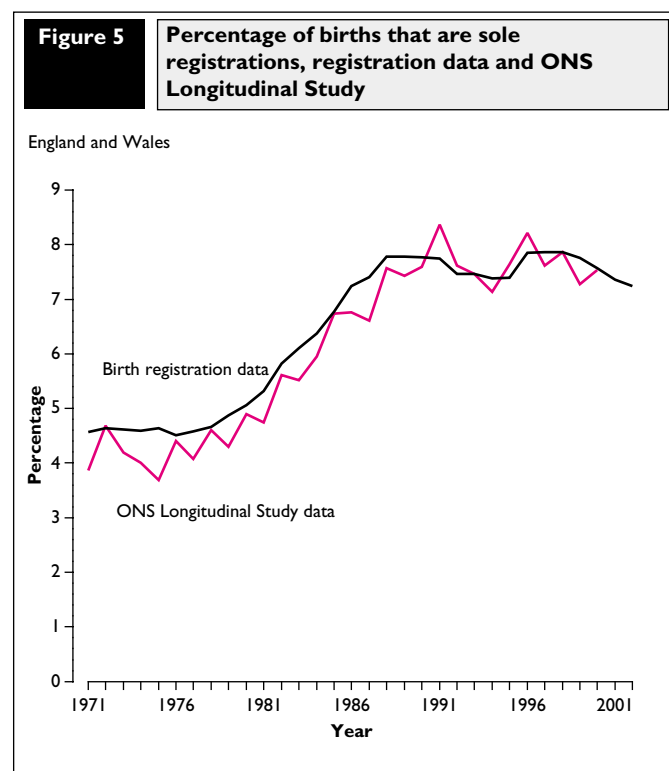


Table 2 Mean age at birth of first child and completed family size: women born 1955–1962, comparison of LS sample¹ and all births

England and Wales

Year of birth of woman	ONS Longitudinal Study to 2000			National data to 2002 ²	
	Mean age at birth of first child (years) ³	Average completed family size (excluding childless) ³	Number in sample	Mean age at birth of first child (years) ³	Average completed family size (excluding childless) ³
1955	24.8	2.26	2,277	25.0	2.38
1956	25.1	2.24	2,496	25.2	2.40
1957	25.3	2.26	2,489	25.3	2.42
1958	25.5	2.25	2,531	25.5	2.43
1959	25.3	2.32	2,424	25.7	2.41
1960	25.6	2.25	2,472	25.7	2.43
1961	25.7	2.22	2,601	25.8	2.43
1962	25.8	2.17	2,681	25.8	2.39
Total	25.4	2.25	19,971	25.6	2.41

¹ See text for additional conditions

² National data on births by birth order are estimated from registration data and General Household Survey data and are regularly published in *Birth Statistics* FM1. The mean age at first child has been calculated from rates using the number of first births by age as the numerator and the numbers of women in the population as the denominator. The average completed family size has been produced by dividing the overall average by the proportion of women who have ever had a live-birth.

³ Note that the mean age and completed family size will be slightly underestimated for the younger cohorts shown as they are still within their fertile years.

Source: ONS Longitudinal Study and birth statistics derived from national registration data

father's social class as recorded in the 1971 Census. These women were aged around 9–16 at the time of the 1971 Census and so their father's social class should provide a reasonable indication of their socio-economic background.

Results

Table 2 shows the results for all women in the LS sample who had a birth and were born between 1955 and 1962 (a total of 19,971 women). It shows their mean age at first birth and the total number of children they have had. It also compares these figures with national estimates from registration data.

The pattern of age at first birth is similar for both the LS data and the registration data, with mean age at first birth rising between women born between 1955 and 1962. Completed family size was consistently lower in the LS sample than in the registration data. This is as a result of both unlinked births in the LS, and also the fact that the national data includes births for 2001 and 2002.

Table 3 shows equivalent information to Table 2 for the subgroup of women from the LS who have ever experienced a sole registration. It shows that around nine per cent of mothers in this sample ever experienced a sole registration. These women had their first birth on average four years earlier than all women and had around 0.43, or 19 per cent, more children than the average for all mothers in the sample.

