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Flexible therapeutic landscapes of labour and the place of pain relief

Abstract

Flexibility in the design and enactment of spaces of healthcare is important in how providers respond to variations in patient expectations and experience. Health geographers have contributed to a wide body of literature concerning the therapeutic qualities of landscapes and the material, social and symbolic orderings of place and their uniqueness for individuals. In this paper, we draw upon these findings and a ‘culture of place’ approach to consider the complexities of maternity care and issues of pain relief. Given that pain is widely held to be a subjective experience and one that, in an era of patient decision making, increasingly demands discretionary approaches to its relief, we consider how medical professionals help to construct flexibility in healthcare and how this affects therapeutic landscapes. Drawing on analysis of four focus groups involving parent educators, midwives, health visitors, anaesthetists and obstetricians in the NE of England, we explore the material and discursive construction of *flexible therapeutic landscapes* and pain relief. Our findings suggest that flexibility is constrained and fashioned in association with health care professional’s sense of place as already constituted. We propose that providing maternity care professionals with an explicit awareness of how places are relationally constructed, may help in expanding the therapeutic qualities of particular settings, and support a (more) flexible approach.

Key words: Therapeutic landscapes; culture of place; maternity care; pain relief

Introduction

Maternity service providers should ensure that ... all maternity services have policies and procedures which reflect an individualised, flexible, woman-focused approach to care and support (Department of Health 2004, p. 8).

Increasingly, flexibility is valued as central to maternity healthcare provision in order that women may exert or express some measure of their subjective desires and needs over how labour, and the mitigation or experience of pain, takes place. In the UK, service provision for maternity comes in many forms and spaces; for example home-based care, midwife-led units and diverse spaces within hospitals; all of which may offer differing access to pharmacological options as well as access to so-called alternative (but increasingly mainstream) methods such as hydrotherapy (birthing pools)¹ and multi-sensory (snoezelen)² environments. Within and across these spaces, women choose different options for pain relief, and sometimes choose to experience pain. The availability of even the most effective forms of pharmacological pain relief, such as epidural anaesthesia, does not necessarily determine use (Burnstein, Buckland & Pickett 1999; Capogna et al. 1996). Given the diversity of means, technologies and places available to women for birth – including choice about various pain relief technologies, and options about where to give birth – the evidence-base is one, but not the only, form of knowledge contributing to what is constituted as a legitimate choice. Flexibility in provision creates a space for women's preferences to be heard, and for discretionary practices in the interactions between health care practitioners and women in labour.

Recent contributions to health geography have emphasised the potential for using place as a lens through which to critically examine provision in contemporary health care practices (Poland et al. 2005). Building on the insights of more than a decade of research in health geography on the importance of space and place to health care³ the 'culture of place' approach advocated by Poland et al. emphasises the contribution that critical accounts of place can bring to the perceived universalising tendencies inherent in discourses of evidence-based practice. In this view, the expectation that health care practitioners will adhere to the evidence of 'what works' to inform their practice, may run counter to their everyday experience in which many factors influence health care outcomes as they are experienced in place. Complicating factors might include the presence or absence of human and non-human resources, the particular skills that individuals may bring to place and the experiences or expectations of individuals in different health care settings (Poland et al. 2005). Rather than place as a blank slate upon which one may exercise an evidence-based practice, it is a 'complex cultural and symbolic phenomenon constructed through relationships between people and their

settings' (Andrews & Moon 2005, p. 55). Such an understanding of place owes much to Kearns (1993) formative contribution to health geography in bringing to the fore the mutability of health care experience in place. Kearns recognised the importance of context, both physical and socio-cultural, in setting the scene of health interventions. The development of such perspectives is representative of a more general shift in interest from 'medical' approaches to culturally and theoretically informed 'health' geographies, well traced in the work of Brown and Duncan (2002). Moreover, alongside this transition increased attention has been given to critical social science approaches and the insights of post-structural scholarship (Brown & Duncan 2002; Dean 1999; Poland et al. 2005).

Rather than retracing this shift in geographic interest here, we only point to these debates and consider their significance for taking place, and flexibility, into account in maternity care. Importantly, from these perspectives, places are physical locations as well as social productions of space, not fixed containers of activity, but fluid, overlapping arenas of interest that exist alongside on-going investments in their reformation. Of significance to maternity care provision, if the right mix of ingredients exists, places may affect 'therapeutic' qualities.

