Midwifery 107 (2022) 103272

Contents lists available at ScienceDirect

Midwifery

journal homepage: www.elsevier.com/locate/midw

Exploring trust in (bio)medical and experiential knowledge of birth: The perspectives of pregnant women, new mothers and maternity care providers

Georgia Clancy[a,1,*], Felicity Boardman[b], Sophie Rees[b,2]

[a] Department of Sociology, University of Warwick, Coventry CV4 7AL, UK
[b] Warwick Medical School, Gibbet Hill Road, Coventry CV4 7AL, UK

ARTICLE INFO

Article history:
Received 29 April 2021
Revised 14 January 2022
Accepted 3 February 2022

Keywords:
Experiential knowledge
Embodied knowledge
Childbirth
Pregnancy
Maternity care

ABSTRACT

Objective: To explore women's and maternity care providers' experiences of birth, and the roles of (bio)medical and experiential knowledge therein.
Research design/setting: In-depth qualitative interviews were undertaken with pregnant women and new mothers ($n = 14$) as well as with a range of maternity care providers working for the National Health Service ($n = 6$) and privately ($n = 7$).
Findings: Trust emerged as a key concept in women's and maternity care providers' narratives. It was found that women and maternity care providers placed trust in two key areas: trust in past experiences and trust in women's innate abilities and embodied knowledge of birth.
Key conclusions: Women and maternity care providers trust and utilise both (bio)medical and experiential forms of knowledge of birth in complex ways and the value an individual ascribes to (bio)medical and/or experiential knowledge is highly subjective, and not necessarily mutually exclusive. This destabilises the notion that (bio)medical knowledge is associated with experts and experiential knowledge is associated with 'lay' people, and that these two bodies of knowledge are distinct.
Implications for practice: Trust is a key concept in maternity care. The predominance of biomedical models of birth risk reducing trust in the value of experiential based birth knowledges – both embodied and empathetic. Trust in experiential knowledge could help to facilitate woman-centred care by recognising women as valuable 'knowers' with unique insight to contribute, and not just receivers of medical knowledge. It may also help providers 'tune-in' with the women in their care if they allow their experiential knowledge to complement their (bio)medical knowledge.

Introduction

Trust is often thought of in healthcare as a means by which to facilitate positive interactions between patients and providers, managing anxiety and improving efficiency and effectiveness (Brown et al., 2011; Elliot, 2004: 73; Taylor-Gooby, 2008). To these ends, trust is typically examined in the interactions between patients and providers, as well as between staff in healthcare systems. However, in order to understand these interactions, it is helpful to first understand the different perspectives and knowledges of those participating in them. This article seeks to explore women's and maternity care providers' use of different forms of knowledge – (bio)medical and experiential – the role of trust within these contrasting birth schemas, and their respective roles in decision-making and management of birth.

(Bio)medical knowledge constitutes the dominant model of health and illness in the western world. It focusses on biological factors and allopathic approaches often at the exclusion of psychological, environmental and social factors. Despite the dominance of (bio)medical knowledge, experiential knowledge has been found to have valuable applications in health and maternity care. In particular, with regards to reinforcing or challenging (bio)medical 'expert' knowledge, managing risk and uncertainty, and facilitating decision-making (d'Agincourt-Canning, 2005; Entwistle et al., 1998; Etchegary et al., 2008). Problematically, whilst (bio)medical knowledge is typically privileged and associated with 'experts', ex-

* Corresponding authors.
E-mail addresses: g.clancy@warwick.ac.uk (G. Clancy), Felicity.Boardman@warwick.ac.uk (F. Boardman), S.Rees.1@warwick.ac.uk (S. Rees).
[1] Twitter: @_GClancy
[2] Twitter: @sophielour

https://doi.org/10.1016/j.midw.2022.103272

periential knowledge is often synonymous with 'lay' individuals and consequently assigned a lower status (Caron-Finterman et al., 2005; Markens et al., 2010). This can leave patients dependant on doctors as the mediators between (bio)medical and lay knowledge (Kohler-Riessman, 2003). Indeed, keeping expert knowledge 'untouchable' can be advantageous to patients who trust and rely on experts to make difficult decisions (see Henwood et al., 2003). Traditionally trust in the provider-patient relationship has referred to how much patients trust the expertise and competence of their healthcare providers to perform this mediator role (Calnan and Rowe, 2008) and apply seemingly objective (bio)medical knowledge to individual cases. However, there is complexity within the polarities of rational, expert knowledge and non-rational, lay knowledge ((Markens et al., 2010). Zinn (2016) considers that experiential, or tacit, knowledge in fact lies "in-between" these polarities and draws on strategies such as trust, intuition and emotion to manage risk and uncertainty.

