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Title	"She was there all the time". A qualitative study exploring how women at
	higher risk for preterm birth experience midwifery continuity of care
Type	Article
URL	https://clok.uclan.ac.uk/id/eprint/52461/
DOI	https://doi.org/10.1016/j.wombi.2023.01.003
Date	2023
Citation	Brigante, L., Coxon, Kirstie orcid iconORCID: 0000-0001-5480-597X, Fernandez Turienzo, C. and Sandall, J. (2023) "She was there all the time". A qualitative study exploring how women at higher risk for preterm birth experience midwifery continuity of care. Women and Birth, 36 (4). e397-e404. ISSN 18715192
Creators	Brigante, L., Coxon, Kirstie, Fernandez Turienzo, C. and Sandall, J.

It is advisable to refer to the publisher's version if you intend to cite from the work. https://doi.org/10.1016/j.wombi.2023.01.003

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"She was there all the time". A qualitative study exploring how women at higher risk for preterm birth experience midwifery continuity of care

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Abstract

Problem: There is a paucity of research on experiences and views of women at higher risk of preterm birth of midwifery continuity of care.

Background: Midwifery continuity of care (MCoC) has been associated with improved maternal outcomes and with lower levels of preterm births and still births. The majority of MCoC studies have focused on women without risk factors and little has been published on women with complexities, those being medical or social. The aim of this study is to explore the views and experiences of women at higher risk of preterm birth of midwifery continuity of care.

Design: Face-to-face, semi-structured interviews with 16 women who experienced midwifery continuity of care across pregnancy, birth and postnatal period as provided in the intervention group of the POPPIE trial. Purposive sampling was employed to maximise variation in social complexity, social economic group, ethnicity, parity and obstetric history including preterm birth. Two participants experienced preterm birth (PTB).

Findings: Thematic data saturation was achieved after 16 interviews. Women valued continuity of midwifery care across the care pathway and described the reassurance provided by having 24/7 access to known and trusted midwives. Consistency of care, advocacy and accessibility to the team were described by the women as the main factors contributing to their feelings of safety and control. Key Conclusions: Knowing that trusted midwives were 'there all the time' made women feel listened to and actively involved in clinical decision making, which contributed to women feeling less stressed and anxious during their pregnancy, birth and early parenthood. When developing MCoC models for

women with complexities: access, advocacy and time should be embedded to ensure women can build trusting relationships and reduce anxiety levels.

Introduction

Midwifery-led care has been shown to positively impact maternal and newborn health while contributing to a reduction of unnecessary interventions (ten Hoope-Bender et al., 2014) in particular when compared with other models of care and especially when continuity models are implemented. Furthermore Midwifery Continuity of Care (MCoC) has been associated with improved maternal outcomes and prevention of preterm births and still births (Sandall et al., 2016). Midwifery continuity of care is defined as the care provided to women throughout their pregnancy, birth and early parenting period from a known and trusted midwife or a small team of midwives.

A Cochrane review (Sandall et al., 2016) focusing on outcomes of continuity has shown that women cared in the model were more likely to have a vaginal birth and less likely to experience intra-partum interventions (instrumental birth, epidural, episiotomy and amniotomy)than women cared in other models of care. Women were also 24% less likely to experience preterm birth less than 37 weeks (average RR 0.76, 95% CI 0.64 TO0.91) and 19% less likely to experience fetal loss before and after 24 weeks plus neonatal death (average RR 0.84, 95% CI 0.71 TO 0.99) and 16% less likely to lose their baby at any gestation. Women were more likely to experience better psycho-social outcomes including feeling more prepared and in control during pregnancy and are also more likely to enjoy the labour and birth experience (Flint et al., 1989, McLachlan et al., 2016, Sandall et al., 2016). Whilst the precise mechanism is unclear, improved experience could be associated with being seven times more likely to be looked after by a known midwife when in labour and at birth and more likely to have a positive overall birth experience (McLachlan et al., 2016, Sandall et al., 2016). Qualitative studies have found that women are more likely to described caseload midwives as empowering possibly because the relationship is based on trust and mutual understanding that contributes to women feeling safe and nurtured (Allen et al., 2017). Therefore, physiological processes may be facilitated and the woman's sense of control is increased (McCourt and Pearce, 2000).