Space and place: therapeutic landscapes

One area of expanding research interest in health geography is in the concept of 'therapeutic landscapes' (Andrews 2004; Gesler 1992, 1996, 2005). Gesler (1992) introduced the term to medical geographers arguing that cultural geography had much to offer in understanding how 'landscapes of healing' are complex systems imbued with symbolic and cultural values. Importantly, his work emphasised that the positive meanings people attached to place help sustain well-being. Recent contributions to *Health and Place* have considered the evolving notion of therapeutic landscapes within health geography and widening usage to incorporate spaces that have hitherto been overlooked – particularly within medical environments.

...a significant aspect of hospital design is the extent to which it is responsive to variations in patient experiences of hospital settings and in social and cultural interpretations of what makes for an efficient and therapeutic health care setting (Gesler et al. 2004, p. 118).

Gesler (2004) pinpoints a number of issues of relevance to the growing literature on therapeutic landscapes and to issues of space and place. First, even physical spaces like those of a hospital, may be perceived, conceived and lived differently, such that what may be therapeutic in one context or for one individual may not be the same, or affect the same qualities, in a different context or for another individual. Second, neither the physical spaces nor material technologies within them are innocent, but rather are invested with complex social and cultural meanings; and whose origins and effects are all too often obscured by the seemingly immutable qualities of the physical (Latour 1991; Webster 2002). Third, technologies and spaces of healthcare make certain kinds of practices possible – one element of which is *flexibility* in the kinds of modification of those places that individuals may bring to bear in constructing their own sense of place. Flexibility may then be viewed in two ways, as the provision of options *in a place* and/or as the recognition of, or scope for, an individual's sense of place to *affect the modification of place*.

The 'culture of place' approach provides one strategy through which to consider all these concerns (Poland et al. 2005). Central to it is Agnew's (1993) dialectical relationship between three areas of spatial practice; locale, location and sense of place. Using pain relief to help define these terms: 'locale' refers to the setting – the birthing suite, hospital, midwifery-led clinic; 'location' to the wider social processes in which health care is enmeshed – the practices of governance and social setting; and sense of place is the 'transference of moral and aesthetic judgements to particular sites' (Gesler 1992, p. 164) or in other words, the meanings that people, women and health care practitioners, attach to place. Through these three overlapping and mutually constitutive categories we may consider how (flexible) places are constructed and construct maternity care for pain relief. In this paper we draw upon the narratives of health care professionals about pain relief to consider questions of flexibility across three locales in maternity care: educational classes where women receive information prior to labour; within the hospital; and in particular locations in the hospital engineered for labour in accordance with evidence-based design (EBD).

Conradson (2005) cautions that there is a danger that (some) place-focused research may reify places as intrinsically therapeutic, rather than viewing the relational effects through which places affect therapeutic qualities. Thus as Kearns and Moon (2002, p.

611) suggest, the notion of a landscape may be used as a metaphor to signify the coming together of social and material practices and processes in particular places. In this view, fixed boundaries are not what mark out a landscape as therapeutic, but the network of factors, both material and social, that bind a landscape together as therapeutic in particular contexts and for particular cases. Drawing on the culture of place approach, we examine the relational effects of social discourses informing practice and the material workings of flexible maternity care through narratives of maternity care professionals. Before turning to our examination of narratives of health care professionals, we first consider the location of pain and its relief, and the context of decision making, in more general terms.

Flexible pain relief

Pain in labour is invested with complex social, cultural and political meanings that intersect with women's physical experience of the event (Heinze & Sleight 2003; Mander 2000; Norr & et al. 1977). The constantly shifting network amongst the social and material factors contributing to what constitutes pain, and women's experience of pain in labour, is neither consistent within or across different contexts or cultures, or amongst different epistemic communities. Pain is highly contested in the birthing experience, particularly because, unlike other health concerns, labour may also be constituted as a positive and 'natural' experience, and pain as part-and-parcel of that experience (Gaskin 2003; Mander 2000; Oakley 1980).

