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An ethnographic study of the interaction between philosophy of childbirth and place of birth

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Abstract

Background

Organisational culture and place of birth have an impact on the variation in birth outcomes seen in different settings.

Aim

To explore how childbirth is constructed and influenced by context in three birth settings in Australia.

Method

This ethnographic study included observations of 25 healthy women giving birth in three settings: home (9), two birth centres (10), two obstetric units (9). Individual interviews were undertaken with these women at 6–8 weeks after birth and focus groups were conducted with 37 midwives working in the three settings: homebirth (11), birth centres (10) and obstetric units (16).

Results

All home birth participants adopted a forward leaning position for birth and no vaginal examinations occurred. In contrast, all women in the obstetric unit gave birth on a bed with at least one vaginal examination. One summary concept emerged, *Philosophy of childbirth and place of birth as synergistic mechanisms of effect*. This was enacted in practice through ‘running the gauntlet’, based on the following synthesis: *For women and midwives, depending on their childbirth philosophy, place of birth is a stimulus for, or a protection from, running the gauntlet of the technocratic approach to birth.* The birth centres provided an intermediate space where the complex interplay of factors influencing acceptance of, or resistance to the gauntlet were most evident.

Conclusions

A complex interaction exists between prevailing childbirth philosophies of women and midwives and the birth environment. Behaviours that optimise physiological birth were associated with increasing philosophical, and physical, distance from technocratic childbirth norms.

Keywords: Childbirth philosophy; Birth environment; Birth culture; Birth position; Birth centre; Home birth

Statement of significance

Problem

Healthy women and babies have different birth outcomes in different settings. Evidence about the influence of organisational culture and context in different birth settings, within the same socio-political environment, is limited.

What is already known

The place of birth and model of care has an influence on labour outcomes with some variations explained by case-mix variation, financing models, and/or socio-cultural behaviours.

What this paper adds

Depending on the childbirth philosophy of both women and midwives, place of birth is a stimulus for, or a protection from, 'running the gauntlet' of the technocratic approach to birth. Birth centres provided an intermediate space with a complex interplay of factors influencing acceptance of, or resistance to this gauntlet.

1 Introduction

There is a general acceptance that place of birth has an influence on labour outcomes [1–5]. Only some of this variation can be explained by systems level factors, such as case-mix variation, financing models, and/or socio-cultural behaviours and norms. Ethnographic studies of specific types of birth settings have been undertaken [6,7] but there appear to be no contemporaneous, comparative ethnographic studies of different but geographically proximal places of birth in the same broad socio-political setting. We present the results of an ethnography of labour and birth in three different types of birth places (home, alongside birth centre, obstetric unit) located within 30 km of each other, as a means of identifying what philosophical and cultural mechanisms might be operating in each birth space when the broad context is the same.

Higher rates of normal vaginal birth with equivalent perinatal outcomes have been demonstrated for homebirth and birth centre (BC) compared to obstetric units (OUs) in a range of countries [1–4]. Both midwifery care and out of hospital settings have been associated with improved outcomes for healthy women and babies when compared to birth in OUs [4,8]. Despite this there are significant obstacles to midwife led units/community based care reaching their full potential. Lack of commitment and leadership by managers to embed these options as essential services alongside standard OUs continues to be an issue [1]. Childbirth is a complex biological, cultural, political and social phenomenon, and this is never more evident than when place of birth enters the debate [2].

Robbie Davis-Floyd published an anthropological interview study identifying different birth philosophies among both staff and childbearing women in the USA, linked to place of birth [3]. She coined the term 'technocratic birth' to capture the philosophy and activities of the normative, risk averse, technically intense form of childbirth that was reported by participants in her study who used doctor led OU settings. Since her study, the term has been widely used, and single site ethnographies of both out of hospital and in-hospital birth have reinforced many of her findings [4,5]. In contrast, the philosophy and activities of what has been termed 'humanised', or 'woman centred', care have been more strongly associated with the provision of midwifery care and the use of settings outside the hospital [6]. However, many studies of childbirth outcomes do not disaggregate childbirth philosophies, type of care provider, and place of birth. While there is likely to be some interaction between these components, it is also possible that the mechanism of effect for outcome differs to some extent between them. To date, there has not been a study that combines ethnographic observation of labour and birth in different birth settings where the birth philosophies of both service users and maternity care providers using these various spaces are also explored.

We report on a study that used observations of events during labour and birth, interviews and focus groups as a lens to examine the impact of the social framing of childbirth in different birth settings. We draw on the theory of *Birth Territory* to explain and frame findings as developed by Fahy, Foureur and Hastie in their book Birth Territory and Midwifery Guardianship: Theory for Practice, Education and Research [7].

1.1 '*Birth Territory*' theoretical positioning

The theory of *Birth Territory* was developed to explain and predict the relationships between the birth environment and the use of power and control in that environment [~~7~~ [7]]. Taking a critical post-structural feminist

perspective, the authors of *Birth Territory* expand on ideas from Michel Foucault to explore the concepts of 'terrain' (birth environment) as either a 'sanctum' or a 'surveillance room' and 'jurisdiction', which includes the concepts of 'integrative power' (midwifery guardianship) and 'disintegrative power' (midwifery domination). These concepts resituate Foucault's 'panopticon' which has become a metaphor, or model for analysing surveillance [8].

