AIMS For a better birth...

Birthplace Study Conference

AIMS Journal, 2012, Vol 24 No 2

Holly Lyne gives a personal view of the recent Birthplace Study

Contrary to what you've probably heard in the mainstream press, the recent Birthplace Report clearly demonstrates that the safest place to give birth is at home or in a midwife led unit, and not in an obstetric unit. But the media love to twist a scientific fact in order to sell papers.

I was lucky enough to be at the launch event for this study at the Royal Society of Medicine on 25 November 2011, attended by many midwives, obstetricians, paediatricians, antenatal teachers and campaigners like myself. There was a lot of debate about the results of the study and much discussion about how increasing midwifery skills could improve the results still further. I want to be very clear from the onset that this study only looked at 'low risk' mothers. The study compared PLANNED places of birth for these women. Those who started off at home but transferred to hospital had their results recorded in the 'home birth' category. The study was very large, nearly 65,000 women in England were included, over a two year period.

I don't want this whole article to turn into statistical overload, so I'll try to spare you the in depth analysis of the research and focus on the bits that really matter: mothers and babies, especially women, as the focus is frequently on the outcomes for babies without regard to the safety of women, in the whole birth place debate. Even the study's own summary conclusion refuses to come out and tell it like it is: Mothers are safest at home or in a midwifery unit. But that's what the results say, crystal clear. However, when babies are equally safe wherever they are born, it really comes down to the safety of the mothers to tip the scales. But sadly, the headlines did not do this and only concluded, like many other studies that home and birth centres confer 'benefits' to mothers. Heaven forbid that we say that avoiding hospital is safer.

We're not just talking about a slight increase in risk either, we're talking big numbers. For example, for caesarean sections, only 2.7% of women who planned home births had one, compared to 3.6% in Free-standing Midwifery Units, 4.3% in Alongside Midwifery Units and 11% in Obstetric Units. Some of these caesarean sections will be for genuine medical reasons that only become apparent during labour, but all the women included were healthy, 'low risk' women. Clearly something is happening in hospitals that isn't happening at home or in midwifery units and by avoiding obstetric units, most women can avoid whatever it is that is happening in hospital.

It's not just caesareans that happen unnecessarily in hospital either; it's forceps and ventouse, acceleration of labour, epidural, episiotomy, third or fourth degree tears and blood transfusions. Women

who give birth in hospital are also less likely to breastfeed their babies: not breastfeeding carries long term health risks for both mother and baby.

So why am I describing these interventions as harmful? Because birth isn't about one day, it's about the start of motherhood, long term physical and mental health, future pregnancies and births. Women matter when giving birth. Our bodies and our mental and emotional health matter. One of the leading causes of maternal death in the UK is suicide. For women having interventions, recovery can be hard, infections are common, mobility can be affected, problems can occur with breastfeeding and bonding and many women can be left with both physical and emotional scars.

Why do women have so many more interventions in hospital then? Well, we don't actually know with any certainty. If true continuity of midwifery care could be provided in obstetric units, it would be interesting to know if the outcomes for mothers would be closer to those giving birth at home or in midwifery units. The process of moving from home to hospital itself affects labour. The cocktail of hormones that we need in order to have safe, relatively pain-free births (yes, really), need us to remain undisturbed if they are to flow properly. Once adrenaline begins to flow, which is perfectly natural when going into hospital, a place for sick and dying people, then the good hormones (oxytocin and endorphins) stop and birth suddenly becomes more dangerous. It's also likely that even low risk women going in to hospital become less mobile once in hospital, i.e. they sit or lie down on the bed, which increases the pain and slows down labour, and interventions that could have been avoided often follow.

OK, so let's talk about the headlines about the babies. Overall, no matter where these women planned to give birth, their babies were perfectly well. There was less than 0.5% chance of anything significantly bad happening to their child. In fact, so few adverse outcomes were expected, that the study grouped together several things into one overall 'primary outcome' category. This included stillbirth and neonatal death, infant encephalopathy (brain damage), meconium aspiration syndrome, and various broken and fractured bones. Only 250 babies had one of these adverse outcomes, and only 32 babies died. Even for the headline worst group, i.e. women planning to have their first babies at home, over 99% of their babies had none of these problems. What the press appeared to have done was to take the numbers out of context. The study showed that we are 95% certain that the difference in risk for babies born at home or in hospital is between 1.10 and 2.82, yet the press quoted this as babies being three times as likely to have one of the primary adverse outcomes. This is a dishonest representation of the odds. Some papers even went so far as to declare that babies were 'three times more likely to die or be brain damaged at home' which takes the misrepresentation of the data even further. As I described above, a range of adverse outcomes were included, not just death. In fact, deaths didn't even make up the majority of those outcomes, only about 13% of the adverse outcomes were death.