The use of pain relief technologies that are pharmacological may also complicate the cultural context of pain (Callister et al. 2003; Escott et al. 2003). Various authors have noted a transition in modernity towards the routine treatment of childbirth as a medical event, and some have found reason to challenge such interventions. These authors suggest that patriarchal and 'medicalised' environments may contribute to a reduced sense of women's autonomy and an increased use of (unnecessary) interventions (Abel & Kearns 1991; Jowitt 2000; Mander 2000). Mander (2000, p. 137) for example, argues that medical professionals have colonised pain in labour in masculine terms as something 'to be defeated'. In contrast to such negative views of pain as something that should be overcome (through medical intervention), others regard childbirth as a positive experience involving the thrill of birth, a sense of self-control over the process,

and even promote certain benefits to the experience of pain (Gaskin 2003; Mander 2000; Oakley 1980). Thus the provision of pain relief technologies are also implicated in relations of power – that may be enabling and/or extend power and social control over subjects in certain ways. One discourse frequently raised in the provision of pain relief technologies for women in labour is that of choice and empowerment (Machin & Scamell 1998; Westfall & Benoit 2004) to which we now turn.

Labour and decision making about pain

All women are involved in planning their own care with information, advice and support from professionals, including choosing the place they would like to give birth ... (Department of Health 2004, p. 5)

Changing patterns of maternity care in the UK have seen an increasing emphasis in policy and practice on assisting women towards decision making about pain relief methods and places for labour. While this move may be seen as responding to the subjective nature of pain and the particular and complicating case of labour as *not quite* a medical event, the move is also consistent with the turn towards the promotion of increased patient involvement in decision making across multiple domains in health care (Bekker et al. 1999; Murtagh & Hepworth 2003; Petersen 1996; Petersen & Lupton 1996). Provided women are regarded as ‘low risk’, they are exposed to a wide range of expert discourses about where they may give birth and the benefits and risks for particular forms of pain relief. Such expert accounts provide one, particularly compelling, source of information upon which women may draw on to facilitate patient decision making.

However, whether such information giving ‘empowers’ women or meets the goals of good treatment outcomes as far as health care professionals are concerned remains somewhat controversial. For example, as raised as a concern by anaesthetists in our focus groups, women frequently miss opportunities to have the pain relief they choose in late stages of labour because at the point they recognise the desire to have it, there is no longer the time to administer it before the actual birth. As Roberts et al. (2004) suggest in general ‘it is increasingly evident that the provision of patient and provider information alone, even if evidence-based, is not sufficient to influence health outcomes and behaviour’. The nexus between information given by professionals and women’s

experience or expectations about pain relief provides the background context to our consideration of how such information giving about pain relief may effect therapeutic landscapes of care.

Summarising thus far, the provision of pain relief ties into much broader concerns than those of maternity care *per se*; as such a difficult balancing act may be seen to exist between the application of principles of evidence-based practice, the flexibility in provision that is implied by discourses of individual choice, and how pain relief and responses to it (including information) are provided for, and to, women in the context of the contested nature and subjective experience of pain. Taking the social and discursive context of pain and its relief into account, we turn to the empirical data from our focus group sessions to explore the material and discursive construction of therapeutic landscapes as *healing places* (Andrews 2004; Gesler 1996; Gesler & Kearns 2002; Williams 2002) to consider *how* (and if) spaces are constructed as therapeutic *and* flexible. Our aim is to explore how places may be constituted as flexible in relation to pain relief, and how health care practitioners navigate between the desires of women, the evidence of what works, and what flexibilities exist in maternity care. Using the metaphor of therapeutic landscapes to describe the network of factors through which place affects a sense of well-being or health, we place at the centre of our analysis the material and discursive qualities of ‘pain relief’ as they are ‘contained’ in and through place via an analysis of the focus group discussion of healthcare practitioners.

Research design

The findings reported here form part of a broader research project concerned with women’s decision making regarding pain relief in labour in the School of Population and Health Sciences at the University of Newcastle upon Tyne. The objectives of that project were to ascertain the views and expectations of women and professionals regarding their information needs, and to support decision making on pain relief in labour. As part of the project, four focus groups (one with obstetricians and obstetric anaesthetists; three with community and hospital based midwives) were held in early 2005 with professionals involved in education, treatment or care practices associated with pain relief for pregnant women. Focus group discussions centred on the theme of women’s decision making about pain relief in labour. While a topic guide was used

direction was minimal enough to enable participants to steer conversations towards topics of their particular interest in relation to pain relief. All sessions were audio-recorded and transcribed, and the accuracy of transcriptions checked against audio recordings. The key themes for this paper were drawn from the literature and a discourse analysis of transcripts that included a data session in which excerpts of the transcripts were analysed collectively by DB-W, MM and JL. For this paper our examples draw only on professional views, and as such are not representative of the views of women in labour.