Terrain is a major sub concept of *Birth Territory*. Space, lay out, privacy, furniture and accessories within a birth room can position it as a 'sanctum' or a 'surveillance' room. The 'sanctum' is homelike, private and comfortable for women and protects and enhances the woman's sense of embodiment and physiological function and emotional wellbeing. On the other hand, the 'surveillance' room is clinical, designed for surveillance of the woman and her baby and for the comfort and functioning of the staff. Many OU spaces are designed primarily as surveillance rooms, whilst BCs and the woman's home environment tend to be designed to be more sanctum-like. 'Jurisdiction' represents the power to do what one wants within the birth environment. The jurisdiction to enact 'Integrative power' is associated with integration of the woman's body and mind, and support for the woman to feel in control. 'Midwifery guardianship' is a form of integrative power as it guards the woman and her birth territory, controlling who crosses the boundaries of the birth space and what is done to the woman. 'Disintegrative power' on the other hand is ego centred and imposes the users self-serving goal on the environment, undermining the woman's sense of confidence and self. 'Midwifery domination' is one form of this and is based on the use of disciplinary power. Under this condition, when the woman is compliant and docile the environment appears quite harmonious, but when the woman offers resistance, the use of midwifery domination can become disturbing [7,9].

2 Method

An ethnographic approach guided data collection and analysis [10]. Other studies have used ethnography as we have in order to observe the birth and explore how environment and ideologies affect practice [11,12]. Ethnography provides a 'mirror on practice' [13] and takes a micro-perspective of a culture and environment, and of how various actors behave and feel in a particular context. It also enables exploration of the impact of environment on practice, which is of particular relevance to our study. Ethnography uses observation of actions and interactions. It focuses in on linguistic and cultural manifestations (signs, symbols, rules and rituals) as well as relationships and conflicts or contradictions that can help understanding of a particular social situation [14]. An ethnographer also examines and synthesises the perspectives of both the observer and the observed [10].

In this ethnographic study, observations, individual interviews and focus groups were used to gather the data. Data were analysed thematically [15]. The Birth Territory theory was used to reflect on and explicate findings and theorise them fully.

2.1 Settings

The observations were conducted in the homes of women, and in two OUs and two BCs co-located within public hospitals in New South Wales, Australia. Private midwives in various locations around Sydney attended the homebirths. Interviews with the women who were observed occurred 6–8 weeks after the birth in the woman's home. Focus groups with the midwives occurred in a park (homebirth midwives) and in the two hospitals (BC and OU midwives).

Each of the included BCs were co-located with one of the two included OUs. Birth Centre one (BC1) provided care for around 700 women (5 rooms) a year and entry was directly off the street. OU1 was co-located (across the corridor and physically separate) with BC1 and was a large (>5000 births) unit (9 beds) providing care to women with complications as well as healthy women. Birth Centre two (BC2) provided care for around 300 women. Entry to BC2 was through Obstetric Unit (OU2), through one main door with intercom access. At the end of the corridor there were three BC rooms with OU2 rooms on either side. Obstetric unit two was a medium risk unit, with 3000 births per annum and provided care to healthy women and those of moderate risk.

2.2 Recruitment

Flyers were placed on the walls of the maternity units and information sheets were provided to women and midwives who then contacted the researchers. Homebirth midwives were emailed fliers and information sheets to give to their clients. If the women wanted to participate the researchers were given the contact information for the woman. Written consent was then obtained by the researchers from all participants during a subsequent antenatal visit with the woman's midwife present. This visit occurred in one of the two hospitals for the BC and OU women and in the woman's home for the homebirth women. This was so the researchers could meet the woman and be familiar to her when they were called to observe the labour and birth. Before the study commenced the researchers met with the midwives in the different settings to inform them about the study and to answer any questions.

Any midwife who was caring for one of the participants during the labour and birth observation period was included in the observation phase if they consented to take part. If they did not consent there were no observations of the woman undertaken. Some midwives who were not part of the observations were also included in the focus groups if they indicated interest, and formally consented to take part before the focus group commenced. Midwives were aware of the study due to the fliers on the walls (BC and OU) or through emails (homebirth midwives). They also had the opportunity to attend information sessions before the study commenced so they were aware. Following this familiarisation with the midwives, researchers and the study, a date and time was organised for the focus groups to occur in the hospitals (BCs and OUs) and in a park (homebirth midwives).

2.3 Participant eligibility and inclusion

Women were eligible to participate if they had a healthy pregnancy, were able to speak and read English fluently, and had given consent to take part during the third trimester of pregnancy. They also needed to be in spontaneous labour with a full-term pregnancy, planning a vaginal birth, and have no medical or obstetric complications in labour at the time the observations began. Both nulliparous and multiparous women participated.

2.4 Data collection

Midwives providing care during the first stage of labour were asked to complete a structured labour data collection tool for clinical interventions and for the birthing positions observed during the labour. They had become familiar with the data collection tool during the information sessions prior to the study commencing. Clinical interventions included cardiotocography (CTG) monitoring, vaginal examinations (VE), artificial rupture of membranes (ARM), episiotomies, epidural, augmentation, and instrumental birth. Positions were recorded hourly, and coded as 'upright' (standing, sitting, and right and left lateral positions) (Gupta et al. 2012) or 'recumbent' (supine, semi recumbent and lithotomy). 'Forwards leaning' positions were defined as the arms or upper body being used to rest or support the woman in a forward leaning position.

From the onset of second stage, one of two midwife research assistants (MJ and HP) took detailed field notes, documenting the birth environment, role of support people, verbal or physical support or suggestions from the midwife relating to birth positioning, and the reason for the positions being adopted. They sat in the far corner of the room in an unobtrusive position but did not have a direct view of intimate procedures or the actual birth of the baby. The two researchers were allocated to different hospitals and homebirths and were on call on call 24 hrs a day during the period that observations took place. These were the same researchers who had met all the women previously and obtained consent from them.