Midwifery continuity models have been the focus of maternal policies for over two decades with several high-income countries such as the UK, Australia, New Zealand, Canada implementing the model on small to medium scale (Homer et al., 2019a). Current maternity policies in the UK focus on implementation of continuity of care on a large scale with a commitment to most women receiving care throughout the whole maternity pathway from the same midwives (NHS England, 2016, ScottishGovernment., 2017) and 75% of women from ethnic minorities groups and those living in deprived areas by 2024 in attempt to address health inequalities (NHS England, 2021).

Preterm birth rates have been steadily increasing in the last two decades in almost all countries, however underlying drivers for PTB remain poorly understood (Frey and Klebanoff, 2016)Goldenberg et al, 2008). The mechanism by which PTB and fetal loss are reduced when women are cared in continuity models is unclear and has not been extensively researched. A mixed methods study found that a combination of MCoC and group antenatal care can improve health engagement and address modifiable PTB predictors common amongst pregnant adolescents (Allen et al., 2016). There is increasing interest in how relational continuity may impact maternal stress level and perceptions of safety as well as providing a network of support that positively effect birth outcomes. The established woman-midwife relationship may also lead to earlier recognition of problems and improved access to care as well as improved multidisciplinary network of support (Freeman and Car, 2007, Homer et al., 2019b, Rayment-Jones et al., 2015). A qualitative study of women under care from a specialised preterm surveillance clinic has found that they value continuity of care and those women experiencing it have more confidence in care providers. (Carter et al., 2018) However, little has been published on the experiences of women at higher risk of PTB and none on experience of women at increased risk of PTB who received midwifery continuity of care.

NIHR CLAHRC South London funded the POPPIE research programme, including a pilot trial assessing whether a new model of continuity of midwifery care with access to a specialist obstetric clinic for women considered to be at increased risk for preterm birth is feasible in an inner UK teaching hospital and improves pregnancy outcomes and experiences. The trial found that implementation of the model of care was feasible for this high risk group of

women and full findings are reported elsewhere (Fernandez Turienzo et al, 2020). A mixed methods evaluation of the experiences of maternity care among women in the POPPIE trial found that women who received midwifery continuity of care were significantly more likely to report increased perceptions of trust, safety and quality of care compared to women receiving standard care (Fernandez Turienzo et al, 2021)

Aims

This qualitative study explores the views and experiences of women in the midwifery continuity of care intervention group of the trial. The objectives included exploring women's views and experience of the model of continuity of midwifery care provided within the intervention group and whether the findings generated from women's insights may offer possible explanations of the mechanism by which the model may influence outcomes for women with complexities. We also sought to identify the core aspects of continuity from womens' perspectives and inform the development of continuity of care models in this site and more generally.

Methods

A qualitative study design with semi-structured, in-depth interviews in the early postnatal period was employed to explore how women at higher risk of preterm birth experience midwifery continuity of care. Pregnant women, attending for antenatal care before 24 weeks and identified to be at increased risk of preterm birth (e.g., previous cervical surgery, preterm birth, late miscarriage, short cervix), were randomised into the two trial groups. The women in the trial intervention group received antenatal, intra-partum and postnatal care from a named midwife with a buddy system and the team covering 24/7. The team is composed of six full time equivalent midwives inclusive of a team leader working closely with a specialist obstetric clinic. The local maternity service provision includes community and hospital based antenatal care, community based postnatal care and intrapartum care in obstetric unit, alongside midwifery unit and homebirth service (Fernandez Turienzo et al 2020).