Locating place in pain relief education

Women's decision making about pain relief in labour occurs across a variety of different social settings, amongst which parent education prior to labour is one. Antenatal education varies widely and may involve drop-in sessions, group classes, one to one counselling across different formal and less formal environments and at different times during a woman's labour. Thus consideration about pain and which methods of pain relief a woman may wish to use is expected and initiated by medical professionals long before women are likely to experience the physical sensations of pain of labour. Women's decisions about pain relief may also be influenced by the socio-cultural context in which they are enmeshed, and by friends, family and media (Fox & Worts 1999; Roberts et al. 2004). That different cultural perspectives influence women's choice is not lost on health professionals, for example as one parent educator observed:

I'm just concerned that a lot of the T.V. that they access is American rather than British and it is quite medicalised and the main means of pain relief is epidural. FG2 , Parent Educator

At different scales of local, national and international, and in deterritorialised mediascapes, information about pain relief may not be equivalent, providing potentially multiple sources upon which women may draw and develop particular expectations about what they will encounter. Moreover, the congruence between expectations forged prior to labour and the experience of it are known to influence women's perception of pain (Beaton & Gupton 1990). Thus, medical professionals are *one* source that may help to construct, pre-emptively, the place of pain, and its relief, for women. How different educators help co-construct women's views about pain relief appears to depend on imparting knowledge about the material presence of forms of pain relief available in different locations; descriptions of what constitutes pain relief technologies and whether

they are included or excluded from educational materials; the timing of pain relief messages; and how pain relief methods are rendered equivalent (or not) across different settings. We now turn to the narratives about pain relief from participants in the focus group sessions.

Ordering the spaces of labour

Access to different pain relief methods prior to and during childbirth varies across formal and less formal spaces of maternity care. As some pain relief interventions such as epidural anaesthesia and pethidine may have limited availability, decisions about where to give birth may be determined to some extent by access to pain relief technologies. As one parent educator in our focus group remarked, some women ask about the availability of epidural anaesthesia as soon as they become aware they are pregnant in order that they can book into a hospital or midwifery led unit where such technologies are available. Questions concerning the *material presence* of pain relief technologies then have a bearing on place and on women's decisions; however rather than entering into discussion of where and when different technologies are available we consider how they are constructed within and across such spaces.

Within education classes different pain relief options are commonly constructed as a progression from least interventionist forms (within the home) to more interventionist forms (within the hospital). Such linear narratives about pain relief technologies construct or enable certain kinds of responses and legitimate women's claims that there is a 'ladder' of pain relief upon which one metaphorically climbs step by step. As one parent educator described her provision of information about pain relief within clinic based classes:

...when I do classes I start at the beginning with simple things, simple things like paracetamol for the early stages (uh hm) into the bath... and a TENS⁴ machine to use at home as well, and then into the hospital they can use entonox⁵, the pool, diamorphine⁶, epidural⁷.

In this account such a 'ladder' is a symbolic representation, fed by material presences/ absences of different forms of pain relief in different locations, by evidence, and by a transitional effect in the movement between locations. Place is described *in relation to the availability of pain relief technologies* such that materiality of pain relief options co-constructs the space of hospital and home differently. Moreover, the availability of

‘simple’ forms of pain relief such as paracetamol, a bath and a TENS machine point to the ways in which the parent educator expands the distinction between home and hospital through a narrative that emphasises the *easy presence* to certain forms of pain relief and a non-simple *absence* of other forms. Within the home there are limited options for certain types of interventions, in particular the use of certain methods that can only be administered by trained professionals in locations other than home, in this case the hospital. Thus, pain relief is materially location-specific while at the same time such educational messages serve to construct places as differently constituted landscapes, with different therapeutic effects.