2.5 Face to face interviews

All women who were observed agreed to participate in semi-structured in-depth face-to-face interviews when their baby was 6–8 weeks old with the researcher who was present at their birth. The interviews occurred at a time and place convenient to the woman. The interview schedule sought their views on their interactions with maternity care providers, and how they experienced position and movement during their labour. Filed notes from the observations were used to explore the woman's experiences. Each interview took 30–60 min in length. All were audio recorded, with accompanying notes taken by the interviewer.

2.6 Midwife focus groups

Using a semi-structured format, each of the five midwife focus groups (37 midwives) ran for approximately one hour and were recorded at each site and in each setting (other than homebirth) using a digital voice recorder and transcribed verbatim ~~(Table 3)~~. A reflective listening stance was adopted by the two facilitators, using paraphrasing and summarising of responses to encourage elaboration and exploration of topics.

2.7 Data analysis

Observational field notes and focus group data were analysed using thematic analysis. Interview transcripts were listened to and read thoroughly by the four main researchers (HD,VS,MJ,HP) to ensure data immersion. Concepts, variants, and exceptions were identified iteratively. The researchers first looked at the data independently and then came together to make comparisons and observations regarding their own and each other's findings, providing an extra level of scrutiny. Initial and developing codes and themes were discussed and agreed on with the research team to identify "repeated patterns of meaning" and ensure validity of findings [10]. SD also looked at the data and agreed on or suggested changes in some of the thematic headings, further refining the analysis. All data were de-identified and codes were used.

Ethics approval was obtained from Western Sydney University ~~XXXX~~. Site-specific ethics approval was also obtained from the two relevant ~~XXXX~~ Local Health Districts involved (Protocol No X09-0079).

2.8 Findings

2.8.1 Participants

Thirty-one healthy women were recruited antenatally. One woman withdrew due to induction of labour, and the staff did not contact the researchers when five recruited women presented in labour. Consequently, 25 participants were included (6 gave birth at home; 9 in an OU, and 10 in a BC). There were 10 primiparous women and 15 multiparous women. Two women identified as Aboriginal. All of the women, except for one, were in a relationship/married. Sixteen of the women were born in Australia and nine were born overseas. Fifteen of the women had a university degree and the average age of women was 31 years of age.

One woman who started labour in BC1 was transferred to OU1 for augmentation of labour and had a forceps delivery. One participant in BC2 required transfer to OU2 during labour due to meconium stained liquor but had a normal birth. All women who gave birth at home had a normal birth. In OU1 and OU2 there was one caesarean section and two instrumental births out of the nine births. (Sorry this somehow dropped out of the final version)Observation of the births, regardless of transfer to another place of birth, were continued by research midwives during and after the transfer (except when moving into operating theatre). All other women in the study laboured and gave birth in their planned setting.

Participants also included 11 homebirth midwives, 10 midwives working in the BCs, and 16 midwives working in OUs. The average age of the midwives was 41 and they had been working for an average of 13 years. Twenty-two of the midwives had been born in Australia. Just over half the midwives who were observed also participated in the 5 focus groups (n = 37).

2.9 Position in labour and vaginal examinations (VEs)

Position in labour and VEs were two aspects that stood out most in the observations. Strikingly, none of the home birth women spent any time recumbent or semi-recumbent. Women in BC1 spent the least amount of time in a semi-recumbent position followed by BC2. In OU1 and particularly in OU2 the majority of time was spent semi recumbent.

The research midwives did not observe any VEs being undertaken in the home settings. In contrast, 18 VEs were recorded for the 10 women in the BC settings (an average of nearly two per woman) and 21 for the nine women in OU settings (an average of 3 per woman). Most of (n = 5) the women in the home birth group were multiparous, in contrast to the other settings where the parity balance was more even. Since multiparous women labour more quickly in general, a lower number of VEs might be expected in this group. However, the complete absence was unexpected, and there were no other obvious differences in demographics that might explain this observation.

2.10 Running the Gauntlet

One central concept emerged from the data: *Running the Gauntlet: philosophy of childbirth and place of birth as synergistic mechanisms of effect.* For women and midwives, depending on their childbirth philosophy, place of birth is a stimulus for, or a protection from, running the gauntlet of the technocratic approach to birth. The gauntlet is a term midwife participants used to describe the obstacles to physiological birth women faced due to the technocratic approach to managing birth. Physiological birth was seen as threatened by the increased exposure to the medical model where the technocratic philosophy of birth is most active. The term gauntlet dates from the first half of the 1600s. It came originally from the Swedish word *gatloop* which meant “lane” or “course” and it referred to a type of military punishment. A man would be made to run between the two rows of soldiers who struck at him with sticks and knotted ropes and tried to trip him up and slow him down. Soon after this the word was replaced with *gauntlet* and has been used figuratively to describe other kinds of obstacles or punishment. The figurative term *gauntlet* is how we, the researchers, and the midwives in the study use it [16].

Childbirth philosophies for the participants (childbearing women and midwives) tended to fall into three conceptual groups: *presumption of physiological birth*, *going with the flow* and *presumption of technocratic birth*. In this study, the interaction of these philosophies between women and midwives, and with type of birth place, resulted in resistance to, or acceptance of, technocratic childbirth norms, termed ‘*Running the Gauntlet’*. The two extremes were ‘*Buffering the Gauntlet effect* (generally, but not only experienced by those who were philosophically aligned to physiological birth at home or in the BCs) and ‘*Becoming the Gauntlet’* (noted in the observational data and accounts of some of those in the OU data). There was also a space in which those aligned to physiological birth in all birth places resisted or welcomed full appropriation by technocratically normative forces. This state is termed ‘*Surviving the Gauntlet*’ (Fig. 1). The BCs provided an intermediate space where the complex interplay of factors influencing acceptance of, or resistance to the technocratic gauntlet were most evident, with varying consequences for the behaviours of midwives and women.

