

Maternity care for women having a multiple birth



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Contributions

Keith Reed (TAMBA) and Jane Denton (MBF) contributed to the development of the project and commented on the report, Jenny Kurinczuk advised on the analysis and contributed to the report and Jane Henderson and Maggie Redshaw undertook the analysis and drafted the report.



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Executive Summary

The birth of a baby is a major life-changing event. When more than one baby is expected and there is a multiple birth the needs of babies, mothers and partners may be complex and considerable. Using data from national surveys the report provides an overview of the care mothers of multiples receive during pregnancy, labour and birth and in the early months that follow.

The aims were:

- To describe the care provided during pregnancy and afterwards for women having a multiple birth
- To make comparisons with the care provided for mothers having a single baby
- To describe women's views of the care they received
- To consider the implications for care

Summary findings:

Pregnancy

- Mothers of multiples were more likely to be having their first baby and the proportion of women aged 35 years or over at the time of birth was higher for mothers of twins (37%) and triplets (54%) compared with mothers of singletons (28%).
- Most women, including mothers of twins and triplets, saw their general practitioner or family doctor (GP) first about their pregnancy care.
- Mothers of singletons and twins first saw a health professional about their pregnancy at an average of 7 weeks gestation, while those having triplets did so on average slightly later.
- The timing of the 'booking' appointment, when women receive their pregnancy notes was similar with women having a singleton or multiple pregnancy having this appointment at an average of 11 weeks gestation.
- The number of antenatal checks varied with plurality: mothers of multiples had an average of 13 checks compared with 9 for mothers of singletons and they were twice as likely to have between 15 and 19 checks, with a small proportion (6%) having 20 or more antenatal checks.

- Women with a multiple pregnancy were much less likely to have midwife only care and were twice likely as mothers of singletons to see an obstetrician or other hospital doctor during their pregnancy.
- A higher proportion of women with a multiple pregnancy were not offered Down's Syndrome screening (15%, compared with 4% for singleton pregnancies).
- Women with a multiple pregnancy had more ultrasound scans: mothers with a singleton pregnancy had an average of 3 scans; for multiple pregnancies the average was 8 scans and women expecting triplets on average had one more; while only 6% of mothers of singletons had 7 or more scans, women with a multiple pregnancy (59%) did so.
- There was no difference between women with a multiple or singleton pregnancy having an early 'dating' scan (87% overall) or the later 20 week or 'anomaly' scan (97% overall).
- A higher proportion of mothers carrying multiples, both for the first time and those who had previously given birth, were less likely to be offered antenatal classes at all (16% compared with 10% and 37% compared with 30% respectively).
- If women attended NHS classes, most considered them to be at a convenient time (85%) and location (94%). However, women expecting a multiple birth were less likely to say there were enough classes and to be satisfied with the content.
- Women with multiple pregnancies were significantly more likely to experience some antenatal problems, particularly nausea and carpal tunnel syndrome, but rates of other symptoms such as backache, stress incontinence and pelvic girdle pain (PGP) showed little difference.
- Women with a multiple pregnancy had more antenatal admissions to hospital and overnight stays during pregnancy. The latter was twice as likely (37%) for women with a multiple pregnancy compared with mothers of singletons (18%).
- More women with multiple pregnancies than those expecting a singleton baby were worried about not knowing when labour would start, getting to the hospital in time, and needing to give birth by caesarean section.

Labour and birth

- Women having a multiple birth who went into labour were more likely to be induced than mothers of singletons (43% compared with 25%).
- Mothers of twins who laboured were twice as likely to have an epidural (56%) compared with mothers of singletons (28%) and less likely to have pethidine as an analgesic in labour (18% compared with 33%).
- Caesarean delivery was nearly three times more common for multiple births as for singletons (62% compared with 23%) and was more likely to be a planned procedure.

- Most women having a vaginal birth delivered sitting or lying on a bed, however, the lithotomy position (legs in stirrups) was more common for women experiencing a multiple birth and delivering vaginally (47% compared with 26%).
- Of women who gave birth vaginally, more mothers of multiples had an episiotomy (38%) compared with mothers of singletons (23%). The use of the lithotomy position for delivery and episiotomy were associated with the use of forceps or ventouse for delivery of at least one of the babies.
- During labour and birth women having multiples were more likely to be cared for by a greater number of midwives (36% had 4 or more midwives, compared with 22% of women having singletons), largely as a consequence of instrumental or operative delivery.

Care after birth

- Mothers of multiples stayed in hospital for longer after the birth: 61% and 67% of mothers of twins and triplets respectively stayed 4 days or more compared with 18% of mothers of singletons.
- Almost all women were visited at home by a midwife after leaving hospital, though this proportion was lower in mothers of multiples (89%) compared with mothers of singletons (97%) and was associated with having a baby in a neonatal unit (NNU) and with a longer NNU stay.
- Mothers of singletons and mothers of twins who saw a midwife at home had a similar number of contacts (average 4 visits) and mothers of triplets were seen slightly more.
- Of those women who saw a midwife at home similar proportions said they would have liked more home visits (22% following a multiple birth and 21% following a singleton birth).
- The length of time over which home visits were carried out was quite variable. The average time to the last contact after the birth was 12 days for singletons, and 14 days for multiples, however, 5% of singletons and 10% of multiples were last seen by the midwife at approximately one month or more.
- Almost all singleton infants born to women in the study were delivered at term (mean, 39.5 weeks) compared with twins (mean 36.4 weeks) and triplets (mean 33.3 weeks) who were more likely to be born early. The birthweight distributions followed a similar pattern.
- Over a third of the twins (37%) and nearly two thirds of the triplets were admitted to a neonatal unit (NNU) compared just less than one in ten (9.2%) of the singleton infants.
- Following a multiple birth, babies were twice as likely to have an NNU stay of between 15 and 30 days compared to singletons, and to stay for a month or more.

- When babies were admitted to a neonatal unit, mothers of multiples were more likely than mothers of singletons to report that they had definitely been given enough information about the reason for babies' admission (83% compared with 67%).
- Fewer mothers with more than one baby exclusively breast-fed their infants in the first few days (32% compared with 58%), however a similar proportion of mothers of multiples were feeding some breast milk (73%) at this time compared with mothers of singletons (75%).
- Midwives were less likely to discuss infant feeding antenatally with mothers of multiples: 76% of mothers of singletons, 70% of mothers of twins and a smaller proportion of mothers of triplets.
- Mothers of multiples were slightly more likely to report having received practical help (75% compared with 71%) and active support with infant feeding than mothers of singletons (75% compared with 72%).
- In terms of overall physical health at three months or more after the birth there were no significant differences reported by women who had given birth to a single infant and those who had given birth to twins or triplets, with approximately two-thirds of both groups reporting that their current health was 'excellent' or 'very good' at this time.

Women's experience of care

- For some aspects of antenatal care women with a multiple pregnancy were more likely to feel that some choices and information were less available to them. This included what tests were carried out, particularly those for Down's syndrome, explanations for this type of screening and where antenatal checks would take place.
- More than half of all women expecting singletons (58%) were given information about choice of place of birth compared with 46% of those with a multiple pregnancy.
- More women expecting a multiple birth indicated that for medical reasons there was no choice about where to give birth (17%) compared with women having a singleton pregnancy (7%).
- Women having a multiple birth had less choice in some aspects of their labour and birth, being less able to move and to adopt alternative positions.
- There were no differences following birth in women's feelings about the length of postnatal stay, with 70% feeling their stay was about right.
- Following a multiple birth 20% of women would have liked more information about their own recovery and health compared with 16% of mothers of singletons.
- The quality of care during pregnancy was generally highly rated, with most women feeling they were treated with respect and kindness and that they were informed and spoken to in a way they could understand.

However, mothers of multiples appear slightly less likely to be as positive as mothers of singletons.

- With a multiple pregnancy fewer women (42%) reported mostly or always seeing the same midwife for antenatal care compared with women having a singleton pregnancy (57%)
- A higher proportion of women expecting multiples had met staff prior to labour compared with mothers of singletons (34% and 21%)
- During birth almost all women (91%) had their partner with them, with no difference between the groups and almost all (93%), reported that their partner was with them as much as they wished.
- Women were also asked if they or their birth partner were left alone at a time when it worried them. Mothers of multiples were more likely to say they were not left alone and not worried at all (83%) compared with mothers of singletons (74%).
- During labour and birth most women (68%) definitely had trust and confidence in the staff caring for them and a further proportion (27%) did so to some extent, with no difference between the groups.
- The care received during labour and birth in terms of respect, kindness and being spoken to in a way they could understand, being informed and involved in decisions was perceived as similarly positive by mothers of multiples and singletons.
- The perceptions of postnatal care were largely similar to those of care during labour and birth, though a bit more critical.
- When asked about overall perceptions of the different phases of care, mothers of multiples were more likely than mothers of singletons to rate their antenatal care as 'excellent' or 'very good' (73% compared with 66%) and their labour and birth care similarly (83% compared with 76%). Postnatal care was less likely to be rated 'excellent' or 'very good' by all women, and was rated more poorly by mothers of multiples than mothers of singletons (54% compared with 59%).

Implications for care

The study findings, in addition to informing parents, user groups, health professionals and their professional organisations more broadly, have some implications for the way that maternity services are provided for women having a multiple pregnancy and birth. Managers organising services and those providing direct care will be able to use the information presented, enabling them to address the specific needs of this group of women and their families on the maternity care pathway more effectively.

Key points for future maternity care:

- The information needs of parents, such as those expecting a multiple birth, who tend to be cared for a range of health professionals, should be addressed in a co-ordinated way. It is critical to ensure that women with multiple pregnancy are fully aware of all the options in relation to antenatal screening for Down's syndrome.
- Women with more complex pregnancies and births could benefit from greater access to midwives to discuss their 'day-to-day' care as they may miss out on this before and after birth.
- Parents expecting multiples could be given more help and encouragement to ensure they are aware of options for maternity care and to actively make choices about that care.
- The needs of postnatal women and in this context, mothers of multiples, whose babies are admitted to a neonatal unit following birth need to be fully addressed in organising postnatal care. Separation from one or more babies, the need to feed or provide breast milk and the practical issues associated with discharge home before their infants leave hospital are all aspects of care which can affect women and their babies that need to be taken into account in planning effective care.
- For parents of multiples there is a need for support with transition to parenthood and early parenting, particularly infant care. Postnatal support at home may need to go on for a variable length of time, depending on individual needs and circumstances.
- Greater recognition of the important role of fathers and partners and facilitation of partner support, particularly in the postnatal context could contribute positively to the wellbeing of mothers of multiples and their babies.
- It is important to ensure an effective transfer from midwifery postnatal care, enabling effective health visitor involvement for families following multiple birth.

Women and families experiencing a multiple pregnancy and birth, like other parents, require individualised high quality maternity care that addresses their psychological, practical and clinical needs. The survey data reported provide a context and a baseline for addressing the particular points raised and measuring change over time. However, it must be held in mind that not all women, including mothers of multiples responded to the survey and those where one or more babies died were not contacted. Their experience of maternity services is an important aspect of care that could not be addressed in the study.

Maternity care for women having a multiple birth

1. Introduction

Between three to five per cent of births occur as multiples. However, the rate of multiple births has changed considerably over the years and since 1999 the multiple maternity rate has increased by 13% (ONS 2010). The maternity rate for multiples as a whole increased to 16.4 per thousand women giving birth in 2009, compared with 15.5 in 2008. In 2009, in England and Wales 11,301 women gave birth to twins, 148 to triplets and 5 to quads and above, including both live births and stillbirths (ONS 2010). The pattern for triplet birth has been slightly different: in the England and Wales, between 1982 and 1998, the rate of triplet births increased from 0.12 to 0.47 per 1000 live births. Since then it has fallen to 0.22 per 1000 in 2009. In contrast, the rate of twin births, which make up the majority of multiple births, increased throughout this period from 9.95 to 16.18 per 1000 live births (Taylor 2006; ONS 2010).

