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Post-term pregnancy: the problem of the boundaries

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The current construct that labels a pregnancy 'post-term' at a certain point impacts upon the experiences of large numbers of childbearing women (Yawn *et al* 2001). Whether or not they ultimately experience medical induction of labour, almost all modern women acquire a due date early in pregnancy and understand that this date signifies an optimum time frame during which human pregnancy should end. They learn that the relationship between the current temporal point and their projected due date is a key focus for caregivers, and a marker for the timing of monitoring, interventions and screening tests.

Constructs such as this are pervasive, and have been linked with the way in which the mechanistic, risk-focused, technocratic worldview has become authoritative within modern culture, which views a woman's body as being akin to a defective machine requiring monitoring and control (Jordan 1983, Davis-Floyd 1992, Murphy-Lawless 1998). This worldview, however, is not the only way of seeing birth. There also exist more holistic perspectives which are not based on these mechanistic notions, but instead focus on being 'with women'; supporting their natural physiology and facilitating them in making their own decisions within a relationship that encompasses what Katz Rothman (1982:176) termed 'mutual participation' and promoting the goals of relationship, choice and personal dignity (MANA 1992, Guilliland & Pairman 1995).

While this approach is termed the midwifery model in some areas, holism is not exclusively the province of



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midwives and it is important not to assume that individual members of a particular professional group share the values of a paradigm which carries a similar name. Practitioners from other groups may strive to work holistically, while not all midwives will view this as an important dimension of practice. Some midwives, however, hold strong beliefs around the importance of taking a holistic approach, and a small but significant number have sought to work outside of institutional protocols, sometimes outside of their country's maternity system, in order to do this. Previous experience (Wickham 2001) had led me to surmise that these midwives were taking a somewhat different approach to the application of obstetric norms and rules and to the development of knowledge and ways of knowing, and I set out to further explore the area of post-term pregnancy which impacts upon the experience of many women. This article, then, reports some of the

findings of a research study that explored the views and knowledge of 12 holistic midwives in relation to the obstetric construct of post-term pregnancy.

Methods

The methods used in this study drew upon the work of Charmaz (2000, 2006) and involved reflexive, interpretive analysis using the key tenets of grounded theory from a constructivist perspective. Such an approach acknowledges that participants construct their own knowledge and that the researchers' interpretation of the issue under study is also a construction. It also allows for the seeking of ways of knowing and forms of 'knowledges' that are not necessarily considered authoritative, while prioritising openness to the emergent data and themes rather than forcing these into existing frameworks. To better encompass this view, the word 'knowledges' [sic] has been used in this paper to reflect a multiplistic and more relative view of the world (Doyle McCarthy 2005), which also addresses the way in which shifts in thinking in many disciplines have embraced the concept of uncertainty.

For the purpose of this study, a holistic midwife was defined as a currently practising midwife who is seen by her peers and clients as taking a holistic and woman-centred approach, who has worked with women experiencing natural, physiological birth outside of institutional protocols and who holds beliefs that are broadly congruent with the definitions offered by Davis-Floyd (1992) and MANA (1992). This

definition was then used in order to seek information-rich participants, and I initially drew upon existing networks in order to begin a process of asking midwives to recommend colleagues who they felt fitted these criteria.

Because the intended participants were geographically dispersed and most were not working in systems of maternity care, it proved impossible to seek ethical committee approval. Studies involving midwives are generally considered by local research ethics committees (LRECs), yet this study was not eligible for consideration because the midwives were self-employed. Concurrently, no university ethics committee was available to consider this research at the time the study began, perhaps because research involving midwives is usually considered by LRECs. The study was endorsed as a whole by the Faculty Research Degrees Committee and all possible steps were taken to ensure ethical treatment of participants, including seeking peer and supervisor approval and ensuring that all potential participants were fully aware of this situation. As an aside, several of the midwives saw an interesting parallel between this issue and the way in which they are practising on the margins, sometimes without indemnity insurance and/or support from professional bodies.

A combination of initial and (later) theoretical sampling identified 12 midwives working in five different countries who were interested in participating in this study. In order to protect the midwives who are working in countries where their numbers are small, not all of these countries can be named, but they include the United Kingdom, the United States and New Zealand. Each of these midwives was interviewed at least once in a setting of their choice. A semi-structured approach was used and two questions were used as a starting point:

Could you tell me about your views on the concepts of term and post-term?

I'm really interested in finding out about your approach to giving a due date?