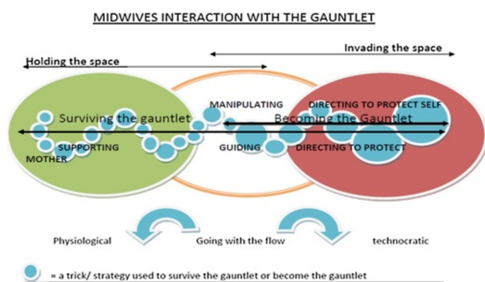

Fig. 1 Interactions with the technocratic norm.

alt-text: Fig. 1

2.11 Childbirth philosophies

2.11.1 Presumption of physiological birth

In interviews with those working or giving birth in all settings, most respondents stated their belief that birth is a fundamentally physiological phenomenon.

When I actually started the labour and I was actually at home I don't recall one moment or second that fear came into it. I felt this feels so right for me. Women have been birthing for millions of years by themselves. Your body can do it (HB woman).

Because we are coming from a focus of this whole thing being normal (BC midwife).

2.11.2 Going with the flow

The concept of 'going with the flow' in childbirth settings has been used previously by us and others to express the way in which some women accept interventions in childbirth [17,18]. This response was evident for some women in the current study, especially in the OU and BC settings:

... my husband and I are just very much 'go with the flow' people. I was quite comfortable with (the midwife) so I thought well if she is telling me that it's a good idea maybe I'd have it. The choice was mine but she suggested that I have it [the morphine] to help with the pain and I thought alright (BC woman).

...just follow your body. Everyone is different, every delivery is different, every baby is different. Just simply go with what makes you feel good, and don't worry about what you say. What you sound like, what you do. Just do what feels absolutely natural to you. I just let rip. It was the most satisfying experience of my life, that's what worked for me, but just simply go with what feels most comfortable (OU woman).

Some of the OU midwife respondents noted that women who were more adaptive to the labour process (either in response to the norms of that birthplace, or in response to their body) tended to do better in that setting: *'Some women with no preconceived ideas do better...they just 'go with the flow'* (OU midwives).

2.11.3 A presumption of technocratic birth

Some midwives and some women (a minority in both cases) seemed to be philosophically aligned with a technocratic approach to childbirth. In one case, a midwife was observed to urge a reluctant doctor to intervene when, to the observer, there did not seem to be a strong indication to do so.

The doctor ponders for a few minutes and watches the next contraction. There is some inaudible chatter amongst the midwife and doctor where I get an impression that the midwife is painting a picture of reasons as to why some assistance from the doctor may be required. There is some hand waving at the clock and some at the CTG machine and then some further pointing at [woman's] vulva and also some shrugs from the midwife as she chats with the doctor. The doctor has a relaxed stance and facial expression and does not appear convinced by whatever it is the midwife is saying. I get the impression that she is impatient with the situation and would like to opt out of the hard work and waiting and that the doctor doesn't think intervention is required. None-the-less the doctor states (in a somewhat reluctant tone with an air of hopeful expectation that she will birth without him) to the midwife in a conversational manner, 'I'll just go and do a speculum for a woman who is waiting and then I'll come back' and before he can finish his sentence the midwife says, 'and give it a lift out' with a nod. The doctor leaves and as he gets to the door the midwife says directly to the mother, 'did you hear that, if you don't get it out soon, he's going to suck it out' (OU observation).

Very few midwives stated that they, personally, took this approach, but many gave examples of 'other' midwives who did so, 'I think the ones [midwives] that don't feel comfortable in delivering a woman standing up or squatting tell them more to hop on the bed' (OU midwife).

Where midwives did express this view, they justified it either for maternity systems reasons, or for reasons of personal professional protection:

Having an epiduralised woman, on her back, with the synto [syntocion] on and the CTG on is a lot easier managed than to lose a midwife in a room. As the 'in charge', which I mainly am, you're losing a midwife, doing all this natural stuff (OU midwife).

But I suppose 'cause it's – we want to make sure the baby and the woman are safe and at the end of the day, it's our livelihood that's on the line. If we stuff up in a massive way, then our registration can be gone and then that's us done (BC midwife).

A few women also demonstrated an alignment to this approach:

I'd experienced labour pain. Okay these contractions, they're hell. That's enough. I was there thinking to myself, I don't live in a grass hut. I know there is a man out there that can take this pain away in 20 minutes. Fantastic. Let's do it (OU woman).

2.12 Alignment between women, midwives and place of birth

Alignment between the birth philosophy of women and midwives and place of birth was evident in a number of the quotes and observations:

[midwife's name] *has a very – how do you describe it? She just backs off and lets you do your thing, until yeah. So I felt very confident, because of that, that I could just have this baby and I didn't need someone there to tell me what to do or to do something for me. I could actually birth the baby all by myself, and I'd be fine (HB woman).*

She (midwife) took charge of everything, so I was really happy with that... because she knows what she's doing. I don't. She had to take charge and give direction, but she was great, we loved her (OU woman).

Most of the midwife respondents were aware of the importance of the alignment between women and midwives, especially where this related to physiological labour and birth:

I think you have to have a woman who is willing to go your way… well not your way… the natural path… I think we all start out trying that way (OU midwives).

