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The impact of maternity service restrictions related to COVID-19 on women's experiences of giving birth in England: A qualitative study☆

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ABSTRACT

Background: The COVID-19 pandemic led to significant changes in maternity service delivery in England, including: antenatal appointments being cancelled or held by phone; women having to attend antenatal scans alone; partners not being allowed to accompany women during labor; visitor restrictions on postnatal wards; and limited postnatal support.
Methods: We conducted semi-structured interviews with 46 women aged 18–45 who had low-risk pregnancies and gave birth to their babies using NHS services in England between 1st March 2020 and 1st March 2021.
Results: Our thematic analysis of interview data generated key themes: profound negative impacts of birth partners not being allowed to accompany women (including on emotional wellbeing, birth preferences and care-seeking choices); deep frustration about policy variation between trusts and inconsistent implementation of guidance; women being more concerned about the risk of giving birth alone than of COVID-19 infection; and women turning towards private care or delaying seeking NHS care so that they could have the birth experience they desired. The latter two results are, to the best of our knowledge, unique to this paper.
Conclusion: Our participants reported significant negative affects to their emotional and physical wellbeing because of maternity service restrictions. Going forward, efforts are required by policymakers and health service providers to re-establish trust in NHS maternity care and ensure capacity to provide for potential shifts in birthplace preferences. Health systems strengthening efforts should prioritise protecting the rights of women to access high quality, person-centred care in the event of future health emergencies that strain NHS capacity.

Introduction

The COVID-19 pandemic led to significant changes in maternity service delivery worldwide that were underwritten by public and institutional-level policies. Service modifications in the National Health Service (NHS) in England included: maternity staff being redeployed to meet the urgent demand in COVID-19 wards; antenatal appointments being cancelled or being held online or over the phone; women having to attend essential antenatal scans and tests alone; partners not being allowed to accompany women through some or all of labor and birth; restrictions for visitors on postnatal wards; and limited postnatal care (Renfrew et al., 2020; Romanis and Nelson, 2020).

These modifications to care were based upon guidance produced by the government on the temporary reorganisation of maternity care during the pandemic (NHS England, 2020). This guidance recognised that such modifications may be necessary to maintain safety, considering the risk of COVID-19 transmission and fewer maternity staff being available due to re-deployment. Despite this, service providers were clearly instructed to heavily consider alternative options (particularly for service suspension), to maximise choices for women where possible, and to ensure that women continued to receive compassionate, clearly communicated, and informed care; this included allowing a birth partner during labor.

While centralised policy guidance was provided, trust administrators had autonomy to implement service modifications based on context-specific discretion resulting in considerable variation in care provision between trusts. Restrictions did relax over the course of the pandemic but were reintroduced during subsequent "waves" of infections. These modifications had a widespread impact on NHS maternity service users throughout their pregnancies and around birth, and overall led to poorer

☆ This work was carried out at University College London.

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quality care than that which was available pre-pandemic (see Supplementary File 1 for an outline of policy changes over this period).

Various teams of academics have sought to understand the impact on maternity care providers and service users in health systems around the world (Coxon et al., 2020; Gutschow and Davis-Floyd, 2021; Renfrew et al., 2020; Sanders and Blaylock, 2021; Wilson et al., 2022; Silverio et al., 2021; Romanis and Nelson, 2020; Jardine et al., 2021). Jardine et al. (2021) surveyed maternity service providers across the UK to investigate local modifications to care. More than two third of the units surveyed reported a reduction in antenatal appointments and over half of units stopped providing some forms of intrapartum care for a week or more, most frequently homebirths (Jardine et al., 2021). The WRISK-COVID study surveyed 524 NHS maternity service users, and found that:

> 'Communication between NHS organisations and individuals was generally regarded as poor and confusing…Restrictions placed on partner involvement in maternity care, particularly during scans, emergency attendances, and during labor assessments, caused widespread distress and anxiety…On postnatal wards women described being lonely, sad, and struggling physically without visitors or sufficient staff to support and help them' (Sanders, 2020).

