The Royal College of Midwives

The Royal College of Midwives Survey of Positions used in Labour and Birth

Final Report

Acknowledgements

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Executive Summary

This survey was initiated as a strand of work within the Royal College of Midwives' (RCM) Campaign for Normal Birth (CNB) activities. One of the RCM's *Ten Top Tips'* to help midwives enhance the birth experience of the women they work with is:

> **Get her off the bed**
> Gravity is our greatest aid in giving birth, but for historical and cultural reasons (now obsolete) in this society we make women give birth on their backs. We need to help women understand and practise alternative positions antenatally, feel free to be mobile and try different positions during labour and birth. Once she is comfortable, try not to move her unless she wants to, or unless the position becomes inadvisable for maternal or fetal (and not organisational!) reasons.
>
> RCM 2009[1]

The CNB steering committee considered it important to take a 'snapshot' of contemporary practice to identify what positions are being used during labour and birth. Through this the RCM might direct the CNB strategy[2] and identify any education, practice and training needs for the continuing development of good practice. The RCM consultant midwives group were invited to participate and their commitment and enthusiasm were invaluable in undertaking local surveys.

Objectives of the survey

- To gain a national picture of the positions being used in labour and birth, highlight areas for improvement and promote normal birth best practice.

- To gather data to provide individual services with specific feedback on their performance in encouraging women to labour and birth 'off the bed'.

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[1] RCM 2009 *Ten Top Tips* RCM London http://www.rcmnormalbirth.org.uk/practice/ten-top-tips/

[2] RCM 2010a *RCM Campaign for Normal Birth* http://www.rcm.org.uk/college/policy-practice/campaign-for-normal-birth/

Methodology

A simple one page form (See Figure 3 in the report) was designed to keep the burden of participation minimal. It was circulated to the 24 participating maternity units and completed during one week of their choice, between July and early August 2010.

The survey questions were designed to collect data on

- women's demographic characteristics – parity
- midwives' demographic characteristics - student or qualified
- place of birth
- date of birth
- type of birth
- particular positions used during labour
- particular positions used for birth

The form illustrated the following 8 images of different positions that could be ticked to indicate what positions were used either during labour or birth.

1 Supported standing
2 Sitting on a ball
3 Leaning forward on chair
4 On all fours
5 Squatting
6 Leaning forward /kneeling on bean bag
7 On the bed - semi-recumbent
8 In the pool

A free text option was included for respondents to enter other positions that might have been used by the woman during labour or birth.

Results

A total of 929 forms were returned from 24 units which were given individual code numbers to anonymise the data for the report. The different units reported on a range between 13 and 86 women.

Further suggestions made for positions in the free text option were *lithotomy*, *lateral*

and *'other'*. These were added to the original options list to be used in the data entry.

The positions for labour and birth therefore included the 1 - 8 original options, as above, plus:

9 Lithotomy
10 Lateral
11 Other
12 No particular position used

The majority of the births (67%) took place in an obstetric unit, 26% in a midwifery unit, and 1% at home. 6% of the forms received were missing this data. 60% of the women reported on were primigravida, and 37% multigravida, the rest were missing this data.

Onset of labour

Though the majority of labours (71%) were spontaneous, within the group of women having their labour induced, 52% were described as being mobile using upright positions. This is encouraging though it could not be ascertained how many had a prostaglandin-only induction. As a practice issue this supports midwives encouraging women to use different positions and mobilisation as an intervention in all labours.

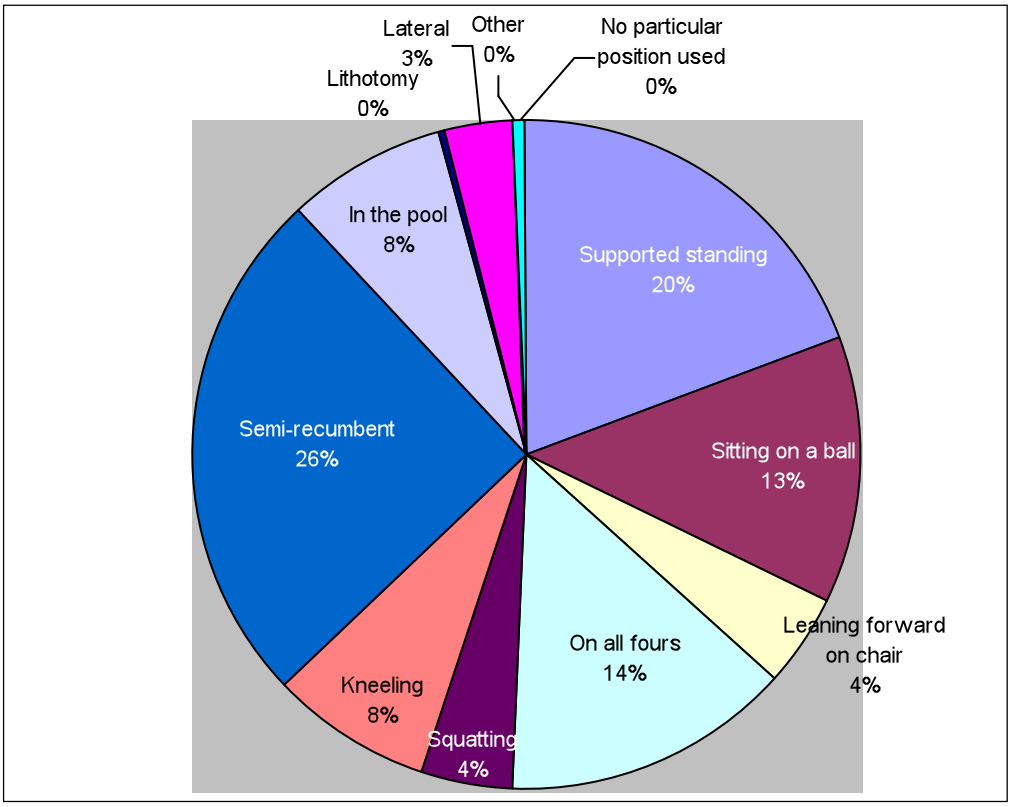
The effect of who was providing care to the woman

There appeared little difference in labour positions used by the women cared for by student or qualified midwives, with qualified midwives slightly more likely to report the use of supported standing (15% and 20% respectively) and less likely to use kneeling labour positions (12% and 7% respectively).
As for the birth positions, women cared for by qualified midwives were slightly more likely to use the pool than those looked after by student midwives (11% versus 6%) and slightly less likely to use the semi-recumbent position (48% versus 55%). Student midwives always work under the supervision of a qualified midwife, but are encouraged, as they become more senior, to lead care.

Labour positions used

A total of 1898 positions in labour were identified by the caregivers; a positive indicator as more than one position was reported as being used in most labours. The majority of positions (63%) (see Figure 1) used were in the upright category which included supported standing (20%), all fours (14%), and sitting on a ball (13%). Only in 26% of labours was the semi-recumbent position used. This encouraging finding is in line with current evidence based practice recommendations by RCM [3] and the National Institute for Health and Clinical Excellence (NICE)[4].

Figure 1. All labour positions used in the study



Labour positions and type of birth

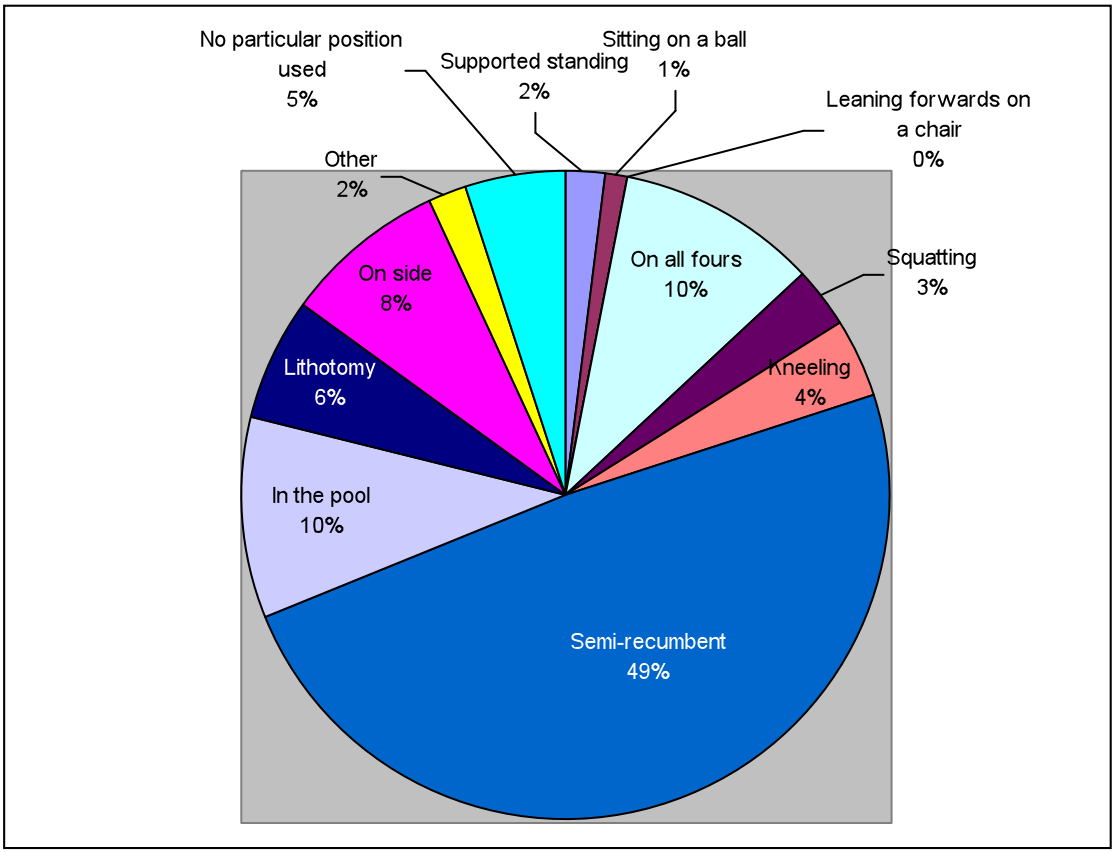
Interventions such as instrumental births and caesarean sections were more likely to be associated with women utilising semi-recumbent positions during labour. The rates of these interventions in this group were ventouse delivery (31%), forceps delivery (28%), and caesarean section (CS) (38%). These findings merit further investigation through formal research.