However, one case in the intermediate BC space (which was philosophically sited between the home and the OU) illustrates what happened when there was a clash of philosophical norms, both between midwives and women, and between the actual and preferred birthplace. In this case, the midwife working in the BC made the assumption that the woman must be aligned with a physiological birth philosophy, as she had chosen the BC for her labour. However, the woman chose this setting for different reasons, and the resulting lack of communication led to frustration and disappointment for her. She also did not have continuity of midwifery care which complicated the communication and trust:

…my feeling of the situation is that, they delayed moving me to the labour ward longer than I would have liked. I chose the birth centre because that maximises options. I didn't actually have a particular idea of what labour should be, and I was very happy to be moved to the labour ward, but because there wasn't any communication and I wasn't able to communicate it never happened. We'd had no discussion beforehand, so she had no idea that I didn't actually have any issues with transferring. She was working on the statistical model of a patient that attends a birth centre (that they want to have a natural birth). I really had no preconceptions. I don't hold any beliefs about the birthing and labour process being a reflection on your identity as a mother. I really find them quite separate entities, so there was none of that philosophical issue for me. I didn't give two hoots whether my birth was natural or not (BC woman).

2.13 Birth in different settings: '*Running the Gauntlet*'

Although a philosophical orientation towards physiological birth was evident in much of the data from both women and midwives, this was often shadowed by knowledge that technocratic ways of managing birth were the socio-cultural default. The closer the place of birth was geographically to the OU, the more strongly the data suggested that technocratic philosophies of birth were active, as others have observed in a range of countries and settings [19,20]. It was evident from observations, interviews and focus groups that the more institutionalised the setting became the more women and midwives were exposed to what we have conceptualised as 'the gauntlet' of the technocratic approach to birth (technocratic norms) and associated interventions and technologies. One midwife talked about the experience of trying to balance the professional project of being 'with woman' and offering individualised care with these perceived organisational and social constraints, which she termed, 'running the gauntlet': *Midwives are protecting themselves from* ***the gauntlet they would need to run*** *through if someone did "fall off the perch"* (BC 1 Midwife).

In this case, 'the gauntlet' seems to be a managerial or even legal process that would come into play if the midwives were observed to deviate from technocratically normative practices. Another midwife used the same phrase, but this time applied to the need for women to 'pass' a range of tests en route to accessing BC2, that was situated at the back of OU2:

…so they [women] walk into the birth centre and it's almost like they have to ***run the gauntlet*** *to get to birth centre, so they've got to get past birth unit (OU2). And they say 'I'm just here for the birth centre', and 'oh well, just wait here - maybe we'll just pop you on a CTG'. You know - this sort of stuff. (BC midwife).*

However, as noted above, in the current study, this effect was not inevitable, in that the behaviours of both midwives and women were also more or less constructed by their philosophical alignment. The notion of running the gauntlet is therefore used to conceptualise activities and behaviours amongst and between the study participants in different birth settings, that either reinforced or challenged technocratic birth norms. We found midwives were involved in 'holding the space' and supporting women's physiological flow so they would survive the gauntlet (seen mostly at home and in the BC), or 'invading the space' by manipulating the space and this could be in *guiding* the woman or more *directing* of the woman to protect her from the gauntlet (seen more in the BC and OU). In some cases, we observed the midwife *becoming* the gauntlet and directing the women to protect her own self (seen mostly in the OU).

This was operationalised as three distinct but overlapping states, framed as 'Buffering', 'Surviving', or 'Becoming.'

2.14 Buffering the gauntlet effect

In this study some birth environments, and especially the woman's home, seemed to act as a buffer to technocratic philosophies and interventions. The BC represented an in-between space that had some boundaries, but they were relatively permeable. In the case of BC2, this lack of boundary protection was physical as well as metaphorical, as women had to walk through OU2 to get to the BC, and they could be held up or even stopped en route by processes that held them temporarily or permanently in the OU space. In both OUs, no buffer was evident. The inter-relationship between the midwife, the woman and the space is illustrated conceptually in Figs. 1–4 below.

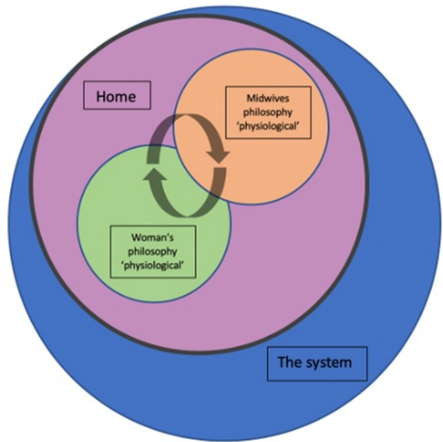

Fig. 2 Strong buffer: home setting, when woman and midwife both have a physiological philosophy and the environment is physically distant from the OU.

alt-text: Fig. 2

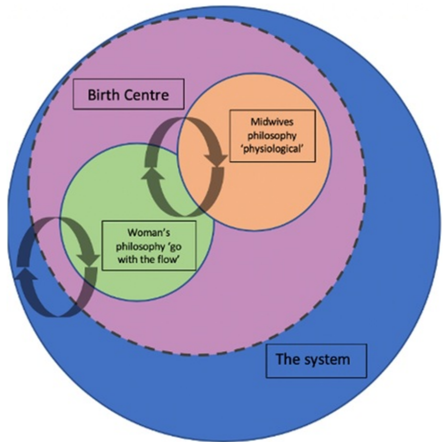

Fig. 3 Permeable buffer: alongside BC, where the woman and midwife may hold different philosophical beliefs and the environment is physically close to the OU.

alt-text: Fig. 3

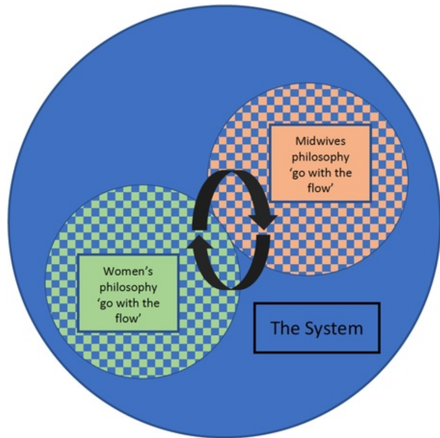

Fig. 4 No buffer: woman and midwife have a 'go with the flow' or technocratic philosophy and the environment is within the OU.

alt-text: Fig. 4

The buffering effect of the home was noted even by midwives working in the OU setting:

The environment is really important. It's so different at a home delivery that's her territory, you're a guest in her home and it makes a huge difference, she's in control, she's relaxed, she's got support, she's got her own familiar surroundings, she can do what she wants and you go with the flow (OU midwife).