Table 4 provides more information on the number of sole registrations that mothers in the sample experienced. Of the 1,804 women, around one in five experienced a further sole registration. For the individual cohorts the probability of progressing to a second sole registration ranged from around 0.18 to 0.26. The sample numbers are too small to calculate the odds of proceeding to a third sole registration for each cohort of women who have already experienced two sole registrations, but using all the cohorts covered by this study the probability is around 0.28. While the sample numbers are small there is clear evidence that of women who experience a sole registration a substantial minority have at least one further sole registration.

Analysis by social class for all women in the sample and women who have ever experienced a sole registration is shown in Table 5. Social class was determined by using the variable that indicates the social class of the woman's father at the 1971 Census. Small sample numbers meant it was only possible to analyse the data by grouping into three categories: non-manual; manual; and other. Around 14 per cent of mothers who experienced a sole registration came from a non-manual social class background, compared with 28 per cent of all the mothers in the sample. The proportions in manual classes were 66 and 59 per cent respectively and in the 'other' category 20 and 13 per cent. Most of the women in the 'other' category (which includes armed forces, inadequately described occupations, students and no information available on the father or his occupation) had no father present in 1971 (around 77 per cent of the 'other' category).

Table 3

Mean age of women at birth of first child and completed family size: women born 1955–1962, comparison of women in LS sample¹ who had ever experienced a sole registration and all mothers in LS sample¹

England and Wales

ONS Longitudinal Study to 2000

Year of birth of woman	Mean age at birth of first child	Difference from all mothers in ONS LS sample	Completed family size (excluding childless) ²	Difference from all women in ONS LS sample	Number in sample who experienced a sole registration	Percentage of all mothers in ONS LS sample
1955	21.4	-3.4	2.63	0.37	193	8.5
1956	21.3	-3.9	2.71	0.47	219	8.8
1957	21.3	-4.0	2.64	0.38	212	8.5
1958	21.5	-4.0	2.66	0.41	238	9.4
1959	20.9	-4.4	2.91	0.59	221	9.1
1960	22.1	-3.5	2.51	0.26	236	9.5
1961	21.4	-4.4	2.77	0.55	235	9.0
1962	21.6	-4.3	2.56	0.40	250	9.3
Total	21.4	-4.0	2.67	0.43	1,804	9.0

¹ See text for additional conditions

² Note that this will be slightly underestimated for the younger cohorts shown as they are still within their fertile years.

Source: ONS Longitudinal Study

Table 4

Numbers of women in the LS sample who ever experienced a sole registration by number of sole registrations, women born 1955–62

England and Wales

Year of birth of woman	Single sole registration	Two sole registrations	Three or more sole registrations	probability of having a second sole registration	Probability of a third sole registration, given two
1955	159	25	9	0.176	-
1956	176	34	9	0.196	-
1957	170	31	11	0.198	-
1958	182	47	9	0.235	-
1959	164	37	20	0.258	-
1960	190	32	14	0.195	-
1961	181	37	17	0.230	-
1962	203	36	17	0.212	-
Total	1,419	279	106	0.213	0.275

- Too few births to estimate

Source: ONS Longitudinal Study

Table 5 Percentage of women by social class of father in 1971 Census, for all mothers LS sample, and for mothers who experienced a sole registration, women born 1955–1962

England and Wales				
Percentages				
Social class of the mother's father				
Year of birth of woman	Non-Manual [†]	Manual [‡]	Other [*]	Number
All mothers in LS sample				
1955	29	56	15	2,277
1956	27	59	13	2,496
1957	28	58	14	2,489
1958	28	58	14	2,531
1959	27	61	12	2,424
1960	29	59	12	2,472
1961	30	58	12	2,601
1962	28	61	11	2,681
Total	28	59	13	19,971
Mothers ever experiencing a sole registration in LS sample				
1955	12	61	26	193
1956	11	68	22	219
1957	15	63	22	212
1958	15	66	18	238
1959	15	65	20	221
1960	15	68	17	236
1961	16	66	18	235
1962	13	70	16	250
Total	14	66	20	1,804