The distinction between the physical location of pain relief and the ways in which pain relief messages construct place may also be demonstrated using the following statement of another midwife about one type of pain relief – opiates:

That [hospital] is the right place for them, that’s the right place for them, there’s not place for opiates in their home environment, not even to have them in the cupboard because one time they will be used and it does change your labour. It should be a hospital where opiates are used I think.
FG1, Parent Educator

Places may be constructed through the presence of particular forms of pain relief *whether or not* they are to be used. In this description, the presence of particular technologies of pain relief sullies the understanding of the home as a reified space. For this midwife, a therapeutic landscape of labour is also a symbolic and imaginative landscape that distinguishes between natural and medically constructed environments and promotes exclusivity to the natural space of the home. If opiates are used in the home, the comment that it ‘does change your labour’ signifies not (just) the physical experience if used, but how presence modifies the idealised natural space. The use of opiates in the hospital is deemed appropriate in that setting. Rather than a ‘ladder’ of pain relief across settings, material technologies in this example, are not coterminous. As Andrews (2004) points out, most therapeutic geographies to this point have focused on people *in* specific locations – spas, wilderness areas, hospitals, homes. Such accounts, as has already been suggested, run the risk of obscuring what individuals may bring to make place (therapeutic). Andrews focuses on the use of mental imagery of place in complementary and alternative medicine (CAM), and describes how such ‘imagined’ places are drawn upon to contribute a therapeutic effect. In this view it is possible to see how places are actively constructed in both physical and ‘imaginative’

form as therapeutic and dependent on the material technologies that are available within them.

Thus imaginative and material presence is used to construct places differently, an orientation that is exemplified by further comments from the same focus group participant when she observed:

...we all have a responsibility to let women know that their bodies are designed to do this process and, that if they allow the process to unfold in the comfort of their own home where they're still surrounded by familiar things and well supported by a partner if that's the case, em, and then allow endorphins to take over and be, and help in the process of labour. FG1 'A', Parent Educator

Here, 'familiar things' are material objects that symbolically represent a particular sense of place to the parent educator for whom familiarity is equated with therapeutic effect. Moreover such a view also acts to effect a differentiation between the 'natural' conditions of the home to its other - the hospital. She continues:

... afterwards when a woman has had everything [all the options available for pain relief] and thinks well, you know, the midwife told me ... my body's supposed to be designed to do it [give birth]. Well not everybody's body will respond in the right way and will do that and not every woman's pain threshold is the same and we have to be able to adapt to meet that individual woman's needs. FG1 'A', Parent Educator

In this account, adaptation to the woman's needs and desires is predicated on a similar 'naturalised' account of childbirth, a body designed for birth, and a non-pharmacological therapeutic landscape. The rhetoric of natural childbirth has been extensively examined elsewhere, and commonly promotes the idea of 'letting nature bring out the babies'(Westfall & Benoit 2004, p. 1399). Moreover, flexibility in responding to the woman's desires in this case is conditional upon *body failure*. That the women may or may not react 'in the right way' is a truth claim, and one that disallows the possibility of a therapeutic landscape of labour in which pharmacological options are part and parcel of that landscape. A's narrative demonstrates how (in)flexibility may be fashioned in association with individual health care practitioners sense of place.

Another midwife makes a counterpoising argument based on the presence/absence of technologies. Responding to the suggestion that opiates should not be available within the home, this midwife states:

I was just thinking it removes a level of choice from the woman...

[and]

We never actually used it [opiates]. We never used it but it was there. FG1'B', Midwife

In this view, the absence of opiates within the home is an indicator for lack of choice. Valuing of choice accords with the pervasive social discourse about empowerment and choice, but does not account for issues of co-presence; for example, how choice is enacted may be dependent on the woman's mobility or proximity to the hospital where this technology is available. In this example the health care professional is not so concerned about using the technologies, but about defending the bounds of a therapeutic landscape through material co-presence. These healthcare professionals demonstrate the contested nature of place, how sense of place influences their valorisation of certain outcomes, and how the presences of material technologies of pain relief help to co-construct places differently.

At the same time, pain relief technologies may also render places as *equivalent* as 'B' continues:

I think er it's all about choice as well for the woman and er you know although we start off with the general progression, we link the coping strategies and pain relief with the different stages of labour as well and talk about early phases of labour and being at home and all of those things you can do at home, and you can translate all of those coping strategies into the hospital and then the choice is then to go on if you've enjoyed using the water, or the pool you know then the entinox, diamorphine and epidural. FG1'B', Midwife.

In this view, choice is enabled through material co-presence and the material presence of pain relief in the home may be 'translated' into the hospital environment. However, the translation of coping strategies in the woman's physical relocation from home to hospital and the therapeutic effect of pain relief is conflated. But is it? In the accounts presented so far, flexibility towards the woman's sense of place and its therapeutic qualities appears absent, or at best constrained. The narrative of place from both health care professional A and B are already constructed through their sense what may be included and/or excluded from place. Flexibility and choice relates to the use of different technologies and spaces, but not how those technologies and spaces may interact and be enacted differently for different individuals. At the same time, these health care professionals help actively construct place in particular ways and this information is (necessarily) packaged and provided for the consumption of pregnant women. We do not question the need or desirability of providing information to women about pain relief, but merely point out that this information is positioned and conceives

places differently, reducing the potential for what women bring to make place therapeutic. In the following section we consider how pain relief is placed and places women once they arrive in the hospital.