Historically, childbirth has been a social event and as such cannot unequivocally be understood as a 'medical' condition. Proponents of the medicalisation critique have detailed the transformation of childbirth from a social event with predominantly non-interventionist 'lay' female midwives, to a medical event with male obstetricians utilising (bio)medical techniques (Ehrenreich and English, 2005). Whilst the medicalisation of birth has been welcomed by those who trust in its association with improved safety and evidence-based (bio)medicine (Pitchforth et al., 2008; Lavender and Chapple, 2008; (Longworth et al., 2001), critics highlight its capacity to normalise the disempowerment of pregnant and birthing women (Davis-Floyd and Sargent, 1997; Morgan, 1998). However, at the other end of the spectrum, the natural childbirth movement which favours women's experiential knowledge has typically been perceived as associating 'good' motherhood with natural birth and consequently received criticism for promoting the idea that women who do not or cannot have natural births are 'bad' mothers and furthermore 'bad' women (Brubaker and Dillaway 2009: 749; Lowe, 2016). The complex and competing discourses on birth leave women and providers walking a tightrope between different birth schemas.

In order to understand the application of, and trust in, lay experiential knowledge of birth in relation to expert (bio)medical knowledge, Abel and Browner (1998) distinguished between two types of experiential knowledge: 'embodied' and 'empathetic'. Embodied knowledge is relative to the individual body that experiences a phenomenon and during pregnancy and birth women can have a unique awareness of their bodies and foetuses. This 'interoceptive awareness' has been found to influence decision-making and behaviour regulation, particularly when facing uncertainty, complexity and risk (Herbert and Pollatos, 2012).

Studies have explored women's embodied experiences of pregnancy and its facilitation of decision-making (e.g. Lippman, 1999; Rothman, 1984; Abel and Browner, 1998). In addition, midwives who utilise their own experiential knowledge have been found to develop more trusting, calming, and communicative relationships with women (Thelin et al., 2014; Berg, 2005; Hunter, 2008). Indeed, Fry (2016) explored how independent midwives allow their practice to be led by intuition developed through experiential knowledge, whilst Henley (2016) notes that although doulas often obtain formal qualifications to gain legitimacy, they and their clients most value their experiential knowledge of birth. d'Agincourt-Canning (2005) demonstrates that empathetic experiential knowledge (obtained through the experiences of others) can be just as influential as embodied knowledge, and indeed Regan et al. (2013) found that stories of/attendance at a birth of relatives and friends was the most significant factor for women deciding on their birth type. As such there are many ways that trust in experiential knowledge can influence pregnancy and birth.

Experiential and (bio)medical knowledge of birth are valuable, and the relationship between the two knowledge bases is often more complex and synergistic than dichotomous thinking suggests. Drawing on interviews with 27 women and maternity care providers, this paper brings together different understandings of birth to interrogate their intersection in decision-making and provide insight into the role of trust in this process.

Methods

The research methodology was informed by a feminist approach to explore knowledge, power, relationships and discourses in and through experiences of childbirth (Randall, 2002: 112; English, 2010). Semi-structured interviews were conducted between October 2018 and September 2019 with a sample consisted of women who had current or recent experience of maternity care, and a range of maternity care providers. Ethical approval was granted by the National Health Service (NHS) Solihull Research Ethics Committee and Health Research Authority (18/WM/0149) in July 2018 and the University of Warwick's Biomedical and Scientific Research Ethics Committee (71/18–19) in July 2019.

Women

Participants included 14 women, four of whom were pregnant and 10 of whom had recently given birth (within 6 months). Five women were first time mothers and nine were second time mothers. Recruitment took place via recruitment leaflets distributed by a midwife in an NHS maternity unit and through private maternity/parenting groups/websites. The sample came from a large metropolitan county in England. Three women were recruited for interview through the NHS and 11 women were recruited outside of the NHS. Participants received a £10 shopping voucher in appreciation of their time and effort.

Interviews with women were conducted face-to-face by the lead researcher (GC) in private rooms in public spaces (e.g. libraries, community centres) to ensure the safety of both the participant and researcher. Interviews lasted on average 51 min, were audio recorded and transcribed verbatim by the lead researcher, with identifiers removed and pseudonyms assigned. The interview schedule was semi-structured with open-ended questions to allow flexibility, personalisation, and participant involvement in data production.

Maternity care providers

Thirteen interviews were carried out by the lead researcher with a range of NHS and private maternity care professionals: five NHS midwives, one NHS perinatal psychologist, two independent midwives, three doulas, and two hypnobirthing teachers. Recruitment took place via an invitation email shared through industry organisations, personal contacts, and snowball sampling.

Participants could choose a face-to-face or telephone interview, however in the end all interviews were conducted via telephone as the most convenient method for busy professionals collectively working across 12 English counties. Semi-structured interviews lasted on average 42 min, were audio recorded and transcribed verbatim by the lead researcher, with identifiers removed and pseudonyms assigned. Maternity care providers also received a £10 shopping voucher in appreciation of their participation.