Sampling strategy

Women from the POPPIE intervention group were selected through purposive sampling. The recruitment rate was high with 16 women agreeing to take part out of 20 that were invited. Variation in social complexity, socio-economic group, ethnicity, parity and obstetric history including preterm birth was considered at sampling level to increase diversity in the sample, enabling exploration of multiple perspectives by recruiting women with different characteristics (Bowling, 2014). Differences in education, economic and social status allowed the observation of heterogenous perspectives and experiences of care in relation to individuals' contexts.

Data Collection

Qualitative semi-structured interviews were conducted 6 to 34 weeks after giving birth. A topic guide and open-ended questions were used in order to explore the 'how' and 'why' of the participants' experiences ensuring flexibility while maintaining a focused conversation (Jamshed, 2014). The prompts were designed with the aim of exploring the women's views and experiences focusing on acceptability of the various components of the model. The semi-structured questions were informed by existing literature and using the description of the complex intervention from the study protocol, including number of midwives met, presence of known midwife at birth and team availability out-of-hours. The women's journey through care was explored from antenatal allocation to the continuity team until discharge from midwifery care. Open questions enabled women to speak freely about their experience focusing on issues and benefits of the model as relevant to them.

All participants were interviewed face-to-face at their home and in the presence of their children. Three women were interviewed with their partners present although intermittently. The interviews were conducted by the first author, a researcher with no clinical involvement in the pilot trial team but with a clinical background as a midwife and experience of caseload midwifery. This information was made clear to women at the start of interviewing process. The interviews were audio recorded, the audio files were transcribed, anonymised and uploaded on NVIVO 12 data software for the analysis. A reflective diary was also completed by the researcher, taking notes retrospectively but immediately after the completion of each interview encouraging reflexivity and adding details on context.

Reflexivity also contributed to awareness of the researchers of the importance of 'the story behind the story' and of the participants contribution to the research process (Burns et al., 2012).

Data analysis

Thematic analysis was conducted by the first author on the interview transcripts following the six stages described by Braun & Clarke: familiarising with data, generating initial codes, searching for themes, reviewing themes, defining themes and writing up (Braun et al., 2014). Data were analysed alongside data collection in order to develop and relate themes and categories to each other, expanding understanding of the phenomenon adding meanings to the data (Morrow, 2005, Braun et al., 2014). In order to increase validity two transcripts were coded by the researcher's academic supervisor. Recruitment continued till data saturation was achieved and no new themes were identified. The analysis was inductive and divided in codes and sub-themes. Themes were reviewed and their applicability to the whole dataset was considered for the generation of a thematic map of the analysis. Negative and dissonant findings were considered carefully and included in the report, contributing to trustworthiness (Booth et al., 2013). Secondary objectives were also considered in the analysis by exploration of the components highlighting the mechanism of potential effect of continuity of care as they emerged from the data. The analyticalinductive process was strengthened by reflexivity of the first author, discussion within the research team and the keeping of a research diary.

Regulatory and ethical approval

Regulatory and ethical approvals were obtained (REC Ref 17/LO/0029; ID 214196) and written consent was provided by all women participating in the qualitative interviews.

Findings

Participants

The demographic variables and clinical details are reported respectively in Table 1 and 2. The majority of women resided in a deprived urban area although their household income was above the median average UK income. Women in the sample planned to give birth in

the obstetric unit or in midwifery-led settings, including Alongside Midwifery Unit and homebirths although only 8 women did while 8 were transferred in labour or opted for Obstetric Unit (e.g. Induction of labour, Elective caesarean birth). Two participants experienced preterm birth and their babies were alive and healthy at the time of data collection.