Twins occur most commonly in Nigeria and least in Japan. They are twice as common in some groups, but this is attributed only to differences in non-identical (dizygotic (DZ)) twinning rates. Identical (monozygotic (MZ)) twinning rates appear to be geographically and temporally constant. Twinning increases with maternal age and between the ages of 15 and 37 years twinning rates increase fourfold. In 2009 in England and Wales women aged 45 and over had by far the highest multiple maternity rate (105.8 per thousand maternities) and also the largest increase in this rate over the previous decade (123%) compared with younger age groups (ONS 2010).

Mortality rates for babies born in multiple births are significantly higher than that for singleton babies. Twins are at least three times the elevated risk and triplets are at yet greater risk (Sutcliffe and Derom 2006; Shinwell et al 2009). In 2007 the perinatal mortality rate (PMR) for twins was 23.8, and for triplets 49.3 per 1000 live and stillbirths (ONS, 2008) compared with 7.2 for singletons.

Multiple pregnancy is associated with a greater number of complications and as a consequence mothers of multiples may require more care before and after giving birth than mothers with a singleton pregnancy, have more antenatal care and monitoring, receive antenatal steroids, deliver by caesarean section, and their babies are more likely to be admitted to a neonatal intensive care unit (Shinwell et al 2009). Babies born as a consequence of multiple birth are also at increased risk of significant short and long term morbidity (Shinwell et al 2009). This is principally due to their increased rates of prematurity, intra-uterine growth restriction (IUGR) and low birthweight (less than 2500g) (Shinwell et al 2009). The complexities of adjusting to and caring for two or more newborn babies at the same time are also numerous from both practical and psychological perspectives.

Thus midwifery care during pregnancy and the need for specialist clinical antenatal care, the type of birth experienced, and the need for postnatal help and support may to be affected by having a multiple birth. Worries and concerns before the birth may be different and women's wellbeing before, during and after the birth may be affected. The aims of this research were to explore the care experiences and perspectives of women who had recently given birth to more than one baby

2. Methods

2.1 Data sources

This analysis used data from the Healthcare Commission (now Care Quality Commission) surveys of women's recent experience of maternity care. All the NHS trusts providing maternity care in England were included (Healthcare Commission 2008). Almost 45,000 women aged 16 years and over at the time of giving birth receiving care in 151 trusts were asked about their experiences of care in pregnancy, labour and delivery, and the postnatal period. Women who had given birth in January or February 2007 were mailed a questionnaire and a covering letter when their baby was three months old, unless the baby was stillborn or had died subsequently. A leaflet about the survey was available in 20 non-English languages and a telephone interpretation service was available.

Reminders were sent out 2 weeks after the initial mailing and a further reminder and questionnaire two weeks later

2.2 Survey content

The survey covered both clinical aspects of care and attitudinal data on perceptions of care. Questions were asked about access to care, which health professionals were seen and timing of first contact and booking, tests and scans, antenatal hospital admissions and antenatal classes. Questions about labour and delivery related to whether labour was induced, the length of labour, pain relief, type of delivery, damage to the perineum, staffing and companions in labour. Regarding postnatal care, women were asked how long they stayed in hospital, about infant feeding, whether one or more of the babies were admitted to a neonatal unit, and about postnatal care once home. Women were asked whether they had sufficient information and choice throughout, whether they were spoken to in a way they could understand, treated with respect and dignity, and with kindness and understanding. At the start of the questionnaire they were asked how many babies they had given birth to, about birthweight and gestation. If more than one baby was born mothers were asked to give birthweight details about the first baby. Towards the end of the survey they were asked about any previous pregnancies, and to give some details about their own socio-demographic and ethnic background.

2.3 Data analysis

Statistical analysis was descriptive, with tabulated responses to questions by plurality of birth. Continuous variables, for example, length of labour, were analysed as such but also recoded into categorical variables. Statistical comparisons were made using Chi-square tests. Multiple comparisons, were made and so statistical significance for univariate analyses was set at $p < 0.01$ (a difference by plurality compared to singletons is indicated by * $p < 0.01$, ** $p < 0.001$ in tables and on figures). A result which is statistically significant, for example $p = < 0.01$ means that the result is only likely to have occurred by chance 1 in a 100 times and for $p = < 0.001$ only in 1000 times.

Analyses were conducted using the Statistical Package for the Social Sciences (SPSSX) version 17.0. Because of the small numbers of triplet births involved a decision was made not to present tabulated data for mothers of triplets separately from mothers of twins.

2.4 Additional data

This analysis also used data from a longer and more detailed, but smaller scale, maternity survey conducted by the National Perinatal Epidemiology Unit (NPEU) in 2006 (Redshaw et al 2007). In that survey questionnaires were sent to a random sample of 4800 women aged 16 years and over living in England, excluding mothers whose babies had died. Questionnaires covering antenatal, labour and birth and postnatal care were mailed by the Office for National Statistics (ONS) to new mothers 3 months after the birth. A reminder letter was sent after two weeks and a further reminder and questionnaire at four weeks. The same timing and procedures were used by NHS trusts in managing the HCC data collection. Some quantitative data from this survey has been used in this report and open text responses provided by mothers of multiples in their own words have been used to illustrate specific points.

3. Results

The response rate to the Healthcare Commission survey was 59% representing 26,325 women. Younger women and women from ethnic minority groups were less likely to respond (Healthcare Commission 2007; Raleigh et al, 2010). Of these, 25,385 women delivered singletons, 384 delivered twins, and 13 women delivered triplets. The NPEU survey had a response rate of 63% (2966 women, 44 women delivered twins or triplets). Compared with women who responded to the NPEU survey, non-responders were more likely to live in London, live in a deprived area, be single parents, and born outside the UK (Redshaw et al 2007). Ethnic minority and younger women were also less likely to respond to the survey. Comparison with ONS data for all births in England in 2007 (ONS Birth Statistics FM1) confirms that, in common with other questionnaire surveys, teenagers and young women are under-represented. Unless otherwise stated, the following results relate to the Healthcare Commission survey.

3.1 Socio-demographic characteristics

Mothers of multiples were more likely to be primiparous (having their first baby) compared with mothers of singletons and twins (Table 1). The proportion of women aged 35 years or over at the time of their baby's birth was 28%, 37%, 54% for mothers of singletons, twins and triplets respectively (Figure 1), which is consistent with previous studies.

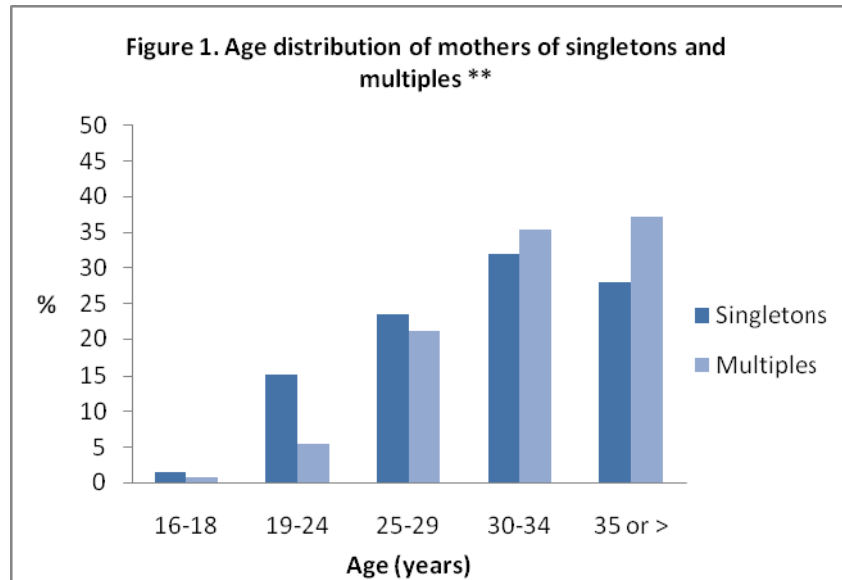
The proportion of women responding to the survey from the White and Black and Minority Ethnic groups differed little in terms of multiple birth (1.6% and 1.4% respectively). However, among the 12 women who had triplets, black African women were over-represented, which is also consistent with previous studies. Direct comparison with data from the Office of National Statistics (ONS) was not possible because ONS data provide country of birth statistics rather than ethnicity.

Table 1. Proportions of women with multiple and singleton births having different demographic characteristics (%)

Parity *	Singletons <i>n=25729</i>	Multiples <i>n=401</i>	All women <i>n=26130</i>
Primiparous	48.0	44.6	48.1
Multiparous	52.0	55.4	51.9
Age group**	<i>n=25823</i>	<i>n=401</i>	<i>n=26224</i>
16-19	2.9	1.5	2.9
20-24	13.6	4.9	13.5
25-29	23.4	21.4	23.3
30-34	32.0	35.6	32.1
35-39	22.0	29.9	22.1
40+	6.1	6.7	5.7
Ethnicity	<i>n=25385</i>	<i>n=396</i>	<i>n=25781</i>
White	87.1	88.5	87.1
Mixed	1.7	1.6	1.7
Indian	2.3	2.9	2.3
Pakistani	2.1	1.6	2.1
Bangladeshi	0.6	1.0	0.6
Black Caribbean	1.0	0.3	1.0
Black African	2.7	2.3	2.7
Other	2.5	1.8	2.5
Partner status *	<i>n=25823</i>	<i>n=401</i>	<i>n=26224</i>
Lone parent	12.4	9.8	12.4
Not lone parent	87.6	90.2	87.6

* p=<0.01, ** p= <0.001

When asked at 3 months postnatally, 12% of respondents were lone parents, with little difference by plurality. It was not possible to tell whether the parents were together at the time of the babies' birth.



**p=<0.001

3.2 Care provided during pregnancy

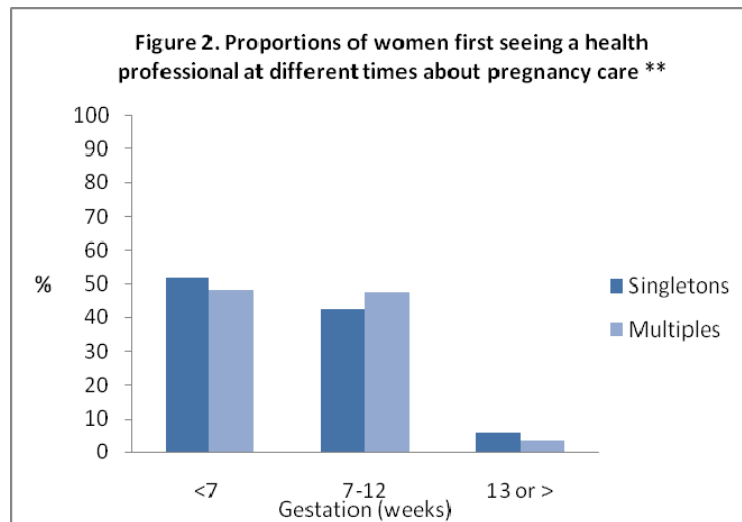
The services used by pregnant women and the care received during pregnancy consists of many elements that include checks of their health and wellbeing, antenatal screening and information giving.