[3] Royal College of Midwives (RCM) (2008) *Evidence based Guidelines for midwifery led care in labour* RCM: London http://www.rcm.org.uk/college/policy-practice/guidelines/practice-guidelines/
[4] National Institute of Clinical Excellence (NICE) 2007 *Intrapartum care.* http.//www.nice.org.uk/nicemedia/pdf/1PCNICEGuidance.pdf.

Birth positions

Birth took place in the semi-recumbent position for 49% of the women (See Figure 2). This links with similar findings from another RCM audit of current practice[5]. Despite the use of many upright positions in labour, nearly half of the women appear to have got onto the bed for the birth. Questions need to be asked whether this was influenced by established practice, midwives' confidence or by environmental factors e.g. furniture or cleanliness.

Figure 2. All birth positions used in the study



3% of women in this survey who had a normal birth were described as being in the lithotomy position for the birth of their baby. This mirrors the findings of the recent Care Quality Commission Survey[6] (2010) in which 16% of women who had a normal birth, were in the lithotomy position for the birth. It is impossible to know from this audit the reasons that might lie behind the use of this position for normal birth. This again merits further exploration through formal research.

[5] Royal College Of Midwives (RCM) 2010b *The Royal College Of Midwives' Audit Of Midwifery Practice* RCM London

[6] Care Quality Commission 2010 *Maternity Services Report* http://www.cqc.org.uk/aboutcqc/howwedoit/involvingpeoplewhouseservices/patientsurveys/maternityservices.

Conclusion

The survey provides a snapshot of current midwifery practice and illustrates that various positions that support normal birth are being used in labour. However, some practices during birth may need to be questioned.

The associations between semi-recumbent positions in labour and operative deliveries (instrumental and CS) suggest that strategies such as using mobilisation and upright positions would be positive interventions.

The midwives reported that they found the form easy and simple to use and were positive about its application as a survey/audit tool. The potential 'Hawthorne effect' of altering behaviour, could be viewed as a positive impact supportive of using local surveys or audits as change agents in practice.

Key Recommendations

The emergent findings support the recommendations that:

- more tools and resources be developed for midwives to work with women to encourage 'off the bed' positions during labour and birth.
- the findings are cascaded through the midwifery community to actively inform education, research and practice.
- the RCM *positions survey form*, with the labour and birth position diagrams be made accessible for use in other contexts
- other maternity units – both midwifery and consultant led units, be encouraged to undertake their own local audits and surveys
- this information is used to develop new practice material to address the issues raised
- the potential for new research triggered by these findings, in support of effective practices related to labour and birth positions, be explored

Introduction

This survey was carried out in July and August 2010 by the Royal College of Midwives (RCM), with the Campaign for Normal Birth (CNB) steering group and members of the of the RCM consultant midwives group.
Birth positions are an important area of practice, in the past dominated by traditional and old practices. In recent years, this has been challenged by midwives, women and obstetricians, and the advantages of the upright position have been highlighted, supported by research and evidence.

The CNB steering committee considered it important to take a 'snapshot' of contemporary practice to identify what positions are being used during labour and birth. Through this the RCM might direct the CNB strategy and identify any education, practice and training needs for the continuing development of good practice.

The RCM consultant midwives group were invited to participate and their commitment and enthusiasm were invaluable in undertaking local surveys.

Background

There are several theoretical physiological advantages for being upright during labour and birth. These include the effect of gravity of the fetus within the uterus; reduced risk of aorto-caval compression; better alignment of the fetus; more efficient contractions and increased pelvic outlet when the woman is in squatting and kneeling positions (MIDIRS 2008).

A recent Cochrane review by Lawrence et al (2009) concluded that upright positions and walking in labour are associated with a reduction in the length of the first stage of labour and the use of epidural analgesia. Upright positions in the first stage are those that avoid lying flat, and may include walking around. Upright positions in the second stage include sitting (more than 45 degrees from the horizontal), squatting or kneeling, and being on hands and knees. Recumbent positions include supine, lateral, semi-recumbent with wedges, and lithotomy (MIDIRS 2008). Use of upright positions for the second stage of labour have been found to have several benefits including a shorter second stage, fewer instrumental births and fewer episiotomies. (De Jonge et al 2004; Gupta et al 2004).

Birthing positions can also have a psychological impact on the women's experience of

labour when being able to find a comfortable position can influence her feeling of being in control of her labour (de Jonge & Lagro-Jansenn 2004, Green et al 1990, Green & Baston 2003).

This evidence formed the basis of the following Royal College of Midwives' *Top Tip, Get her off the bed*, to help midwives enhance the birth experience of the women they work with:

> **Get her off the bed**
> Gravity is our greatest aid in giving birth, but for historical and cultural reasons (now obsolete) in this society we make women give birth on their backs. We need to help women understand and practise alternative positions antenatally, feel free to be mobile and try different positions during labour and birth. Once she is comfortable, try not to move her unless she wants to, or unless the position becomes inadvisable for maternal or fetal (and not organisational!) reasons.
>
> (See RCM Ten Top Tips http://www.rcmnormalbirth.org.uk/practice/ten-top-tips/)

The National Institute for Health and Clinical Excellence (NICE) guidance on intrapartum care (2007) recommends that women should be encouraged to move and adopt whatever positions they find most comfortable in labour. The NHS Institute for Innovation and Improvement's toolkit for reducing caesarean section rates (2007) also recommends that women should be discouraged from lying on the bed during labour and birth. However in a recent audit of current midwifery practice (RCM 2010b) midwives reported that most women still give birth in the semi-recumbent position.

Midwives have an important role in helping women to find and choose comfortable positions (Cotton 2010, Walsh 2007) De Jonge et al's (2009) study found that there was considerable variation between midwifery practices in the use of different positions for labour and birth.

The RCM, working with the Campaign for Normal Birth (CNB) steering group, undertook this survey of midwifery practice in the UK, to explore this area in more detail. As part of the strategy for the survey, the RCM consultant midwives group were approached, their opinion sought on the value of such a survey, and their

interest in facilitating it within their units elicited. The Consultant Midwife group were enthusiastic and fully committed to this survey, and several of them agreed to be the local project lead. This involved recruiting midwives to participate, raising awareness, distributing forms, encouraging involvement, and collecting and returning the forms to the RCM.

Objectives of the survey

- To gain a national picture of the positions being used in labour and birth, highlight areas for improvement and promote normal birth best practice.

- To gather data to provide individual services with specific feedback on their performance in encouraging women to labour and birth 'off the bed'.