Table 1. Demographic variables of participants

Age	n = 16
20-25	1
26-30	4
31-35	4
36-40	7
Education	
High school or less	4
Degree	6
Higher Education	6
Ethnicity	
European	12
African or Afro Caribbean	2
Mixed	1
Asian	1
Household income (gross-week)	
<£250	1
£250-£350	1
£350-£450	1
£450-£650	1
>£650	10
Declined to answer	2
Parity	
Primiparous	7
Multiparous	9
Risk Factors	
Previous PTB	1
Previous miscarriage or loss <24w	4

Table 2. Birth Outcomes

Birth outcomes			
Spontaneous Vaginal Birth (SVB)	10		
Operative birth (OB)	1		
Emergency Caesarean Birth (EMCB)	4		
Elective Caesarean Birth (ELCB)	1		
Place of birth			
Home	2		
Alongside Midwifery Unit	6		
Obstetric Unit	8		
Gestational age at birth (weeks)			
<37	2		
37-38	2		

39-40	9
41	3

Synthesis of Results

The findings of the qualitative interviews generated six themes: accessibility, time, building relationship, advocacy, trust, and reduction of stress and anxiety and these are discussed in turn below.

Accessibility (Theme 1)

Women described the direct access to their named midwife and team as extremely valuable. Having a mobile number to call and text rather than having to go through an institutional switchboard was appreciated for the responsiveness and the personalised response. Many women felt at ease just knowing that 'someone was there' for them all the time. Accessibility applied to the midwives' role in following up tests, scans and appointments. The direct line with their named midwife, and occasionally the team, contributed to women feeling reassured and avoiding them to worry about navigating the system or having to get their results through complex routes involving their GP or local hospital. Women appreciated the promptness and the opportunity to keep their midwives updated when the multi-disciplinary was involved in their care.

"You know, if I needed anything she was there, I could text her, you know, I could speak to her, it was completely different. She was there all the time" (Int.2, Multiparous, SVB)

"And also it's the fear thing, so you feel less scared because you've got that constant reassurance, and information, like they're constantly, I could text [name of midwife] and say, you know, 'Are my bloods back?' and she'd text back and say, 'Yeah all clear.' And it's like, great, I don't have to wait for a doctor's letter, I don't have to, it's that kind of constant information and then, yeah, the consistency of just having somebody" (Int.10, Multiparous, ELCB)

Time (Theme 2)

All women described the midwives as being extremely generous with their time, in the form of long appointments. Women were never made to feel rushed and felt they had all the attention and focus of the midwives for as long as they needed. Women valued the convenience of appointment times, including routine visits taking place in the evenings or weekends as it suited them and their families' lives.

"She, some of the appointments were like an hour long maybe. Like she would just come and, you know, answer anything, deal with anything..." (Int.15, Primiparous, SVB)

"I always sensed that I was their focus, their minds weren't elsewhere on the next appointment or anything else, it was, OK, where are we at, how are things? You know, following on from the last appointment they always knew what we'd discussed, whether there was a check-up I'd been to and anything to chat about. And there was definitely a trust relationship that developed through that continuity, that same person." (Int. 3, Multiparous, Homebirth)

Building relationships (Theme 3)

Women described feeling a sense of family or friendship with their midwives. They described them as being part family like a 'sister' or 'mother', or as being 'friends with a lot of skills'. The relationship enabled social and emotional support in addition to clinical care and support for women transitioning into motherhood for the first time, as well as for women having subsequent babies by involving older siblings in appointments especially when these took place at their homes. One woman described how saying goodbye to the midwives was emotional, as it felt like saying goodbye to a close friend.

"Definitely it was a social support, you know, Midwife Z. and Midwife X. in particular felt like they were friends, you know, because we'd seen them for so long, they were just friends with lots of skills..." (Int. 1, Primiparous, EMCB)

"It's a relationship you build up, which is nice. So I think, because I think if I've got a problem I would text them and I have and they reply, then suddenly you don't feel

quite so alone, you just think, I think if I rang any of them and said, 'Could you come round now and help?' they would." (Int.14, Multiparous, SVB)

"...The whole model is just, to have a small team of people that you can call on, and to feel like you've got a little team of people who really know you, so you don't have to start again, all the time. You don't have to think, oh I'm, you know, you sit in the doctor's surgery and think, I wonder who it's going to be today..." (Int.14)

The relationship built through continuity of care was particularly valued by women in the intra-partum period.