One woman captured the home birth situation below:

I felt like – I felt safer and more in control and no-one was going to say, I'm just going to do this whether you like it or not. There was that relationship with [midwife's name] and I felt that she had my best interests at heart rather than – like she didn't have an agenda so it felt like, she's going to let me labour however I want and she was going to do everything possible to make sure it's the way I wanted it to go, which added that sense of security…So it felt like, yeah, I just felt I could do what I needed to do, you know, welcome our baby into the world on our terms, not somebody else's agenda (HB5 woman).

The majority of midwives and women who worked in or chose to give birth in the OUs tended to hold a 'go with the flow' approach. All the participants giving birth in this context were observed to have one or more procedures during labour (such as a VE). Therefore, there appeared to be no physical or philosophical buffer to technocratic intervention in these settings (Fig. 4).

The potential buffering effect of changing the birth space from being about the provider and their convenience to one that promoted physiology was discussed by midwives.

I think we should empty out all our birthing rooms and take every bit of equipment out… you'd have to get a signed consent form to be able to access a bit of equipment…all our birth rooms have a fetal heart monitor, huge resuscitator…The bed is the centre focus of the room. Why is it not that the bath is the centre focus? Why is it that we don't have poles and hang ropes all around the room (OU midwife).

In practice this buffering process was observed very rarely in OU. In contrast, it was always present for the homebirths, and it was observed to some degree in the BCs. Even within settings, differences were obvious. For instance, the practice of midwives in BC2 of putting a mat and the bean bag on the floor was associated with more women being upright during the labour than in BC1 where this practice did not occur, and the women were more likely to get on the bed. Obstetric unit midwives noted the differences between BCs and their work environment:

… when you're in the birth centre, when they know there's a woman coming in labour, they often pull the mat out, get the bean bag, it's always already there. In the labour ward, there's only a couple of mats and one bean bag. You've got to go and get it. It's often not until the woman's already gotten used to being in the room without those things that you're then introducing them. It's quite different to just having them available and letting them work out for themselves what they want to do (OU midwife).

Midwives were clearly aware of the potential buffering effect on women's positions during labour and birth of the obstetric bed, and the presence of alternatives such as birth balls and mats, but, for some reason, they were unable to action their knowledge. The potential benefits of these tools were therefore lost to both midwives, and to women who might have preferred physiological birth in the OU setting.

2.15 Surviving the gauntlet

Midwife behaviours that helped women to survive the gauntlet was focused on 'holding the space' and facilitating physiological birth positioning. In the following quote a woman describes how her midwife was 'holding the space' for her with simple support:

I guess she just stood outside and realised when I was doing my deep breathing as to how frequently the contractions were coming. She didn't interfere. The lights were off. Everything was perfect...I would only realise that she'd been in the room when I'd realise that the CD would then start again (BC woman).

Below a homebirth midwife described the role of 'guiding' behavior as something she would engage in if the woman 'looked stuck' and a BC midwife talks about when she would 'step in':

If a woman looks stuck, if she looks like she's floundering, I might make a suggestion, if that doesn't work, she'll do it some other way (HB midwife).

There is an element for me about following what the woman is doing. I've got this picture of a primip lying on the bed and then they start thrashing around and saying things like 'I can't do this, I need drugs', and this is when I step in and start making suggestions (BC midwife).

The concept of 'directing to protect' the women is apparent in this midwife's observation that if it might be detrimental to normal labour progress, she might inhibit an action, for example getting in the pool:

It depends how dilated they are as where I might guide them. I might inhibit them from getting in the bath if I don't consider them to be in good labour (OU midwife).

The subtle effect such words can have is illustrated by the following woman reflecting on her home birth experience:

She phrased it more as, do I want to? [get in pool] Not, I think you should... Yeah. It also made me think, as well, oh [midwife] – perhaps [midwife] thinks that it's close – and my waters usually break just before the baby comes. I remember thinking; I probably should get in the pool, because if my waters break now, I haven't put anything down to protect it... It was kind of like a confirmatory thing (HB woman).

Midwives recognised that they had a significant amount of influence over what women chose, and that in some cases 'direction to protect' may be at least partly about the midwife, rather than the woman. This was particularly evident in a number of accounts from midwives and students about 'other' midwives who managed to persuade women to adopt positions that were preferred by the midwife:

I think midwives that do...get the woman off their back, they have specific positions they like... I know some midwives ... really like the bath, or some really like all fours... every time I'm with these midwives, they all deliver their own way every time, like it's their position (BC midwife).

In this case, surviving the 'gauntlet' of technical intervention was also about the midwives' personal capacity to manage women's needs within both the environmental context, and in light of their own preferences.

