
The Rise and Rise of the Obstetric Bed

Margaret Jowitt

When I had my first baby in hospital in 1985 the labour room contained a low bed that I was able to sit on, bolt upright, with my feet touching the floor (my baby was OP). For the birth itself, I was moved to a delivery room which contained, among other things, a birth chair which was derided by a senior midwife — “Oh, *Andover* use *that!*” (The midwife led unit in Andover survived until last year).

As far as I remember, Winchester’s birth chair was in moulded beige plastic with electronic height and tilt control. Its very existence showed that the benefits of an upright position for birth were recognised, although the derogatory words of the senior midwife show how difficult it was to change practice in obstetric units.

Today, in many obstetric units the labour room is also the delivery room and the obstetric bed takes centre stage – or indeed is absent altogether if the woman has been wheeled away to theatre. How sad are those images from the TV documentary, *One Born Every Minute*, where the partner is left alone in an empty labour room.

In my local hospital, a small obstetric unit, the bed seems to be the only permanent fixture intended for the woman herself; beanbags, birth balls and the birth stool have to be brought in from a store room. The bedside chair is clearly meant for the woman’s partner.

Last spring *One Born Every Minute* inspired my latest quest to provide women with some way to find comfortable positions in labour in hospital (see *Midwifery Matters*, 128, p 16). I remember one particular video clip, a woman was labouring beautifully, leaning against her partner; then the midwife asked her to pop up onto the bed for an examination. She never got off again and in the next clip she was asking for an epidural. This year’s series looks to be no different with women tethered to the bed with wires to ECG machines (birth balls are bounced along corridors by partners and midwives, but there are not many clips of them being used). One woman expressed a desire to stand.

Earlier in her labour she had leant against the window sill to good effect, but she was reminded by her partner that she couldn’t stand; she ended up with an epidural too. On the other hand, the woman labouring in the pool laboured beautifully – and silently. Is much of the benefit of labouring in water the ability to move at will to find comfortable positions?

The bed is no place for labour but often that is all there is in hospital.

In the current *Home Birth Association of Ireland Newsletter* Anna Boch writes her birth story and scattered throughout are references to positions she found comfortable in labour:

..it was great having the buggy to push and moreover the handlebars to grip every 20-30 minutes!

That afternoon I started to do some ironing – definitely a sign that something was up, I NEVER iron, and I found that the ironing board was absolutely amazing to lean on and over, just the right height.

... not only the water providing buoyancy and warmth and letting me turn any way I needed to without effort, but also having the handles and bouncy inflated walls to brace myself against during intense contractions...

So I moved around by walking up and down the hall, putting one leg onto a stool and holding onto Alun ‘slow dancing’ to get my hips moving ...

I found I could almost encourage contractions by being in a certain position, for example if I moved to a deep squat it would bring on an intense one.

If you listen to women, they will tell you what they need.

In July I was asked to speak at a birth environment conference about designing obstetric beds. I did not hesitate to accept the invitation and chose to devote the session to showing how it evolved from the birthing stool. I went on to talk about how women need a piece of furniture in the birthing room that is designed by women for women instead of putting up with a high tech bed designed by men for men.

(It may well be designed for women to be placed upon, but it is designed to place her in a position that suits the needs of the obstetrician.) I opened my talk with a quote from the introduction to *Human Engineering Guide for Equipment Designers*; Woodson and Conover (1964) warn their readers to: "Remember that nothing is designed except for the use of or by Man." A pre-feminist quote maybe, but still true of the obstetric bed.

It quickly became apparent that many people at the conference shared my views about obstetric beds; Kathryn Gutteridge, consultant midwife of Sandwell and West Birmingham Hospitals NHS Trust spoke about the Serenity Birth Centre in Birmingham and how they have done away with the obstetric bed altogether, having instead a fold down bed housed in the wall.