3.2.1 Access to antenatal care

Women carrying a multiple pregnancy may not be aware of the fact until they have an ultrasound scan. Timing of early contact with maternity care health professionals is thus similar to that reported by mothers of singletons (Table 2). Mothers of triplets appeared to come into contact maternity care staff slightly later. This may reflect the increased proportion of these women who became pregnant through assisted reproductive technology (ART) and had early pregnancy confirmation at their fertility clinic, though this is also likely to have been the case for some mothers of twins. A breakdown by gestation (weeks pregnant) at first contact is shown in Figure 2.

Table 2. Timing of early contact and booking in weeks gestation by plurality, mean, (median), *n*

	Singletons	Multiples	All women
First saw health professional	7.5 (6) 25481	7.2 (7) 394	7.5 (6) 25875
Booking appointment	10.8 (10) 24499	10.7 (10) 381	10.8 (10) 24880



**p=<0.001

Most women, including mothers of multiples, saw their general practitioner or family doctor (GP) first about their pregnancy care, though this was slightly less likely for women with a multiple pregnancy. One in five of both groups went to a midwife first (Table 3). Although two-thirds of mothers of multiples saw their GP first, they were also more likely than mothers of singletons to see another health professional; we speculate that this may have been a fertility specialist in some cases.

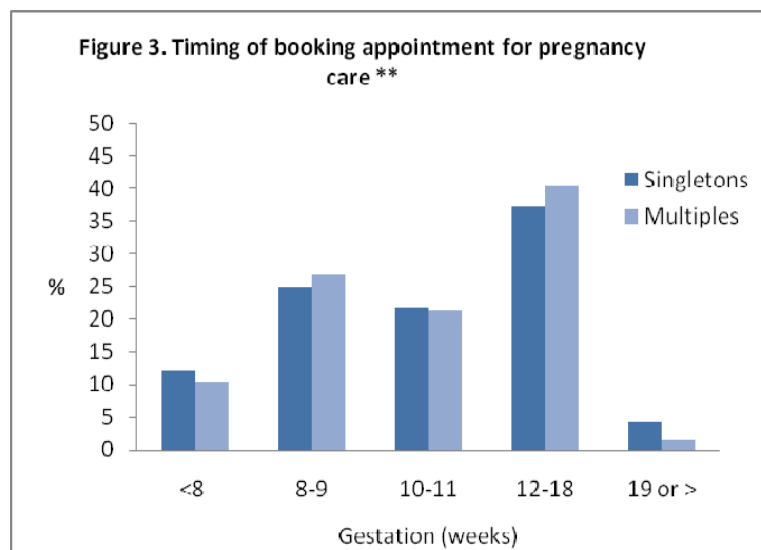
Table 3. Proportions of women first seeing different health professionals about their pregnancy (%)

Health professional**	Singletons <i>n</i> =25680 %	Multiples <i>n</i> =399 %	All women <i>n</i> =26079 %
General Practitioner	77.8	67.7	77.6
Midwife	19.5	20.1	19.5
Other Health Professional	2.7	12.3	2.9

**p=<0.001

Almost all women of women (90%) were able to see these health professionals as soon as they wished although the proportion was slightly lower for mothers of triplets seeing their GP or midwife.

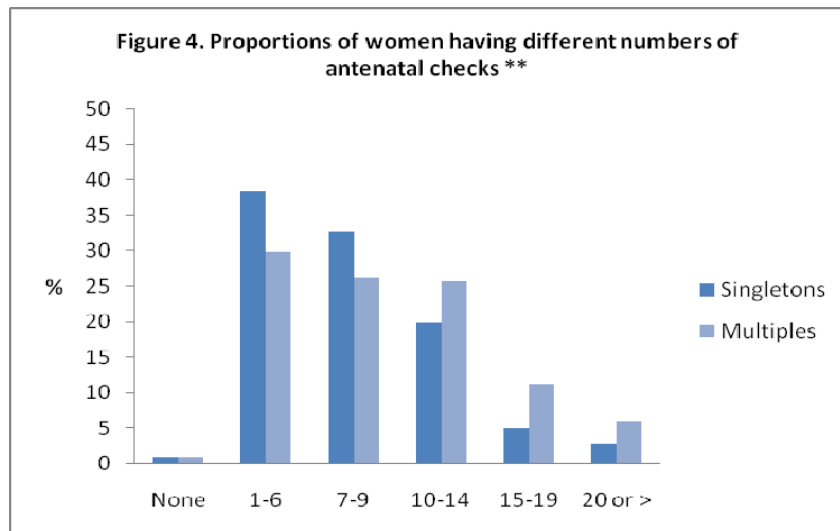
The booking visit, at which women give their history, is an important element of antenatal care. Many key issues are discussed and care is planned. Although on average the time when women had their booking appointment, differed little (Table 2), the distribution of timing of this appointment was slightly different, with women a multiple pregnancy booking later when compared with women expecting a single baby (Figure 3).



**p=<0.001

3.2.2 Antenatal checks

In the 2006 NPEU survey, women reported having on average 10.5 antenatal check-ups (median 10 for primiparous women and 9 for multiparous women) (Redshaw et al, 2007). A check-up is any contact with a doctor or midwife to check on the progress of the pregnancy which usually involves checking urine and blood pressure, but does not include visits to a hospital or clinic for a scan or a blood test only.



**p=<0.001

Mothers of multiples had significantly more checks (mean 12.9, median 11) compared with mothers of singletons (mean 10.5, median 9). The larger scale 2007 HCC survey data confirm this, although the question was asked slightly differently with pre-specified categories (Figure 4). Women with a multiple pregnancy were twice as likely as mothers of singletons to have between 15 and 19 checks and a small proportion (6%) had 20 or more antenatal checks. Use of services by women with multiple pregnancies is, not surprisingly, greater in this respect due to the greater chance of pregnancy complications arising.

Almost all women saw their midwife antenatally at least once, and about a third saw their GP. However, women with a multiple pregnancy were much less likely to have midwife only care and were twice likely as mothers of singletons to see a hospital doctor (Table 4). Their care was much more likely to be shared, that is care provided by a combination of midwifery and medical health professionals, that could include their GP or family doctor. Women with a multiple pregnancy were also much more likely to have some care provided by other health professionals. The 2006 NPEU survey indicates that these other health professionals were likely to be staff in early pregnancy assessment units, day assessment or fetal medicine units, staff in private clinics, fertility and other specialists.

Table 4. Proportion of women having antenatal care provided by different health professionals, by parity ('Other health professional' is additional; the other categories are mutually exclusive).

Health Professional	Primiparous women %		Multiparous women %	
	Singletons <i>n</i> =12104	Multiples <i>n</i> =221	Singletons <i>n</i> =13159	Multiples <i>n</i> =176
Midwife only*	44.0	14.0	35.5	11.9
GP only	0.6	0	0.6	1.1
Hospital doctor only*	0.7	7.7	1.4	6.3
Midwife and GP*	19.9	6.8	14.4	4.0
Midwife and hospital doctor*	20.3	49.3	29.0	53.4
GP and hospital doctor	0.2	0.9	0.3	0.6
Midwife, GP and hospital doctor	14.2	21.3	18.7	22.7
Other health professional *	5.2	12.4	9.1	5.3

***p*<0.01. Differences indicated occurred for both primiparous and multiparous comparisons

Some women emphasised the numbers of appointments and the number of different individual health professionals involved in their care, as well as a more medical emphasis on care:

'Due to the fact that I was carrying twins I had regular check-ups at the hospital... I was seen by a different doctor every time and this process meant that I did not develop as good a rapport with staff as I would have liked'

'Four-weekly appointments were made with my consultant to see if there were complications that had arisen during my pregnancy'

'I am 44, IVF pregnancy and had twins, so had a hospital consultant-led pregnancy. This meant a loss of contact with the midwife and so a loss of the basic 'day-to-day'.... I missed out on local advice like booking antenatal classes in the first trimester as they fill up and so could not attend as a result'

3.2.3 Antenatal screening

It is recommended that, if women want screening for Down's syndrome, those with a multiple pregnancy have a nuchal or combined test rather than a blood serum test screening only. This was done for most women in this situation. However, a higher proportion of women carrying multiples were not offered Down's screening than mothers of singletons (15% compared with 4%)(Table 5).

Table 5. Women having tests for Down's syndrome during pregnancy

Testing **	Singletons <i>n=24844</i> %	Multiples <i>n=384</i> %	All women <i>n=25228</i> %
Blood test only	40.8	10.9	40.5
Nuchal scan only	12.4	29.2	12.7
Nuchal scan and blood test	17.5	18.8	17.6
Didn't want Down's screening	25.2	26.3	25.3
Not offered Down's screening	4.0	14.8	4.2

**p=<0.001.

Table 6. Women having tests for Down's syndrome during pregnancy by parity (categories are mutually exclusive), % (n)

Testing	Primiparous women**		Multiparous women**	
	Singletons <i>n= 11893</i> %	Multiples <i>n= 216</i> %	Singletons <i>n= 12866</i> %	Multiples <i>n=170</i> %
Blood test only	42.2	12.5	39.5	10.0
Nuchal scan only	12.6	30.1	12.3	27.6
Nuchal scan and blood test	17.5	20.4	17.5	16.5
Didn't want Down's screening	23.3	23.6	27.0	29.4
Not offered Down's screening	4.3	13.4	3.7	16.5

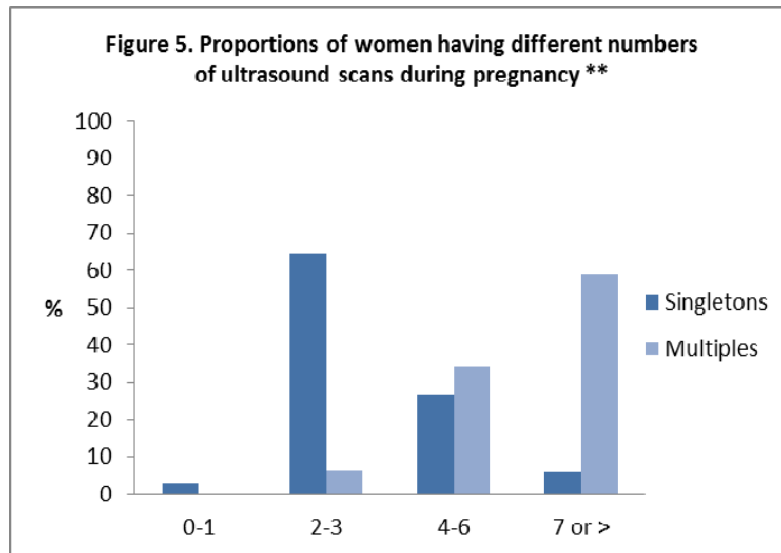
** p=<0.001

For primiparous and multiparous women, those with a multiple pregnancy were less likely to just have a blood test (12% compared with 42%) and more likely to have a nuchal scan (29% compared with 12%) and to report not being offered Down's screening than women with a singleton pregnancy (Table 6). A slightly higher proportion of multiparous women with a multiple pregnancy declined screening.

Almost all women had at least one ultrasound scan in pregnancy. During pregnancy women usually have a dating scan at 11-13 weeks pregnancy (at which doing the nuchal screening test is also done if requested and available), and a fetal anomaly scan at about 20 weeks. Based on the 2007 HCC survey data most women had the early scan (87%) and almost all had the anomaly scan (97%) with no difference between those expecting one or more infants.

However, women carrying multiples had more ultrasound scans overall, having up to 24 in number: mothers having a singleton pregnancy had fewer scans with an average of 3.4 (median 3) while for those expecting multiples the

average was 8 scans (median 7). There was thus considerable variation within both groups, however, only six per cent of mothers of singletons had seven or more scans compared to more than half of those carrying multiples (59%) (Figure 5).