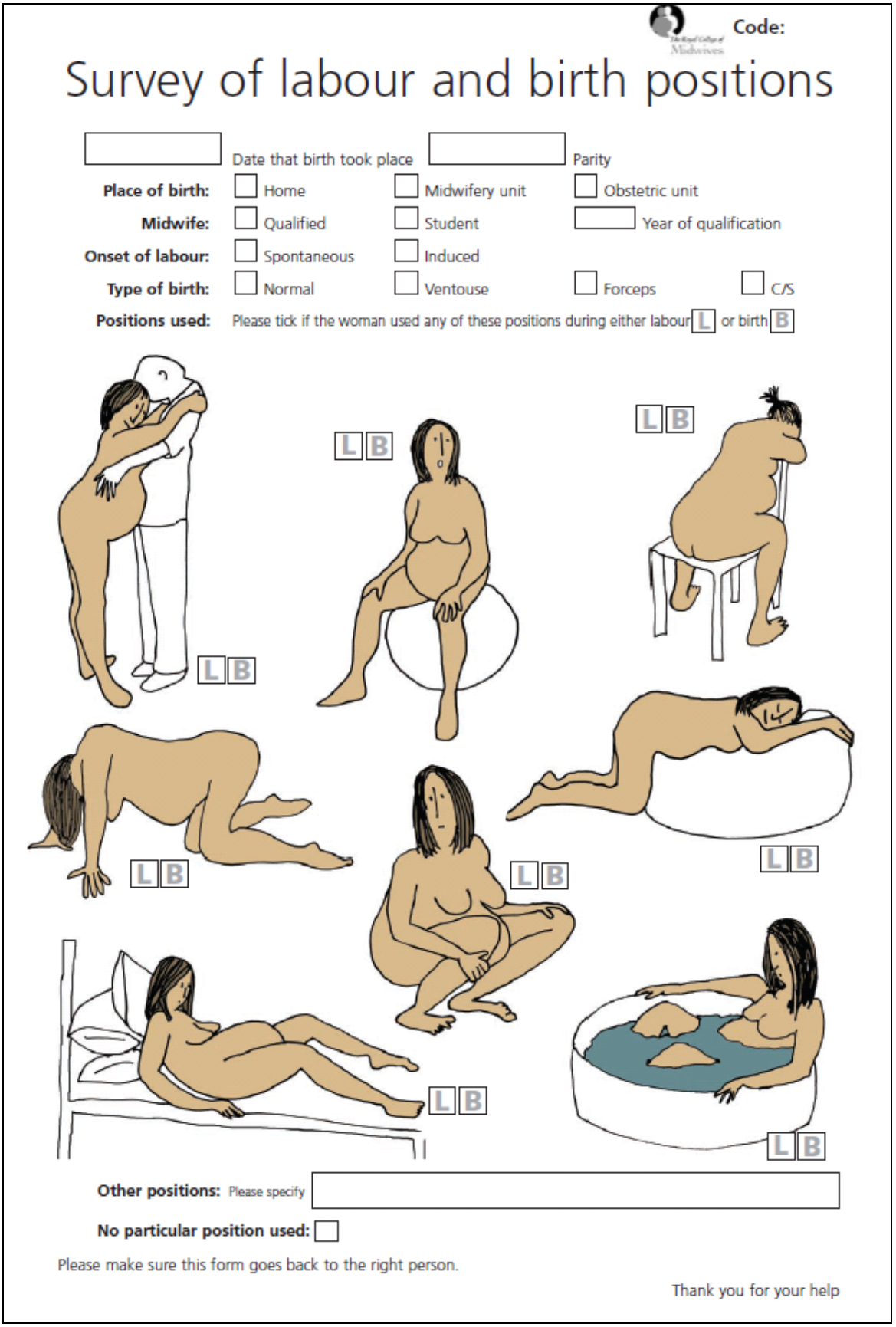
Methodology

The survey form was developed and agreed by the midwives in the CNB Steering group and the RCM consultant midwives group. There was discussion about the scope of the survey, with considerable interest in linking it to multiple outcomes, and it was agreed that this would be the remit of a large scale research trial rather than an initial audit survey. In this context, it was agreed that the form should be one page in length, and very simple to complete in order to encourage involvement and ensure a good response rate (See Figure 3).

The questions were designed to collect data on

- women's demographic characteristics – parity
- midwives' demographic characteristics - student or qualified
- place of birth
- date of birth
- type of birth
- particular positions used for labour and birth

Figure 3: Survey Proforma illustrating different positions used for labour and birth



Code:

Survey of labour and birth positions

Date that birth took place

Parity

Place of birth: Home | Midwifery unit | Obstetric unit

Midwife: Qualified | Student | Year of qualification

Onset of labour: Spontaneous | Induced

Type of birth: Normal | Ventouse | Forceps | C/S

Positions used: Please tick if the woman used any of these positions during either labour L or birth B

L B

L B

L B

L B

L B

L B

L B

L B

Other positions: Please specify

No particular position used:

Please make sure this form goes back to the right person.

Thank you for your help

The form included 8 images of different positions that could be ticked for use in either labour or birth (see Figure 3)

1 Supported standing
2 Sitting on a ball
3 Leaning forward on a chair
4 On all fours
5 Squatting
6 Leaning forward/ kneeling on bean bag
7 On the bed – semi recumbent
8 In the pool

Respondents could tick one or more position used by women in either labour or birth. A free text option was included for respondents to enter other positions that had been used.

The consultant midwife in the participating units undertook to be the local project lead. It was completed for women who had given birth at the unit during one week of their choice, in July and early August 2010. The completed questionnaires were returned to the RCM during August and September.

27 units originally agreed to take part in the survey, but 3 had to withdraw. One unit withdrew when they decided that the form was not appropriate for their unit, which had a high rate of epidurals, and the positions that these women were using were not represented. The remaining 24 units returned 929 questionnaires to the RCM which were all coded to anonymise the data.

The data was entered into *SPSS 17* for the analysis. Only descriptive statistics were produced. No statistical testing was done as the number of variables involved were at risk of providing spurious outcomes.

Results

A total of 929 women were reported on, with different units reporting on a range between 13 and 86 women. The number of births that had taken place in the participating units during the week of the survey was 2016, giving an overall response rate of 46%. The response rate varied considerably between sites from

16% - 100% with several of the small units which were midwifery led, returning 100%. This may have reflected the workload of the unit at the time, as well as interest and commitment among the midwives. Some trusts, where there was more than one unit or an alongside midwifery led unit, sent in all the questionnaires together, and some chose to separate them, by requesting a separate code, to facilitate individualised feedback in the different environments.

Further suggestions for positions in the free text option were *lithotomy*, *lateral* and *other* and produced the following list of variables used in the data entry.

Positions for Labour and Birth:

1 Supported standing
2 Sitting on a ball
3 Leaning forward on chair
4 On all fours
5 Squatting
6 Leaning forward/ kneeling on bean bag
7 On the bed – semi recumbent
8 In the pool
9 Lithotomy
10 Lateral
11 Other
12 No particular position

625 (67%) of the births were described as taking place in an obstetric unit, 236 (26%) in a midwifery unit, and 10 (1%) at home (missing data 58 (6%)). 561 (60%) of the women were primigravidae, and 339 (37%) multigravidae (missing data = 29 (3%)).

The effect of who was providing care

The steering group agreed that it was important to collect information about who was providing the majority of care. Although student midwives are always be supervised by a qualified midwife, it might be assumed that the student midwives reporting in the study, were also perceived as having an important role in caring for the women they were describing. Student midwives are encouraged, especially as they become

more senior, to lead care. It would be useful to investigate this more clearly in future studies. Table 1, indicates the midwife status (qualified or student) and the number of forms returned for each site.

Table 1. Response by site and midwife status

Site	Midwife Status			Total
	Missing	Qualified	Student	
1	3	42	0	**45**
2	1	56	0	**57**
3	4	49	9	**62**
4	0	22	3	**25**
5	3	31	1	**35**
6	4	23	4	**31**
7	1	36	9	**46**
8	0	13	0	**13**
9	7	68	11	**86**
10	0	49	10	**59**
12	4	16	4	**24**
13	9	50	6	**65**
14	2	20	4	**26**
15	6	13	0	**19**
16	6	27	15	**48**
17	4	44	2	**50**
18	3	46	9	**58**
19	0	15	0	**15**
20	1	12	0	**13**
21	1	32	10	**43**
22	2	13	2	**17**
23	2	18	1	**21**
24	1	15	2	**18**
25	0	53	0	**53**
Total	**64**	**763**	**102**	**929**

There appeared little difference in labour positions used by the women cared for by student or qualified midwives, with the latter slightly more likely to use supported standing (15% and 20% respectively) and less likely to use kneeling labour positions (12% and 7% respectively) (table 2, figures 4 and 5).

There was little difference in birth positions either, with the women cared for by qualified midwives slightly more likely to use the pool than those looked after by students (11% versus 6%) and slightly less likely to use the semi-recumbent position (48% versus 55%).

Table 2. Labour positions used and midwife status

Midwife Status	Labour Positions												Total
	1*	2	3	4	5	6	7	8	9	10	11	12	
Missing	28	22	5	18	5	10	33	6	1	5	0	2	**135**
Qualified	309	203	72	218	68	118	394	132	2	49	1	8	**1574**
Student	29	26	6	27	7	22	51	11	0	8	2	0	**189**
Total Positions Used	**366**	**251**	**83**	**263**	**80**	**150**	**478**	**149**	**3**	**62**	**3**	**10**	**1898**

Key

1.Supported standing
2.Sitting on ball
3.Leaning forward on a chair
4.On all fours
5. Squatting
6. Leaning forward/ kneeling on bean bag
7. On the bed – semi recumbent
8. In the pool
9. Lithotomy
10. Lateral
11. Other
12. No particular position used