Our study sought to add to this body of work by collecting rich data on the impact of COVID-19 on women's experiences of NHS maternity services through semi-structured interviews. We were particularly interested in how women felt about the way changes to maternity services and policy were communicated and how their preferences for birthplace were affected. Our Statement of Significance in Table 1 outlines our contributions to this area of research.

Choice of birth setting has been a policy priority in the UK for nearly 25 years, with women having the option of giving birth in hospital on an obstetric unit (OU) or midwifery led ward (AMU), a freestanding midwifery led unit in the community (FMU), or at home, supported by a homebirth team (Coxon et al., 2017). COVID-19-related service restrictions influenced women's preferences for where and how they gave birth, but these preferences were often not met by service providers. In the UK, news reports suggested an increased interest in maternal request c-section (MRCS) because of women's concerns about whether their partner will be allowed to attend hospital-based vaginal births (Betteley, 2020). Despite an anticipated and demonstrable rise in demand for homebirths during the pandemic, around one third of NHS trusts had suspended homebirth services in March 2020 (Romanis and Nelson, 2020). The justification for this was the increased risk for midwives coming into homes, staff shortages due to COVID-19 infection or needing to self-isolate, and a shortage of ambulances. These service restrictions varied between trusts and were lifted at different times, adding to confusion and uncertainty among service users.

Table 1
Statement of significance.

Problem	Maternity service changes during the pandemic had a serious negative impact on quality of care.
What is Already Known	Maternity service users were distressed by having to manage various stages of perinatal care without their partners. Being left alone on postnatal wards left women struggling to cope. There has been a reported rise in related mental health issues, and impacts on partners' relationships with their children.
What this Paper Adds	Further investigation into the impact on service users, including our finding that women were delaying care seeking, leaving postnatal wards early, or paying for private services despite the significant cost, to have their partner attend their birth.

Participants, ethics and methods

Study design and research questions

This study aimed to explore the impact of service changes to NHS maternity services on service users' experiences of pregnancy, birth and the postnatal period. Our objective was to understand what women felt were the most significant effects on their care, how they felt about the way changes to services and policy were communicated and how their preferences for birthplace were affected.

We conducted 46 semi-structured interviews with women via online video and voice calls on MS Teams and WhatsApp, between 25th March and 13th May 2021. 34 of these were by LI, and 12 by GC. Interview length ranged between 30 and 75 min. Both interviewers followed a topic guide (Supplementary File 2) with a list of questions to ensure interviews covered similar themes, but there was flexibility to allow for women to discuss things that were most important to them.

Recruitment

Our selection criteria included women aged 18–45 who gave birth between 1st March 2020 and 1st March 2021 using NHS services in England. We recruited women who were considered low-risk during their pregnancy because we wanted to understand the impact of the pandemic on women's decision making about place of birth. Women with high-risk pregnancies are more likely to experience complications and are usually advised to deliver on an obstetric unit. We also felt that our team was not qualified to provide the support that would potentially be needed for women when discussing highly traumatic events or poor outcomes.

We recruited through social media channels (Instagram and Facebook) using a research advert. Potential participants who contacted us via email and who met the selection criteria were then sent the study information sheet and consent form. Once these were returned, online/phone interviews were arranged at times convenient to the participants.

After conducting 20 interviews and comparing demographic data collected, we noted that our study population predominantly identified as White British, were based in London, and were middle class. We began to purposively select participants who lived outside of London and who were not White British, in order to record the experiences of a wider demographic. We also selected participants based on their place of birth to ensure we had representation from women who gave birth in hospital and at home, as well as by c-section and vaginally.

Data collection and analysis

A team-based approach to analysis was facilitated using RREAL (also known as Rapid Assessment Procedure or RAP) Sheets (Vindrola-Padros and Johnson, 2020). RREAL Sheets are working documents created on a study-by-study basis which are used to analyse data on an ongoing basis throughout the data collection period and build upon the well-established use of table-based methods in qualitative research such as framework analysis (Gale et al., 2013).