Analysis

Transcripts were imported into NVivo11 and analysed using Braun and Clarke's (2006) approach to thematic analysis, coding

sections of text into thematic nodes which were reviewed and refined. Analysis was an iterative process moving between the data and existing literature. This process refined understandings of what was happening in the codes and how they became themes. The presentation of the findings below reflects this process and therefore includes references to the literature where relevant. Themes were compared and contrasted between the women and maternity care providers to produce a conceptual framework through which to understand women's maternity experiences. Whilst the frequency of codes was considered, if an infrequent code related to a theme and was considered important in understanding the data, it was incorporated.

The findings below draw on accounts from both women and maternity care providers to explore their experiences of birth and trust in (bio)medical and experiential knowledge.

Reflexivity

The researchers were mindful of how their 'situated knowledges' (Haraway, 1991) influenced the research process. The lead researcher (GC) who conducted the interviews presented as a young, white, middle-class, able-bodied woman, which affected how she was perceived by participants and the conversations had. A number of participants asked GC whether she had given birth herself. Following the principles of feminist interviewing, which emphasise reciprocity and minimising power differentials (Oakley, 1981), GC disclosed that she had not given birth. Muir (in Earle, 2003) notes a 'conspiracy of silence' around birth in which women who have given birth purposely conceal negative details so as not to deter potential 'mothers-to-be' from having children. Whilst this may have influenced participants' responses, the research team included individuals who had and had not given birth when it came to research design, analysis and presentation of findings. Moreover, speaking to an interviewer without personal experience of birth may have created spaces for some participants to offer more detailed explanations than they may have done if interviewed by a woman with birth experience.

Similarly, it was hoped that GC's independence from healthcare institutions would result in more open, relaxed conversations with participants. However, it is noteworthy that these associations were made anyway, with some participants assuming that GC had a medical background. When corrected, it was observed that maternity care providers in particular modified their responses to avoid or explain jargon. These observations underscore the various ways that participant responses are influenced by the characteristics of the researcher, the need to be attentive to bodily signifiers and their role in the production of research findings (Brown and Boardman, 2011).

Findings

Women and maternity care providers talked about birth knowledge in complex ways and trust was identified as a key concept in their narratives. Firstly, the idea of trust in past experiences of birth for both women and providers will be explored, and secondly the impact of trust in women's innate abilities and embodied knowledge of birth shaping decisions and practices.

Trust in past experiences of birth

For women and maternity care providers, perceptions of birth were often described through their personal and professional experiential knowledge, shaping their understanding of birth as a normal event or a risky endeavour.

Hailey perceived that birth was normal and following the positive embodied experiential knowledge of her first birth, decided on home birth for her second child.

> *'I've not had a risky experience. Out of my NCT [National Childbirth Trust] group of friends – and there's eight of us – I was the only one with my first pregnancy […] who got anything relatively similar to my birth plan. So I had a really positive experience, they have completely different experiences because theirs was slightly more traumatic, so I think they would have a slightly different perception. I think it's really based upon your experiences, but you don't get any control over that.'*
>
> Hailey, 32, postnatal woman, second child

Hailey's embodied knowledge of her first birth influenced her future decisions about the type and location of her second birth. For Hailey, her own embodied knowledge was the most important factor in her perception of birth and overrode her empathetic knowledge of her friends' more complicated births. Similarly, Julia was keen to repeat her first positive childbirth experience for her second birth.

> *'We had such a positive home birth experience [previously] we didn't really question that, we just said we want to have exactly the same experience again in so far as that's possible with birth. […] we knew that statistically it was even safer second time around and there's less risk of interventions and complications'*
>
> Julia, 33, pregnant woman, second child

Julia's experiential knowledge of home birth with her first child was reinforced by (bio)medical knowledge regarding home births for second children. Indeed, since home birth is often considered an alternative and (bio)medically risky option (Viisainen, 2000), women's trust in their experiential knowledge of birth was used to resist the status quo of medicalised birth and justify their decision for home birth to both themselves and others.