How wonderful it would be we could ban the bed (or at least push it into a corner and forget about it unless the woman asks for it). Of course this is not a new idea, at the turn of the millennium Denis Walsh called for a revolution on delivery suites to restore a facilitatory birth environment and/or removal of all beds (Walsh, 2000).

Here are just a few reasons why:

- It turns the woman into a patient
- It infantilises women
- It can turn a midwife into a nurse
- It dominates the birthing room
- It makes women passive
- It is designed for the convenience of the caregiver
- It puts women on their back, an uncomfortable position for labour and birth
- It assumes that women need the same furniture for labour as they do for birth
- It fails to support the physiology of normal labour
- It restricts mobility, increasing pain
- It restricts blood supply to the uterus and to the fetus
- It makes labour longer than it need be

How did women end up on the bed?

The assumption that birth take place in bed is not new; the Merriam-Webster online dictionary defines childbed as the condition of a woman in childbirth and gives the date of first usage as the 13th century. However, I would suggest that the predominantly male writers of history assumed that an event taking place in a bedroom necessarily involved the bed. On the other hand, perhaps they were not quite so naïve; illustrations depicting birth stools, with the bed in the background, are common, suggesting that the bed was used after the baby was born. In the illustration below the woman is attended by three women, the men in the background are casting the horoscope – birth itself is still women's domain. Women labouring at home would have carried on with their domestic activities for as long as possible and had various pieces of furniture on which to lean when a contraction came. They would call the midwife and move to the bedroom only when the birth became imminent. The midwife would often bring a birth stool for the birth itself.

Move to hospital

The use of the bed for labour is likely to have become established following the move of birth from home to

hospital which took place largely to provide a captive pool of women to train doctors in obstetrics. In the USA this move took place early in the twentieth century; delivering babies was a useful way of signing up all of the family on to the doctor's list. In Europe, the first women to go to hospital for birth were poor, they laboured together on wards and had to accept the lack of privacy. Hospital patients were more easily accommodated on beds and there would have been no chairs, unless possibly one in the middle of the ward for the use of the sister in charge. Many women would be moved to theatre for the birth and it is almost unthinkable that a woman would have been allowed to choose her position for birth; the professor of obstetrics needed to see what he was doing; the woman's body had to be on display for medical students in the theatre. Birth itself became a dramatic show produced by the obstetrician. Doctors did not concern themselves with the tedious hours of labour, but were called in for the birth itself.

With the exodus to hospital, having nothing else to distract them, women become focused on the labour itself. (Is the clock as insidious a device as the obstetric bed? There is nothing like a few chores to while away the time, but confined to a bed there is nothing to do but watch the clock and wait for the next contraction.) Today, women are often sent home again when they come into hospital in early labour, there is an understanding that women cope with early labour better at home. (Unfortunately the timing of transfer to hospital then becomes a source of stress for the parents-to-be.)

Space for women in hospital is measured in terms of the number of beds and, although the dangers of going to bed have been recognised for 65 years (Asher, 1947), no one has thought to change the terminology to count spaces in hospital for women who are not ill but having a baby. Obstetricians may be learning not to call them 'patients' but



many women are still counted into and out of delivery beds. And what is the effect on staff of seeing women as patients? Asher writes, "Too often a sister puts all her patients back to bed as a housewife puts all her plates back in the plate-rack – to make a generally tidy appearance." He is talking about nursing sisters caring for ill, hospital patients 65 years ago, but is there still a temptation for midwives to tidy women away onto beds? (I do remember a discussion at an ARM national meeting on 'tidying' the white board at the end of a shift, is tidying an occupational hazard in midwifery?) Is this why beanbags and birth balls are tidied away into store rooms?

The bed infantilises women; they are put to bed like naughty children, their supine position puts them at a psychological disadvantage of inferiority; it makes them feel like a patient. Being on the bed leads to an expectation that someone will do something to them and compliance is easier to achieve. Today, I cannot imagine anyone telling me I am a 'good girl' although the few times it has been said to me in the past I remember feeling angry and patronised. I lost count of how many times I heard the phrase, "Good girl," in *One Born Every Minute*, though other midwives addressed women by their names.