RREAL Sheets are designed as a table with two columns. The first column is composed of pre-established categories of interest identified at the start of the study and the second column contains focused annotations made by the researchers for each category. Hence, the method uses a blended inductive-deductive approach. For this study, pre-identified categories were guided by the devised interview topic guide. During interviews researchers took notes in real-time using the RREAL Sheet as a template (hence a sheet was completed *per participant*). Interviews were transcribed using NVivo audio to script software, but these tended to contain errors so were used as rough guides to locate key parts of the interview. Researchers then re-listened to interview recordings and added notes and quotes to the RREAL sheets, including transcribing what were deemed to be key excerpts of the interview. As

more interviews were carried out, we were able to identify common repeating themes within the separate sections of the RREAL sheets – for example, within the section "How did COVID-19 affect your postnatal experience?", two thirds of interviewees specifically mentioned the negative impact of restricted hours for partner visits. All authors met regularly to discuss findings (i.e., themes) and to facilitate ongoing team-based analysis of the RREAL sheets. The four themes that came up most frequently were used to structure the results section in this paper.

Ethical issues

This study was conducted in accordance with the Declaration of Helsinki and voluntary informed consent has been obtained from all participants included in this study. This study was granted ethical approval by the University College London Research Ethics Committee (Project ID: 19863/001). This included a data protection protocol, where study data was pseudonymised and stored securely as per UCL REC guidance.

Discussing pregnancy and birth can be emotionally challenging. To prepare for participants being distressed, LI discussed the topic guide with a representative from *Birthrights*, a maternity advocacy group, and identified support agencies that we could signpost to. We checked throughout interviews that participants wished to continue.

Results

Participant characteristics

All 46 women participating in our study gave birth between 1st March 2020 and 1st March 2021, using NHS maternity services in England. For most participants (33), this was their first baby. Participants ages ranged from 28 to 44, with the mean age 33. Around half of women interviewed (24) lived and accessed their care in London, with the other half widely spread across England. We used job title as a proxy for approximate income level, and from this deduced that most participants were within the lower-middle to upper-middle income brackets for England. Table 2 shows participants' place and mode of birth, parity and age. More detailed participant characteristics are available in Supplementary File 3.

Interview results

The key role of partners

Over the year of interest to this study (March 2020 to March 2021), policy guidance from the UK government on partner attendance during and after birth changed and was also interpreted differently across trusts. Some of the earliest advice (April 2020) on the temporary reorganisation of services acknowledged that trusts had reported imposing restrictions on visitors but stated that 'women should have access to one birth partner during labor (from the point of admission to labor ward or birth centre)' (NHS England, 2020: 3). Later NHS guidance informed women that there may be changes to where they plan to give birth and that they should speak with their maternity team for more information (NHS, 2020a) and look for relevant websites or social media sites (NHS 2020b). This guidance also specified that while women were entitled to a birthing partner during labor and birth, there may be limits on how long they were able to stay after birth (NHS 2020a).

Many participants reported that hospitals would only allow birthing partners during "established labor" (with the cervix 4 cm or more dilated and having regular contractions). This meant that women arriving at hospital in the first stage of labor were given the option of going home or being admitted alone. Most participants reported some form of limitation on the number of visitors on postnatal wards, and the hours which visitors could attend. This meant that only their partners could visit, and usually just for around 2 h per day, at a fixed time. Some of our participants were not allowed any visitors at all.

Almost all our participants reported the negative impact this had on their experiences of pregnancy and birth. Some were extremely distressed and went on to have serious postnatal mental health issues. They attributed these to being left to cope alone with a new and challenging situation that they had not anticipated. For women who were having their first baby, or for those who had previously had miscarriages, going to antenatal scans alone was particularly upsetting.

> *"For me, that was very stressful, because obviously I'd had three miscarriages before and we'd found out through scans for two of them. So to go on my own, to sit in the waiting room was pretty horrific"* (SL, aged 40, 2nd baby, elective CS on OU)

Women also mentioned the negative impacts of these restrictions on their partners, explaining that they felt distant or even excluded from the pregnancy. SL was one of several who mentioned their partners had found it harder to prepare for parenthood and bond with their babies as a result of not attending appointments.