2.16 Becoming the gauntlet

Some midwives who were working regularly on one of the OUs recognised that their actions were increasingly aligned with the norms of the OU:

I think we lose touch with the normal. We lose touch with what's normal in what is a normal physiological event for most women but in a unit like this it is very easy to go down the path of thinking it is not normal (OU midwives)

This situation appeared to lead to a negative spiral of low expectations of normal birth, low rates of physiological birth positioning, and outcomes that reinforced these expectations for both midwives and women, in a negative process of 'going with the flow':

We had a lady who was labouring up on the antenatal ward... she'd been up in the shower upstairs, up and walking. We brought her down stairs ... but because she then needed a VE; she needed a palp [palpation] and everything. They asked her to get on the bed and then they broke her waters because she was fully, broken waters, meconium and a CTG had to go on. Then she was confined to the bed and that was it; that was the last of the shower (OU midwife).

The consequent midwife behaviours were characterised as 'becoming part of the gauntlet', as they reinforced the technocratic norms that midwives in general claimed to resist. These behaviours were described as 'manipulating' the woman and 'directing to protect self' from the system, and they acted to 'invade the space' of women who were otherwise experiencing physiological processes, in order to comply with system requirements:

Yeah, you're doing stuff. You're doing stuff. Constantly in her ear, I'm just going do this, I'm just going to do that. And it's virtually every ten minutes at least you're going, I'm just going to do this. Can you just move back a little because I've just got to put this in here? It's constant interruption (OU midwife).

The directing of women in this instance differed to that seen when helping women to survive the gauntlet, as it did not seem to be undertaken to provide safe and optimal care for the woman or maximise normal birth, but to protect the midwife from criticism or occupational health related issues such as a sore back:

We've got an educator... who is very medical... she likes to have the control in the situation. She's the one who tells the woman to hop on the bed and you know that every time you work with her that you'll have a woman deliver in a semi-recumbent position, she'll get them to turn over (OU midwife).

The experience of 'running the gauntlet' was most visible in the data when the labours of women, and/or the practices of midwives transgressed technocratic birth norms, and therefore became visible to the dominant maternity care system. This effect was particularly evident in the accounts of the BC midwives. It generated a sense of being visible and always at imminent risk of being held to account, which was associated with a fear of failure, and a hypervigilant awareness of the critical need to balance clinical judgement that everything was okay, the aspirations of BC women, and the policies of the system that dictated how and when they should act: *We are constantly under scrutiny – like they are waiting for us to fail* (BC midwife).

You know a woman has been pushing for maybe two hours... and nothing is happening and you know that if you are- you could leave her a bit longer. But if you leave her for any longer then you are going to get the wrath over there. So it does. It has to have an influence (BC midwife)

While the BC was seen as a separate space (particularly BC1), there were clearly times when the midwives became directive in order to avoid triggering protocols that might mandate transfer of the woman to the OU, and the consequent risk of more protocol-driven interventions for her post transfer. This is seen in the following interaction, where the midwives' actions also cause the woman to voice her increasing discomfort:

'Then the midwife directs, 'let's move onto your side then'. Trudy moves onto her side with assistance from midwife and husband. Trudy then calls out, 'this is hurting' just before she is overcome by a contraction and involuntarily pushes. Trudy holds her own leg up to her chest during contractions and after the contraction passes says, 'I've got pins and needles'. Midwife continues to coach Trudy through contractions, 'come on Trudy chin down' (BC observation).

On some occasions, the resistance of the midwives to the scrutiny of the OU over-estimated the allegiance of the woman to a physiological approach to childbirth. In fact, some women made this choice for the comfortable décor, the fact their husbands could stay after the birth and the shorter waiting times for antenatal appointments. These women were amongst the most dissatisfied of any of the participants when interviewed six weeks after the birth.

There was no attention. No one at any point asked me about my plan. Now, my feeling of the situation is that, they delayed moving me to the labour ward longer than I would've liked... I would happily have gone quite a bit earlier, because it was apparent to me – as it was to them – that things really weren't progressing as they should, but because there wasn't any of that communication and I wasn't able to communicate some 18, 19 hours into the ordeal, it never happened. (BC woman).

3 Discussion

In this study, we found prevailing childbirth philosophies of women and midwives form a complex interaction with birth environment. It was evident that choice of place of birth for women, and of preferred work environment for midwives, reflects personal childbirth values, beliefs and philosophies to a greater or lesser extent. Maternal and midwife behaviours appeared to be influenced by an interaction between personal philosophy and type of birthplace. Where these were strongly aligned (at home or in OU), patterns of behaviour were seen to be generally consistent. Where they were less strongly aligned (alongside BCs) behaviours are more fluid. The extent to which the childbirth philosophy of women and their attending midwives is aligned with each other and with the birth setting can affect, or protect from, the need to run the gauntlet of the technocratic approach to birth. Specifically, differences were seen in upright positioning and in use of VEs in the three different places of birth examined. While medical intervention is necessary for some women in order to have safe childbirth experiences there is increasing concern expressed about the routine nature of some interventions [21,22]. In this study this could not be explained entirely by clinical characteristics of the participants, as they were all healthy women with no complications in pregnancy or at the time of admission to their chosen birth setting. We have previously reported on the lack of high level evidence to support the routine use of vaginal examination [23] and the way midwives in different models of care use this clinical skill [24].

3.1 Integrating and expanding the theoretical position of *Birth Territory*

As discussed in the introduction to this study we underpinned this ethnographic study with the theory of *Birth Territory*, taking a critical eye to the 'terrain' (birth environment) as either a sanctum or surveillance room and the 'jurisdiction' (power to do what one wants) as represented by integrative (midwifery guardianship) and disintegrative (midwifery domination) power [7,9]. While it was clear the home environment women gave birth in was a 'sanctum' of their own making, and the jurisdiction of the midwives was 'integrative,' the BC settings were an intermediate space that was much more complex. The OU births observed were more likely to occur in 'terrain' that was a surveillance room and midwives were at times very directive and dominant and at other times really went with the flow of whatever the woman wanted. We rarely saw midwives strongly active in promoting and facilitating physiology in the OUs. The couple of times we saw this was with midwives who worked permanent nights and they articulated their choice of shift was in order to avoid the heavily medicalised routines and surveillance of the day shift.