Interviews were tape-recorded and notes were made during and after the interviews. Following transcription, data were hand coded and analysis began with multiple readings and memo-making. Further sampling, data collection and analysis continued in a simultaneous fashion and, later, map-making and qualitative software were used to bring another dimension to sorting and analysing the data. The core category that emerged from the data had a number of dimensions and, while there is a tension between the concept of saturation (Glaser 1992) and the tenets of an approach where data analysis is also viewed as constructed (Dey 1999, Charmaz 2000, 2006), new subcategories stopped appearing in the data after ten of the interviews had been analysed. All of the midwives chose pseudonyms and, for the purposes of publication, some of the language that was used by the midwives – particularly when they became passionate about expressing their concerns for women's rights – has been edited with the use of asterisks.

Midwives, journeys and obstetric spacetime

Although the core elements of the midwives' approach to practice will be more fully described elsewhere (Wickham 2010), a number of features of this are important in providing context for their viewpoint. One of the most fundamental aspects of their worldview is the way that they see themselves as accompanying – or journeying alongside – childbearing women. The midwives talk about their primary role as accompanying women on their journey rather than attempting to direct the journey themselves. They prioritise the creation and sustenance of a relationship and seek to be open-minded, inclusive and discerning in relation to knowledge. They also have a deep awareness of context in many dimensions, which includes an understanding of the political location of different birthing ideologies and knowledges, and this can perhaps be seen most clearly in the way in which they tailor care to the needs of each

woman rather than applying population-based norms to everyone.

The midwives' words consistently convey an abundance of passion and this may partly explain why they see midwifery not as a job but as a way of life in which they are actively and passionately engaged. Their engagement with midwifery and women has led them to challenge the problems they see stemming from the obstetric 'process management' approach. Arney (1986:75) described the situation around induction of labour as, 'a search for a technology of control and for the control of technology'. These midwives perceive the technocratic model to depict and respond to childbirth as a mechanistic, physical process which needs to be managed by means of assessing risk (monitoring) and imposing intervention when situations are considered to be outside of normal limits (manipulation). This approach has entailed the creation and imposition of spaces and boundaries that are crucial to the monitoring and manipulation of women's and babies' bodies, and the midwives' view of obstetrics' focus in this area is similar to Foucault's (1973) description of the normalising gaze, which is turned on the body by means of asking questions, monitoring matter and making decisions about what is normal and what is deviant.

The concept of 'obstetric spacetime' emerged early on during data analysis, partly in order to avoid relying on the heavily contested concept of normality, but also to combine the dimensions of these midwives' perceptions of the obstetric gaze into a single manifold that describes the way in which obstetric ideology:

- contains notions of what constitutes the appropriate temporal location of the matter contained in women's and babies' bodies
- forms boundaries between what obstetrics perceives to be normal or deviant progression of the process of childbirth
- leads to the making of recommendations about how this

matter should be managed via monitoring and manipulation.

These midwives are characterised by their engagement with, challenges to and (as will be reported elsewhere) stretching of these boundaries, which they perceive to be problematic.

The problem(s) of the boundaries

[If] you make a boundary, it's just going to cause you trouble... (Sally)

I hate rules. I hate them. (Bonnie)

The midwives in this study are aware that the constructs of term and post-term are deemed useful within the obstetric paradigm and go largely unchallenged within modern culture. They acknowledge that these constructs emerged as the result of the need for a shared understanding of the length of pregnancy and understand that the areas encompassed by obstetrics' boundary of normal limits – in this case, the temporal space within which gestation is deemed to be of normal length – are intended to enable the application of appropriate and safe standards in relation to monitoring and manipulation. Yet the midwives are also deeply concerned with thinking about what is contained within (and without) the concept of normal limits, and just as concerned with the fact that containment exists. They see this containment as problematic for a number of reasons, not least because they have become an ongoing and pervasive source of pressure and control on themselves, other birth attendants and women.

Society puts us under enormous pressure [in relation to the due date]. (Sally)

This pressure is seen as related to the power that the midwives perceive the boundaries of obstetric spacetime to carry; a power which is embedded in wider social beliefs and norms (Davis-Floyd 1992), as well as the legal, ethical and professional frameworks which govern their practice (Arney 1986, Davis-Floyd 1992, Murphy-Lawless 1998, Fahy 2007).

When you start applying dates, it's really hard to get beyond that. You're

totally indoctrinated, not just as a midwife, but your whole life when you've been brought up hearing about women having babies. You know the first question is how many weeks, how many months are you? When's the baby due? You know, everything focuses around quantitative stuff, like how many weeks? How many months? (Bonnie)

The majority of the midwives see these boundaries as the province of obstetrics and not something that they – or women – have ownership of. For the most part, the midwives tend to talk about 'their' boundaries rather than 'our' boundaries.