However not all women had positive natural births like Hailey and Julia, and empathetic knowledge of other women's experiences caused them to perceive birth as risky, which was then reinforced by (bio)medical discourses, as Magda showed:

> *'[…] for me it is a risky event […] both times my children got stuck and I had to have assisted births with forceps, so that's the sort of thing you need, you know someone with a degree of medical um training to help you with. I mean I suppose, partly from knowing the history of how many women tended to die in childbirth before modern medicine, um, knowing the number of people who have had to have emergency c-sections because of various things that have gone on who were apparently low-risk and healthy throughout the pregnancy. So yeh, I do, I do think it's risky.'*
>
> Magda, 38, postnatal woman, second child

In justifying her belief that birth is risky, Magda draws on different knowledges. Firstly, she situates birth within her embodied experiences of it and subsequently describes a trust in (bio)medical techniques and training to facilitate labour. This presents medicalisation as a necessity rather than a choice and absolves her of the social judgement that may come from those who demonise medicalised birth and privilege natural birth. Secondly, Magda draws on a shared medical and historical narrative of birth in which maternal mortality has decreased with the advent of medicalised childbirth. Finally, she uses empathetic knowledge of her friends' difficult childbirth experiences to reinforce her beliefs and subsequent trust in (bio)medicine. This demonstrates nuance in decision-making and that (bio)medical knowledge is not exclusive to professionals.

Though interviewed about her personal childbirth experiences, Natasha's professional experiences as a doctor demonstrated how experiential and (bio)medical knowledge could intersect in com-

plex ways. When asked whether she considered birth to be risky, Natasha said:

'[…] yes, but that's probably because, that's not been coloured by my own experience of my own pregnancies and birth, just that I've worked on the other side of it. So I worked in paediatrics for a few months when I was younger, and obstetrics for a few months when I was even younger than that. So you inevitably see the people who don't do as well, the babies who don't do as well. Umm… so yeh you can't help but then feel that it's riskier.'

Natasha's, 34, postnatal woman, second child

Natasha's view of birth as risky was informed by her professional, rather than her personal, knowledge and experiences. This demonstrates how different knowledges can be hierarchically ordered to shape perceptions and approaches to birth. In Natasha's case, the prioritisation of her professional (bio)medical knowledge and experience may reflect wider societal tendencies to privilege (bio)medical accounts and the narrative that birth is risky. However it may be personal to Natasha because she has a greater amount or severity of professional experiences to draw on compared to her own two births. Though Natasha had not worked in maternity care since she was a student, her account demonstrates the powerful and long-lasting effects of witnessing and learning about birth as risky, and how this shapes trust in women's ability to birth naturally. This knowledge had continued to shape her perceptions of birth, childbirth decisions, trust and acquiesce to (bio)medical power, again showing the complex and porous nature of expert and lay knowledge.

Drawing on past experiences of birth is not available to first-time mothers and as such first-time mothers may give more weight to empathetic knowledge. Jessie spoke about both her mother's and sister's childbirth experiences:

'My mum had to have three c-sections because of the shape of her pelvis but then my sister was able to deliver twice naturally, so fingers-crossed all will be grand. […] for my peace of mind for my first baby I'd like to be in hospital […] knowing how beautiful my sister's births were at home I wanted to get a piece of that [in an alongside maternity unit] without being at home.'

Jessie, 27, pregnant woman, first child

The seemingly opposing birth experiences of Jessie's mother and sister made it hard for her to unequivocally trust in either medicalised or natural birth. As such she attempts to combine her empathetic knowledge of both their experiences by deciding to give birth in an alongside maternity unit. Jessie considered that this birth option offered her (bio)medical safety but also a 'normal' birth experience which could reflect the home birth experience of her sister. In light of Zinn's (2016) understanding of different knowledges, Jessie has neither rational (bio)medical knowledge or 'in-between' embodied knowledge of birth herself but embraces the traditionally non-rational strategy of hope to manage risk and uncertainty about how her own birth will unfold.

Just as the experiential knowledge of women produced a variety of perceptions and approaches to birth, there was also variation in the accounts of maternity care providers. Many of those working for the NHS considered childbirth to be risky and dealt with this by trusting in (bio)medical knowledge, interventions, and processes.

'I think it's quite risky to be honest yes […] so many things can go wrong in a very short space of time, within seconds sometimes that it is very, um risky. That's why I think it should be very controlled, and by controlled it means um, observed very well by specialists […] I've seen so many things, so many complications, so many, oh my god you would not believe […] I always tell them [women] something may happen but we will try to deal with it as much as we can do, and we always, I always say we pretty much have solutions for everything.'

Ana, 38, labour ward midwife

'I think that's why we call it low-risk, because it's not no-risk. It's not like, no childbirth is ever going to be risk free. […] we [labour ward midwives] also come from that medically high-risk side as well where we've seen things that have gone wrong'

Beth, 30, labour ward midwife

Ana's and Beth's awareness of the unpredictability and riskiness of birth is shaped by their professional experiential knowledge of high-risk birth in the labour ward. Their accounts demonstrate that experiential knowledge is not just a lay phenomenon but used by experts to form their perception and management of childbirth. Ana's experiential knowledge of birth caused her to trust in (bio)medical knowledge and solutions, and she encouraged the women in her care to do the same.