This surveillance from the institution, which was manifested most clearly in the OUs due to the lack of buffer from the medical gaze, has been described by others as the 'paradox of the institution' [25]. In this paradox, surveillance from the institution places time constraints on staff, who in the pursuit of safety and efficiency reduce social relations and increase the interventions, with physiological support being lost in the process [25]. This was very evident in our study where women in the OU were much less likely to be upright and off the bed for birth and had more vaginal examinations, continuous electronic fetal monitoring and augmentation, despite all the women observed being low risk at the onset of labour.

Both the study BCs were geographically attached to, or within, their host hospital spaces, and their boundaries were permeable to OU staff and philosophies. In particular, to access BC2, women had to negotiate the surveillance space of the associated OU, meaning that they became subject to gatekeeping interventions, like electronic fetal monitoring, before being granted access (or not) to the BC. The further away the birth setting was, geographically and philosophically, from these technocratic norms, the less women experienced technical procedures during their labour and birth and the more midwives appeared to promote and support physiological birth and associated strategies. Similar observations have been made by other authors, based on interviews with staff and childbearing women [3,19,26]. Birthplace has been found to be a profoundly important aspect of women's experiences of childbirth with the OU identified with the medical model of birth and the primary unit (like freestanding BCs) identified with the midwifery model [27]. In this study, the addition of observational data provides evidence of the interaction between beliefs and settings on childbirth behaviours. In this regard, BCs behaved as boundary objects, in that, while they were invariant physical phenomenon, they were sometimes interpreted in different ways by the different actors within them. This led to a situation of 'talking past', setting up unmet expectations and assumptions for some midwives and women using the BC spaces. Midwives were trying to use integrative strategies but in order to protect women from the gauntlet and permeable boundaries of the BC they were at times dominating and directive to achieve a normal birth and avoid transfer and intervention. Some midwives undertook what Annandale has termed 'ironic interventions' [28] in an attempt to 'direct to protect' women from the consequences of the institutional panoptical gaze. This led them to undertake actions that did not fit with their philosophy of physiological labour and birth, 'as if' they were under constant surveillance. While the alongside BC midwives worked in sanctum-like rooms they felt surveilled by the nearby OU and vulnerable due to the permeable boundaries between the co-located BC and the OU. For some women, such actions were in contrast to their birthing intentions, either because they did not want or need interventions, or because they would have preferred to transfer to the OU setting earlier.

All human events are socially structured, by contemporary expectations and discourses, and by historically learned behaviours, but some embodied functions are more or less bounded by physiology. Childbirth is both a physical and a liminal or an embodied event that marks the body and the psyche in ways that are irreversible [29,30]. This study reveals that, in contemporary childbirth practice in one high income country, similar women in different birth spaces exhibit birthing behaviours that are more or less constrained by both the physical and the philosophical space in which they labour, and by the degree to which there is dissonance or assonance between them and their care givers in these different spaces. The notion of 'running the gauntlet' summarises the consequences of this situation, in which some responses to the panoptical gaze act to buffer the gauntlet effect, some enable survival from it, and some entail integration into, and reinforcement of, the technocratic surveillance and responses to it.

3.2 Limitations

This study involved a small number of women and midwives from the same area within NSW, who were fluent in English, so the findings may not be transferable to women and staff in other settings. There were more multiparous women in the home birth group. Observation of practice can change behaviour, and those consenting to take part in such studies may not be comparable to the general population of childbearing women or midwives. However, the relatively large amount of data, and the methodological triangulation, imply useful theoretical insights that can be tested in future studies.

4 Conclusion

In this study, midwives and childbearing women who had a physiological orientation to childbirth had to 'run a gauntlet' in which they were subject (actually or theoretically) to a panoptical gaze and *birth territory terrain* which privileged technocratic ways of birth. The more distant and *sanctum* like birth was (geographically and philosophically) from a OU setting, the more likely women were to adopt a forward leaning upright position for birth, and the less likely they were to have procedures such as VEs. When there was a lack of philosophical alignment between women and midwives and/or with the birth setting and the terrain was more of a *surveillance* terrain, or the OU was proximal and boundaries more permeable, such as with the BC, there was evidence of dissonance in women's accounts. The activities of midwives in all settings either buffered the gauntlet effect, or enabled midwives and women to survive it (*midwifery guardianship*), or led to integration with, and reinforcement of, the power of the panoptical gauntlet (*midwifery domination*). This provides an empirical insight into the theoretical assumption that there is a synergy between childbirth philosophies and place of birth that can have important clinical consequences for women and babies.

Conflict of interest

None declared.

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Author contributions

HD, VS designed the research question and the study.

HD, VS, MJ, HP gathered the data and undertook the observations and interviews.

HD, VS, MJ,HP, SD ~~and AD~~ analysed the data.

HD, VS, MJ,HP, SD and AD participated in the writing of the paper.

All authors reviewed the manuscript prior to submission.

The paper is not under consideration for publication elsewhere The authors have no conflicts of interest to declare.

Ethics approval

Ethics approval was obtained from The University of Western Sydney's Board of Ethics. Sitespecific ethics approval was also obtained from the two relevant NSW Local Health Districts involved (Protocol No X09-0079).

Please note there are no appropriate reporting guidelines for ethnographic studies

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