"It does just have that slight edge, knowing them and having that familiarity. It makes you feel and being in my home made me feel much more...relaxed." (Int. 3, Multiparous, homebirth)

Most women attended by their midwife felt a sense of release and confidence as soon as the midwife walked into the birthing space.

"I mean it was so nice to have someone that you, you can get to know, obviously who you can tell your concerns to, because I mean it's quite a personal time, isn't it, and certain things you don't really want to open up to, to anybody. But obviously when you have someone personal. I also found in the birth it was, I literally waited for [midwife S] to actually arrive before I felt fully comfortable, and then it was such a relief when she got there." (Int. 2 Multiparous, SVB)

Any lack of continuity of care generated disappointment and anxiety, women receiving intra-partum care by midwives they didn't have a relationship with and felt less relaxed than those attended by their own midwife or buddy. In one instance a woman in labour was assisted by a newly recruited POPPIE team midwife that she hadn't met antenatally, causing disappointment.

"So eventually I did get a POPPIE midwife, I actually can't remember her name, but she did come in, but she wasn't as like involved, I felt like ... to be honest it could have been any midwife." (Int.12, Primiparous, EMCB)

Advocacy (Theme 4)

Women discussed several instances in which their midwives had advocated for them by safeguarding their autonomy and choices and to ensure women were getting the best treatment.

"She came to one of my consultant (obstetrician) appointment with me as well. And obviously when you're nervous, yeah they scare you and when you are nervous you don't also take in all the information, so she came along and she asked the right questions, even questions I didn't think of at the time. So I didn't feel like I was alone, basically, I didn't feel on my own." (Int.5, Primiparous, SVB)

One woman described how the consultant obstetrician dismissed her choice of place of birth (as a clinical risk factor was present) and how her primary midwife secured her a water birth at the alongside midwifery unit. The woman also reflected on how this level of personalised care and out-of-guideline support had not been available with her first pregnancy when she was in standard care.

"Midwife S. really did try to get me in the Birth Centre. And that, you know, that sort of thing, they came with me to see the consultant, (...) And midwife S. was there at the appointment with me, so things, you know, things like that. But in the end the consultant changed her mind. They'd sort of done everything they could to...(it) just would never have happened in my first pregnancy, it was labour ward (obstetric unit) and that was what it was...(...) Just the comparison (with standard care) was just, it was just like being in a different world. And I just, I think it's a real shame that not every woman is getting it."

"(Int.11, Multiparous, SVB)

Women reported examples of the team navigating institutional bureaucracy for them and its positive effect on their feelings. This included advocating for a woman to have an elective

caesarean birth for 'maternal request', which historically has been challenging to achieve within the UK national health service.

"So I spoke to both midwives about it, the two that I saw throughout, and both of them told me all the info but they both said, 'If you really want one (Elective caesarean) we'll book you in for one at 39 weeks.' And I felt, and it took all the anxiety out of the pregnancy, I felt really confident about it, having done it before I knew what I was doing..." (Int.10, Multiparous, ELCB)

Trust (Theme 5)

The established relationship contributed to women feeling listened to and respected by the midwives and generated trust in return. Women recounted feeling able to open up and disclose personal information freely as they felt they could trust the midwives. Being known to the midwife also helped partners' involvement and facilitated their feeling of ease when they had to call out-of-hours or when decisions regarding induction of labour or emergency scenarios had to be made promptly. Women and their partners trusted midwives' advice and perceived it as tailored and informed by their individual preferences. They also felt midwives were taking their concerns seriously, which facilitated early detection and prompt escalation.