In contrast for Ellen (previously an NHS midwife but now independent), rather than her experimental knowledge causing her to rely on (bio)medical techniques, she trusted it to help her support women who were considered (bio)medically 'high-risk' but wished to pursue less-medicalised births.

'So they [clients] may well have chosen me because they know that they're going to get resistance […] I look after a lot of women who have had previous caesarean sections, post-partum haemorrhages, this that and the other […] I do consider risk, of course I do, but I, I, I'm big enough and robust enough now to have been around the block so many times that I, I'm confident enough to feel confident to support a woman who is having a baby with risk factors.'

Ellen, 59, independent midwife

Ellen trusted that modern-day childbirth in the UK was safe and she combined her (bio)medical training with the professional experiential knowledge she had developed over a long midwifery career to resist (bio)medical approaches to birth and facilitate choice and normality for the women she worked with. Indeed, many of the accounts from women and maternity care providers drawn on here demonstrate that (bio)medical and experiential knowledge do not need to be viewed as polar opposites. The two can intersect revealing the complexity of decision-making as both women and providers can trust in and utilise different forms of knowledge during their personal experiences and professional practice of birth. Since the midwifery profession is dominated by women, many of whom will have given birth themselves, midwives' practices can also be shaped by their personal experiential knowledge of birth. Henley (2016) found that many doulas had only embarked on this occupation after becoming mothers themselves, demonstrating how first-hand experiential knowledge, and subsequent trust in this knowledge, can grant an individual access to privileged knowledges.

Trust in women's innate abilities and embodied knowledge of birth

In addition to trusting in (bio)medical and experiential knowledge of birth, women and maternity care providers also spoke about their trust in women's innate ability to give birth.

'I don't think it's risky, I think it shouldn't be risky. Um, I very much buy into the hypno-science of it, that it's something that we are physically designed to do and then if we respect the way that the human body has been designed, then there are measures to um support birth in a very normal, natural, non-interventionist way.'

Julia, 33, pregnant woman, second child

'I have absolutely got an unshakable belief in women's ability to do this. And it did affect me working in the institution, I could

even feel that but I did, my foundations were solid but for my colleagues, they were like… 'I don't see normal birth, I don't know if women can do this anymore'.'

Martha, 63, independent midwife

Julia and Martha trusted in women's natural ability to give birth though both were conscious that this was not the mainstream view. Julia's trust in women's abilities was reinforced by her own experiential knowledge. However, she frames her perception as counter-cultural, 'hypno-science' (referring to hypnobirthing ideology), rather than 'hard-science'. Martha describes how her trust in women's ability to birth was at odds with the dominant discourses, practices and workplace cultures of (bio)medical birth that she encountered in the NHS. Although her trust in women's ability to birth was challenged by her professional experiences, it allowed her to resist professional discourses of risk and uncertainty. It is worth noting that whilst trust in women's innate ability to birth was helpful to some participants, emphasising women's 'natural' ability to give birth can draw on essentialising discourses which depict women who do not, or cannot, have intervention-free vaginal births as lesser mothers and indeed lesser women (Brubaker and Dillaway, 2009). Thus it is important that promoting trust in women's natural ability to give birth does not simultaneously demonise medicalisation and valorise natural birthing by implying that natural birth is the only 'good' birth or the only way to perform 'good' motherhood.

Associated with a trust in women's innate ability to give birth was also trust in women's embodied knowledge (Abel and Browner, 1998) of their bodies and foetuses during pregnancy and labour, as Jane demonstrated:

'[…] the midwife who was looking after me, she, it was almost like she didn't believe that I had gone into labour that quickly […] she was saying, 'oh come back in like 3 h and we'll examine you' and I was thinking 'I don't think so, baby will be here!'"

Jane, 33, postnatal woman, second child

Jane had the embodied knowledge to tell her midwife what was happening during labour, although her midwife privileged trust in her own (bio)medical knowledge of birth. This demonstrates the common subjugation of experiential knowledge to (bio)medical knowledge (Markens et al., 2010) and the difficulty women face in having their voices heard. Although Jane was rushed to the birth centre she had already lost the opportunity to have her planned birth experience because her midwife did not trust her embodied knowledge. Indeed, many of the women who took part in this study had experienced change to their preferred birth plans. They expressed the difficulty they had negotiating change with their maternity care providers as their role and knowledge was subjugated to an assumed trust in (bio)medical approaches.

In contrast to the experience of Jane, as a doula Sally spoke about her experiential knowledge of birth and her clients developed through continuity of carer, and how this facilitated the care she provided:

'When you get to know your women and you get to know them properly, you know when they're about to give birth, you get to know from the tone in their voice, or from the… you know I had a client who gave birth at 32 weeks, she phoned me […] and I could tell from her voice that she was having her baby […] she called the hospital and they told her to go and have a bath and a paracetamol because they thought it was pelvic pain […] I said 'get to the hospital, go to the hospital now', because I'd got to know her and that makes a massive difference.'