Figure 4. Labour positions with qualified midwives

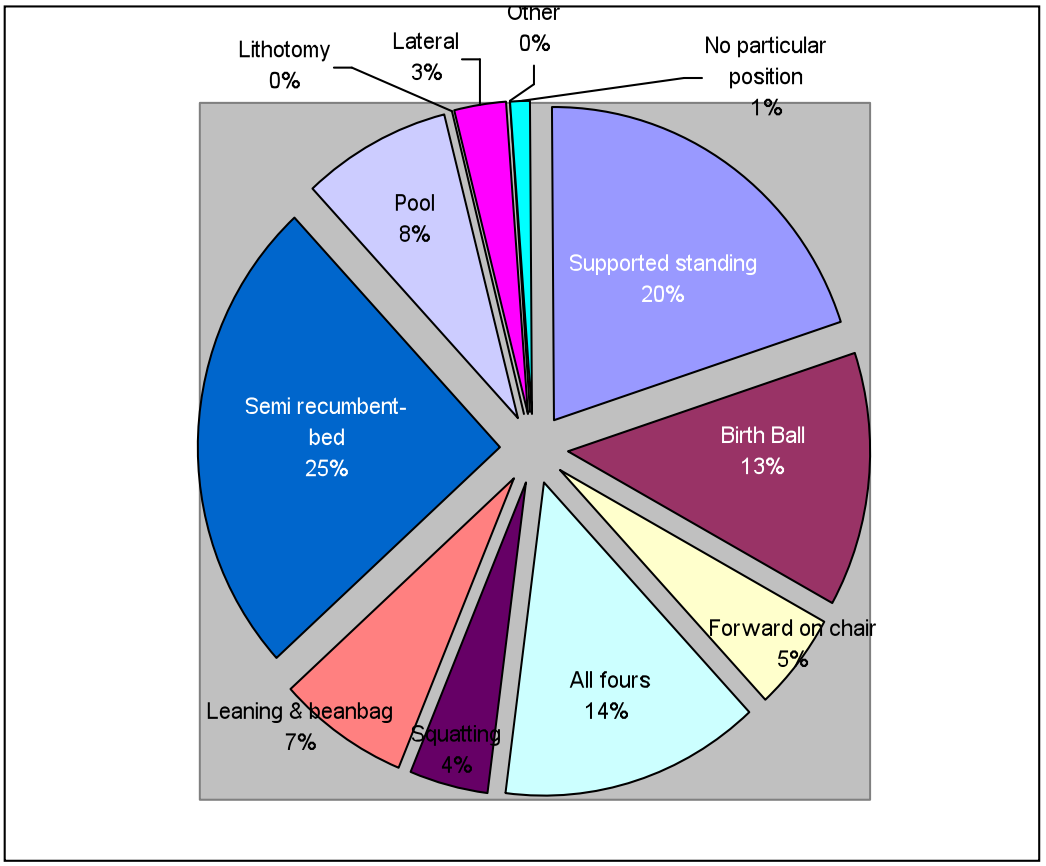
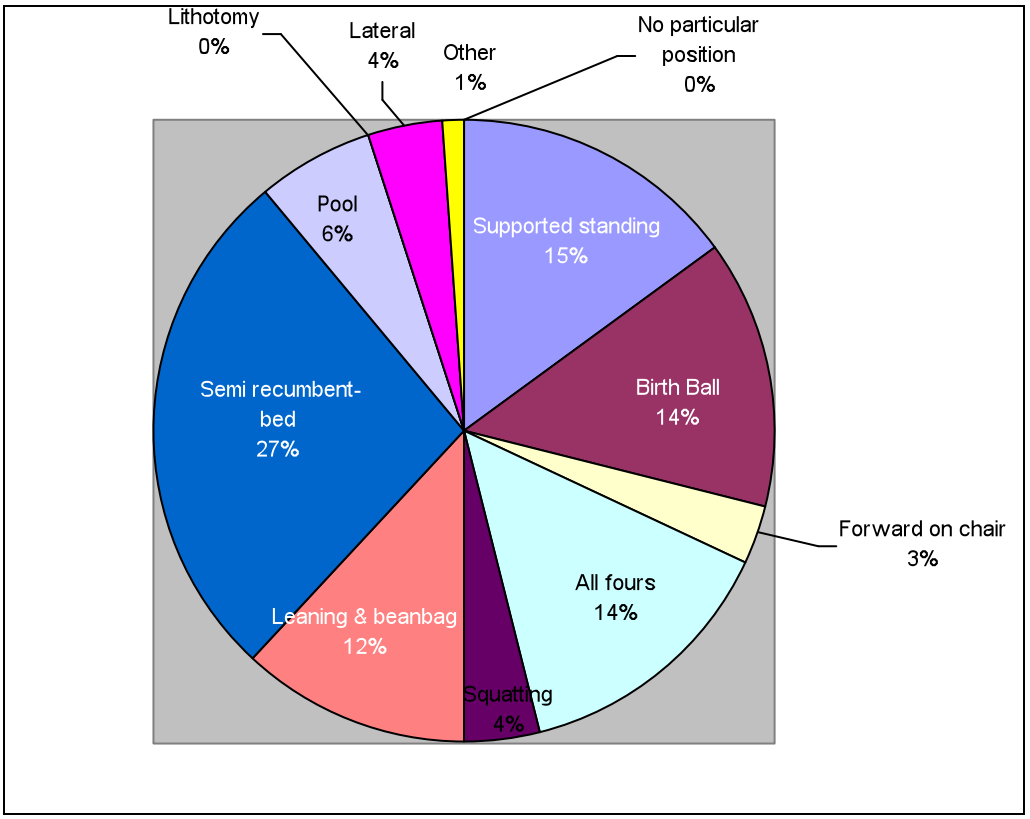


Figure 5 Labour Positions with student midwives



Labour positions

Midwives could identify the use of more than one position in labour and 1898 positions were reported for 929 births. Table 3 and figure 6 present detail on labour positions by site and overall use. 63% of the positions reported were upright, including supported standing (20%), all fours (14%), and sitting on a ball (13%). The semi-recumbent position was only used in 26% of the labours described. This is an encouraging finding that suggests that current practice is moving in line with recommendations by RCM and NICE.

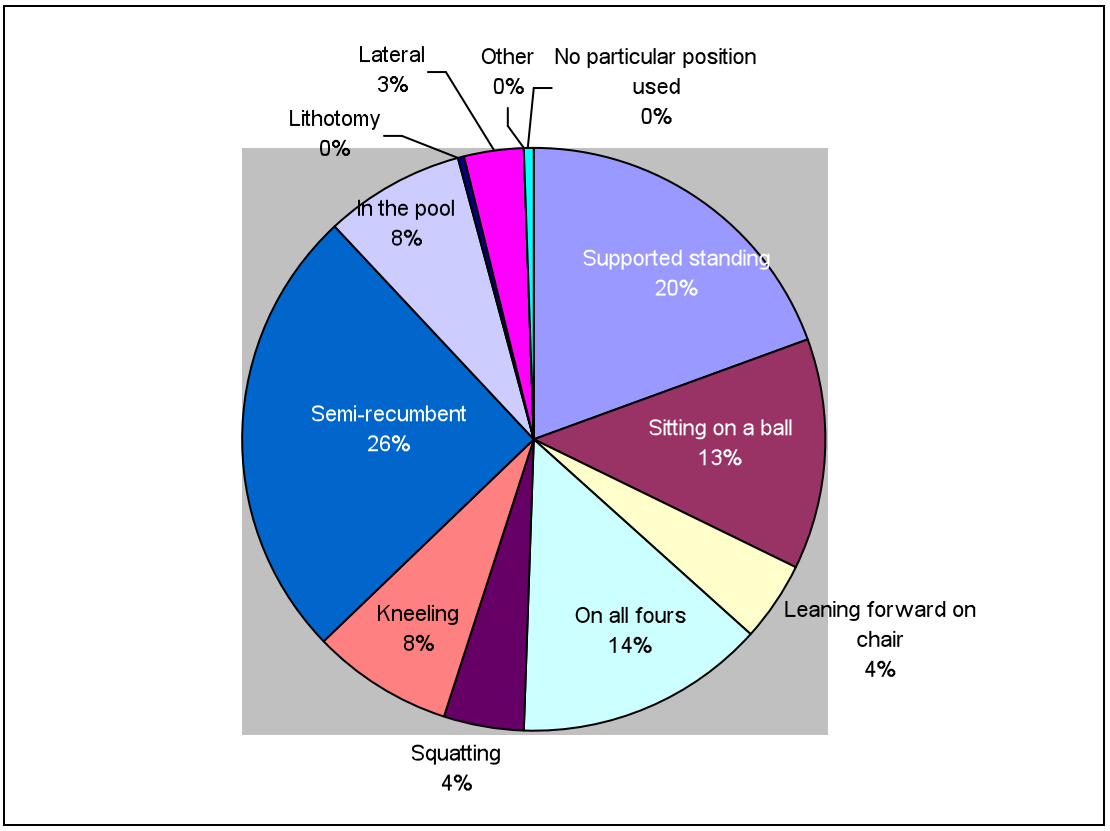
Table 3. Labour positions by site

Site	Labour Positions												Total
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	
1	20	9	1	20	7	13	13	7	1	9	0	7	107
2	27	10	5	11	4	6	25	14	0	9	0	0	111
3	17	13	6	21	5	13	34	13	1	15	2	2	142
4	9	6	2	11	4	5	19	4	0	0	0	0	60
5	7	12	1	10	0	0	21	0	0	0	0	0	51
6	13	8	2	11	4	5	18	3	0	3	0	0	67
7	20	19	5	17	9	17	27	10	0	0	0	0	124
8	5	2	0	6	0	0	5	7	0	0	0	0	25
9	39	42	15	27	14	20	47	10	0	0	0	0	214
10	19	15	4	20	3	13	33	13	0	2	0	0	122
12	8	5	3	6	2	4	12	3	0	3	0	1	47
13	42	5	8	2	0	2	47	0	0	0	0	0	106
14	5	8	3	11	0	2	15	1	0	1	0	0	46
15	10	7	4	2	1	0	10	1	0	3	0	0	38
16	19	13	5	9	3	3	27	8	0	1	1	0	89
17	22	23	3	18	5	5	18	18	1	6	0	0	119
18	20	15	3	8	4	6	30	3	0	6	0	0	95
19	7	4	2	9	3	6	6	9	0	0	0	0	46
20	4	7	1	3	2	2	3	6	0	0	0	0	28
21	17	9	0	9	2	4	20	3	0	3	0	0	67
22	11	1	3	5	3	9	6	6	0	0	0	0	44
23	9	2	3	6	1	5	10	1	0	1	0	0	38
24	7	8	3	6	1	4	8	3	0	0	0	0	40
25	9	8	1	15	3	6	24	6	0	0	0	0	72
Total	**366**	**251**	**83**	**263**	**80**	**150**	**478**	**149**	**3**	**62**	**3**	**10**	**1898**

Key

1.Supported standing
2.Sitting on ball
3.Leaning forward on a chair
4.On all fours
5. Squatting
6. Leaning forward/ kneeling on bean bag
7. On the bed – semi recumbent
8. In the pool
9. Lithotomy
10. Lateral
11. Other
12. No particular position used

Figure 6. All labour positions used in the study



Labour positions and type of birth

Table 4 and figures 7-10 relate labour positions to the type of birth. Instrumental births (ventouse (31%), forceps (28%)), and caesarean sections (38%) were more likely to be associated with semi-recumbent positions during labour and normal births were associated with the use of upright labour positions. These are very interesting findings that would be important to follow up in a formal research study.