Pain legitimises the spaces you can inhabit

In our study site, a woman in the early stages of labour normally contacts the maternity unit in the hospital and is advised about the appropriate stage at which to enter the hospital, or if home birth, to arrange for the attendance of a midwife(s). If the woman is not coping with the pain, is in an advanced stage of labour, or has particular concerns about the labour she will be admitted to the hospital where she enters the maternity assessment unit (MAU). The MAU is an intermediate space between the home and space of delivery at which point the woman is assessed for her 'progression' in labour. If not considered sufficiently advanced she may be sent home. Pharmacological pain relief is not administered in the MAU. So long as there are no medical complications, once the labour has progressed sufficiently, the woman is transferred to a 'delivery suite': a collection of rooms equipped for birth, also including the snoezelen and birthing pool (which may be requested and used if available).

When a woman enters the Maternity Assessment Unit (MAU) assessments are made about the spaces she may inhabit,

They [the MAU unit] ring and they say a woman wants to come round because she needs pain relief and you get her into the room and you start talking about pain relief and she says "oh I'm all right at the moment" and yeh actually she just wants to be on the delivery suite with someone supporting her and actually as soon as she is in that environment (Uh ha) suddenly does not actually need this analgesia that they say that she's coming round for. (Uh hm). FG3 'C', Rotational Midwife

In this example the *presence of pain* legitimises the relocation of the woman to the delivery suite. The woman may still be given a choice about which (material) forms of pain relief to use, however in this context, the "translation" that has been anticipated on entry to the hospital does not occur as the woman's need for pain relief is modified with her ongoing labour. In this account, the midwife C's repeated use of the term 'actually' acts to counter what 'they', presumably other professionals with whom she is in disagreement, say is a necessity. Rather the midwife recognises the setting changes the needs for analgesia. Having relocated to a place where professional support forms part

of care for the delivery stages of labour, and where professionals are empowered to provide this support, the experience of pain by the woman may well have changed. Moreover, the woman may be aware that once on the delivery suite, she will not be sent home to advance the labour further. The woman in labour wants to be in a place that is or has been constituted as therapeutic– the delivery suite. Midwife C’s description of this changed experience of pain as anomalous demonstrates missed opportunities to understand the therapeutic effects of place. This is evinced by the apparent surprise in her colleague’s response below that the woman in labour may remain “happy” and “calm” in that space, *even* in the absence of a midwife.

And even if the midwife isn’t there, if you have a lady like that you can’t always, you maybe have another lady, and even just then knowing that they’re on delivery suite, and knowing that they’ve got a midwife to them, (Uh hm) it’s still the same (mm) you don’t need to sit with them if they’ve got a partner and that with them (Yeh) at that stage of they’ve come from M.A.U.... desperate, as soon as they’re settled you say right I’m going to nip out, I’m just popping next door... “that’s fine, that’s fine” and they’re so calm, obviously until labour does get going, (uh ha) but em, it’s funny that even leaving them (Yeh), they’re quite happy. FG3 ‘D’, Rotational Midwife

The equation established between pain and pain relief in this context does not take into consideration the subjective nature of pain and its potential translation across different spaces. That the presence of a significant other or midwife loses its significance if the place is right, demonstrates the centrality of the symbolic landscape to the experience of pain.

It is broadly accepted that pain is a highly subjective experience (Baker et al. 2001; Lowe 1996; Lundgren & Dahlberg 1998). Yet amongst the accounts presented above, what constitutes ‘subjective experience’ appears not to include an explicit professional understanding of how therapeutic landscapes of labour are relationally constructed. For midwife D, the woman’s changing experience of events appear in contradistinction to her professional expectation; thus it seems anomalous that her own presence is not necessary to produce a therapeutic effect. Yet the midwife makes critical assessments about what it is that makes up the context of place, or a therapeutic landscape for that woman; her presence, the partners presence, being in the delivery suite. She uses geographic metaphors to describe the woman’s achievement of a sense of place suggesting that anxiety subsides ‘as soon as she’s settled’. In such accounts, places may not be conceived as flexible, but they may be enacted as such.