Sally, 49, doula

Sally's trust in her embodied and empathetic knowledge of her client meant that she 'knew' that her client was in labour despite the (bio)medical assertion that it was pelvic pain. Indeed, as well as trusting their experiential knowledge of women and birth, the private maternity care providers interviewed here highly valued women's experiential knowledge and encouraged women to trust it, rather than deferring to (bio)medical knowledge:

'I think that we've dumbed down women's intuition, you know, there are women in my home birth group who are, they say, 'I don't know why but I feel like I need to go to hospital, I need to change my birth plan and I need to be in hospital' and that intuition that they've got is invariably right […] but when you try to say that to healthcare professionals they just look at you like you've gone mad, 'I'd rather trust a machine than intuition."

Sally, 49, doula

'[…] 'how do you feel instinctively, how do you feel in your gut you know, do you feel that baby is well and healthy and you're ok to wait or do you feel instinctively there might be something wrong and maybe need to act?' And through that gentle conversation she was able to say, 'no I feel really good I don't feel like there's any problem, I don't know why they're [NHS provider] suggesting it [induction]'.'

Imogen, 46, hypnobirthing teacher

Whilst experiential and (bio)medical knowledge can be mutually reinforcing, there is also the possibility for one to undermine a person's trust in the other. Indeed, Sally and Imogen highlight the tension between experiential and (bio)medical knowledge and the difficulties women may face explaining this knowledge to their NHS providers. This illustrates a need to change perspectives on experiential knowledge within health and maternity care. Indeed, trusting women's embodied and empathetic knowledge of birth facilitates women-centred care by recognising women as valuable producers of knowledge and not just receivers of (bio)medical knowledge. In contrast, denying women's experiential knowledge as untrustworthy or invaluable risks harming the provider-women relationship.

Discussion

Through interviews with women and maternity care providers about the different knowledges they draw on in pregnancy and childbirth it emerged that women and providers base their trust in a unique combination of both (bio)medical and experiential knowledge, although the relationship between these two knowledges shifts and changes over time and context. In some instances, biomedical and experiential knowledge are mutually constituting and reinforcing, however trust could be threatened when they conflicted. This is in line with the work of Kleinman et al. (2006) who noted that practitioner-patient interactions centre around the transfer and understanding of each other's 'explanatory models' of health conditions, which often draw on a combination of knowledges. As such it is not simply the case that (bio)medical knowledge is for experts and experiential knowledge is for lay people, in reality the utilisation of both knowledge sources is much more porous. Clinicians use their professional and personal experiential knowledge, just as women draw on biomedical discourses to justify and present their birth choices and decisions. As such, a strict division between (bio)medical and experiential knowledge may be too simplistic, as Zinn (2016) and Markens et al. (2010) argue that expert and experiential knowledge can co-exist in a symbiotic relationship, shaping and informing one another. Indeed, thinking specifically about birth, Newnham et al. (2018) also argue for the need to more beyond dualistic thinking whilst Davis-Floyd (2001) proposes that best practice should combine different paradigms of birth, which Martin (1992) noted midwives could be particularly adept at.

The data here showed how women trusted their experiential (embodied and empathetic [Abel and Browner,1998]) knowledge of birth to influence their future birth decisions. Though not all of the women interviewed here were led by their experiential knowledge to trust in the safety and normality of birth - since medicalised birth is currently the norm - experiential knowledge was an important resource for those looking to resist medicalised care and opt for an 'alternative' home birth. Indeed, the important role of experiential knowledge in resisting normalised (bio)medical birth was apparent when considering that NHS providers interviewed here largely considered childbirth a risky endeavour as a result of their own professional experiential knowledge and (bio)medical training. They subsequently trusted in (bio)medical knowledge and techniques to manage risk, demonstrating how women's own experiential knowledge can be a counterbalance to (bio)medical knowledge and its valorisation of medicalised birth (Flanagan et al., 2019). Indeed, when considering the trust women and providers could have in women's innate ability to give birth without (bio)medicine, the examples given here show how this belief could be both reinforced and challenged by experiential knowledge of birth actually unfolding. This finding is supported by Coddington et al. (2020) who found that exposing hospital-based midwives to home birth - and consequently equipping them with experiential knowledge of different births - improved their acceptance of home birth, highlighting the significance of experiential knowledge, not only to women, but also health professionals.