Table 4. Labour positions and type of birth

Type of Birth	Labour Position												Total
	1	2	3	4	5	6	7	8	9	10	11	12	
Missing	30	27	10	20	5	13	33	15	1	1	0	0	**155**
Normal	272	182	57	195	57	114	322	119	1	46	3	3	**1371**
Ventouse	23	8	2	19	10	12	39	5	1	5	0	0	**124**
Forceps	17	15	9	16	6	8	29	3	0	2	0	0	**105**
C/S	24	19	5	13	2	3	55	7	0	8	0	7	**143**
Total	**366**	**251**	**83**	**263**	**80**	**150**	**478**	**149**	**3**	**62**	**3**	**10**	**1898**

Key

1.Supported standing
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9. Lithotomy
10. Lateral
11. Other
12. No particular position used

Figure 7. Labour positions and normal birth

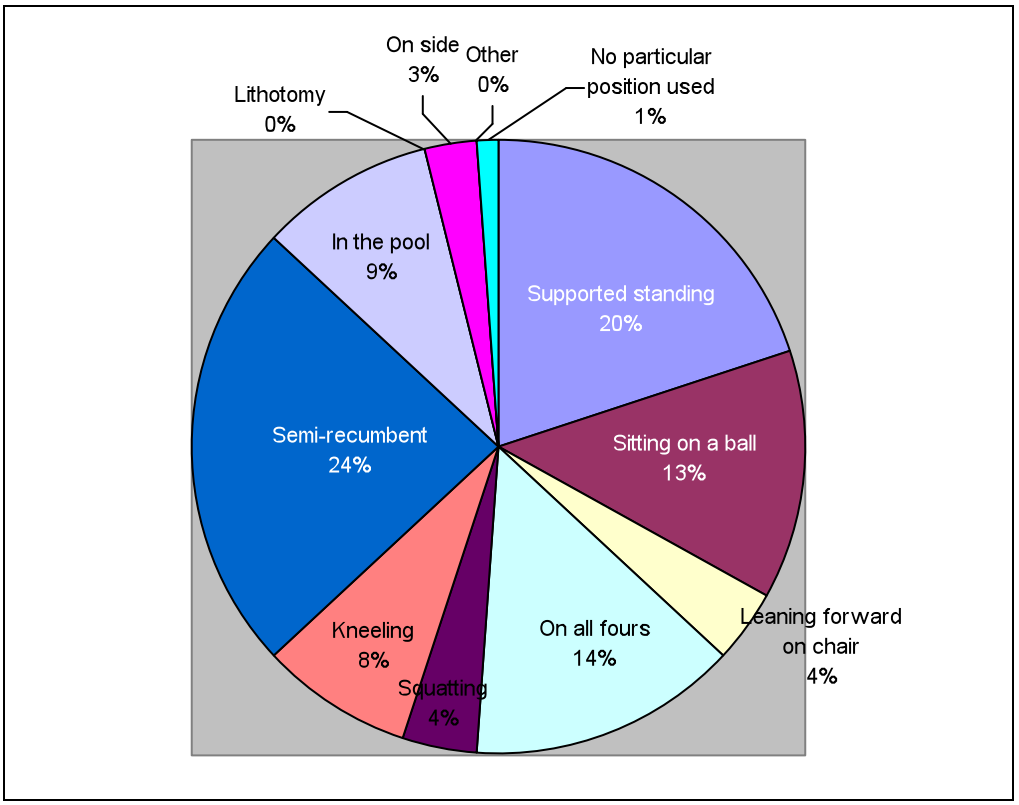


Figure 8. Labour positions and ventouse births

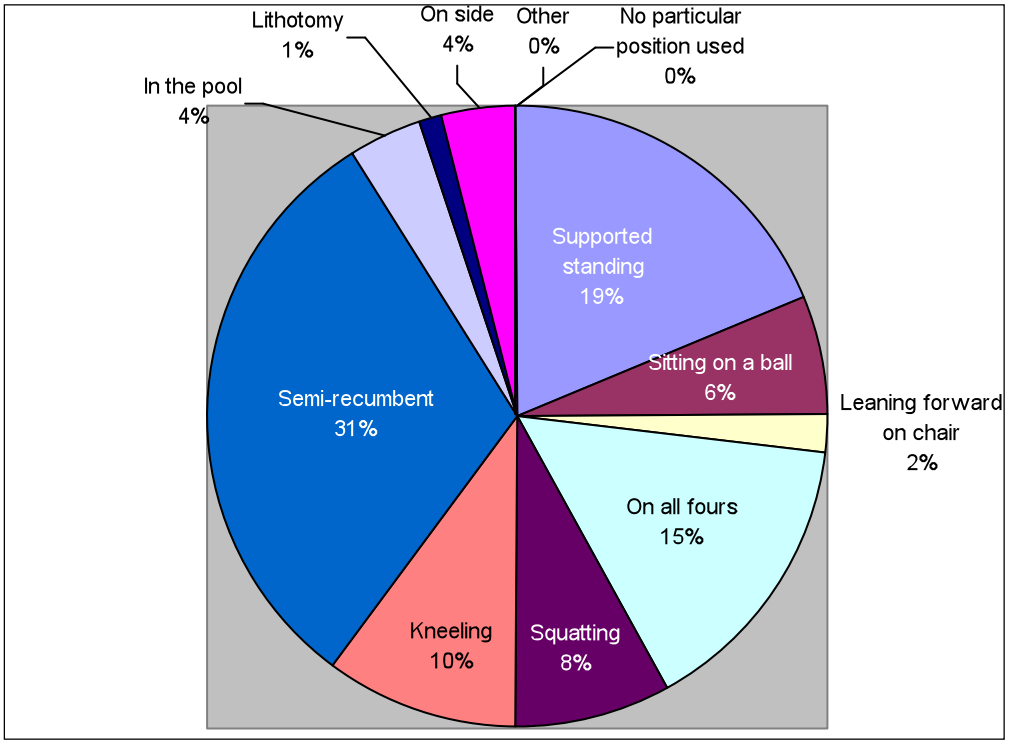


Figure 9 Labour positions and forceps births

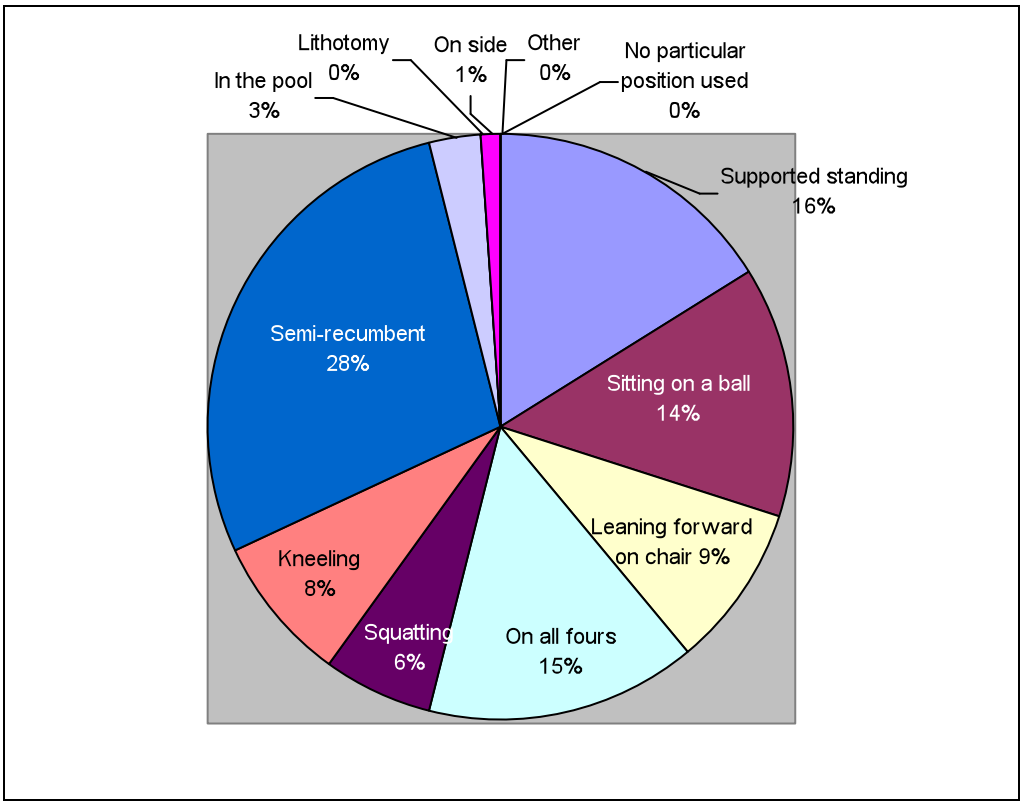
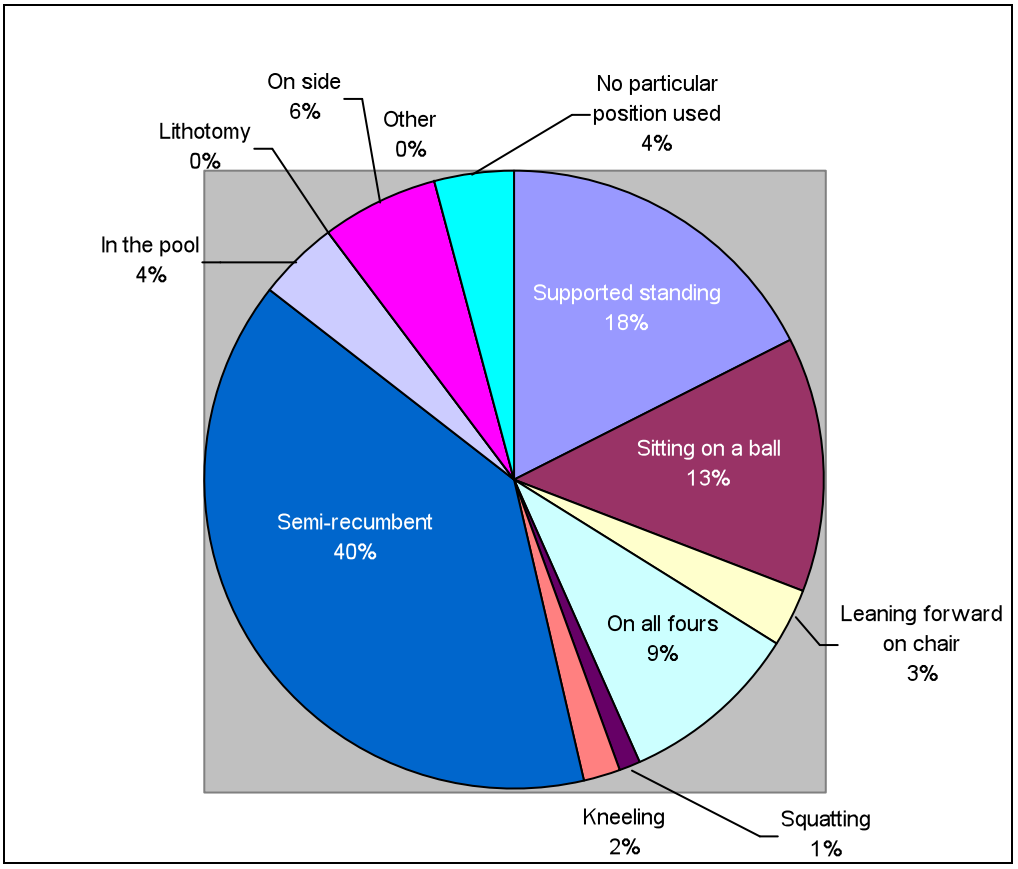


Figure 10 Labour positions and Caesarean section



Onset of labour

As shown in Table 5, the majority 71% (n 661) of the labours reported on were spontaneous in onset. Induction of labour varied considerably between sites. This wide variability is not surprising, given the number of midwifery led units in the study, where it is not common practice to undertake induction of labour.