** p=<0.001

The ultrasound scans were clearly recognised and valued as an important part of care, especially for parents of multiples for whom the individuality of their babies is particularly important:

'Because I was expecting twins, my pregnancy was carefully monitored and regular scans were carried out to check fetal growth'

'When you have a scan it is an exciting and precious time, though sometimes they felt rushed'

3.2.4 Antenatal education

Antenatal education classes are offered in most areas. NHS classes are free or offered at a nominal cost; private classes run by organisations such as the National Childbirth Trust (NCT) are more costly but also allow more time and detail in topics covered. About a third of both groups of women women attended NHS antenatal education classes and a smaller proportion attended only private classes. A higher proportion of mothers carrying multiples than singletons were not offered classes at all (26% compared with 20%) (Table 7). This may be due to lack of contact if much of these women's care is at hospital, or may be for other reasons. NHS education classes are often not offered to women who have

previously given birth and some multiparous women considered that they did not need classes (Table 8).

Table 7 Participation in antenatal education (mutually exclusive categories used), % (n)

Attendance at classes *	Singletons <i>n=25409</i> %	Multiples <i>n=392</i> %	All women <i>n=25801</i> %
Yes, attended NHS AN classes	32.6	31.9	32.7
No, not offered	20.2	25.5	20.4
No, booked up	1.8	1.8	1.8
Attended private classes only	3.4	5.1	3.4
No, did not need AN classes	30.2	19.7	30.1
No, did not attend for other reason	11.7	16.1	11.9

**p=<0.001

For women expecting a multiple birth, the timing of antenatal education may be an issue as multiple births are often delivered preterm and women may miss out on classes which have been arranged for late in the last trimester. However, there is a suggestion that some women with multiple pregnancies are attending classes earlier in pregnancy, possibly to allow time for this eventuality.

Table 8 Proportion of women receiving antenatal education by parity (mutually exclusive categories used) %(n)

Attendance at classes **	Primiparous women**		Multiparous women	
	Singletons <i>n=12146</i> %	Multiples <i>n=217</i> %	Singletons <i>n=13181</i> %	Multiples <i>n=175</i> %
Yes, attended NHS AN classes	58.6	49.3	8.7	10.3
No, not offered	10.0	16.1	29.7	37.1
No, booked up	2.8	2.8	0.9	0.6
Attended private classes only	6.2	8.3	0.7	1.1
No, did not need AN classes	8.5	3.7	50.2	39.4
No, did not attend for other reason	13.7	19.8	9.9	11.4

**p=<0.001

Primiparous women with a multiple pregnancy who delivered early were significantly more likely to have attended classes than women with a singleton pregnancy who also delivered early. No such difference was evident for women who had previously given birth. Hospital admission made no difference to the proportion of women attending. Women who had previously given birth, whether they were expecting singletons or multiples were more likely to feel they did not

need to attend classes. No information was collected on offer or attendance at classes specifically for mothers of multiples.

If women attended NHS classes, most considered them to be at a convenient time (85%) and location (94%), and partners or a friend were almost always allowed to attend (95%). Most women thought there were sufficient classes (71%), though this was slightly less likely to be the view of women having a multiple birth (66%). Another significant difference by plurality was in satisfaction with topics covered. Most women expecting a singleton thought the classes covered the topics they wanted (80%) but fewer of those carrying multiples shared this view (73%), presumably wishing to have other topics covered that related to multiple birth.

3.2.5 Worries and concerns in pregnancy

The smaller 2006 NPEU survey asked about some common conditions in pregnancy and if women had sought professional help. Women with multiple pregnancies were significantly more likely to experience some antenatal problems, particularly nausea and carpal tunnel syndrome, but reported rates of other symptoms such as backache, stress incontinence and pelvic girdle pain (PGP) showed little difference.

Women were also asked about antenatal concerns or worries about labour and birth. More women with multiple pregnancies than those expecting a singleton baby were worried about not knowing when labour would happen, getting to the hospital in time, and needing a caesarean, whereas women with singleton pregnancies were more likely to be worried about having a long and difficult labour, and about needing a forceps or ventouse delivery.

3.2.6 Admissions during pregnancy

Women carrying multiples are at greater risk of problems during the pregnancy and this is reflected in admissions to hospital and overnight stays at this time. This was much more common in women carrying multiples, especially mothers of triplets. Data from the 2007 HCC survey indicate that women with a multiple pregnancy were twice as likely to have an overnight hospital stay during pregnancy as mothers of singletons (37% compared with 18%). Data from the

2006 NPEU survey indicate mothers of multiples were also more likely to have day hospital stays during pregnancy. The reasons for overnight and day admission among mothers pregnant with twins or triplets included preterm labour, bleeding, high blood pressure, suspected pre-eclampsia, and concern about fetal movement or growth.

3.3 Care during labour and childbirth

Women were asked a range of questions about labour and birth that covered their clinical care, the interventions experienced and the staff involved.

Women having a multiple birth were significantly more likely to be induced than mothers of singletons (43% compared with 25%) and to have their waters were broken by midwifery or medical staff (70% compared with 56%).

The type of pain relief used in labour is commonly related to mode of birth. Among women who laboured and had a vaginal birth, a range of methods of pain relief were used, particularly by mothers of singletons (Table 9).

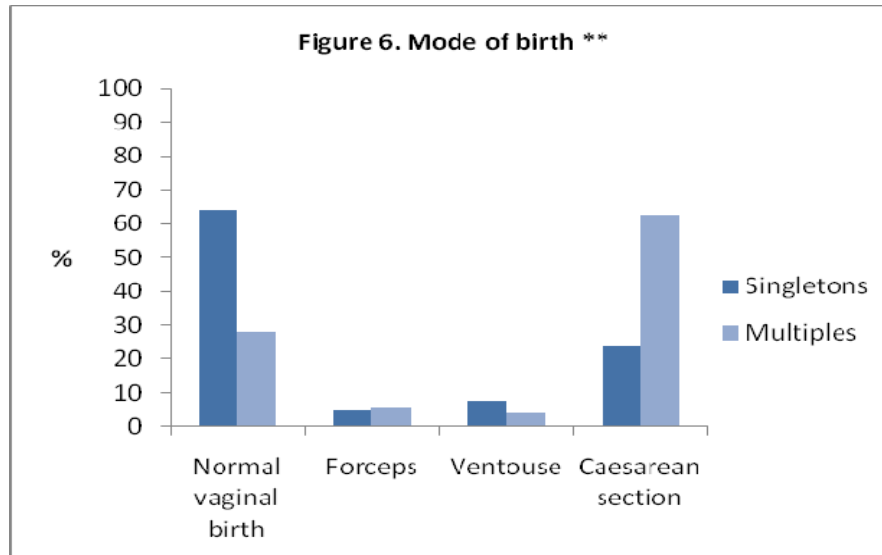
Table 9. Pain relief used by women who laboured% (n)(Women could use more than one method of pain relief)

Type of pain relief	Singletons % <i>n=22843</i>	Multiples % <i>n=226</i>	All women % <i>n=23069</i>
Natural methods*	48.5	32.3	48.3
Water, birth pool*	10.8	2.2	10.7
TENS machine*	20.4	5.3	20.3
Gas and air*	79.5	58.0	79.4
Pethidine (or similar)*	32.7	16.8	32.7
Epidural (or similar)I*	28.4	54.9	29.2
Other	2.7	2.7	2.8
No pain relief	6.5	3.5	6.5

p=<0.01

Mothers of multiples who laboured were twice as likely to have an epidural (55%) compared with mothers of singletons (28%), were less likely to have pethidine as an analgesic in labour (18% compared with 32%) or to use some of the non-medical methods of relieving pain in labour.

Caesarean delivery was more than twice as common for multiple births as for singletons (62% compared with 23%) (Figure 6). Nevertheless a third of triplets were delivered vaginally.



**p=<0.001

The type of caesarean also differed for mothers of multiples compared with singletons. Two thirds of the women with multiples who were delivered by caesarean had a planned caesarean section procedure (69%), whereas for singletons delivered by caesarean, the procedure was more likely to be required for an unforeseen problem in labour (Table 10).

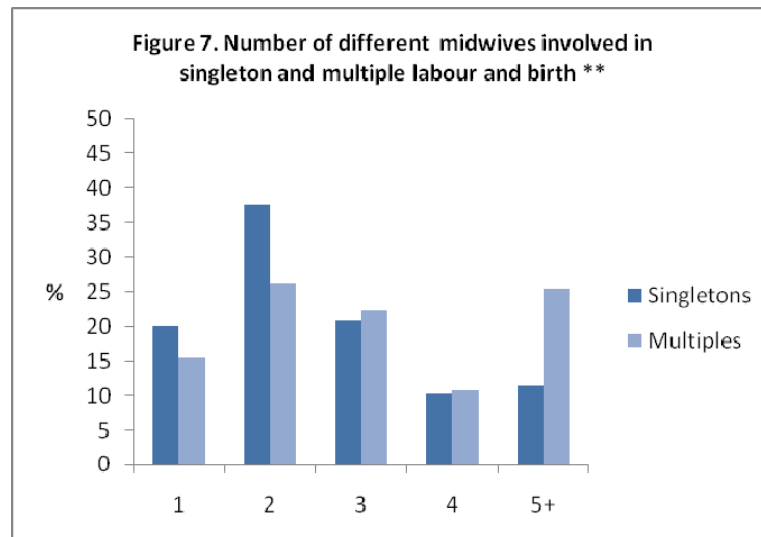
Table 10. Type of caesarean section for women with singleton and multiple pregnancies who were delivered by CS (categories were mutually exclusive) (%)

Type of caesarean section **	Singletons <i>n</i> =6005 %	Multiples <i>n</i> =243 %
Planned and carried out before labour	37.2	55.6
Planned but carried out after labour started	6.2	13.6
The result of an unforeseen problem in labour	56.5	30.9

**p=<0.001

Women were asked about the number of midwives who had cared for them during their labour and birth. Most women delivering singletons had one or two midwives caring for them during time, whereas women delivering multiples generally had care from a greater number of midwives (Figure 7). This reflects

the more complex nature of their care and the higher levels of intervention for these women. One mother of triplets reported that 15 different midwives had been involved in her labour and birth.



**p=<0.001

Women having a vaginal birth almost always delivered on a bed (90%) but, of those delivering singletons, small proportions gave birth in water or on the floor (5% and 3%), both of which were unlikely events for mothers of multiples. While most women delivered sitting or lying on a bed, the lithotomy position (with legs in stirrups) was more common for women having a vaginal birth and delivering multiples (47% compared with 26%). Of women who delivered vaginally, more mothers of multiples had an episiotomy (38% compared with 23%) and more mothers of singletons had a tear (52% compared with 38%). The use of the lithotomy position for delivery and the use of episiotomy were related to the use of forceps or ventouse for delivery of at least one of the babies. Serious tears (3rd or 4th degree, extending to the back passage) were reported by about 16% of women irrespective of plurality.

3.4 Neonatal outcomes

Compared to singletons, twins and, to a greater extent triplets, are more likely to be born preterm and at lower birthweight (Tables 11a and 11b).