Though participants may have been unlikely to share instances where their experiential knowledge was wrong, the data demonstrates how women's embodied knowledge of birth could contradict (bio)medical knowledge, though this was not always acknowledged by NHS providers. The examples of embodied awareness given here demonstrate how experiential knowledge can be a valuable form of knowledge. Zinn (2016) argues that experiential knowledge is particularly useful in complex and time-sensitive situations and thus it is possible to see how it might be drawn on in maternity care to inform decision-making. This highlights how maternity care can be quite distinct from other areas of healthcare, with both women and providers the 'experts' in birth, and their privileged and subjugated positions socially constructed. Indeed, it was maternity care providers working privately, outside of the (bio)medical system, who particularly valorised experiential knowledge and the potential for (bio)medical knowledge and techniques to disrupt both women's and providers' trust in experiential knowledge.

Conclusion

Women's and providers' trust in (bio)medical and experiential forms of knowledge has been shown to be more complex and co-existent than traditional dualisms suggest. However, if both groups interviewed here draw on both forms of knowledge then one need not be privileged above the other, reinforcing traditional doctor-patient power relations. Experiential knowledge can be complementary or challenging to (bio)medical knowledge for both women and providers. It is worth considering the potential for experiential knowledge to be applied in maternity care; how providers can trust and explore women's experiential knowledge, how it influences women's birth preferences, perceptions and responses to (bio)medical information and practices. Moreover, it is imperative that providers trust and respect women's experiential knowledge of pregnancy and birth as part of women-centred care and creating trust in the provider-woman maternity relationship.

Credit author statement

Dr Georgia Clancy: Conceptualization, Methodology, Formal analysis, Investigation, Writing - Original Draft, Project administration, Funding acquisition. **Prof. Felicity Boardman:** Supervision, Formal analysis, Writing - Review & Editing. **Dr Sophie Rees:** Supervision, Formal analysis, Writing - Review & Editing.

Acknowledgements

This research was funded by the Economic and Social Research Council, award no: ES/J500203/1. The funder had no role in the conduct of the research or presentation of this article.

References

Abel, K., Browner, C., 1998. Selective compliance with biomedical authority and the uses of experiential knowledge. In: Lock, M., Kaufert, P. (Eds.), Pragmatic Women and Body Politics. Cambridge University Press, Cambridge.
Berg, M., 2005. A midwifery model of care for childbearing women at high risk: genuine caring in caring for the genuine. J. Peri. Edu. 14 (1), 9–21.
Braun, V., Clarke, V., 2006. Using thematic analysis in psychology. Qual. Res. Psychol. 3 (2), 77–101.
Brown, P., Alaszewski, A., Pilgrim, D., Calnan, M., 2011. The quality of interaction between managers and clinicians: a question of trust. Publ. Money Manag. 31 (1), 43–50.
Brown, L., Boardman, F.K., 2011. Accessing the field: disability and the research process. Soc. Sci. Med. 72 (1), 23–30.
Brubaker, S.J., Dillaway, H.E., 2009. Medicalization, natural childbirth and birthing. Sociol. Compass 3 (1), 31–48.
Calnan, M., Rowe, R., 2008. Trust, accountability and choice' *Health*. Risk Soc. 10 (3), 201–206.
Caron-Finterman, J., Broerse, J., Bunders, J., 2005. The experiential knowledge of patients: a new resource for biomedical research? Soc. Sci. Med. 60 (11), 2575–2584.
Coddington, R., Catling, C., Homer, C., 2020. Seeing birth in a new light: the transformational effect of exposure to homebirth for hospital-based midwives. Midwifery 88.
d'Agincourt-Canning, L., 2005. The effect of experiential knowledge on construction of risk perception in hereditary breast/ovarian cancer'. J. Genetic Counsell. 14, 55–69.
Davis-Floyd, R., 2001. The technocratic, humanistic, and holistic paradigms of childbirth. Int. J. Gynaecol. Obstet. 75 (1), S5–S23 Suppl.
Davis-Floyd, R., Sargent, C., 1997. Childbirth and Authoritative Knowledge: Cross–Cultural Perspectives. University of California Press, Berkeley, CA.
Earle, S., 2003. Bumps and boobs": fatness and women's Experiences of pregnancy'. Women's Stud. Int. Forum 26 (3), 245–252.
Ehrenreich, B., English, D, 2005. For Her Own Good: Two Centuries of the Experts' Advice to Women. Anchor Books, New York.
Elliott, A., 2004. Subject to Ourselves: Social Theory, Psychoanalysis and Postmodernity, 2nd Edition Paradigm, Boulder.
English, L.M., 2010. Poststructuralist Feminism'. In: Mills, A.J., Durepos, G., Wiebe, E. (Eds.), Encyclopaedia of Case Study Research. Sage Publications, Thousand Oaks, CA, pp. 711–713.
Entwistle, V.A., Renfrew, M.J., Yearley, S., Forrester, J., Lamont, T., 1998. Lay perspectives: advantages for health research. BMJ 316, 463–466.
Etchegary, H., Potter, B., Howley, H., et al., 2008. The influence of experiential knowledge on prenatal screening and testing decisions. Genet. Test. 12 (1), 115–124.
Flanagan, B., Lord, B., Reed, R., et al., 2019. Listening to Women's voices: the experience of giving birth with paramedic care in Queensland, australia'. BMC Pregnanc. Childbirth 19 (490) unpaginated.
Fry, J.P., 2016. *A Descriptive Phenomenological Study of Independent Midwives' Utilisation of Intuition as an Authoritative form of Knowledge in Practice*. Unpublished PhD thesis. Bournemouth: Bournemouth University.
Haraway, D., 1991. Simians, Cyborgs and Women. Free Press Association, London.
Henwood, F., Wyatt, S., Hart, A., et al., 2003. 'Ignorance is bliss sometimes': constraints on the Emergence of the 'Informed Patient' in the Changing landscapes of health information. Sociol. Health Illn. 25 (6), 589–607.
Henley, M.M., 2016. *Science and Service: Doula Work and the Legitimacy of Alternative Knowledge Systems*. Unpublished PhD thesis. The University of Arizona, Arizona.
Herbert, B.M., Pollatos, O., 2012. The body in the mind: on the relationship between interoception and embodiment'. TopiCS 4 (4), 692–704.
Hunter, L.P., 2008. A hermeneutic phenomenological analysis of midwives' ways of knowing during childbirth'. Midwifery 24 (4), 405–415.
Kleinman, A., Eisenberg, L., Good, B., 2006. Culture, Illness, and care: clinical lessons from anthropologic and cross-cultural research. Focus (Madison) 4 (1), 140–149.
Kohler-Riessman, C., 2003. Women and medicalization: a new perspective. In: Weitz, R. (Ed.), The Politics of Women's Bodies: Sexuality, Appearance and Behaviour. Oxford University Press, Oxford, pp. 46–63.
Lavender, T., Chapple, J., 2008. How women choose where to give birth. In: Wickham, S. (Ed.), Midwifery: Best Practice Volume 5. Elsevier Publishing, London, pp. 48–54.