(Numbers may not add to 100 due to rounding)

† Non-manual includes Class I professional occupations
Class II managerial and technical
Class IIIN skilled non-manual

‡ Manual Includes Class IIIM skilled manual
Class IV partly skilled
Class V unskilled

* 'Other' includes Armed forces
Inadequately described occupation
Full-time students/independent means
No information on the father or his occupation

Source: ONS Longitudinal Study

CONCLUSIONS

Sole registered births and the mothers who register them show different characteristics from other births. On average they occur to younger mothers. Women who ever experience a sole registered birth are likely to have begun their childbearing around four years before the average. Sole registered births are less likely for multiple maternities. A stillbirth is more likely to be sole registered than a live birth.

Caribbean and West African born women are likely to have a greater than average proportion of sole registered births. Indian, Pakistani and Bangladeshi women are least likely to register a sole birth. A further area of study would be to examine whether the women who were cohabiting or in close contact with the father, despite him not appearing on the birth certificate, were from particular ethnic groups.

Nine per cent of mothers born from 1955–1962 had at least one sole registered birth. Women who ever experience a sole registered birth are likely to have a larger family than other mothers and they are also half as likely to come from a family background with a higher social class.

Sole registered births have been taken as an indication of entry into lone parenthood and absence of paternal involvement. The Millennium Cohort Study has shown that while this simple conclusion is true for the majority of sole registered births, for around one in twelve the mother

is cohabiting with the father and a further three in twelve have close involvement with the father. It is not clear in these cases why the father's name does not appear on the birth certificate. Possible reasons may include lack of knowledge of the requirement for a father to attend or provide legal evidence where a birth takes place outside marriage (see Box one); a lack of desire for the father to appear on the birth certificate, either by the father or the mother (or both); and, prior to December 2003, the knowledge that having the father's name on the birth certificate made no difference. Incidentally, during the 1990s there were major changes in legislation on child support. The formation of the Child Support Agency in 1993 followed the introduction of the 1991 Child Support Act and further changes in legislation followed with the 1995 Child Support Act and 2000 Child Support, Pensions, and Social Security Act. It is not clear, however, how trends in sole registrations may have been affected by these changes.

ONS regularly publishes information about the registration status of births,¹² and the lack of a father on the birth certificate is important social information. It will be interesting to see if trends in sole registration change from December 2003 following the acquiring of parental responsibility for fathers present on the birth certificate. Beyond 2005, changes may occur to the statistics with the modernisation of the civil registration system that will allow unmarried fathers to give birth registration information separately in person, by telephone or over the Internet. Any information given in this way would, as now, need to be corroborated by a child's mother before it was recorded in a birth entry.¹³

Box one

Registering a birth outside of marriage

Before beginning a registration, the registrar establishes whether the child's parents were married to each other at the time of the birth. If the informant is a parent the registrar asks, 'Are you married to the child's mother/father?' Where the parents have been married to each other, but the marriage has ended since the child was conceived, the child should be registered as the child of that marriage.

If the birth occurred outside marriage the father can only appear on the birth certificate in the following circumstances:

- Joint information provided by both parents present at the registration
- Statutory declaration by the father countersigned by the mother
- Statutory declaration by the mother, countersigned by the father
- A Parental Responsibility Agreement (Section 4 of the Children Act 1989)
- Appropriate Court Order (Section 4 Children Act 1989; Para 1 Schedule 1 Children Act 1989; Section 4 Family Law Reform Act 1987; Section 9 Guardianship of Minors Act 1971; Section 11B Guardianship of Minors Act 1971).

Categorisation of a birth outside marriage in statistical analysis

In analysing births outside marriage two pieces of information can be used. Firstly whether a father is recorded and, if so, his address. Three categories of births outside marriage can then be created:

- Joint registration – same address
- Joint registration different address
- Sole registration.