"...I found after a little while, you know, just sit back and relax because they actually know what they're doing, they know what they're talking about, they're dealing with women who have had problems ... in the past, and during their pregnancy, so just kind of relax and let them take the lead, basically. And once I was able to do that it was a ... much better experience, you know, it really really was, they were so helpful, they really were. It's quite sad thinking about them now..." (Int.5, Primiparous, SVB)

"...Picking up the phone and even just to, 'Hello [name of woman],' she knows already that it's you. She knows the story, even though you tell her, 'I'm having headache is it because of the blood pressure?' 'You need to come into the hospital.' But if you call the hospital they will still be, 'Is there any blurry vision, swollen feet, blah-blah,' they will still go long story..." (Int.8, Multiparous, EMCB, PTB)

The trust invested in the midwives allowed them to take an unobtrusive role while being supportive, particularly during labour and birth care, and at the same time permitted women to let go and embrace the birthing process with confidence. Women trusted the midwives to get their preferred place and mode of birth to the best of their ability. The trust extended to the birthing process and its perception as a positive life event.

"I don't remember being told to push or anything like that, it all sort of just happened. And at times it was like Midwife F. wasn't in the room..." ..." (Int.11, Multiparous, SVB)

"...I was just so impressed with all of them. Lovely people and just felt, yeah wonderful. It has completely changed my attitude to birth. And I like the fact that if she (baby) ever has a child the message I will be giving her about my experience of birth is positive. I'm very happy that I will be able to pass on a positive message about birth to friends, my own daughter, and I don't what it would have been like without the POPPIE team..." (Int.11, Multiparous, SVB)

Reduction of stress and anxiety (Theme 6)

The interviewees have described feeling calm, empowered, reassured, confident and in control. Their stress and anxiety levels were reduced by the responsiveness and reassuring presence of the midwives at every step of the way. Being known to the midwives also provided reassurance as they felt understood and did not have to explain themselves or have to worry about the content of appointments.

I've been able to, because of the relationship I built up with them, things that have worried me I've texted them, and they've replied straightaway with things that, I mean surely, you know, they don't have to answer, but they answer really quickly, and they put your mind at rest very quickly. Which saves all the time of me having to go and see them or make an appointment, or feel silly..." (Int. 14, Multiparous, SVB)

But as soon as Midwife B. was there, I stopped feeling fear, and like your body obviously relaxes. I think that without the fear there it would just, you just feel a lot safer anyway. And, and I think having had that experience I, I would now trust my own instincts..." (Int.11, Multiparous, SVB)

In summary, women spoke about feeling listened to, able to disclose concerns and count on their midwives to be active advocates. The latter not only permitted better navigation of a complex healthcare system but enabled safer and personalised care.

Discussion

Most research on MCoC has focused on pregnancy and intra-partum care, rather than postnatal care and the whole early parenthood experience. Furthermore, the majority of MCoC studies have focused on healthy women without risk factors and little has been published on women with complexities, those being medical or social. This study attempted to address that gap, focusing on the experiences of women at higher risk of preterm birth and how they reflected on being cared by the same midwife across all stages of pregnancy, birth and early parenthood. The recollections from women tended to focus on what meant for them to be cared during pregnancy and the intra-partum period by known and trusted midwives and, subsequently, assisted postnatally by those same midwives present at the birth.

The accessibility of the small team of midwives reassured women as they were able to access a midwife familiar with their circumstances rather than a faceless institution; hence not having to repeat their story. The 24/7 access to known and trusted midwives, increased feelings of safety and control, particularly for those women with previous experience of pregnancy and birth complications. In addition, convenience of appointments and time available for them facilitated meaningful conversations, allowed for doubts and questions to be answered and guaranteed discussion of preferences regarding their care. Women in the MCoC described receiving consistent antenatal care with fewer missed appointments and follow ups, additionally the team system enabled smooth communication and efficient hand-over of tasks related to care between midwives.