Table 5 Type of onset of labour by site

Site	Onset of Labour			Total
	Missing	Spontaneous	Induced	
1	11	28	6	**45**
2	1	46	10	**57**
3	5	38	19	**62**
4	5	14	6	**25**
5	3	25	7	**35**
6	7	22	2	**31**
7	5	36	5	**46**
8	1	12	0	**13**
9	20	52	14	**86**
10	8	48	3	**59**
12	2	18	4	**24**
13	9	32	24	**65**
14	2	20	4	**26**
15	2	17	0	**19**
16	7	39	2	**48**
17	3	39	8	**50**
18	5	46	7	**58**
19	0	15	0	**15**
20	3	10	0	**13**
21	2	32	9	**43**
22	0	17	0	**17**
23	1	14	6	**21**
24	3	14	1	**18**
25	13	27	13	**53**
Total	**118**	**661**	**150**	**929**

Labour positions and onset of labour.

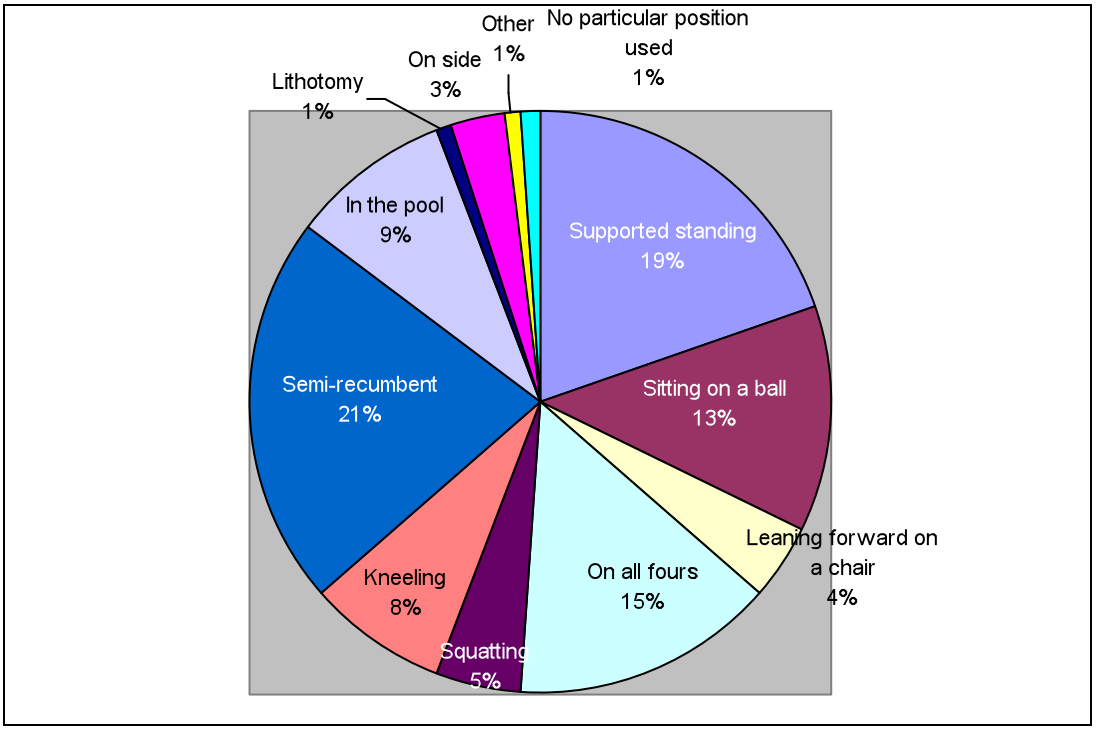
Table 6. Labour positions by onset of labour

Onset	Labour Positions												Total
	1	2	3	4	5	6	7	8	9	10	11	12	
Missing	38	31	8	26	9	21	59	18	1	3	0	7	**221**
Spontaneous	278	185	59	212	65	117	308	124	1	48	3	2	**1402**
Induced	50	35	16	25	6	12	111	7	1	11	0	1	**275**
Total	**366**	**251**	**83**	**263**	**80**	**150**	**478**	**149**	**3**	**62**	**3**	**10**	**1898**

Key

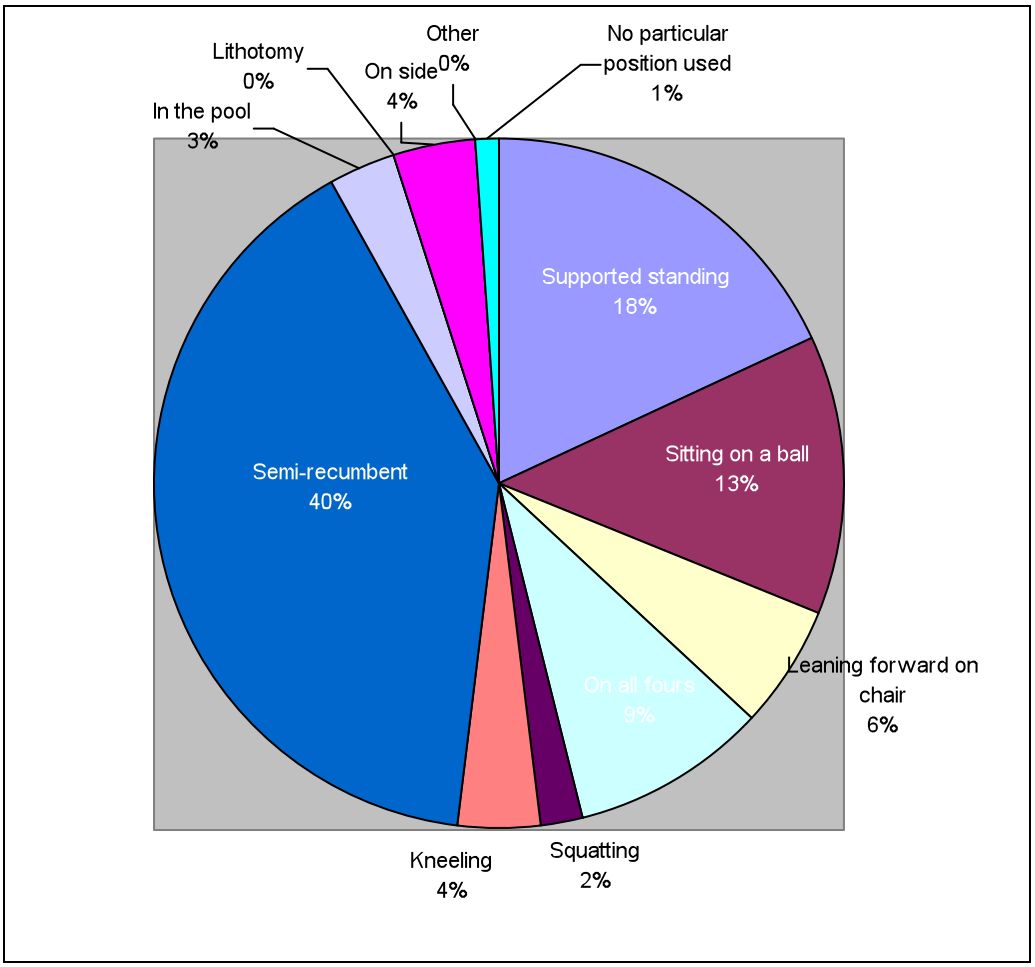
1.Supported standing
2.Sitting on ball
3.Leaning forward on a chair
4.On all fours
5. Squatting
6. Leaning forward/ kneeling on bean bag
7. On the bed – semi recumbent
8. In the pool
9. Lithotomy
10. Lateral
11. Other
12. No particular position used

Figure 11 Positions used in spontaneous labour



The most common position used by women having an induction of labour (40%) was semi-recumbent (Figure 12). However it is very interesting that 52% of the positions reported were upright, with 18% using supported standing; 13% the ball; and 9%, all fours, which implies that women were not confined to the bed for the whole of their labour.

Figure 12 Positions used in induced Labour



Types of birth and birth positions

67% (676) of the labours reported on resulted in a normal birth (table 7).