Key findings

- In 2003 in England and Wales 41.4 per cent of births occurred outside marriage, 26.3 per cent were to unmarried couples both living at the same address, 7.9 were joint registered by parents at separate addresses and 7.2 per cent were sole registered. Sole registrations are often taken as indication of absence of paternal involvement, however the Millennium Cohort Study shows that for one in twelve sole registered births the mother is cohabiting with the father and a further three in twelve have close involvement with the father.
- In the mid-1960s over 60 per cent of births outside marriage were sole registrations. By 2003, only 17 per cent were.
- The proportion of all births that are sole registered has remained at around 7 to 8 per cent in the last two decades, but from 1998 has declined from 7.9 per cent of all births to 7.2 per cent in 2003.
- A stillbirth is more likely to be sole registered than a live birth. Sole registration is less likely for multiple maternities.
- Nine per cent of mothers born in the years 1955 to 1962 experienced a sole registration.
- Mothers born in the years 1955 to 1962 who have ever experienced a sole registered birth, began their childbearing on average four years before the overall mean age at first birth and were more likely to have a larger family than other mothers.
- Mothers born in the years 1955 to 1962 who have ever experienced a sole registered birth are more likely to come from a family background with a lower social class.

ACKNOWLEDGEMENTS

The author is grateful to Peter Goldblatt, Michael Rendall and Jessica Chamberlain (all of ONS) for helpful comments on earlier drafts of this article and to Kathleen Kiernan (then of the London School of Economics now of University of York) for the provision of data from the Millennium Cohort Study. The author also wishes to thank the ONS Longitudinal Study team for the provision of the dataset used and their help and support.

REFERENCES

1. Moser K, Li L, Power C.(2003) Social inequalities in low birth weight in England and Wales: trends and implications for future population health. *Journal of Epidemiology and Community Health* September 2003; **57**(9), pp 687–91.
2. Pattenden S, Dolk H, Vrijheid M.(1999) Inequalities in low birth weight: parental social class, area deprivation, and 'lone mother' status. *Journal of Epidemiology and Community Health* June 1999; **53**(6), pp 355–58.
3. Whitehead M and Drever F (1999) Narrowing social inequalities in health?: Analysis of trends in mortality among babies of lone mothers. *British Medical Journal* **318**, pp 908–12.
4. Keirnan K and Smith K (2003) Unmarried parenthood: new insights from the Millennium Cohort Study. *Population Trends* **114**, pp 26–33.
5. Shouls S, Whitehead M, Burström B and Diderichsen F (1999) The health and socio-economic circumstances of British lone mothers over the last two decades. *Population Trends* **95**, pp 41–46.
6. Haskey J (1999) Having a birth outside marriage: the proportions of lone mothers and cohabiting mothers who subsequently remarry. *Population Trends* **97**, pp 6–18.
7. Ermisch J and Francesconi M (2000) The increasing complexity of family relationships: lifetime experience of lone motherhood and stepfamilies in Great Britain. *European Journal of Population* Volume **16** (3), pp 235–249.
8. Collingwood Bakeo A (2004) Trends in live births by mother's country of birth and other factors affecting low birthweight in England and Wales, 1983–2001. *Health Statistics Quarterly* **23**, pp 25–33.
9. Hattersley L and Creeser R (1995) *Longitudinal study 1971-1991: History, organisation and quality of data*. Office for National Statistics Series LS7. HMSO: London.
10. See Werner B (1984) Fertility and family background: from the OPCS Longitudinal Study. *Population Trends* **35**, pp. 5–10 and Babb P and Hattersley L (1992) *An examination of the quality of LS data for fertility analysis* LS User Guide 10. OPCS: London.
11. Rendall M (2003) How important are intergenerational cycles of teenage motherhood in England and Wales?: a comparison with France. *Population Trends* **111**, pp 27–37.
12. See Office for National Statistics annual reference volume *Birth Statistics: Births and patterns of family building England and Wales* (Series FM1) – available at <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=5768&Pos=&ColRank=1&Rank=256>
13. <http://www.gro.gov.uk/gro/content/aboutus/lookingahead/index.asp#0>