Architecting therapeutic landscapes

So far we have considered the construction of therapeutic landscapes by placing at the centre of the analysis professional narratives about pain relief. But what of evidence-based design (EBD)? There is growing interest in using evidence-based approaches to inform the deliberate modification of buildings for health gains (Hamilton 2003, 2004; Ulrich, Quan & Zimring 2004). Such approaches are cognisant of the importance of the built environment in affecting health outcomes:

[Evidence-based design] refers to a process for creating healthcare buildings, informed by the best available evidence, with the goal of improving outcomes and of continuing to monitor the success of designs for subsequent decision-making (Ulrich, Quan & Zimring 2004, p. 26).

Public policy favouring decreased medical intervention have led to investments in new kinds of maternity spaces that increase the options available to women (Department of Health 2004). In many hospitals around the UK, new spaces have been specifically designed for their so-called therapeutic effect. These include opportunities for hydrotherapy (birthing pools) and multi-sensory therapies ('snoezelen'). Here flexibility in provision is fashioned through the availability of, and access to, different spaces within the hospital.

A midwife working on the labour ward within a hospital recounted her experience with one woman in the snoezelen room:

I was looking after a lady em who was a second time mother who em was in early labour and I took her round and I thought well nobody has been using the snoezelen room, let me try the snoezelen room out, which is em, it's got lots of lighting effects and things (Right) and em, so I took her into this room and very shortly afterwards she actually delivered her baby. I didn't think you know (laughter), I didn't think she was going to and I was getting so worried because I thought all the health care assistants would be getting at me because I've not, you know, how do we clean this room and stuff like this? (Laughter). So, em, I don't know whether it was the pain relief of just being in this room with the lighting effects or not, but it was, it was a surprise to me how quickly this lady actually delivered. (Right). She was supposed to just go and wander round in it for a bit. FG3, 'E', Midwifery care team

Interviewer: but she gave birth there.

Yeh. Yeh. So, I'm interested in alternative forms of pain relief. (Right). Like lights. FG3, 'E', Midwifery care team

For this midwife the snoezelen room was already constituted as a place with a particular therapeutic effect that the woman may or may not find helpful, it was 'supposed' to help with pain relief. Similar examples from other midwives in our study reported the

speeding up of labour, minimisation of pain, and reduced demand for pain relief in relation to the use of the birthing pool, also a recent initiative at the hospital. Our findings have shown that health care practitioners may affect therapeutic landscapes of care by approaching women's access to and use of space as their choice, yet such approaches may appear to them to be incongruous with the evidence-base, demonstrated further by another midwife:

the ironic thing is, the first thing we say to people on the phone, you know when they ring in and we tell them to get in the bath. [In the hospital] we then talk about not going into the pool because they're not established in labour, yet we know it's good pain relief, you know, but just the ... research tells us that [it is not appropriate]. FG3, 'F' Rotational midwife

The use of hydrotherapy and snoezelen remains controversial for use in maternity care because of the limited evidence-base supporting their use (Campbell 2004; Eckert, Turnbull & MacLennan 2001; Schofield & Davis 2000). One randomised controlled study in Australia went so far as to conclude 'bathing in labour confers no clear benefits for women in labour' and is a 'potential waste of resources' (Eckert, Turnbull & MacLennan 2001, p. 92). Another that snoezelen should be considered 'leisure' rather than 'therapeutics' because of the lack of conclusive studies of efficacy (Burns, Cox & Plant 2000). Yet, Campbell (2004) suggests low risk women should be encouraged to use hydrotherapy because it demonstrates a 'woman-centred' approach and increased opportunity for patient control. As we have already considered, discourses of personal responsibility and empowerment tie into much broader understandings of how health and health care is socially situated and mediated. The midwives in these examples, are then caught between the evidence-base, and their interpretations of how place affects therapeutic landscapes of labour.

While these examples suggest practitioners are amenable to the provision of choices and the variability of what constitutes a therapeutic effect, sometimes flexibility in provision, because it is confused with flexibility of place, may sit uncomfortably with the evidence base. But as Andrews and Moon (2005) suggest, because something is 'evidence based' does not mean that 'other voices' such as those represented in the research reported here should be absent, but rather that rigorous qualitative social science accounts may form *part of* the evidence base.