Table 7. Types of birth by site

Site	Type of Birth					Total
	Missing	Normal	Ventouse	Forceps	C/S	
1	2	23	4	0	16	**45**
2	2	48	3	4	0	**57**
3	2	47	4	5	4	**62**
4	0	17	3	0	5	**25**
5	0	30	2	2	1	**35**
6	6	22	0	2	1	**31**
7	4	33	5	1	3	**46**
8	1	12	0	0	0	**13**
9	8	50	8	9	11	**86**
10	4	40	1	3	11	**59**
12	1	20	1	0	2	**24**
13	0	48	3	1	13	**65**
14	2	18	4	1	1	**26**
15	2	15	0	2	0	**19**
16	4	38	3	1	2	**48**
17	10	29	3	4	4	**50**
18	4	45	7	0	2	**58**
19	0	15	0	0	0	**15**
20	2	11	0	0	0	**13**
21	3	36	0	3	1	**43**
22	1	15	1	0	0	**17**
23	1	16	1	3	0	**21**
24	0	15	0	1	2	**18**
25	5	33	7	2	6	**53**
Total	**64**	**676**	**60**	**44**	**85**	**929**

Table 8 gives data on birth positions used in different sites. Just one position was reported as being used in the majority of cases, but there were 999 birth positions described for 929 births (table 7). This finding perhaps challenges the definition of birth as understood by the midwives completing the survey. Some midwives might consider the second stage to inherently be part of labour, and some midwives might consider it to be part of the birth. This could also be seen as an encouraging finding implying that some women are choosing to change position during the birth, and are being supported in doing so.

Table 8. Birth positions by site

Site	Birth Positions												Total
	1	2	3	4	5	6	7	8	9	10	11	12	
1	0	0	0	9	2	7	11	5	4	8	1	15	**62**
2	2	1	0	6	1	2	36	13	7	9	0	0	**77**
3	0	0	0	6	2	2	30	7	9	12	4	4	**76**
4	0	0	0	5	0	1	11	2	0	1	0	1	**21**
5	1	1	0	4	0	1	18	0	4	1	0	3	**33**
6	1	0	0	5	0	3	12	7	0	3	1	0	**32**
7	0	0	0	2	0	0	23	3	5	4	2	1	**40**
8	1	0	0	6	0	0	3	7	0	0	1	0	**18**
9	3	1	0	5	9	3	49	1	4	3	0	9	**87**
10	1	2	0	8	6	1	32	9	2	2	2	0	**65**
12	2	0	0	0	1	0	18	0	0	1	1	2	**25**
13	0	0	0	0	0	0	53	0	0	0	0	7	**60**
14	0	0	0	5	0	0	15	0	0	3	1	1	**25**
15	0	0	0	1	2	0	12	0	0	3	1	0	**19**
16	1	1	0	4	0	1	30	2	3	2	2	3	**49**
17	1	2	0	7	1	3	18	13	7	2	1	3	**58**
18	1	0	0	3	0	2	40	4	7	10	1	3	**71**
19	0	0	0	5	3	1	3	7	0	0	0	0	**19**
20	1	0	0	3	2	0	1	3	0	2	0	1	**13**
21	0	1	0	5	0	0	26	1	2	5	0	1	**41**
22	2	0	0	1	1	2	6	4	0	2	0	0	**18**
23	1	0	0	1	0	1	10	2	0	4	0	0	**19**
24	0	0	0	5	0	0	7	2	1	1	0	2	**18**
25	1	1	0	5	1	5	24	8	0	6	0	2	**53**
Total	**19**	**10**	**0**	**101**	**31**	**35**	**488**	**100**	**55**	**84**	**18**	**58**	**999**

Key

1.Supported standing
2.Sitting on ball
3.Leaning forward on a chair
4.On all fours
5. Squatting
6. Leaning forward/ kneeling on bean bag
7. On the bed – semi recumbent
8. In the pool
9. Lithotomy
10. Lateral
11. Other
12. No particular position used

Figure 13 illustrates the total of the birth positions reported on in the study. 49% of the birth positions were reported as semi-recumbent; 10% were on all fours; 10% in the pool; 3% squatting and 4% kneeling. It may be seen as surprising that given the use of upright positions in labour; nearly half of the women appear to have got onto the bed for the birth. This could imply that midwives are confident in promoting different positions in labour but less so during the birth. It might suggest that midwives and/or women believe that the birth needs to take place on the bed.

Figure 13. Total birth positions used

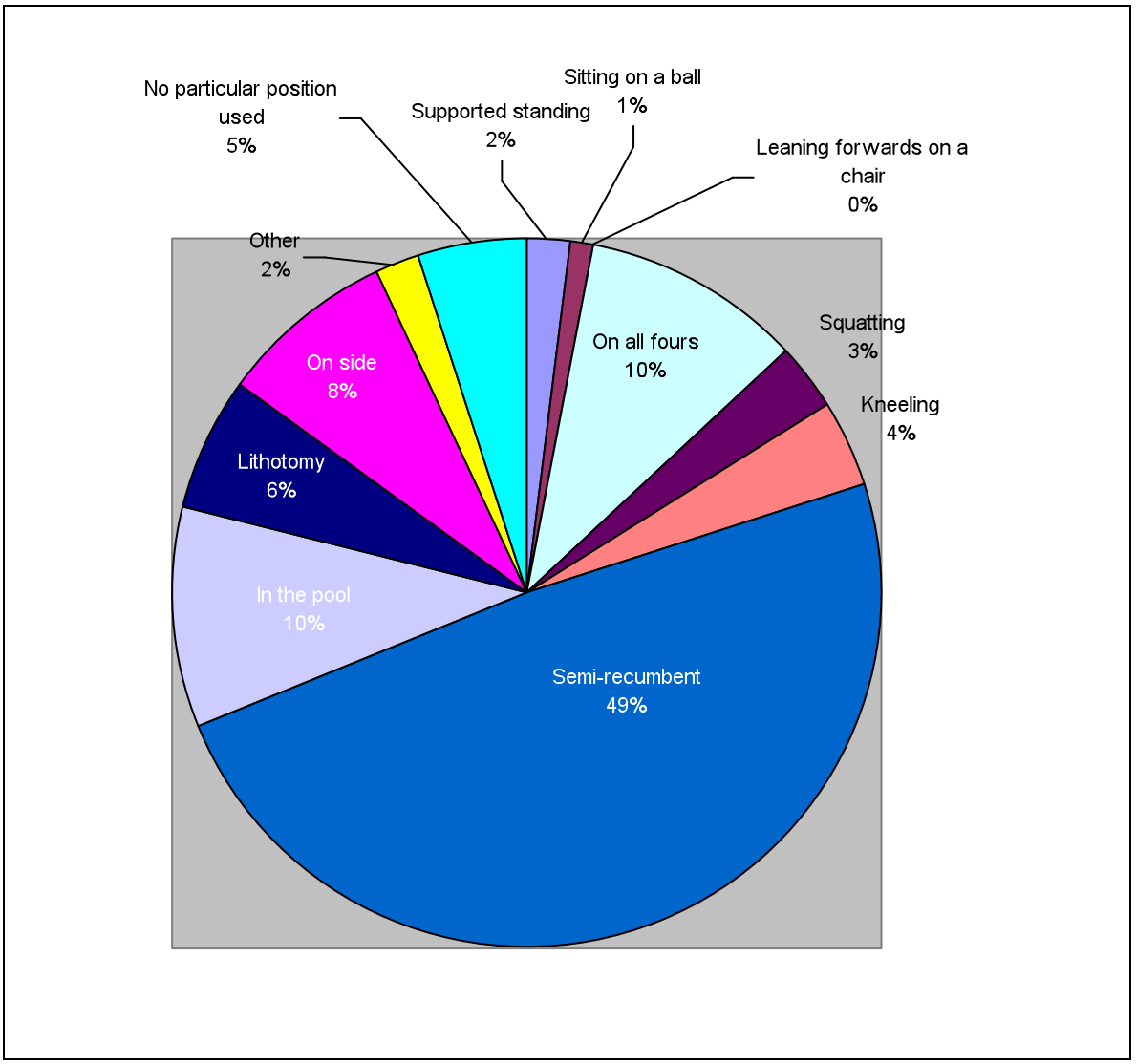


Table 9 and figures 14-15 illustrate birth positions relating to the type of birth. 3% of normal births appear to have been in the lithotomy position - which could suggest that this position is being promoted as an effective birth position. This reflects the findings in the recent Care Quality Commission study, where 17% of women reported using this position. Previous research has highlighted that the lithotomy position will tend to reduce the pelvic outlet, and tighten the perineal area, which may impact on the likelihood of facilitating normal birth