Lippman, A., 1999. Embodied knowledge and making sense of prenatal diagnosis. J. Genetic Counsell. 8 (5), 255–274.
Longworth, L., Ratcliffe, J., Boulton, M., 2001. Investigating Women's preferences for intrapartum care: home versus hospital births. Health Soc. Care Commun. 9 (6), 404–413.
Lowe, P., 2016. Reproductive Health and Maternal Sacrifice: Women, Choice and Responsibility. Palgrave Macmillan, London.
Markens, S., Browner, C., Mabel Preloran, H., 2010. Interrogating the dynamics between power, knowledge and pregnant bodies in amniocentesis decision making'. Sociol. Health Illn. 32 (1), 37–56.
Martin, E., 1992. The Woman in the Body: A Cultural Analysis of Reproduction. Beacon Press, Boston.
Morgan, K.P., 1998. Contested bodies, contested knowledges. In: Sherwin, S. (Ed.), The Politics of Women's Health. Temple University Press, Philadelphia, pp. 83–121.
Newnham, E., McKellar, L., Pincombe, J., 2018. Towards the Humanisation of Birth: Epidural Analgesia and Hospital Birth Culture. Palgrave MacMillan.
Oakley, A., 1981. Interviewing women: a contraction in terms. In: Roberts, H. (Ed.), Doing Feminist Research. Routledge, London, pp. 30–61.
Pitchforth, E., Watson, V., Tucker, J., et al., 2008. Models of intrapartum care and Women's trade-offs in remote and rural Scotland: a mixed-methods study. BJOG 115 (5), 560–569.
Randall, V., 2002. Feminism. In: Stoker, G., Marsh, D. (Eds.), Theory and Methods in Political Science. Palgrave Macmillan, New York, p. 112.
Regan, M., McElroy, K.G., Moore, K, 2013. Choice? Factors that influence women's decision making for childbirth. J. Peri. Edu. 22 (3), 171–180.
Rothman, B., 1984. The meanings of choice in reproductive technology. In: Arditti, R., Duelli Klein, R., Minden, S. (Eds.), Test-Tube Women: What Future for Motherhood. Pandora, London.
Taylor-Gooby, P., 2008. Reframing Social Citizenship. Oxford University Press, Oxford.
Thelin, I.L., Lundgren, I., Hermansson, E., 2014. Midwives' lived experience of caring during childbirth – a phenomenological study. Sexual Reproduct. Healthcare 5 (3), 113–118.
Viisainen, K., 2000. The moral dangers of home birth: parents' perceptions of risks in home birth in Finland'. Sociol. Health Illn. 22 (6), 792–814.
Zinn, J.O., 2016. 'In-between' and other reasonable ways to deal with risk and uncertainty: a review article' *Health*. Risk Soc. 18 (7–8), 348–366.