I don't want to brush this increased risk under the carpet, however. I think it's important that we ask two questions about these results: Why are first babies more likely to suffer complications when their planned place of birth is at home? And what can we do about it? It would be irresponsible to assume that we can't change this, just as it would be to think we can't reduce the 40% transfer rate! Indeed, the

majority of transfers were for 'slow progress' and 'pain relief'.

Undoubtedly, there are caesarean sections that improve outcomes for mothers and babies, but what the Birthplace Report shows is that a significant proportion of caesarean sections (and other interventions) could be avoided if women stayed out of obstetric units to have their babies. The implied conclusion here is that there are significant numbers of unnecessary interventions which are not benefiting mothers or babies. I'm just going to finish by adding that as well as out of hospital births being very safe, they are also by far, the most cost effective. This Report included a cost effectiveness analysis which concluded that home and free standing midwifery units were the cheapest and safest places to birth. There are people who try to argue that providing these options is a drain on NHS resources, but now there is concrete evidence to the contrary. So how about a shift in perception? Women flock in droves (92%) to these expensive and risky obstetric units, believing that birth is dangerous and that the doctors and facilities will protect them, when in fact, birth is generally very safe, even more so if you stay away from hospital and it is cheaper for the NHS if women stay away from hospital where possible. The very necessary resources available in obstetric units could then be kept for those births that really need them, midwives would be less stretched, all women would receive better care and the NHS would save a fortune. Home birth is safe birth. Birth Centre birth is safe birth. Spread the word.

Birthplace Study Statistics

This is the latest and one of the largest studies of place of birth which included 64,538 women who gave birth to their first or subsequent babies between April 2008 and April 2010. The study was designed to compare perinatal (around the time of birth) and maternal outcomes for women with 'low risk' pregnancies. These women were classified as 'low risk' at the start of their labours, after being assessed by a midwife in their intended place of birth (home, Freestanding Midwifery Unit (FMU), Alongside Midwifery Unit (AMU) or Obstetric Unit). This research shows that healthy women and babies are safer when they give birth outside an obstetric unit, in alongside or free-standing midwifery units, or at home. Women have fewer caesarean sections, ventouse deliveries, episiotomies, less blood loss, and are more likely to breastfeed. These outcomes will have benefits that this study was unable consider, such as safer future births.

The study showed no difference for second or subsequent babies by place of birth, nor for first time mothers between midwifery units and consultant units. However, a small statistically significant increased risk of an adverse outcome was shown for first babies born at home. However, in order to gain funding for the study the researchers were required to identify an outcome that had a good chance of showing a statistically significant difference between the groups.

On their own, baby deaths would have been too few to do this. So the researcher team combined: stillbirth after the start of care in labour, early neonatal death, neonatal encephalopathy, meconium aspiration syndrome, brachial plexus injury, fractured humerus, and fractured clavicle. So, what can be said is that women are safer having their babies at home or in midwifery units, but there is no evidence about whether there is an increased risk of stillbirth or neonatal death for the baby because the

incidence of this is so small. In this study, there were 250 adverse outcomes for babies altogether, but of these, only 32 died. We would need a study which includes hundreds of thousands of women in order to detect differences in babies dying in different settings. The researchers concluded that birth for healthy women and babies is very safe in all settings. However, for mothers, birthing in out of hospital settings is safer.

The normal birth rate was:

- 88% for women who plan to birth at home
- 83% for women who plan to birth in FMU
- 76% for women who plan to birth in AMU
- 58% for women who plan to birth in obstetric units

The caesarean section rate was:

- 2.7% for women who plan to birth at home
- 3.6% for women who plan to birth in FMU
- 4.3% for women who plan to birth in AMU
- 11.0% for women who plan to birth in obstetric units

The Study also published the average costs of birth in the settings available in the UK. It shows that a planned home birth is cheaper than any other option.

On average, costs per birth were highest for planned obstetric unit births and lowest for planned home births. Average costs were as follows:

- £1631 for a planned birth in an obstetric unit
- £1461 for a planned birth in an AMU
- £1435 for a planned birth in a FMU
- £1067 for a planned home birth

Reference: Birthplace in England Collaborative Group (2011) Perinatal and maternal outcomes by planned place of birth for healthy women with low risk pregnancies: the Birthplace in England national prospective cohort study. British Medical Journal, 343:d7400 doi: 10.1136/bmj.d7400. A summary and further information is available at www.npeu.ox.ac.uk/birthplace.