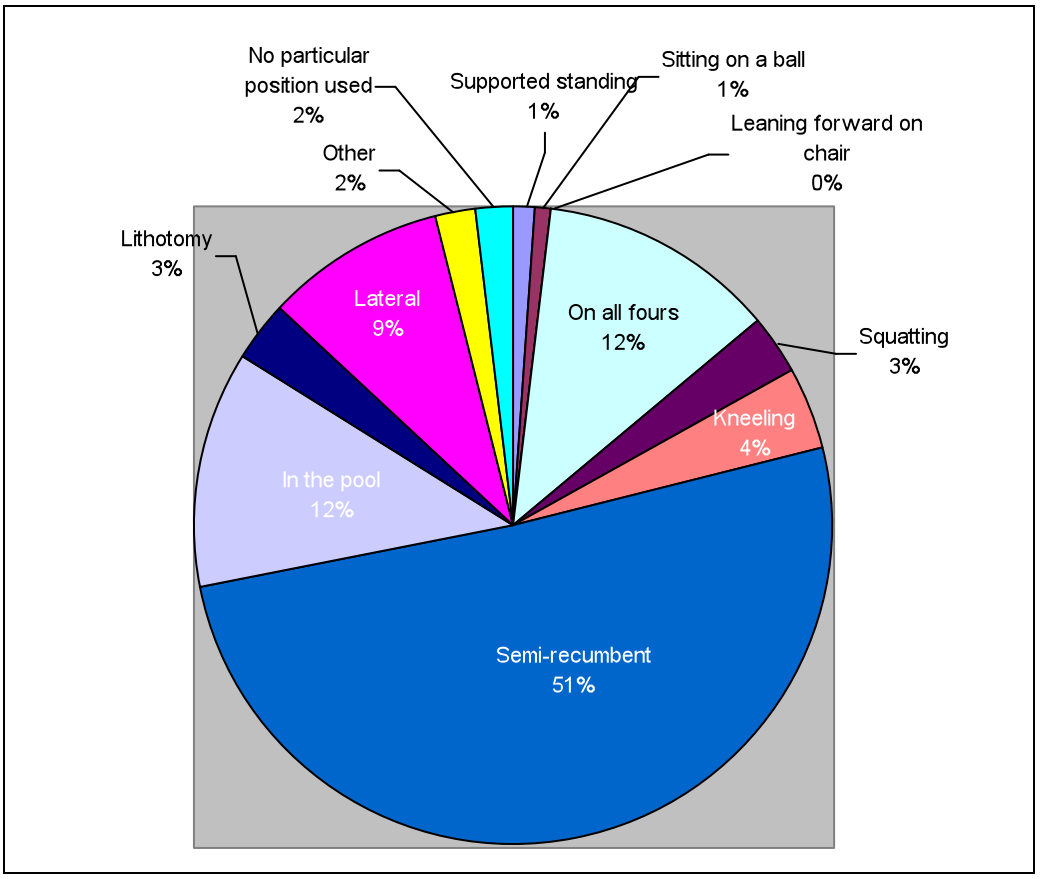
Table 9. Birth position and type of birth

Type of Birth	Birth Position												Total
	1	2	3	4	5	6	7	8	9	10	11	12	
Missing	1	1	0	8	6	3	23	10	4	6	3	3	**68**
Normal	17	5	0	89	22	30	374	89	19	64	8	10	**727**
Ventouse	0	2	0	2	1	0	38	1	20	5	0	3	**72**
Forceps	1	1	0	2	2	2	29	0	10	3	3	1	**54**
C/S	0	1	0	0	0	0	24	0	2	6	4	41	**78**
Total	**19**	**10**	**0**	**101**	**31**	**35**	**488**	**100**	**55**	**84**	**18**	**58**	**999**

Key

1.Supported standing
2.Sitting on ball
3.Leaning forward on a chair
4.On all fours
5. Squatting
6. Leaning forward/ kneeling on bean bag
7. On the bed – semi recumbent
8. In the pool
9. Lithotomy
10. Lateral
11. Other
12. No particular position used

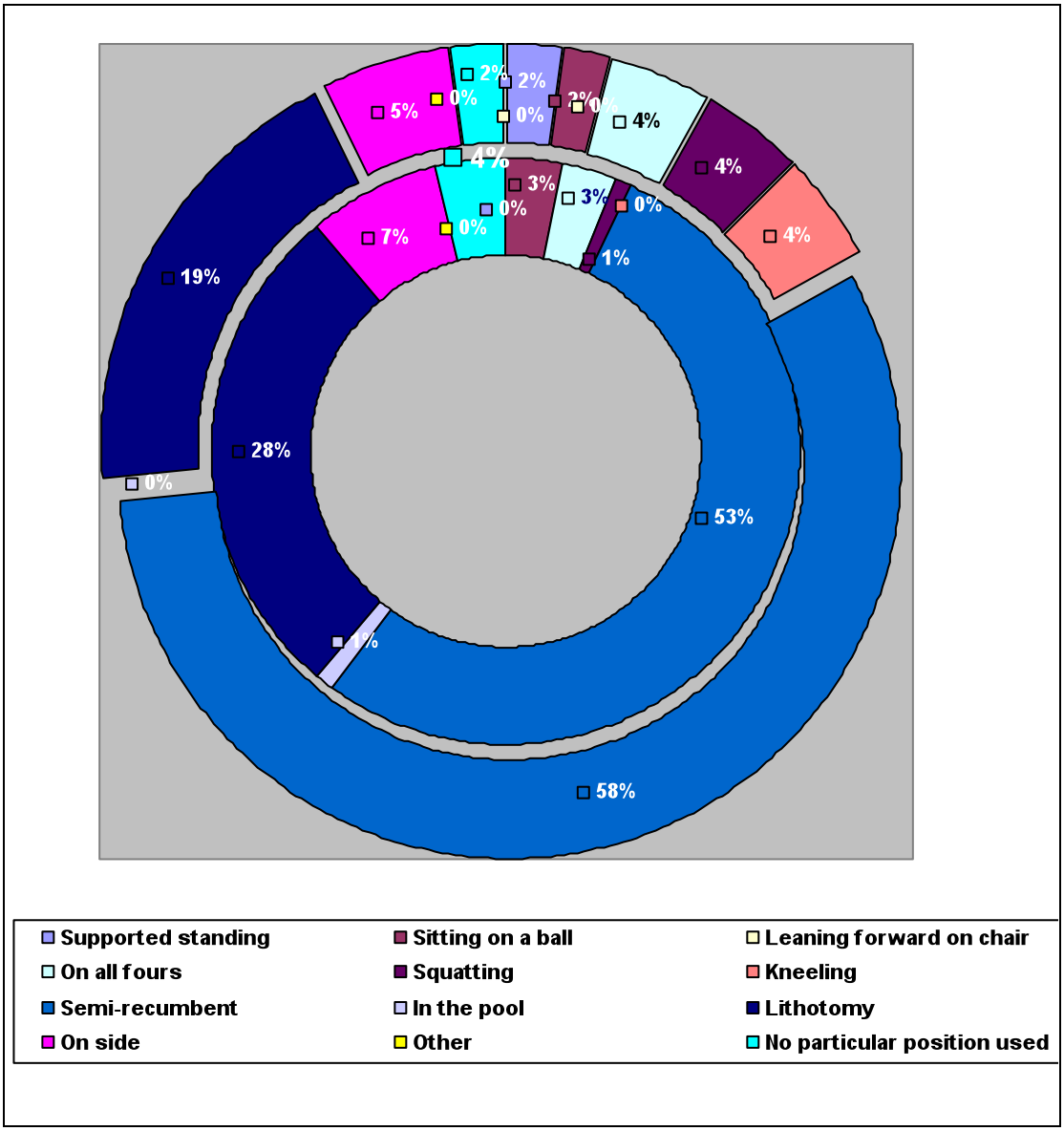
Figure 14. Normal births and birth positions



It is surprising, given the number of upright positions used in labour associated with normal births, that more than 50% of the normal births took place in the semi-

recumbent position. As discussed above, this could suggest that midwives are confident in promoting different positions in labour and less confident doing so during the birth.

Figure 15. Forceps and Ventouse births and birth positions



This figure above (15) shows how the birth position can change, and that women using an upright position early during the birth may need to change in order to have an instrumental delivery.

Limitations

This survey presented information from 24 units across England, where there was an identified consultant midwife identified able to facilitate the project. The potential

'hawthorne effect' activity of undertaking the survey could have influenced the practice in each unit.

The survey form was not piloted outside the RCM consultant midwives group who were involved in its design. This could have improved its usability across the UK. At this particular time the countries of Northern Ireland, Wales and Scotland did not all have an available consultant midwife. The survey was stimulated at a particular meeting. This resulted in a largely England focussed survey, and a wider spread would have been helpful.

The associations highlighted in the text are only based on descriptive statistics. A more thorough investigation of these associations would require the formulation of a specific research question and appropriate study design.

Discussion

This survey suggests that midwives appear to be supporting women using multiple positions during labour and birth. It is likely that undertaking the survey encouraged the use of different positions and this effect of a survey or an audit as a change agent can be seen as a positive outcome that could be used in other contexts. Several of the units that took part described their willingness to undertake repeat studies, and compare their unit's practice to the national picture.

It is disappointing that the units that took part were all in England. This could reflect the fact that there are more consultant midwives leading on normal birth in this country and that they are members of the RCM consultant midwives group, which was a motivating factor to participation in this survey.

The role of the consultant midwife in leading the project was vital to involvement in the unit. It was always felt important to take a flexible approach to the survey, which would have to adapt to the business of the participating units. However, this probably led to a poor response rate in some units, particularly those which were undertaking other surveys or research projects at the time.

The issue of women who are encouraged to labour actively, and who then move to give birth on the bed, raises important practice questions. The survey purely asked for the positions for labour and birth, and did not explore the rationale for moving, or investigate how information was provided to women prior to and during labour and

birth. It is not clear why women might have moved, or whether the move was initiated because of a change in the situation, the women's choice, or whether the midwife encouraged a move. Further audit and research might clarify this in the future.

Conclusion

The survey provides an important snapshot of current midwifery practice and illustrates that various positions are being used, especially in labour that support normal birth. However, some practices during birth may need to be questioned.

The associations between semi-recumbent positions in labour and operative deliveries (instrumental and CS) suggest that strategies such as using mobilisation and upright positions would be positive interventions.

The midwives reported that they found the form easy and simple to use and were positive in its application as a survey/audit tool. The potential 'Hawthorne effect' whereby subjects may change their behavior in response to the fact that they are being studied, could be viewed as a positive impact supportive of using local surveys or audits as change agents in practice.

Recommendations

The emergent findings support the recommendations that:

- more tools and resources be developed for midwives to work with women to encourage 'off the bed' positions during labour and birth.
- the findings are cascaded through the midwifery community to actively inform education, research and practice.
- the RCM *positions survey form*, with the labour and birth position diagrams be made accessible for use in other contexts
- other maternity units – both midwifery and consultant led units, be encouraged to undertake their own local audits and surveys
- this information is used to develop new practice material to address the issues raised
- the potential for new research triggered by these findings, in support of effective practices related to labour and birth positions, be explored

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