Now it is the midwife, not the obstetrician who is standing over the woman or at the foot of the bed peering at her nether regions. Confining women to the bed reinforces behaviour that is not useful for the labourer.

Transforming birth

A change in the furniture of the birthing room led to a

change of the culture of childbirth. Treating women on beds in hospital led to the danger that midwives would come to see themselves as obstetric nurses, following doctors' orders.

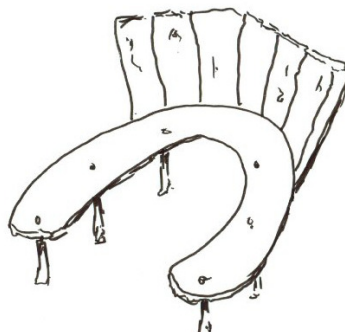
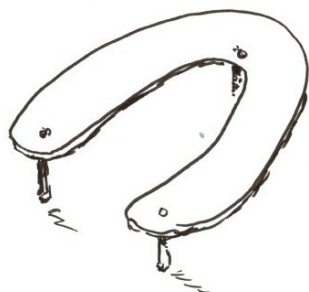
A low stool designed to support women giving birth was transformed into into an elaborate contraption designed to suit the needs of their caregivers throughout labour. Women were also transformed – they were turned into passive patients, stranded on their backs, having things done to them instead of actively working with their bodies to give birth to their babies.

The series of sketches below and overleaf shows how the birth stool evolved into the obstetric bed which ended up in the labour room. Amanda Banks (1999) traces the transformation in her book *Birth Chairs, Midwives and Medicine*. A simple stool designed to help women find a good position for birth changed into something which put them into the worst possible position for both labour and birth. The needs of the obstetrician took precedence over the needs of the labourer herself. (The feminist in me can say that this is because labour, like much of women's work, is unpaid and therefore undervalued).

In the introduction to her book, Amanda Banks quotes Jules Prown who says:

"objects made or modified by man reflect, consciously or unconsciously, directly or indirectly, the beliefs and attitudes of the individuals who made, commissioned, purchased, or used them and, by extension, the beliefs of the larger society to which they belonged."

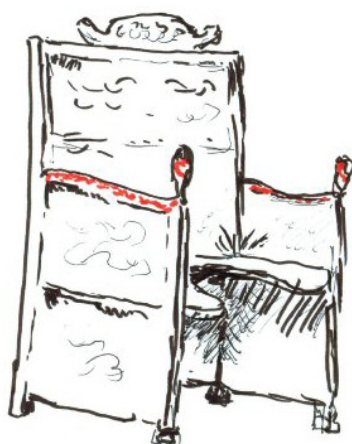
What do the objects in birthing rooms today have to