Table 11a. Gestation at birth of singletons, and firstborn of twins and triplets

Gestation at birth **	Singletons <i>n=25475</i> %	Multiples <i>n=397</i> %	All women <i>n=25910</i> %
<28 weeks	0.2	1.8	0.2
28-36 weeks	5.6	36.8	6.1
37-44 weeks (term)	94.2	61.5	93.7
Mean (median)	39.5 (40)	36.3 (36)	39.4 (40)
Range	24-44	26-42	24-44

** p=0.001

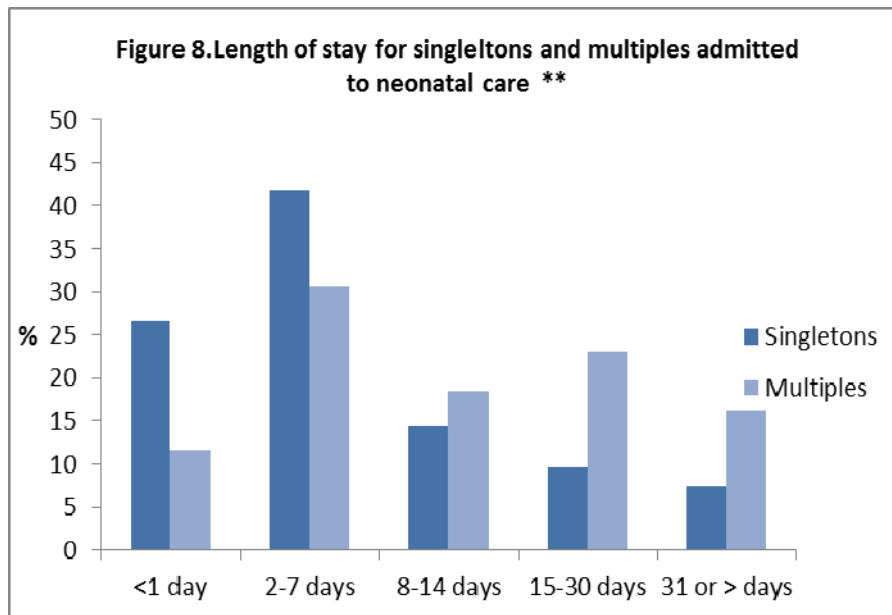
Table 11b. Birthweight of singletons, and firstborn of twins and triplets

Birthweight **	Singletons <i>n=25275</i>	Multiples <i>n=378</i>	All women <i>n=25689</i>
<2000g	5.1	17.5	1.7
2000-2499g	1.5	25.7	3.9
2500-2999g	14.6	33.9	14.9
3000-3499g	36.9	18.9	36.6
3500+	43.4	4.2	42.8
Mean (median) (g)	3404 (3420)	2549 (2619)	3391(3402)
Range	480-5953	810- 4536	480-5953

** p=0.001

Almost all singleton infants born to women in the study were delivered at term compared with multiples of whom more a third were born early. Based on the small number of women in the study giving birth to triplets, birth took place on average at 33 weeks gestation. Using the weight of the first or singleton infant born, the birthweight distributions of the different groups followed a similar pattern and is little different from that reported by the Office for National Statistics (ONS 2008).

Twins and triplets are more likely to require admission to a neonatal unit and parents may thus have a rather different experience from that on a hospital postnatal ward. Less than one in ten of the singleton infants were admitted to a neonatal unit (9.2%), whereas over a third of the twins (37%) and nearly two thirds of the triplets (62%) were admitted for neonatal care.



** p=0.001

Having been admitted to a neonatal unit twins and triplets were on average in-patients for longer than singletons, also admitted to neonatal care, reflecting both health problems and clinical needs (Figure 8). Following a multiple birth, twice as many babies had a stay of between 15 and 30 days compared to singletons, and twice as many stayed a month or more.

When babies were admitted to a neonatal unit, mothers of multiples were more likely than mothers of singletons to report that they had definitely been given enough information about the reason for babies' admission (83% compared with 67%). It seems possible that parents expecting twins or higher order multiples may be given information and prepared for the fact that their babies may need care in a neonatal unit. Open text responses reflect their concern and distress at this time and a need for this to be recognised:

'My babies were taken to SCBU and I was put on a normal ward with mothers and new babies. I found it very distressing being with other babies and not mine'

'My twins were born at mid-day and taken up to SCBU. It was 3 hours before I was told how much they weighed and what was happening'

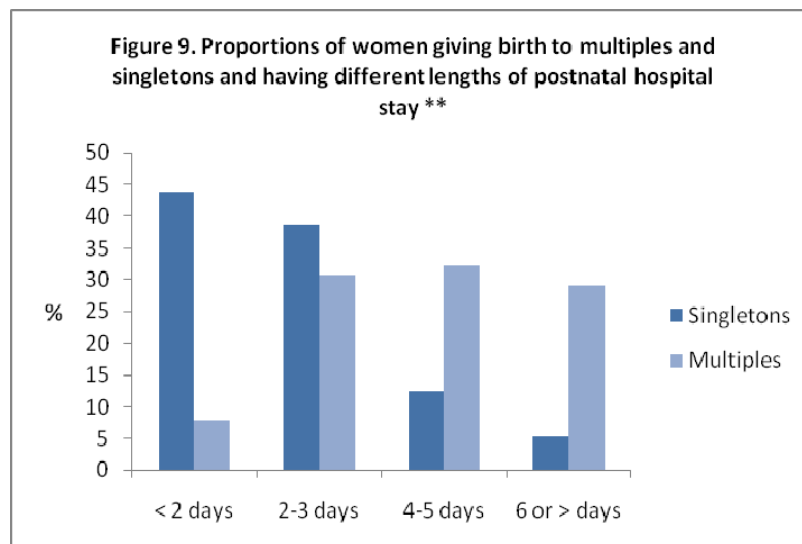
'There should be a separate ward where mothers without their babies can be together... when your babies are on SCBU and not with you as you expected, it is made harder'

'A ward specifically for mothers of babies who are taken to SCBU would cause less emotional distress at an already very emotionally hard time'

3.5 Care after birth

3.5.1 Postnatal care in hospital

Duration of postnatal stay in hospital was strongly associated with plurality (Figure 9).



** p=0.001

More than 80% of mothers of singletons were discharged within 3 days and only 18% stayed 4 days or more. This compares to 61% and 67% respectively of mothers of twins and triplets who stayed 4 days or more. This is likely to be associated with method of delivery, most commonly caesarean section and other complications from which women may take longer to recover, but also with a greater likelihood of their infants having been admitted to the neonatal unit.

3.5.2 Postnatal care at home

Women were asked about their postnatal care after leaving hospital. Almost all were visited at home by a midwife (Table 12). The proportion was slightly lower in mothers of multiples (90%) compared with mothers of singletons (98%), but

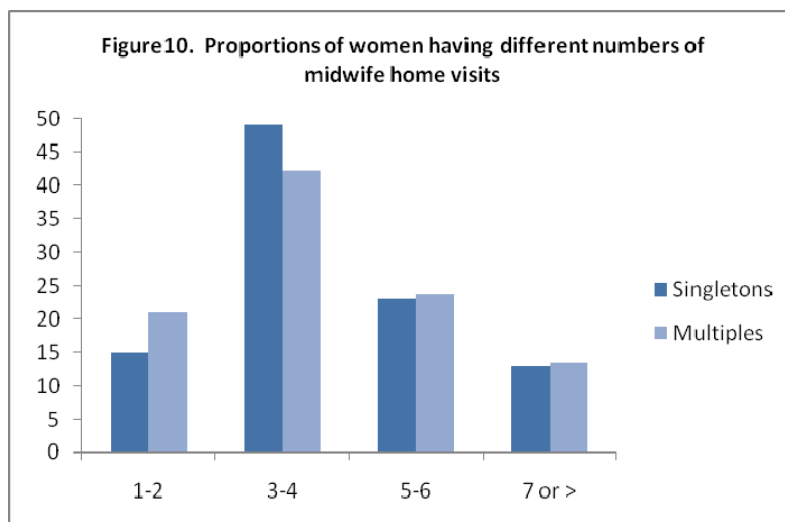
this was associated with having a baby in a neonatal unit and with a longer NNU stay. Thus some women were missing home visits while they were visiting or staying near their baby in hospital.

Table 12. Postnatal home visits by a midwife (mutually exclusive categories were used) (%)

Postnatal contact**	Singletons <i>n</i> =25625 %	Multiples <i>n</i> =397 %	All women <i>n</i> =26119 %
Visited at home by midwife	98.0	90.2	97.9
Saw midwife in clinic	0.9	1.0	0.9
Not offered a visit	0.3	1.0	0.3
No, staying near baby in neonatal unit	0.6	7.1	0.7
No, did not want a midwife visit	0.0	0.3	0.0
No, another reason	0.1	0.5	0.1

** p=0.001

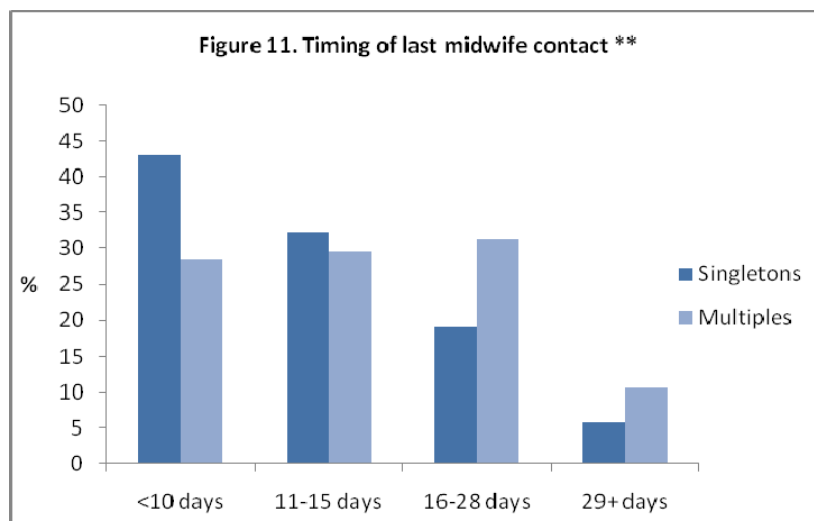
The numbers of postnatal midwife contacts varied considerably (Figure 10). Among women who saw a midwife after discharge home, mothers of multiples singletons had similar number of contacts (mean 4 visits), but mothers of triplets were seen more often than this.



** p=0.001

Three quarters of all women were seen as often as they wanted, although one in five would have liked to have seen a midwife more often and a very small proportion less frequently. Mothers of triplets who had more visits were not so likely to say they would have liked more contact with their midwife.

Women were also asked how old their baby or babies were when they had their last visit or contact with their midwife. As with the numbers of visits, there was considerable variability in the timing of this last contact with a midwife and it could be as much as fourteen weeks after the birth, though most were less than this (Figure 11). This timing differed by plurality, possibly reflecting some infants' stays in neonatal care, as well as the complexities and difficulties associated with caring for more than one infant at a time. The time to the last contact following the birth varied in both groups: it was less for mothers of singletons (mean 14.6, median 12 days of age) than mothers of multiples (mean 18.4, median 14 days), though some with multiples, particularly triplets, were seen over a longer period.



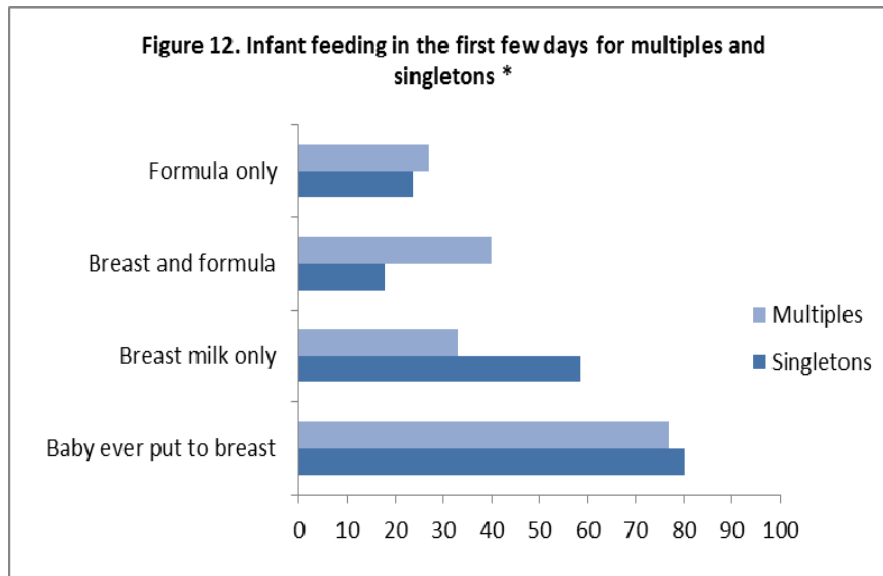
** p=0.001

The variation in timing may reflect some flexibility in the provision of postnatal care for the different groups, as well as timing of discharge home for those babies admitted to neonatal care.