The problem is, it's the system, isn't it, that puts pressure, that makes the boundaries... (Bonnie)

They induce people at 41 weeks everywhere. That's the new thing, it seems. (Xena)

I don't think it's a term that we use a lot in our practice... I think like a multip that would be 42 weeks I don't get very concerned about and say, 'oh you're post term'. (Linda)

Several of the midwives equate their lack of ownership of the boundary of normal limits in this area with their challenging of the validity of the knowledges upon which it is based.

It feels like those terms don't belong to me. The terms 'term' and 'post term'. And I don't think they belong to women. And so, they're not words I would want to use actually. So part of me is rebelling against them because I just think, 'where did they come from?'. You know, we don't know actually when it's term and when it's not term to some extent. (SilverBirch)

The midwives' concerns about these obstetrically-constructed boundaries, however, are not merely theoretical or epistemological in nature. They see the boundaries as intensely problematic, and their language reflects their growing passion as they discuss this issue.

*I know, it's the whole cliché of sort of post-dates, post-mature, post-term... well, to me [laughs] that's b*****s.* (Kate)

The midwives were in agreement that they are unable to sanction the obstetric notion that a fixed temporal normal limit can be applied to the gestational length of all pregnancies. There were, however, several different perspectives from which this notion was challenged.

"Their boundaries don't fit with my worldview..."

Because I sought participants who held a holistic viewpoint, it is perhaps unsurprising that they find obstetric boundaries inconsistent with their ideology. The boundaries are seen by these midwives to contain women through their emphasis on standardisation and by comparing individual women to the population as a whole, and the challenges that they raise highlight key differences between the technocratic perspective and their own views and knowledge.

"Different cakes need different baking times..."

A number of the midwives explicitly stated that they find the obstetric construct (and definition) of the boundaries of term and post-term to be inconsistent with the fact that they view women and babies as individually special. They were very aware that this aspect of their worldview differed from obstetric ideology because the values underpinning the two models differed vastly from each other. However, this did not stop them from explaining how the notion implied by obstetrics' use of the population norm that women were not individual was, upon analysis, completely illogical.

We look different enough. So why would we all have pregnancies of identical length? I mean, people's hair grows at different rates, people's fingernails grow at different rates; these rates even vary within one woman. Why expect there would be some exact science? So I question the assumptions at the bottom of all this. (Amy)

There is no sense in which the midwives see that the female body can be viewed as a defective machine, as is

the case in the obstetric paradigm (Oakley 1980, 1984, 1993, Katz Rothman 1992, Davis-Floyd 1992, Murphy-Lawless 1998). Instead, the midwives seem to broadly agree with the notion of unique normality (Davis-Floyd & Davis 1997, Davis-Floyd 2001, Downe 2004) and see little use for relatively fixed, quantitative obstetric standards.

“You learn from the oven, not the cookbook...”

For these midwives, the obstetric boundary of normal limits is also inconsistent with their related beliefs that (a) individual women and babies possess embodied and personal knowledges and (b) these knowledges are just as useful as, and perhaps sometimes superior to, the knowledges valued within the obstetric paradigm.

Some people come to us for knowledge when we've seen a lot of babies but they've got a lot of knowledge in them... (Linda)

In the case of post-term pregnancy, the midwives seem to believe that, as a general rule, the point of readiness for birth is best determined by the woman and the baby.

When they're ready, they're ready. And some may come early; some may come late. They'll decide, or your body and the baby between you will decide when's the right time. (Bonnie)

My feeling is that most women will just do what they need to do and go into labour when they need to go. (Judy)

It just doesn't make sense to me that it's not normal... To be still pregnant after 42 weeks, you know, it just clearly cannot be that there's something wrong. You know, for a lot of them it's definitely right... I just remember as a student when midwives used to go on about how placentas start packing up... I remember when this midwife said to me, 'placentas start packing up after 36 weeks so by the time you're 42 it's well gone', and I just thought, 'our bodies are not designed to do that'. (Sally)

The midwives cannot sanction the obstetric ideological viewpoint that

childbirth is inherently dangerous, either for the mother or her baby, and several challenged the notion of placental insufficiency. They view the female body as inherently healthy and capable of growing, nurturing and feeding a healthy baby in the vast majority of cases. They understand that the obstetric boundary of post-term defines around ten per cent of women as defective in relation to their ability to go into labour, yet cannot reconcile this with their own viewpoint.