circa 1500 ?6" high



circa 1600 seat 13" high

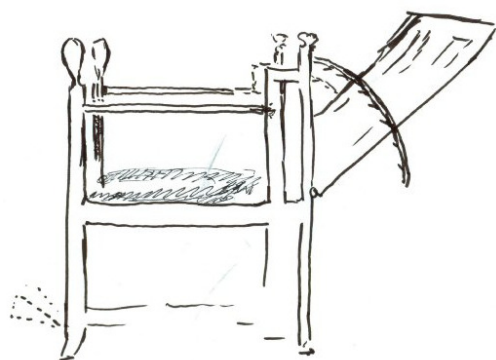


circa 1650 seat 16" high, folding

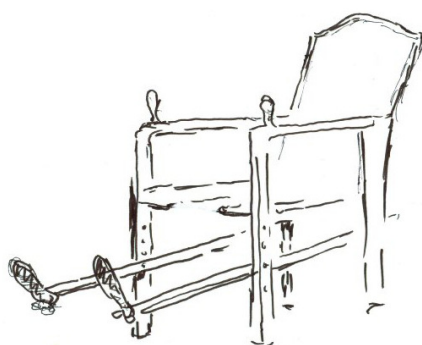


circa 1750 seat 17" high
foot rests added

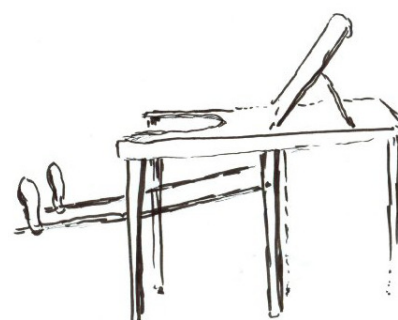
Fig 2:
From stool to
chair



circa 1790, seat 19" high
lowering back

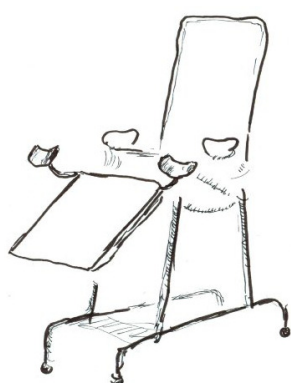


circa 1800, seat 19.5" high. Stretcher for
raised legs



circa 1820, obstetric table
no longer a chair

Fig 3: From chair to table



1925 gynae chair



Fig 4: from gynae chair to theatre and back to to delivery room

say about our society's attitude to birth? By far the most expensive pieces of equipment for birth are the CTG machine (£5,000) and the obstetric bed (£3,000). Midwifery alternatives are the Pinard stethoscope (£8), the birth ball (Argos sale £8.99, January 2012) and the bean bag (£20). What does this say about who holds the budget? More midwifery equipment is available in birth centres which may have a Bradbury birthing couch (£600, likely to have been purchased from fundraising activities or donated – Emily Thornberry, the MP who led the All Party Parliamentary Group on Maternity Services, donated one to the Whittington Hospital for use in their obstetric unit). Some birth rooms contain a pool but access is greatly restricted.

Moreover, however well the obstetric bed suits the needs of birth attendants, it is not what women need for labour.

Women's needs in labour

For a long time women's needs for labour were largely ignored by those who designed obstetric units. Some thought was given to the visual environment, there were attempts to brighten up labour rooms with coloured walls, women no longer had to wear hospital gowns for labour, but as infection control and health and safety issues have come to the fore, the environment has become more and more stark. Curtains are banned in some units, facilities such as Entonox are often piped in to a fixed place at the bed head. Women have less freedom of movement than they have in

birth centres. Recently however, there has been a significant shift towards more woman-centred care, including the use of pools, birth balls, mobility and off-the-bed birthing. The Febromed equipment looks inviting and ropes to pull on are particularly useful, but how widespread is their use outside midwifery led units where midwives hold the budget? Some really large obstetric units now have birthing balls available in all rooms, with folding beds, and active birth is encouraged even if it doesn't seem to be much in evidence in *One Born Every Minute*.

Moving in labour

How often do we hear that women need to 'mobilise'? This weasel word, used in its passive voice, emanates from the world of warfare – troops are mobilised for battle. Women are not passively mobilised, they actively move (although they can be immobilised very easily on the obstetric bed). They may need to 'ambulate' – but what's wrong with plain English – 'walk'? (Even 'ambulate' has a passive feel to it, after all, babies are taken for a 'walk' in a perambulator; passive patients are transported by ambulance.) Women in labour should move if they feel like it, rest if they don't, in whatever position they find comfortable. Moreover, not all movement is 'ambulation'. Women need to be able to shift and squirm around and ease their position to find one which makes contractions easier to cope with.

I would argue that on the whole women don't so much

need to move as to be upright. It's all very well to talk about pacing corridors in early labour, but in the later stages women may need to be upright but more or less immobile. They may need to make small scale movements not whole body shifts. Such small scale movements may not be possible or feel safe on the bed.

Of course large scale movements are also useful. I took a Lego staircase with me to the birth environment conference and some of the midwives laughed and said they could do with some of those! Climbing stairs shifts the hips around and may be enough to wriggle a baby into a more optimal position to navigate the birth canal.