Time and accessibility to the midwives, supported relationships' building and relational continuity enabled women to be listened to and their needs being prioritised above those of

the institution. This translated with the midwives holding space for women's emotional, social, and physical needs. Participants reported several examples of midwives helping them circumnavigating the bureaucracy of the healthcare system by being flexible and eliminating institutional obstacles. This included support with care within the hospital when women or their babies were admitted and not only care in the community. This echoed previous findings on how personal relationships help midwives to identify the untold needs of women and respond to them (Dahlberg et al., 2016, Aune et al., 2012, Jenkins et al., 2015). Postnatal support was particularly valued, and participants recognised they were granted extra time and extra home visits. Discharge from midwifery care, following postnatal care was not standardised with majority of women being cared for over a month after a birth in contrast with standard care, as particularly multiparous women noted and compared with their previous experiences. The trust guidelines allowed postnatal care for up to six weeks when clinically required, the midwives in the team often remained in contact after the woman's discharge from midwifery care. This adds to evidence from Australian RCTs on the positive impact of MCoC on women's satisfaction with postnatal care (Biró et al., 2003, Forster et al., 2016).

The way in which the midwives helped women navigate through the system may be explained by the increased agency for both women and midwives in MCoC models; agency possibly generated by the commitment derived from the woman-midwife relationship (Walsh and Devane, 2012). There is evidence that midwives are more likely to advocate for women they have built a relationship with, as agency is increased as well as sense of responsibility and accountability (Walsh and Devane, 2012, Newton et al., 2016). MCoC models provide the perfect context for an ongoing genuinely caring relationship that motivates midwives 'to do their utmost' (Jepsen et al., 2016).

Relational continuity was perceived as the essential factor contributing to development of trust in line with existing literature (Freeman and Car, 2007, Haggerty et al., 2003, Guthrie et al., 2008). In turn trusting relationships contributed to positive birthing experience and facilitation of choice. The latter extended to place of birth, with most women in the sample planning out-of-hospital settings facilitated by arrangements made by the midwives for of personalised care and support plan. Although not all women managed to give birth in their intended location. Women appreciated the midwives going above and beyond, securing

access to the midwifery unit and advocating for them with the multi-disciplinary team. This echoed previous findings on how women from vulnerable group and minority ethnic groups experience low intervention rates and lower antenatal and neonatal admission when cared in MCoC models (Homer et al., 2017, Rayment-Jones et al., 2015). At the same time women confided in the midwives and their clinical expertise and felt their birthing space was protected as well as their wishes at every stage of care. This facilitated women following their midwives' advice in line with literature (Stapleton et al., 2013), (Leap et al., 2010). Women also describe feeling supported while the midwife takes an unobtrusive, hands-off approach which is facilitated by knowing the woman well and previously reported in the literature (Homer et al., 2017). Some women refer to this support as 'letting it happen', with the midwives being present, guiding gently but not interfering and on the contrary letting the woman taking control of their birth (Lewis et al., 2016).

Knowing that trusted midwives were 'there all the time' made participants feel listened to and actively involved in clinical decision making. Which contributed to women feeling less anxious during their pregnancy, birth and early parenthood in line with published literature (Allen et al., 2012, Huber and Sandall, 2009, Lundgren and Berg, 2007).

The convenience of care being delivered in the community, mainly at the woman's house combined with knowing what to expect from the clinicians in terms of content of care may contribute to a reduction of anxiety. The role of uncertainty in etiology of anxiety is well described in the literature however knowing the midwife and being involved in care planning, could reduce uncertainty-related anxiety (Hirsh et al., 2012).

The model of care was positively experienced and particular aspects contributed to reduction of anxiety and increased feeling of safety and reassurance.

Conversely, receiving conflicting advice and information in fragmented models accentuates women's anxiety and lower their confidence in clinicians (Carter et al., 2018). No direct causation can be drawn from this study although the feelings of calm, confidence and reduction of stress and anxiety described by the women reflect findings from previous studies reporting how social support may provide a buffer mechanism to stress which may

be a predictor for PTB (Hetherington et al., 2015, Carter et al., 2018). Management continuity and accessibility to the team were described by the women as main factors contributing to their feelings of safety and reduced anxiety.