3.5.3 Infant feeding and care

Women were asked about how they fed their infants in the immediate postnatal period and about the support available. Breastfeeding twins or triplets is more difficult and tiring than breastfeeding singletons, especially if they are born preterm or with complications necessitating admission to neonatal care. Among the women who gave birth to more than one baby, fewer women exclusively breast-fed their infants in the first few days (Figure 12), however a large

proportion of mothers of multiples were feeding their babies some breast milk (73%) at this time.



* $p=0.01$

Perhaps more surprising was that midwives were less likely to discuss infant feeding antenatally with mothers of multiples: 76% of mothers of singletons, 70% of mothers of twins and fewer mothers of triplets reported that infant feeding had been discussed with them during pregnancy. This could be because mothers of multiples had greater contact with hospital staff, more health professional involved in their antenatal care and less contact with midwives in the community.

Overall, more than 70% of women reported that they had received consistent advice, practical help, and active support and encouragement with infant feeding in the early days. Mothers of multiples were slightly more likely to report having received practical help (75% compared with 71%) and active support with infant feeding than mothers of singletons (75% compared with 72%). Some mothers of multiples responded with open text to the NPEU survey, describing their difficulties and recognising the staffing issues:

'As I had twins it was difficult to feed both and the ward was short-staffed for the three days I was in'

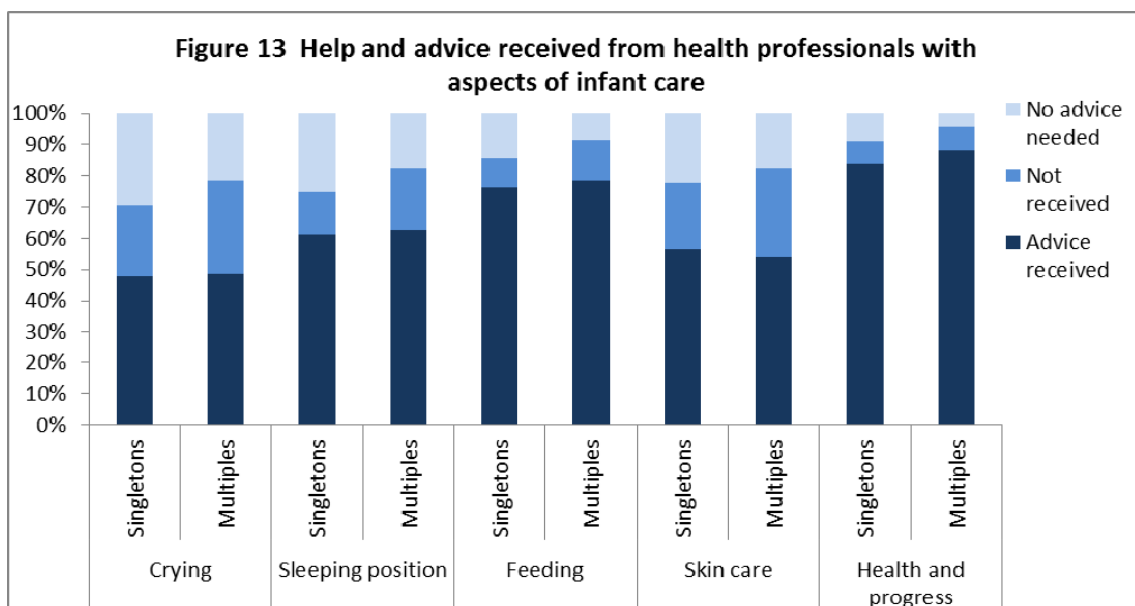
'My biggest criticism was of the organisation of the hospital midwives.... all would ask if you had problems, then the response would be different from the last, which was always verbal, with no practical help and certainly no check to see if the advice had been taken.'

A mother of twins would have liked:

'Better instruction on breastfeeding i.e. consistent advice, one-to-one tuition and consistency of staff over the hospital stay. Staff gave different advice and had no time to watch and advise and more importantly appeared not to really be knowledgeable'

The transition to parenthood and managing a new baby, even when you have previously given birth, is often difficult in the early days and many women have indicated a need for advice and support in the postnatal period both from health professionals and their partners and families (Redshaw and Heikkila, 2010).

Caring for more than one newborn or young infant can be difficult and women were asked about any help and advice from health professionals concerning infant care during the first six weeks after birth. The health professionals most commonly seen are the GP, midwife or Health Visitor (HV). Many women had received help and information about their babies' general health and progress and feeding, while less advice and support was provided in relation to crying, skin care and sleeping position (Figure 13). Some women from both groups felt they did not need advice, though this was less so for the mothers of multiples who were more likely to say they had not received advice on most aspects of their infants' care and development.



3.5.3 Postnatal health and wellbeing

In the HCC survey a general questions was asked about women's recent health. At three months or more after the birth there were no significant differences reported by women who had given birth to a single infant and those who had given birth to twins or triplets, with approximately two-thirds of both groups reporting that their current health was 'excellent' or 'very good' at this time.

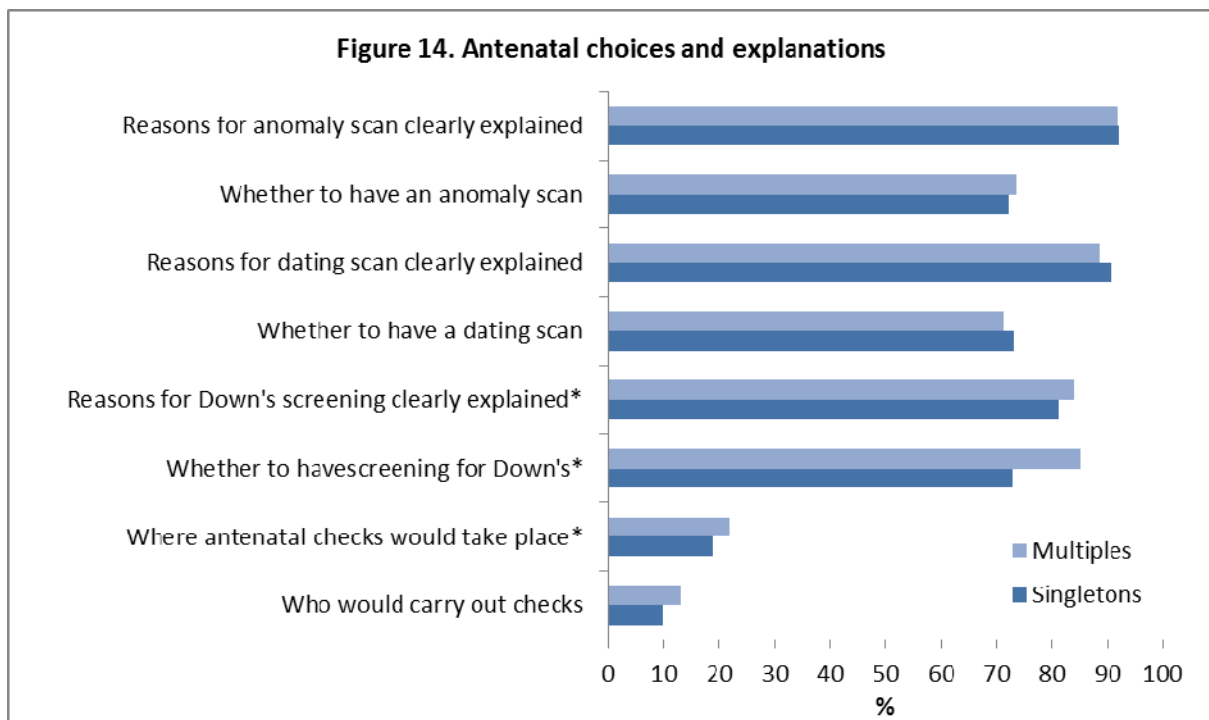
The NPEU 2006 survey asked more detailed questions about specific health problems and women's health and wellbeing after the birth. Mothers of multiples were more likely to report fewer problems than mothers of singletons and more than half had been able to talk over the birth afterwards with a health professional, though this was no more common for mothers of multiples than mothers of singletons

4.0 Women's experience of care

4.1 Choice and information

In many aspects of care women do have some choice about what is provided. However, for all women there was relatively little choice about who would provide their antenatal care and where it would be provided (Figure 14). In some aspects of care where women might expect to have a choice, those having multiples were more likely to feel that these choices were less available to them.

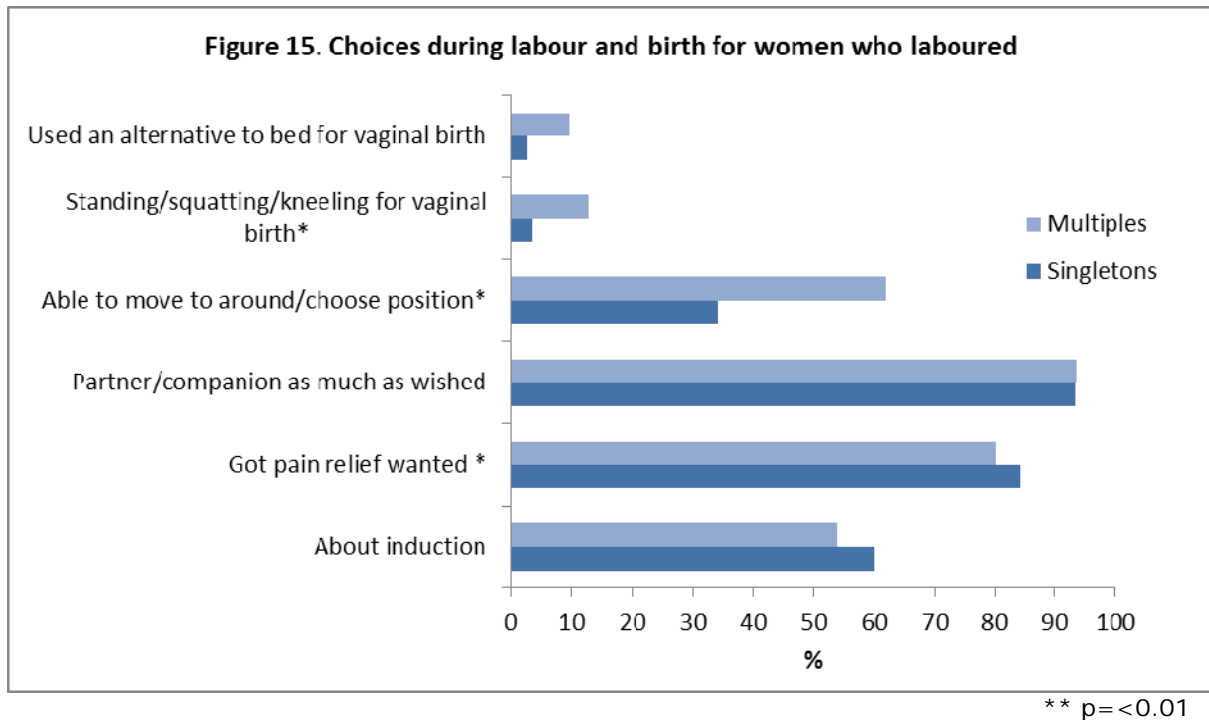
This included issues about what tests were carried out, particularly those for Down's syndrome and the reasons for this type of screening being clearly explained to them.