The bed can be manipulated to some extent to provide support for an upright position, but I would argue that it is still too high off the ground to feel safe. (I felt exposed and vulnerable during second stage in the middle of the marital bed at home, I had spent first stage kneeling on the floor, forearms on the bed, head on arms.)

The language I have been using in this article relating to movement is not clinical language. Just how do you put into words the way labouring women move? So far I have used shifting, wriggling, squirming, easing. It's difficult to describe but on the other hand I have vivid bodily memories of what I needed for labour and birth. Moreover, I doubt whether a male designer would realise that, however suitable a bed may be for doctors to 'deliver' babies on, women are at a disadvantage pushing babies out uphill and, what is more, they need something totally different for labour – unless they feel like lying down or taking a nap.

The Birthrite holistic midwifery website in Australia has more to say on the obstetric bed:

Mainstream current childbirth practice revolves around the obstetric bed. It is the dominant physical feature of the vast majority of birthing rooms, and its presence dictates the whole conduct of the birth.

With few practical alternatives in sight, the woman has little choice but to get up onto the bed. Since she can barely get on and off by herself, any attempts at nurturing self-reliance in the soon-to-be mother are undermined right from the beginning. The close resemblance to other hospital beds does nothing to inspire confidence that the birth will proceed without misadventure.

While the obstetric bed might be useful for some specific obstetric scenarios, these are the exception rather than the rule. To use it routinely as the default environment for childbirth is to place a huge obstacle in the path of practising truly holistic midwifery.

The authors conclude by saying that hospitals operate on the assumption that Childbirth equals Surgery:

This tacit acceptance dictates almost everything about our treatment of women in childbirth. Instinct-based, natural positions are viewed suspiciously and pejoratively dubbed "alternatives".

Is there an alternative?

Obstetrics may well be surgery, and we know that 92% of women in England 'deliver' in obstetric units, but midwives still help out 49% of babies, and 63% of babies are born by spontaneous delivery (HES, 2011) (what used to be known as 'maternal effort'). There is no justification for labelling

instinct-based, natural positions as 'alternative'. Indeed, if alternative furniture were available, perhaps more women would be able to give birth without obstetric intervention. The Cochrane review of maternal position in the first stage of labour shows that upright positions should be encouraged (Lawrence *et al*, 2009). In the summary we find:

"the first stage of labour may be approximately an hour shorter for women who are upright or walk around during the first stage of labour. Women randomised to upright positions were less likely to have epidural analgesia."

An upright position may well prevent surgical intervention for failure to progress in some labours.

The Cochrane review of position in second stage (Gupta *et al*, 2000) says:

"Women should be encouraged to give birth in comfortable positions, which are usually upright. When women gave birth on their backs it was more painful for the mother and caused more problems with the baby's heartbeat"

An upright position for second stage could avoid some forceps and Ventouse deliveries.

Mainstream midwifery care needs to embrace 'alternative' positions; midwives do not need to nurse women on obstetric beds. There is no reason why women should have to make do with the obstetric bed when there are woman-friendly, labour-friendly alternatives.

At the birth environment conference I asked midwives to list furniture in the labour room. They came up with:

- Beds: 'birthing' bed, obstetric bed, electronic delivery bed
- Fitted units, locker, Gratnell trolley
- Birthing ball, bean bags, floor mats, early labour sling
- Plastic chair, stool, reclining chair
- Bradbury couch
- Mattresses can be moved in
- Birthing pool

Nobody mentioned the toilet, but women do make use of this piece of equipment for labour. It's probably about the same height as the bed I used in labour in 1985 with my OP baby. (Thinking about it, it makes me rather angry, nearly as angry as I felt in 1975 when I saw a mother breastfeeding her baby sitting on the pedestal in a public lavatory cubicle in Brighton. Why should women have to use a toilet to find a comfortable position for labour? On the other hand, it could just be the privacy that they yearn for and women do use the toilet at home as well, so perhaps I'm making too much of it?)