> *"The whole pregnancy was without my partner…He wasn't involved at all, at any point. And that was very difficult for him as well, because it's a bonding thing. And of course, not seeing any of the scans, apart from a photo, had an impact."* (SL)

The lack of partner support during birth and in the days following was a common experience among our participants. Several described how surprised they were when their partners were asked to leave immediately after birth, that they weren't prepared to say goodbye, and that they had barely had time to acknowledge or celebrate the birth of their child.

> *"Then my husband was kicked out…I had no time to consider what had just happened…He was just told to walk the other way down the corridor, we hadn't even looked at each other to say 'well done on having this baby"* (SC, aged 33, 1st baby, vaginal delivery on OU)

> *"He wasn't even allowed to go with me to take my things in, to help me settle into this new space, to say goodbye…And he almost cried* [gets upset and cries]. *It was really hard, me being separated from my partner… We didn't even have a chance to decompress, to process what happened"* (TM, aged 36, 1st baby, vaginal delivery on OU)

There was evidently a lack of communication around the restrictions on some postnatal wards that took women by surprise, and affected them more acutely as a result. Participants also commented on how difficult their stay on the postnatal ward was, primarily because they had no emotional or physical support from their partner.

Table 2
Participant and birth characteristics.

Place of birth	*Obstetric Unit (OU)*	*Birth centre*	*Homebirth*	*Attempted homebirth, transferred to OU*
	29 (63 %)	8 (17 %)	6 (13 %)	3 (7 %)
Mode of birth	*Vaginal birth, unassisted*	*Vaginal birth, assisted*	*C-section, elective*	*C-section, emergency*
	26 (56 %)	13 (28 %)	3 (7 %)	4 (9 %)
Parity	*P1*	*P2*	*P3*	*P4 and above*
	33 (72 %)	11 (24 %)	1 (2 %)	1 (2 %)
Age of participant	*<30*	*30–35*	*36–40*	*41>*
	8 (17 %)	27 (59 %)	10 (22 %)	1 (2 %)

"Those five days [on the postnatal ward] *make me more emotional and feel more traumatised than the labor did…I was in a lot of pain and then our baby was sick…Then to be on my own, all alone with the baby for five days…It felt like some sort of torture. It felt like I was locked in there and I couldn't leave"* (HF, aged 32, 1st baby, VD with forceps on OU)

"It was the middle of the night, I couldn't sit up out of the bed - because I had no core strength and I had all these stitches - to attend to the baby, so I started feeling quite nervous to be left alone, after going through this crazy life experience" (JP, aged 35, 1st baby, VD on OU)

Women felt that their partners were seen as non-essential to a positive birth experience, whereas in fact, for most women they are a core component of their care team.

"Why are we still not able to have the support that we need? Why are birthing partners and dads being treated like visitors, when they're not – they're a vital part of the maternity team?" (CR, aged 28, 2nd baby, VD homebirth)

Weighing up risk

Perceptions of risk around contracting COVID-19 during pregnancy have changed since the initial onset of the pandemic. In England, pregnant women were initially categorised as a high-risk group and advised to follow strict social distancing measures. On 8th March 2020, SAGE published a rapid review and expert consensus stating that serious morbidity requiring ICU care occurred in 2/32 pregnant women with COVID-19 (P/G 1). There is now more robust evidence available on the clinical outcomes of COVID-19 infection for pregnant people and their babies. A scoping review of research conducted in the first nine months of the pandemic found that pregnant women were not at higher risk of COVID-19 infection, but that 'pregnant people with symptomatic COVID-19 may experience more adverse outcomes compared to non-pregnant people' ([6] p10).

Although they were not asked to make a comparison, many of the women we interviewed made it explicitly clear that they were more concerned about having to give birth without the support of their partner than they were about contracting COVID-19. This said, some participants did express concern about the risk COVID-19 itself posed to them and their babies, especially earlier on in the pandemic. Despite this, for almost all our participants, the *indirect* risk COVID-19 posed through the impact on services was of far greater concern.