“I've done a lot of baking, and there really are no absolutes...”

The notion of an absolute boundary is also inconsistent with the midwives' experience of attending women over years of practice. They have developed knowledges as a result of observing the individual, 'concrete and capable body rather than a version of the body abstracted from the dead science of anatomy' (Murphy-Lawless 1998: 256).

Yeah, they [the concepts of term and post-term] don't really mean anything. I've seen lots of women that just seem to cook their babies for longer and that's very natural and normal for them. (Xena)

This is not, however, to suggest that the midwives see a need to simply raise the level of the boundary in order to include more women within the space of normalcy. Indeed, a number of them express concern that any absolute boundary is incompatible with their belief that care needs to be individualised because of the unpredictable and uncertain nature of childbirth.

The notion that it is any kind of absolute... I'm just really uncomfortable with. (Kate)

We've seen babies come at 36 weeks that do fine and 38 weeks that don't, and then babies that come at 43 weeks that are fine and babies at 41 weeks that didn't... It's not just about timing... you really have to take it on an individual basis. (Kim)

The midwives' discomfort with absolutes seems to be strongly linked with their view of women as unique

individuals and birth as a complex journey.

“The complex context of the oven is the key...”

Several of the midwives focused on the importance of looking at how all sorts of personal variables can affect individual variations in length of gestation.

In my view even those women [who reach post-term], are not necessarily past their dates, in my view it's just a pregnancy that might need to take a little longer. I actually do feel that the belly or the uterus is like an oven that has different settings, and some babies... it takes longer for them to be baked... (Anna Andhra)

We did recognise that there were some women who could even have a 43 week pregnancy... we see that her mother did this seven times and each of her sisters has done it two or three times – when she's Amish you have a family line there where you're not surprised by it. And you've seen a good outcome many times... you're aware that there's some kind of a family pattern and conclude that we're not like clocks or calendars, that we're not stamped out of a press, a mould. (Amy)

For these midwives, consideration of a woman's context may include looking at a number of factors and the woman's own feelings about the well-being of herself and her baby can be just as valid and useful as, for example, the findings of a cardiotocograph screening test.

“But I understand why cookbooks sell so well”

All of the challenges raised thus far – which tend to focus on the assertion that women are complex and special individuals who exist within a unique context and possess embodied and personal knowledge – could be said to result from the way in which these midwives hold ideological beliefs and knowledges that differ from those held within the obstetric paradigm and an internally consistent worldview from within which the boundary of post-term is seen as illogical.

It just seems mad. It does, actually. When you think about it, if you sort of imagine you didn't have all that history of being a midwife, it just seems mad. It seems totally off the wall that you would go, well we know it ends now so we're gonna do this. (SilverBirch)

However, the midwives understand that the boundaries are seen as logical from a technocratic viewpoint. Most of the participants have a clear sense of self and context, and understand that part of the reason they see the boundaries of obstetric spacetime as inappropriate is because their worldview differs from the technocratic worldview.

It's clearly rubbish, isn't it? In what context is that [notion of post-term] meaningful? And the context it's meaningful in, of course, is the context of medical induction. But in any other context, it's meaningless. (Kate)

As Nadine Edwards (2005:147) shows:

Birth may be responded to in different ways depending on the ideology through which it is viewed and the skills that have been developed and are thought to be appropriate within that ideology. For example, through the obstetric lens, high blood pressure during pregnancy may require hospitalisation, frequent monitoring and induction. Through a different lens it may require supportive watchfulness at home, as it can be exacerbated by the stress of hospitalisation, frequent monitoring and induction.

Through the holistic midwifery lens as explored in this study, the boundary separating term from post-term is viewed as deeply problematic because it doesn't tally with what these midwives believe, see or know. This is, however, only one part of the problem that the midwives have with the boundaries.

"Their boundaries aren't supported by their evidence..."

As well as challenging the boundaries from the perspective of their ideologically holistic standpoint, personal experience and context, some

of the midwives reinforce their challenging of the boundaries by critiquing both the evidence generated from within the obstetric paradigm and what some may see as the contrasting ideology underpinning the notion of evidence-based practice.