A question was asked in the 2007 HCC survey about whether pregnant women had been given enough information by medical or midwifery staff to help them to decide where to give birth. More than half (58%) indicated that this had occurred, with fewer women having a multiple pregnancy feeling they were informed (46%). There was no difference between the groups in those wanting more information, not needing information or feeling they were not given a choice about place of birth. More women expecting a multiple birth indicated that for medical reasons there was no choice about where to give birth (17%) compared with women having a singleton pregnancy (7%).

Some markers for choice in labour suggest that the women having a multiple birth and labouring may have less choice in some aspects of this aspect of care (Figure 15), some of which were related to interventions in labour and birth, including the need for fetal monitoring, the use of epidural anaesthesia and an instrumental mode of delivery.

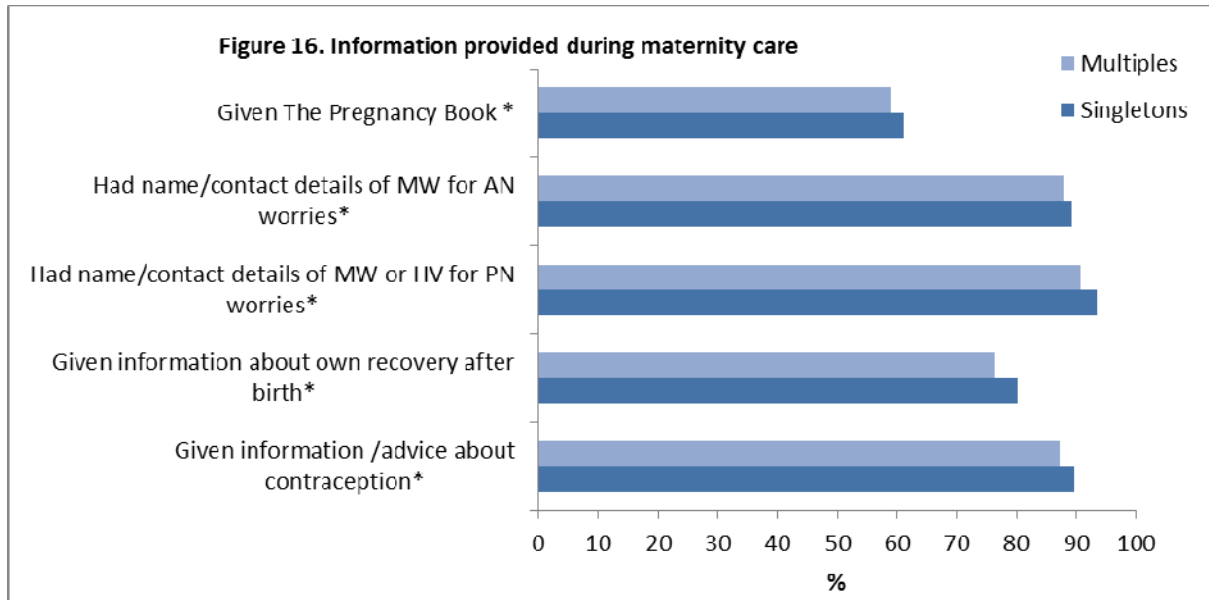
Those mothers of multiples who laboured, were less likely to be able to move around and for those who had a vaginal birth, alternative positions and locations were less likely to be used by mothers of multiples compared with mothers of singletons. There were no differences between the groups in obtaining the pain relief they wished.



There was no significant difference following multiple birth or the birth of a singleton in women’s feelings about the length of postnatal stay. Women were not asked about actually having a choice about their length of stay, but rather whether the stay was too short, too long or about right. Approximately 70% of both groups felt their stay was about right, and much smaller proportions (12-14%) that it was either too long or too short.

Many women were provided with information that could help with managing their pregnancy, birth, recovery and adjustment after childbirth (Figure 16). Some of the differences shown between information provided to mothers of singletons and mothers of multiples were statistically significant, though not marked in the extent of the difference.

Just over 60% of all women were given 'The Pregnancy book' at the start of pregnancy and between 11% and 12% of mothers of singletons and multiples indicated that they had retained a copy from a previous pregnancy.

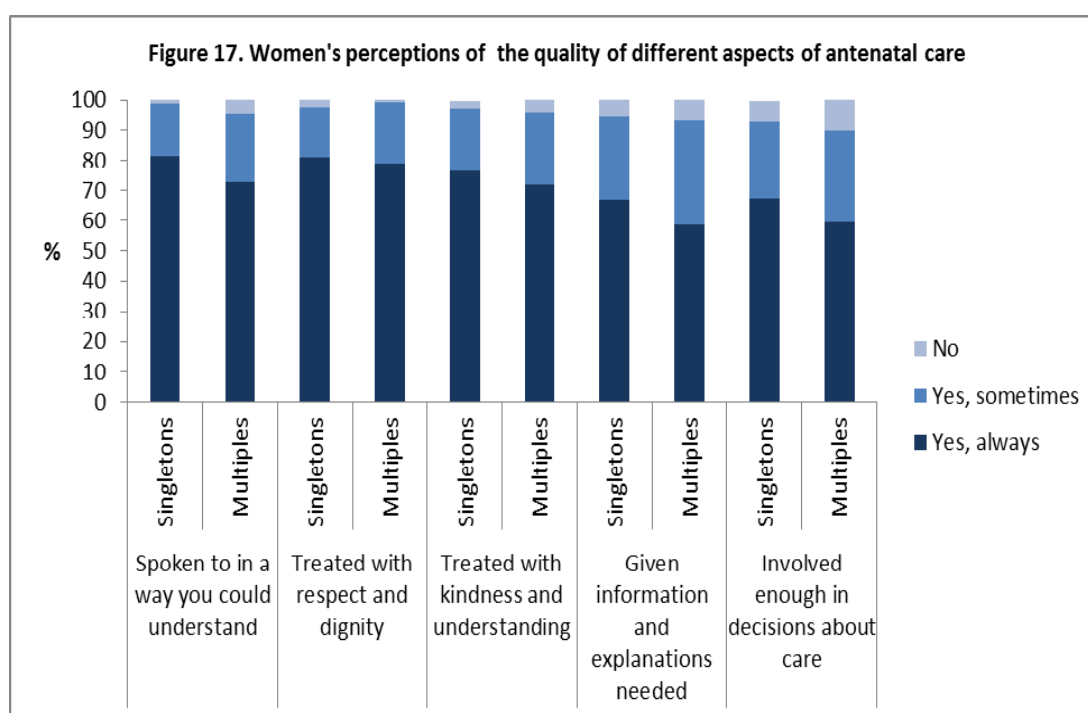


All women should have the name and contact details of a midwife to contact both during pregnancy and postnatally. While at least 10% in both groups did not have this antenatally, fewer were in this position after the birth (6% of mothers of singletons and 8% of mothers of multiples did not have contact details). Having information about recovery after pregnancy and childbirth is important, especially when the pregnancy has been difficult or the labour and birth complicated. While a similarly small proportion of mothers of multiples and singletons (2%) felt they did not need this, following a multiple birth 20% of women who were not given this information did want more advice about this aspect of their care and health, compared with slightly fewer mothers of singletons (16%). Given the higher rates of intervention and operative delivery experienced by mothers of multiples it is not surprising that more women felt they needed this type of information. Almost all women were given advice and information about contraception postnatally.

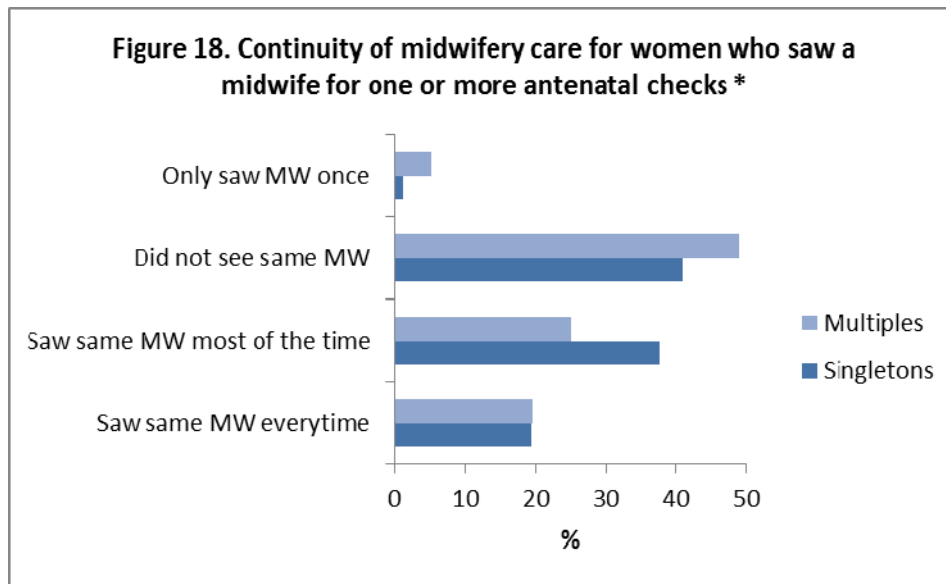
4.2 The quality of the care received

Women were asked questions about specific aspects of their pregnancy, labour and birth and postnatal care as well as to provide a general overall rating about each phase of their care.

The quality of care during pregnancy was generally highly rated (Figure 17), and most women reported being treated with respect and kindness, informed and spoken to in a way they could understand. However, mothers of multiples were slightly less likely to be as positive. While the numbers were small, mothers of triplets appeared more critical about their care than mothers of twins.



Women were asked if they had seen the same midwife for their antenatal checks. Those expecting a multiple birth were less likely to experience this type of continuity (Figure 18). With a multiple pregnancy 42% reported mostly or always seeing the same midwife compared with 57% of women having a singleton pregnancy.