Implications for policy, practice and future research

This study suggests that women with increased risk of PTB value midwifery continuity of care, which represents the only model of maternity care shown to reduce PTB for all women, although PTB is multifactorial and clinical strategies focused on its prevention have shown varied efficacy in different populations. Midwifery Continuity of Care (MCoC) is a complex intervention, this study contributed to highlight core components of the model that made a difference to women's experience of care. Relational continuity and the ability of midwives to navigate the system including liaising with the multi-disciplinary team improved women's experience. The accessibility of MCoC midwives defined as 24/7 team access and time availability contributed to women feeling safe, reassured and less anxious. Trust and advocacy facilitated the personalisation of care hence the sense of control over the process and the reduction of stress. In turn, it needs to be considered that other factors such as quality or degree of the relationship may positively affect clinical outcomes (Sandall et al., 2016). Further research should focus on mechanism of action of MCoC particularly on identifying how multiple components of MCoC impact different outcomes, variation in philosophy of care between midwives working in different models and most effective models of care for women with complexities.

Limitations

This was a small qualitative study and the experiences collected may not be transferable to the whole population. The researcher is a caseload midwife with interest in MCOC, employed by the Royal College of Midwives therefore data collection and analysis may have been influenced by these factors, reflexivity was in place and the tendency to look for positive aspects was mitigated by asking all participants about negative components and experiences of the model as well as involvement of wider research team. Purposive sampling permitted the inclusion of women from diverse backgrounds however the restriction to English-speaking women may have reduced variation in findings. The sample included a majority of women identifying as European, employed and highly educated

women as those proved to be more responsive at recruitment stage; half of the participants delivered at home or the alongside midwifery unit. Women from ethnic minority groups were underrepresented although around 32% of women in the POPPIE trial had an ethnic minority backgrounds, a slightly higher proportion when compared with the local maternity population. Attempts to recruit more women from ethnic minorities were limited by time constraints.

Conclusion

This study represents the first study exploring how midwifery continuity of care was experienced by women at higher risk of preterm birth. The findings provide insightful information on MCoC components that made a substantial difference to women's feelings of calm and confidence during pregnancy, birth and early parenthood. Advocacy, trusting relationships and enough time dedicated to holistic support led to better quality and safer care.

Funding

The POPPIE programme was funded by the National Institute for Health Research Collaboration for Leadership in Applied Health Research South London (NIHR CLAHRC South London) - now recommissioned as NIHR Applied Research Collaboration (ARC) South London, and NHS Lewisham Clinical Commissioning Group. LB was partially funded by the CLAHRC South London, Guy's and St Thomas' NHS Foundation Trust and the Royal College of Midwives. JS, KC and CFT are supported by the NIHR CLAHRC and ARC South London. JS is an NIHR Senior Investigator and CFT is supported by a NIHR Development and Skills Award (NIHR301603). JS and CFT are also supported by a NIHR Global Health Research Group (NIHR133232). The views expressed are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care.

Declaration of interest

LB, KC, CFT and JS declare no competing interest.

CRedit author statement

LB: conceptualization, methodology, investigation, data curation, writing-original draft

preparation. **KC**: Supervision, validation, writing-reviewing and editing. **CFT** POPPIE trial project administration, writing-reviewing and editing **JS** funding acquisition, supervision, analysis, validation, writing-reviewing and editing.

Acknowledgements

The authors would like to wholeheartedly thank the women who laughed, cried, welcomed LB in their homes and shared their stories. We also thank the POPPIE team midwives: Sue Brailey, Natalie Buschman, Jo Murphy, Sam Padain, Manuela Pagliaro, Xim Phu and Sophie Simenson for their support.

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