What research? It's a house of cards; it's not much of a reason to base the decision to actually take direct action on is it? (Bonnie)

Several of the midwives – particularly those who learned midwifery in the UK, where an understanding of research has been an integral part of midwifery curricula for nearly two decades – were very familiar with papers that have critiqued obstetric knowledge around induction of labour for post-term pregnancy (Menticoglou & Hall 2002). Some were cognisant that the Cochrane review of the evidence in this area notes that, 'the number needed to treat to prevent one perinatal death is not very helpful as it varies between 100 to infinity' (Gülmezoglu et al 2006:6) and others noted discrepancies in the obstetric literature and research.

I've read enough of the stuff that was referenced in the first ECPC [Chalmers et al 1989], which of course changed its position in the third edition (Enkin et al 2000) just because of some obstetric guidelines which weren't based on any more research than the first edition, anyway... Apart from maybe one study... which was really and fundamentally flawed. (Cerridwyn)

The midwives explained how, even using the tools of evidence-based practice and by looking at studies that have been carried out from within the obstetric paradigm, the boundaries of obstetric spacetime can be seen as illogical and inappropriate. Several of the midwives highlighted what they saw as the arbitrary nature of the cut-off points which form the boundary of normal limits around term.

OK, so Aristotle says pregnancy is ten lunar months la la la and then that gets carried down through generations and somehow it gets co-opted into the obstetric [deeper voice] this is how it is. And so all this research is based on this

initial assumption made by, oh, some three thousand year old Greek bloke, and then you look at what's actually happening ... well it's not based on anything sound at all. (Cerridwyn)

Another concern is the lack of research addressing the question of what happens beyond 42 weeks of gestation. The midwives perceive a boundary around what obstetrics considers valid knowledge, and this limits the research that can be ethically carried out within this area and impacts upon the ability of researchers to even propose research into what might happen after this time.

Well, there's no real, what I would call real research done into that area of pregnancy, you know. I mean, anyway, if you do do it [research into post-term pregnancy] now who's it done by? You know, it's done in some big unit and, you know, they [the women] are not allowed to go to really post-term pregnancy... It's not even ethical anymore... (SilverBirch)

The way that the hegemonic nature of the obstetric worldview impacts upon women and midwives is of grave concern to the midwives, who see our current knowledge as lacking, while also suggesting that these obstetric boundaries limit the potential for gathering better information.

We've no idea what term is, and for that woman she's not post-term, and for that woman she is her normal term, probably, you know, she might be post some perfect Mrs-normal-distribution average term, but she's not post her own term [mimes inverted commas with fingers]. This whole induction thing, whole length of pregnancy thing, this whole dating when it starts, dating when it ends, our knowledge base is tiny really. It's such a flawed model, but is it the best we have? I don't know. (Kate)

The midwives connect these theoretical challenges to the boundaries with their knowledges and beliefs about the importance of seeing women as individuals and with what they see as the third problem with the boundaries – the way in which these impact upon women's experiences.

"The implications of the boundaries are horrid for women..."

You know, we don't have a good start point and yet this sledgehammer comes in at 42 weeks and it's so flawed. And all we've got is this sledgehammer that comes in at 42 weeks. Well, it's laughable isn't it? (Kate)

Some of the midwives who discussed the inappropriateness of applying the population-focused notion of central tendency to individual women (whether or not they express it in those terms) find a degree of humour in what they see as flawed logic. When it comes to the application of this in practice, they see it in an entirely different way, with two of the midwives in particular moving swiftly between passionate theoretical explanations of the flaws inherent in obstetric ideology and epistemology and equally passionate discussions of the way they feel routine obstetric manipulation to be oppressive and potentially harmful to women.

I just see the morbidity that's attached to that [induction for post-term pregnancy] and it breaks my heart. All those primips with their syntocinon drip in one arm and their sore fannies from all the prodding and they're on the monitor 'cause there's that whole package that goes with it... it breaks my heart, and it's flawed, it's fundamentally flawed. (Kate)

*[The evidence]... it's a b****y joke. I mean, except of course it's not funny, because these are real women, these twenty per cent or whatever the percentage is who are being induced because they've reached this arbitrary point.* (Cerridwyn)

I really have sat in labour wards where it's been a joke, you know, where it's just like it says the 3rd and the 10th and the 17th [and the staff say] oh we'll take the 17th, or the 10th, with no heed to this incredible thing that's gonna happen to a woman if she gets induced or if we get this date wrong, that's what I'm saying. And nobody seems to care about that, so when these poor lovely women get themselves to term plus ten, nobody really cares whether it's right or wrong.