Concluding remarks

Flexibility is important to the constitution of therapeutic landscapes of maternity care not least because of the prevailing social discourses of choice and empowerment, and women's different experiences of pain in labour. In this paper we have opened up the concept of flexibility to critical examination through an account of health practitioner's conceptions of flexibility in relation to pain relief across three locales in maternity care.

In all settings, the provision of choice, individually sensitive and 'flexible' approaches are increasingly viewed as important in opening up health care to a more sensitive appreciation of what individuals may bring to such encounters. Pain relief in labour is a particularly compelling example of the need for flexibility because it is widely understood to be subjectively experienced. However accounts that attend only to the evidence of the efficacy of pain relief, and how individuals need for or desire for pain relief varies, fail to consider the important social and material factors that influence and help construct health outcomes. We found a 'culture of place' approach useful to our analysis of how flexibility gets fashioned and constrained: pre-emptively through maternity education, in the act of providing maternity care, and by the physical setting of labour.

In our study, health practitioners recognition of the uniqueness of place in setting the scene for health interventions was limited, but in some instances they acted in ways consistent with a culture of place approach by facilitating pregnant women's responses to pain and its relief that were place-sensitive and to an extent, also flexible. In these situations, health care practitioners recognised a mismatch between the evidence-base and their responses, prompting reactions of humour or exceptionalism through which to account for such discrepancies.

Our analysis of the narratives of health care practitioners suggests that a particular understanding of place as reified, limits the therapeutic effect of spaces of maternity care and places health care professionals in unnecessary conflict with their professional beliefs. Rather a relational view of place that takes into account how women's sense of place may modify that place, creates opportunities for making more out of the therapeutic qualities of particular settings. We do not see this as counter to evidence-

based design or practice, but rather as complementary. With an understanding of place, a more nuanced account can be presented of situations where the evidence-base may provide a (metaphorical) map, but not the territory.

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¹ Warm water pools may be used as a form of pain relief during contractions, and in some cases for delivery. In 1992 a House of Commons Health Committee on maternity recommended that hospitals in the UK provide the option of birthing pools wherever 'practicable'. Alderdice, F., Renfrew, M., Marchant, S., Ashurst, H., Hughes, P., Berridge, G. & Garcia, J. 1995. Labour and birth in water in England and Wales. *British Medical Journal* 310, 837.

² Sensory stimulation (also termed snoezelen) using colours, lights, sounds and different textures to promote relaxation, has been described for use in relation to people with learning disabilities, aged care and in pain management - including maternity care. Burns, I., Cox, H. & Plant, H. 2000. Leisure or therapeutics? Snoezelen and the care of older persons with dementia. *International Journal of Nursing Practice* 6, 118-126, Schofield, P. & Davis, B. 2000. Sensory stimulation (snoezelen) versus relaxation: a potential strategy for the management of chronic pain. *Disability and Rehabilitation* 22 (15), 675-682, Slevin, E. & McClelland, A. 1999. Multisensory environments: are they therapeutic? A single-subject

evaluation of the clinical effectiveness of a multisensory environment. *Journal of Clinical Nursing* 8 (1), 48-56.

³ See for example Andrews, G. J. 2006. Geographies of health in nursing. *Health and Place* 12, 110-118, Andrews, G. J. & Moon, G. 2005. Space, place, and the evidence base: part I an introduction to health geography. *Worldviews on Evidence-Based Nursing* 2 (2), 55-62, Brown, T. & Duncan, C. 2002. Placing geographies of public health. *Area* 33 (4), 361-369, Dyck, I. 1999. Using qualitative methods in Medical Geography: deconstructive moments in a subdiscipline? *Professional Geographer* 51 (2), 243-253, Gesler, W. M. 1992. *The cultural geography of health care*. University of Pittsburgh Press, Pittsburgh, Kearns, R. A. & Moon, G. 2002. From medical to health geography: novelty, place and theory after a decade of change. *Progress in Human Geography* 26 (5), 605-625.

⁴ Transcutaneous Electrical Nerve Stimulation. Used predominantly in early labour, such equipment hired from hospitals or birthing centres, or may purchased as a consumer product.

⁵ A nitrous oxide and oxygen mixture often referred to (incorrectly) as 'gas and air'.

⁶ An opiate that reduces pain but may cause drowsiness.

⁷ An injection of an anaesthetic into the back that reduces physical sensation below the waist, but does not greatly affect mental capacities.