"I was a little concerned about COVID, especially when we didn't know too much early on…But I was more worried about my husband not being able to be with me than I was about contracting the virus" (SW, 33, 1st baby, attempted homebirth, transferred to OU for VD)

"… I probably should have been more scared [about COVID-19]. *But I wasn't. I knew we were being careful…my biggest concern about the whole thing, was having to have a c-section because of COVID, then having to stay in hospital for longer without support and without my partner"* (EF, 29, 1st baby, VD on OU)

Some women were so concerned about this risk that they made decisions about their care to make sure their partner could be there for as much of the birth as possible. This included laboring at home for as long as possible before going into hospital, and opting for a homebirth and private midwifery care.

"COVID pushed me to make that decision [to get a homebirth]*…I was scared not to have my husband there. So I was more worried about the restrictions due to COVID in hospital, as opposed to actual COVID"* (CR)

"I can't really describe how grateful we felt that we had already made the decision that we had, not only to have a homebirth, but also to go with independent midwives…As we learned about all the restrictions that would have been placed on us, my husband not being able to be with me afterwards or even in active labor – whereas in the homebirth, he never left my side…I feel hugely emotional about the fact that so many women during this time were denied that" (SB, 31, 1st baby, homebirth)

Others made the decision to leave the postnatal ward sooner than they might have normally, so that they could be at home with the support of their partners.

"I said to them that I couldn't cope in there on my own, I needed someone with me, and that I wanted to go home. They said that was fine, so long as I could make it to the bathroom. I was surprised, as I thought normally after a c-section you had to stay in for two days…I dragged myself to the toilet, almost on my hands and knees…because I just couldn't stand another night there on my own…If it wasn't for COVID, I would have stayed in longer, and had more support with breast feeding [and access to stronger pain relief] (CK, 33, 1st baby, emergency CS on OU)

Leaving hospital early meant that women did not access important breastfeeding support and pain relief and could potentially have led to adverse outcomes in some circumstances. Many participants who had negative experiences in hospital explained that they would consider alternative options, particularly homebirths, for future pregnancies.

Use of private health services to fill COVID-related gaps in care

Some participants explained that their negative experiences led them to opt for private care to fill gaps in services during the pandemic, or to consider private care during a subsequent pregnancy. This was usually by paying for additional private ultrasound scans so that their partners could attend (which was permitted throughout the pandemic in most private clinics). A small number of women contracted a private midwife, usually because they had decided on a homebirth, and NHS homebirth teams were suspended for specific periods by some trusts during the pandemic. Others expressed a wish that they had, or explained that they would pursue this option in future.

"I personally wish that I'd had an independent midwife…people in [my Whatsapp baby group] *booked their own private scans, because they felt like things were being missed, or not discussed properly…I've already told one of my friends to put some money in her budget for postnatal support because it's not great* [on the NHS]*"* (SC)

"To be honest, I've completely given up with the NHS, and I've been completely spoilt with a private midwife…they're worth every penny. Which is awful because I know not everyone can afford it, but I just think if you can, just do it. Because the NHS services can't be trusted" (JG, 37, 2nd baby, VD homebirth)

Participants sought out private midwives not because they have a particularly strong vision of what their birth experience should be (some women choose independent midwives because they tend to have a strongly naturalistic view of birth) but because NHS services were not meeting what they saw as a reasonable standard of care. The inconsistency (suspending then reintroducing homebirth services) and the changing rules regarding partners were two key issues that women sought to circumnavigate by paying for private services.

One participant went into detail about her traumatic birth experience. She felt that she was induced unnecessarily, so that her labor was faster and thus more convenient for the already strained services during the pandemic. This experience left her with anxiety about returning to any kind of clinical setting, and with a lack of trust of medical professionals.

"[After the birth] *I was having horrific nightmares about my labor, 2 or 3 times a week, waking up with heart palpitations, sweating. I've got to take the baby for a hospital check-up this month, and I've got anxiety…I just never want to go into a hospital ever again…I would consider giving birth at home because I know now that my body can do it naturally, and it wouldn't be worth it to me, to go back into one of those places. I don't trust them anymore, I don't trust midwives, I don't trust the doctors. I felt like I was bullied and manipulated into doing things that as a first-time*

mum with no experience and no support system, into doing things that suited them, and the way they were running things during the pandemic" (EF)

Participants who did opt for private care knew paying for maternity care was fairly unusual in the UK, and that they were in a privileged position to be able to afford a private independent midwife (the cost of which is typically between £2000-£5000). What is particularly concerning here is that women felt driven to pay out of pocket because they were unable to access services that should normally be delivered on the NHS, free at the point of use.