If that's what's filled in the little box or in the notes, they get induced, and to me, you know, in terms of the oppression, exploitation of women, I mean, I think it's one of the big central cock-ups of modern maternity care... (Kate)

As above, the problems and the pressure are not seen as located solely in institutions or systems of maternity care; the midwives see that the positioning of the due date as a key temporal reference point has a significant and ongoing impact upon pregnant women.

*I think, as a society, there's something about us, it's one of our rituals, isn't it? That [due] date. Because that whole s***e that women get put through that go past their date, that kind of 'you're failing to conform in some way'... [it's] a bit of a nuisance [different voice for emphasis] 'would you hurry up please, you're holding my life up'.* (Sally)

The midwives told numerous stories about the different ways in which women were pressured to agree to medical induction of labour, and the distress that this caused for some of them. Each of these stories not only confirms the potentially oppressive nature of obstetric spacetime, but also adds further weight to the suggestion that the modern cultural prioritising of speed, efficiency, (Hall 1983), order (Thomas 1992) and productivity (Murphy-Lawless 1998) is affecting women's experiences of birth on a deep level.

Discussion

As Foucault (1977) discussed, the exercise of power tends to beget resistance, and these findings illustrate some of the ideological and epistemological elements of these midwives' resistance. The data contained discussion of two key boundaries that the midwives perceive to be features of the process management approach to childbirth. The first of these – the boundary of normal limits – concerns the theoretical fences that are embedded in obstetrics' definition of the appropriate temporal location of

women's matter, which separate that which is perceived to be adequate-for-now from that which is perceived to be pathological or risky. The linked concepts of pre-term, term and post-term are illustrative of this boundary, which also dictates the types and timing of the monitoring and measurement of women's matter that is seen as essential within the technocratic model.

As the midwives show, this boundary can be challenged on a number of levels. Overall, the midwives claim that obstetric recommendations around the construct of post-term are unscientific, illogical and oppressive. The first of these claims has been discussed by a number of sociologists (Oakley 1993, Murphy-Lawless 1998), who show that the technocratic paradigm can be viewed as unscientific and internally inconsistent in relation to its claim to be a scientific discipline which bases decisions on quantitative, scientific research evidence rather than belief, tradition or pathophysiological knowledge (Friedland *et al* 1998). The arguments for both this position and the midwives' challenge that the recommendations are illogical have also been made in professional literature. Researchers have challenged received wisdom around the notion of the average length of pregnancy (Mittendorf *et al* 1990, 1993, Mittendorf & Williams 1991, van der Kooy 1994), criticised policies relating to induction of labour for being based on sparse and dubious evidence (Menticoglou & Hall 2002, Wickham 2006) and highlighted the rather tentative basis of related concepts such as placental insufficiency (Oakley 1984). The oppressive nature of this approach has been widely discussed (Oakley 1980, 1984, Kirkham 2004, Edwards & Murphy-Lawless 2006), yet none of these discussions have made a significant impact upon policies concerning post-term pregnancy.

The second key boundary to which the midwives refer – the boundary of valid knowledge – concerns the limitations that the obstetric paradigm places around the kinds of knowledge that are deemed valid in relation to (a) informing the determination of

normalcy and (b) setting the standards of monitoring and manipulation that relate to this. The midwives perceive that the obstetric paradigm views its own interpretation of the evidence and guidelines detailing population-level recommendations around the boundary of normal limits as more valid than a personal understanding of each woman that they attend. They understand that, from a technocratic viewpoint, obstetric constructs and technologies are deemed to be better determinants of whether a woman's labour should be induced than a woman's embodied, intuitive and other knowledges about the wellness of her baby and the timing of her birth, and are keen to find, create and use knowledges which take into account individual and contextual elements of women's lives and experiences.

Despite the highly contentious and contested nature of the notion of risk as used within the technocratic paradigm, it is consistently used to control women on many levels, not least of which is by dictating 'women's "responsible" decisions"' (Edwards & Murphy-Lawless 2006:37). Each of the midwives in this study works with women who are choosing to challenge the notions, boundaries and expectations that derive from this approach and, while this study did not focus directly on those women's thoughts and decisions, their choices are enormously important in the development of their midwives' knowledge and practice. These midwives' unpacking of the problems of the boundaries is one element of their reframing of contested technocratic constructs such as risk and, arguably, of their refusal to give such constructs the same kind of power that they hold within the obstetric paradigm. While their numbers may be

small and their activities considered marginal by some, their contribution may be significant. By challenging the boundaries of obstetric spacetime as a part of their mission to reclaim birth for women, these midwives are offering new perspectives on dated constructs and seeking to remove some of the key barriers to the development of women's agency.

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