I asked the midwives what would be useful for women:

- Off bed options, freedom of movement
 - Space to mobilise (sic), different heights to lean on
 - Options to support position change
 - Light, adaptable, practical, easy to use, comfortable
 - Allowing the ability to relax
 - Suitable for high risk women
 - Cleaning ease, moveably, attractive, doesn't date quickly
 - Comfortable, promoting upright positions and mobility
 - Safety – needs to feel solid and strong (i.e. won't collapse under her)
 - Balls, gym mats, slings, stools, pools
 - Flexibility, variety, multipurpose
 - Ease of access, manoeuvrable
 - Moved or stored easily
 - Inviting
-

- Big enough to accommodate women with high BMI

Fetal monitoring

One of the midwives mentioned the need for telemetric fetal monitoring to allow women to labour off the bed. Wireless electronic monitoring has been available since the 1970s (Flynn *et al*, 1978) but is still not widely used. There should no longer be a need to tether women to the bed when EFM is prescribed. Why compromise the fetus by restricting its blood supply simply in order to measure how much you are compromising it by confining its mother to a bed?

Epidurals

Similarly, low dose epidurals are available and there is no reason why women should not adopt optimal positions for labour. Much has been talked about optimal fetal positioning in pregnancy, but in labour we should think about optimal maternal positioning. With an epidural, there is even more reason for mothers to adopt positions which enhance the way the fetus moves down through his mother's body during labour, this isn't even a low tech intervention, it is a no tech option.

High risk women

There seems to be no reason to deny high risk women the chance to use an upright positions in labour. A fetus under stress will benefit from the increased blood supply from a maternal vena cava that is not compromised by adverse maternal position. A woman who is better able to cope with pain will be less likely to resort to pharmacological pain relief which may compromise the fetus. Age, previous section, high parity, why should any of these factors prevent women finding a comfortable position?

Designing a chair for upright labour and birth

It's all very well encouraging women to be upright, but many of them labour in a hospital birth room containing a high tech obstetric bed and they assume that it is there for their use. The bedside chair is for their partner and there is usually little else in the room that looks as though it is meant for them. Midwives might or might not rearrange the room, bring in mats and birth balls, encourage women to move about. Their partner might or might not be willing to act as a leaning post for long stretches of time. There needs to be a piece of furniture in the birth room that looks as though it is intended for the women and helps her find a comfortable position to cope with labour. I set about designing something.

The design process

There are some things that you don't forget. I was able to access bodily memories of positions in labour – what worked and what didn't work. I vividly remember just how much I needed a birth stool for pushing my second baby out. I had to make use of my husband and GP who between them managed to support me in a squatting position. Fifteen years on, I can almost feel the contractions I had kneeling on the floor beside our bed, they were easy to cope with, unlike just two on the bed in my first labour which were excruciating.

I experimented with different heights and positions, using the floor, the staircase, bookshelves, a low stool, yes,

even the toilet. I spent hours on Google images looking at chairs, stools, sofas, prie dieus, kneeling chairs – whatever terms came into my head. I discovered a wonderful book, *Rethinking Sitting*, which was packed with ideas about how best to support the body while sitting. I made models out of Lego, Meccano, a coat hanger and balsa wood. I took a variety of models along to the birth environment conference to gauge peoples' reactions and test the water.

One of the people attending was a design student. He said, "There is no ideal solution to any problem, just choose one and go with it." Which is what I did.

The chair has been designed for upright kneeling, all fours kneeling, standing leaning and lounging. The next version will incorporate a birthing stool. If anyone can see how to improve it please get in touch with me at margaret.jowitt@talktalk.net.



I took the chair along to the ARM retreat and we had great fun experimenting with it. I hope the next instalment of this story will be telling you how mothers chose to use it in my local hospital, at the moment it is wending its way through infection control.

Please visit my website: birthupright.co.uk.

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