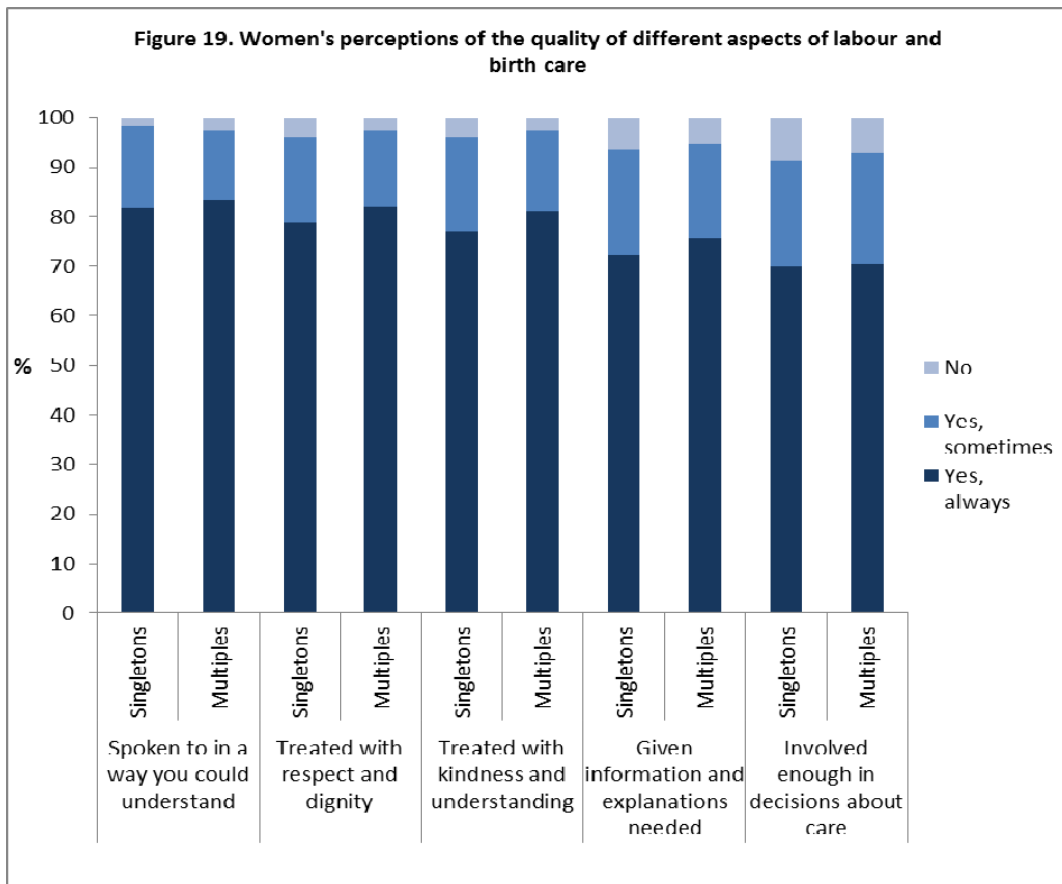


* <=0.01

Overall approximately only one in five women had met any of the staff who looked after them during labour and birth before labour. Nevertheless, a higher proportion of women expecting multiples had met staff prior to labour compared with mothers of singletons (34% and 21%), perhaps as a consequence of greater contact with the hospital staff antenatally. Mothers of triplets were particularly likely to report having met staff prior to labour.

During birth almost all women (91%) had their partner with them, with no difference between the groups and almost all (93%), reported that their partner was with them as much as they wished.

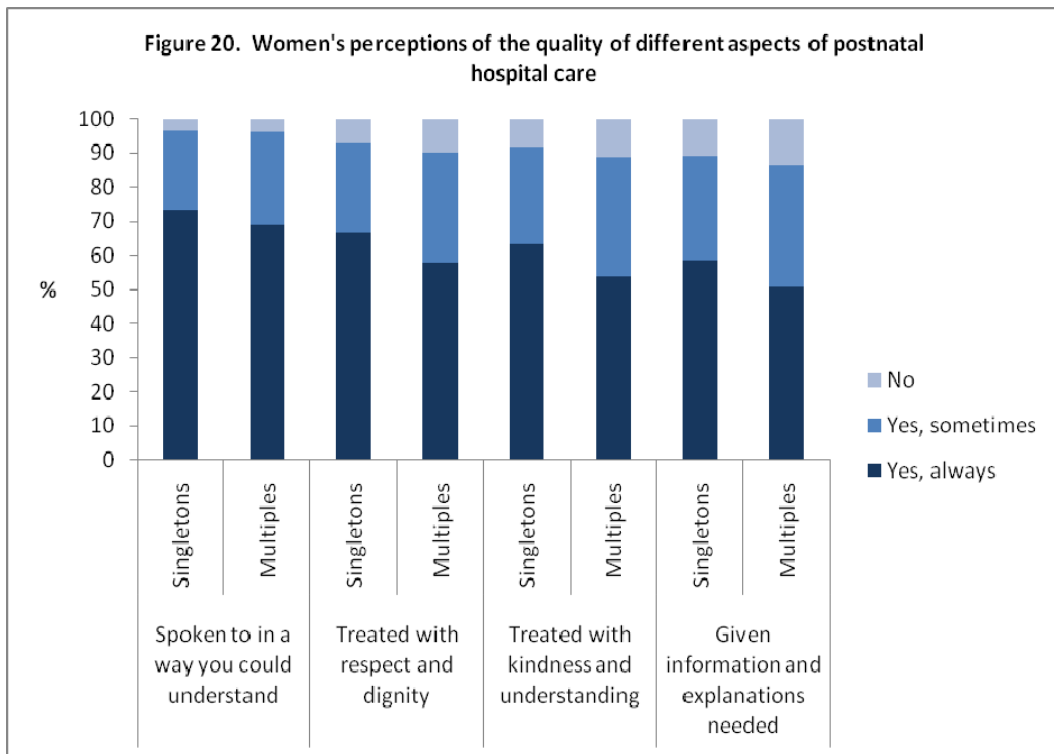
Women were asked several direct questions about the quality of care that they experienced during labour and birth. Most (68%) definitely had trust and confidence in the staff caring for them at this time and a further proportion (27%) to some extent. This was slightly more likely to be the case for mothers of multiples, possibly because they might have met hospital staff previously. They were also asked about interactions with staff, information-giving and involvement (Figure 19). These aspects of the care that was provided at this time were perceived similarly by mothers of multiples and singletons.



Women were asked if they or their birth partner were left alone at a time when it worried them. It seems that mothers of multiples may have had more contact with staff as they were more likely to say they were not left alone and worried at all (83%) compared with mothers of singletons (74%).

The care received during labour and birth in terms of respect, kindness and being spoken to in a way they could understand, being informed and involved in decisions was largely perceived as similarly positive by mothers of multiples and singletons.

The perceptions of postnatal care were similar to those of care during labour and birth, though a bit more critical of the care provided (Figure 20).



Some practical points were raised by mothers of multiples which to some extent echo the views of the broader population of women following childbirth:

'I found the postnatal ward incredibly cramped and claustrophobic. There was a serious lack of privacy, it was noisy and impossible to sleep.'

'The security was so tight and visiting hours so restrictive it spoiled the experience'

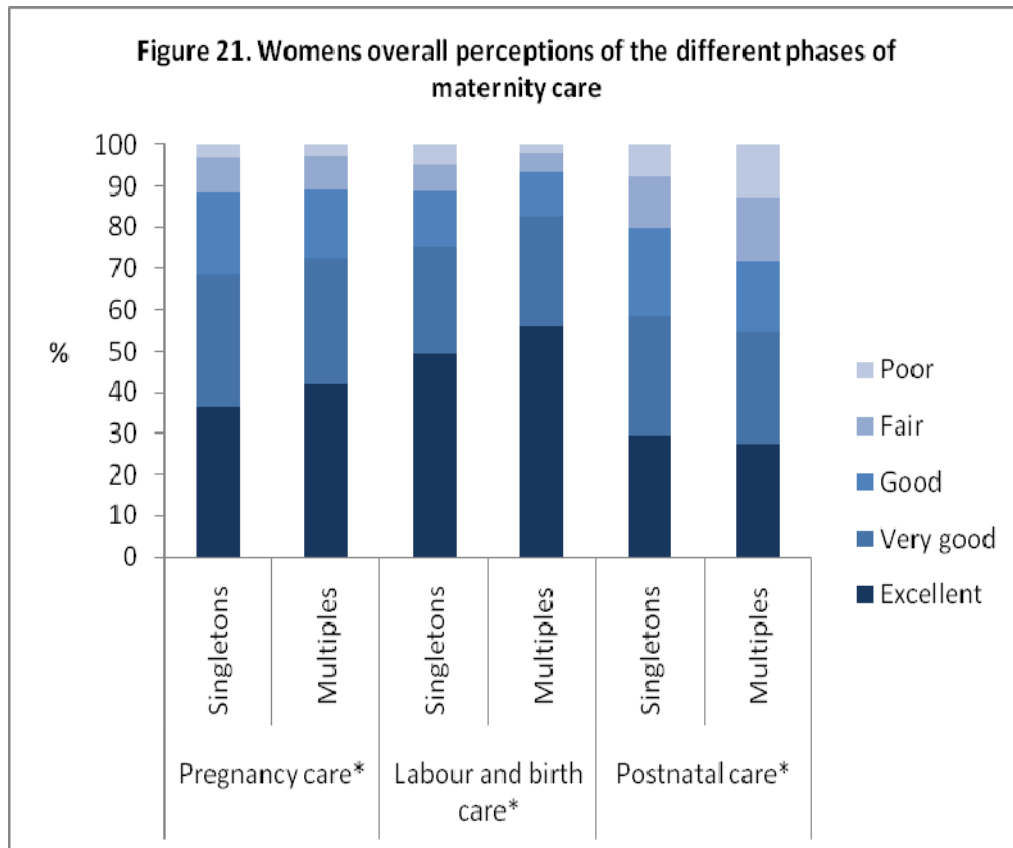
'Because of the twins I would have liked a private room for all of the eight days. I only had it for the last two days'

Other mothers of multiples emphasised how *'very, very small'* the rooms or cubicles were and that they would have liked to have been *'given a side room'*.

Women were also asked to give overall ratings of the care they had received during pregnancy, labour and birth and in the postnatal period (Figure 21).

When asked about overall perceptions of the different phases of care, mothers of multiples were more likely to rate their antenatal and labour and birth care as 'excellent' or 'very good' (73% and 83%) than mothers of singletons (66% and 76%). Postnatal care was less likely to be rated 'excellent' or 'very good' by all

women, and was rated more poorly by mothers of multiples than mothers of singletons (54% compared with 59%).



The open text responses from the NPEU survey illustrate the way that some mothers of multiples felt about their postnatal hospital care:

'Senior staff said that I should ask for help with the babies. However, everyone was very busy... I was very tired and struggling and would have preferred staff to offer.... I had no prior contact with babies and didn't even know how to change a baby'

'Many of the staff were so busy that they don't have time to treat you as an individual. I often felt like just another number'

'The visiting times for partners were very limited, staff too busy to assist, but wouldn't let partners stay to help instead.'

'Nobody had time for me, I was in a lot of pain and struggling to look after my twins (my first children) ... I went home after two days which was much too early, but received much better care from my family'

Nevertheless, there was praise too, though usually taking fewer words:

'The staff were fantastic and deserve every ounce of respect that they get'

'The help, advice and support I received was brilliant'

'All the doctors, midwives and other staff were fantastic'

5. Conclusion

The report reflects the maternity care experience of women with multiple pregnancy and birth, both with regard to their care and their views about care. The differences described can inform caregivers, organisations providing maternity services and parents of multiples. There were some anticipated points of difference in relation to care: having greater contact with maternity services, more antenatal checks, more scans, more overnight stays and more clinical interventions during labour and birth than the mothers of singletons. Like most women in this situation, they were on the whole positive, though were less likely to feel they had as much choice about aspects of their care as women who had a singleton pregnancy and birth. A need for more effective communication in the antenatal period and for better postnatal support and help with infant care, especially in the early days was emphasized.

Key points for future maternity care include:

- The information needs of parents of those expecting a multiple birth should be addressed in a co-ordinated way. It is critical to ensure that women with multiple pregnancy are fully aware of all the options in relation to antenatal screening for Down's syndrome.
- Women with more complex pregnancies and births could benefit from greater access to midwives to discuss their 'day-to-day' care.

- Parents expecting multiples could be given more help and encouragement to ensure they are aware of options for maternity care, including labour and birth.
- The needs of mothers of multiples whose babies have been admitted to a neonatal unit need to be considered in organising postnatal care.
- Following a multiple birth there is a need for support for mothers and fathers in the transition to parenthood and early parenting, particularly infant care. In providing individualised care, postnatal support may be required for a variable length of time, depending on individual needs and circumstances.
- Greater recognition of the role of fathers and partners and facilitation of partner support, particularly in the postnatal context could contribute positively to the wellbeing of mothers of multiples and their babies.
- It is important to ensure an effective transfer from midwifery postnatal care, enabling effective health visitor involvement for families following multiple birth.

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