Policy implementation and government priorities

Our participants were frustrated about the inconsistencies in policy implementation between trusts, and the fact that restrictions on partners were still in place when other lockdown measures were easing.

"When the new guidelines [on partners] *got released, everyone was so excited…but obviously every hospital got to make their own decisions and even…you just didn't know what you were going to get"* (SC)

"There was a trust in South London that had no partners until the very end of birth, some were having in person appointments, some were having phone appointments. In my NCT group there were 3 different hospitals that we were going to. And they were all communicating things differently" (RE, 35, 1st baby, assisted VD on OU)

There was a widespread disbelief among participants that in Autumn 2020, their partners could still not come into hospital to support them in labor, but that hospitality venues – particularly pubs – were opening in England, which seemed to encapsulate for them how misaligned the government's priorities were with their needs.

"Partners should be able to come to appointments, partners should be able to be there for the whole delivery, partners should be there for postnatal. We need that support, and the midwives, they can't give that same level of care to us than our partners could. The thing that made me really sad was that we were being denied that, while it was still ok for people to go to restaurants and pubs…but we weren't allowed to be one to one with the person who is most important to us at that moment" (TM)

"I kind of joked about having the baby at the pub so my husband could be there" (CR)

Several participants had actively campaigned at the local level for more consistent policy implementation. One had written a formal appeal to her hospital to allow her partner or independent midwife to accompany her in the event of a transfer during homebirth, based on the guidelines from RCOG at the time that recommended upholding continuity of care. Her request was declined and she was told that the trust was allowed to make its own interpretation of the guidance. Many participants felt that their wellbeing was not considered – despite this being a policy priority in messaging and guidance from central NHS England, RCOG, and other key actors in maternity care provision.

Discussion

During the pandemic, many women had to cope with parts of their pregnancy, labor, and caring for a newborn alone, which for some, had serious impacts on their mental health and emotional wellbeing – a finding corroborated by other researchers (Otu and Yaya, 2022; Silverio et al., 2021; Filippetti et al., 2022; Sanders, 2020; Sanders and Blaylock, 2021). Of particular importance for our participants was the inconsistency and abruptness in which partner restrictions were communicated, such as when they were given no time to process the birth of their child with their partner before being moved onto the postnatal ward. This is consistent with online survey data from 477 families that found that half of respondents reported not knowing whether there could be someone present at the birth (44.8 %), and 2.3 % of respondents reporting no birthing partner being present due to COVID-related restrictions (Aydin et al. 2022). Partners play a fundamentally important role in supporting women through pregnancy, labor, and the postnatal period and the benefits of continuous emotional support during birth are well established (Bohren et al., 2017). The detrimental effect of restrictions on fathers, including feelings of loss and disconnection from their partners pregnancy, and negative impacts on the father-baby relationship have also been reported (Andrews et al., 2022).

The importance of partner support was further reflected in the comparisons our participants drew between the risk of contracting COVID-19 and the risk of giving birth without their partners in attendance. While some were concerned about COVID-19 infection, almost all saw this as a lower concern than laboring alone. Several cited the risk of partners not being allowed as one of the key factors that had led them to seek out alternative options for care, whether choosing to delay going to hospital for as long as possible, or to give birth at home when they might not have previously considered this option. To our knowledge, this is a unique finding of this study.

One of the main frustrations experienced by our participants was the inconsistent application of policy guidance across the country, with wide variation even between neighboring trusts. This variation in the extent to which services were reconfigured between regions and counties is supported by Brigante et al. (2022) in their review of the impact of COVID-19 on midwifery-led services in the UK. In some cases, women were left to find out information on their own and were sometimes not informed of changes that impacted upon their care until the last minute. Participants stated that they felt that their care was sacrificed for other financial priorities, such as opening pubs while still imposing restrictions on partner support throughout various stages of the maternity pathway. The advocacy organisation Birthrights has argued that many of the restrictions did not sufficiently take women's needs into account, particularly related to birthplace and partner attendance (Birthrights 2020). At the very least (assuming these restrictions were essential), this denotes a failure of the UK government and NHS leadership to successfully communicate the necessity of these restrictions to families.

Another finding we believe is unique to this study is the ways in which COVID-19 restrictions influenced decisions to pay for private scans or private midwives. In the case of the latter, this was a considerable expense for the women we spoke to, but one that they thought was worthwhile. The fact that women are considering paying out-of-pocket for private care because they cannot attain quality women-centred care through the NHS should be deeply troubling to health policymakers, providers, and government. This has the potential to widen existing health inequalities between different population groups and counters the long-term efforts of those in the health sector working to ensure equity of access to high-quality, family-centred care.

The ongoing impact of COVID-19 on maternity services is important to understand, particularly: if there are any long-lasting mental health problems for mothers, and if the shift in birthplace preferences is sustained or returns to pre-pandemic patterns. *Birth Characteristics* datasets from the Office of National Statistics (Office for National Statistics, 2023) show increases in the UK percentage of births at home between 2019 (2.1 %, around which rates had remained for the past decade), to 2.3 % in 2020 and 2.5 % in 2021 (the most recent years for which data is available). Whether or not this increased demand for homebirths continues remains to be seen, but it could have a long-term positive impact, giving women greater choice and more confidence in out-of-hospital birthplace services.

Study limitations

There is likely to have been some selection bias because our participants were self-selecting for this study, meaning that they may have had negative experiences that they were compelled to speak about, and they were more confident in participating in research than other population

groups. Our decision to selectively sample women to ensure we spoke to those who had delivered at home and who were based outside of London will also have influenced our results, and they are therefore not representative of the general population.

We aimed to interview women from diverse sociocultural and ethnic backgrounds in order to capture a range of experiences, and to observe any potential differences in how they felt about their birth experience. We actively recruited through channels that would reach minority communities, such as Instagram accounts of organisations working with these groups. Despite these efforts, there was an overrepresentation of participants who identified as 'White British' compared to the national average for England. It would be important to understand whether women from minority ethnic communities' care was even more adversely affected during the pandemic.

Due to social distancing guidance in place at the time, interviews were conducted on the phone or online rather than face to face. Despite this, we did not find participants to be hesitant about communicating online. This method was convenient for women with babies as they could conduct the interview from home. It also meant we were able to interview a large sample size for a qualitative study.

Conclusion

Women reported significant negative impacts on their emotional and physical wellbeing because of maternity service restrictions, despite the NHS's commitment to compassionate and high-quality care. Providing support to families to re-establish trust in NHS maternity care, particularly those who experienced mental health issues as a result of their experiences, should be a policy priority.

Maternity services should be strengthened so that quality care can be maintained in the event of future crises which challenge the capacity of the NHS. This could include establishing consistent testing policies for infectious disease outbreaks that could allow partners testing negative to accompany women, prioritising health sector reopening over hospitality settings, and reinforcing women's rights to high standards of care, including having a companion during pregnancy, labor and the postnatal period.

Ethics approval and consent to participate

This study was conducted in accordance with the Declaration of Helsinki and voluntary informed consent has been obtained from all participants included in this study. This study was granted ethical approval by the University College London Research Ethics Committee (Project ID: 19863/001).

Availability of data and materials

Due to prior agreement with research participants, the data from this study can only be shared with subsequent agreement from research participants and after complying with a series of conditions. Please communicate directly with the first author regarding access to data.

Funding

The researchers did not apply for or receive any funding for this research.

Terminology

All our participants self-identified as "women", and so this term is used throughout this paper, along with the gender-neutral "participants" to refer to our study population, while acknowledging that not all people who give birth identify as women.

CRediT authorship contribution statement

Lucy C. Irvine: Conceptualization, Methodology, Validation, Formal analysis, Investigation, Writing – original draft, Writing – review & editing, Supervision, Project administration. **Georgia Chisnall:** Conceptualization, Formal analysis, Investigation, Writing – review & editing. **Cecilia Vindrola-Padros:** Conceptualization, Writing – review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.midw.2023.103887.

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