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Giving birth and becoming a parent during the COVID-19 pandemic: A qualitative analysis of 806 women's responses to three open-ended questions in an online survey

Tine S. Eri[a,*], Ellen Blix[a], Soo Downe[b], Carina Vedeler[a], Anne Britt Vika Nilsen[c]

[a] Research Group Midwifery Science, Faculty of Health Sciences, Oslo Metropolitan University, Oslo, Norway
[b] Research in Childbirth and Health (ReaCH) group/THRIVE Centre, University of Central Lancashire, Preston, United Kingdom
[c] Faculty of Health and Social Sciences, Western Norway University of Applied Sciences, Bergen, Norway

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ABSTRACT

Background: When Europe was hit by the COVID-19 pandemic, changes were made in maternity care to reduce infections. In Norway, hospital maternity wards, postnatal wards, and neonatal units' companions and visitors were restricted. We aimed to explore the experiences of being pregnant, giving birth and becoming a parent in Norway during the COVID-19 pandemic.
Methods: The study is based on the responses from women who provided in-depth qualitative accounts to the ongoing Babies Born Better survey version 3 during the first year of the COVID-19 pandemic. The responses were analysed with inductive thematic analysis.
Results: In all, 806 women were included, regardless of parity and mode of birth. They gave birth in 42 of 45 available birthing units across Norway. The analysis resulted in four themes: 1) Pregnancy as a stressful waiting period; 2) Feeling lonely, isolated, and disempowered without their partner; 3) Sharing experiences and becoming a family; and 4) Busy postnatal care without compassion.
Conclusion: The COVID-19 pandemic seems to have affected women's experiences of giving birth and becoming a parent in Norway. The restrictions placed on companionship by the healthcare facilities varied between hospitals. However, the restrictions seem to have affected a range of aspects related to women's experiences of late pregnancy, early labour and birth and the early postpartum period. Postnatal care was already poor, and the pandemic has highlighted the shortcomings, especially where companionship was banned.

Introduction

Childbirth is both a clinical episode and an existential life-event. The WHO Framework for improving quality of care for women during childbirth states that women's experience of care is just as important as clinical care provision (Tunçalp et al., 2015). In their most recent intrapartum guidelines, the WHO recognises that a positive childbirth experience is significant to both the short- and long-term wellbeing of women and their infants (WHO, 2018). The guidelines highlight the importance of woman-centred care to optimise the experience of labour and childbirth for women and their babies by means of a holistic, human rights-based approach. To achieve this, quality healthcare systems must be built on respect and understanding and provide care tailored to women's circumstances and needs (Renfrew et al., 2014).

Globally, women's perspectives of what constitutes respectful care is fairly consistent, and one important domain is ensuring access to family attendance and the presence of a labour companion of their choice (Shakibazadeh et al., 2018). Having a companion present during labour and childbirth is also an important component of a positive birth experience, as well as being associated with a range of clinical benefits (Bohren et al., 2019, 2017).

When Europe was hit by the COVID-19 pandemic, changes were made in maternal care to reduce infections (Coxon et al., 2020). Lockdowns and social distancing became common strategies, and the health services were reorganised to minimise the spread of the virus. Restrictions were imposed in hospital maternity wards, postnatal wards, and neonatal units in relation to companions and vis-

* Corresponding author at: Oslo Metropolitan University, PO box 4, St. Olavs Plass, 0130 Oslo, Norway.
E-mail addresses: tines@oslomet.no (T.S. Eri), ellblx@oslomet.no (E. Blix), sdowne@uclan.ac.uk (S. Downe), calian@oslomet.no (C. Vedeler), anne.britt.vika.nilsen@hvl.no (A.B.V. Nilsen).

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itors. There is emerging evidence that changes in care provision and restrictions due to social distancing have been distressing for many childbearing women, in Norway as in other countries, in addition to the general fear that can arise in the context of a pandemic (Ceulemans et al., 2021; Souto et al., 2020).

A number of studies have reported on the psychological impact of being pregnant and becoming a parent during the pandemic. A Spanish study, for instance, that included 162 women found that women who gave birth during this period have suffered higher levels of stress, rated the quality of their care more poorly and more often suffered from postpartum depression compared to women who gave birth before the pandemic (Mariño-Narvaez et al., 2020). A cross-sectional study that included 9041 women from Ireland, Norway, Switzerland, the Netherlands and the UK found high levels of depressive symptoms and generalised anxiety amongst pregnant and breastfeeding women during the pandemic (Ceulemans et al., 2021). Two other studies found a rise in psychosocial problems in postnatal women associated with social distancing and restrictions in the UK and Italy (Fallon et al., 2021; Ostacoli et al., 2020). A Swedish longitudinal study of 6941 pregnant women and their partners showed that pregnant women experienced a dramatic increase in health-related worries during the pandemic (Naurin et al., 2020).

There is nonetheless limited knowledge about the experience of giving birth and becoming a parent during the pandemic, and the potential impact of changes brought about by COVID-19 in the provision of healthcare on this experience. An Australian study found that women perceived having a baby to be an isolating experience (Sweet et al., 2021), and a study performed in the UK showed that 39% of the 1365 respondents reported changes to their birth plans due to COVID-19. The main changes reported related to the women's preferred place of birth and restrictions on the presence of a birth partner (Vazquez-Vazquez et al., 2021).

The aim of the present study was to explore experiences of being pregnant, giving birth and becoming a parent in Norway during the COVID-19 pandemic, based on the responses of a large sample of women who provided in-depth qualitative accounts on an ongoing European-wide birth experiences survey launched in June 2020.

Material and methods

Maternity services in Norway

In 2020, approximately 53,000 births took place in Norway. Maternity care is free of charge. Most women have antenatal care in a mix between midwives and general practitioners in the municipalities. Intrapartum care is organised at three levels: specialised obstetric units, obstetric units and midwifery units (alongside or freestanding). Due to geography and demography, the population is widely scattered, and maternity services are characterised by both centralisation and decentralisation. Therefore, many women do not have a genuinely free choice regarding the place of birth; it is dependant on where women live. However, in the four largest cities, there are alongside midwifery units in addition to specialised obstetric units where the option of place of birth is dependant on risk status and capacity on admittance.

During the study period, there were 47 birth units in total in Norway. A total of 17 out of 47 units are specialised obstetric units and cater for approximately 70% of all births. More than 44% of the women in Norway gave birth in the five largest units, each with more than 3000 births annually and approximately one percent gave birth in one of the six freestanding midwifery units (Norwegian Institute of Public Health, 2021). There is a national recommendation for continuous support for all birthing women in active labour, and midwives attend all births.

Data collection: We used data from the ongoing Babies Born Better (B3) Survey, Version 3. The B3 Survey is a mixed-methods web-based questionnaire designed to identify factors that underpin women's experiences of maternity care across Europe. The B3 project was developed within the framework of the EU COST Action (IS0907) "Childbirth Cultures, Concerns and Consequences" and continued in Action "Building Intrapartum Research Through Health" (IS 1405). The authors of the study are part of the B3 team.

This version of the survey was launched internationally through social media in June 2020 and is still open for responses. Women were eligible for inclusion if they had given birth during the last three years. The questionnaire comprised 23 questions with subquestions (Supplementary material 1). The first section requires fixed responses related to demographics and clinical factors. For this study we used the following data: age, marital status, education, employment status and place of birth, parity and mode of birth. The subsequent two sections invite open responses, designed to elicit respondents' views of positive factors and suggestions for change after their experience of care. The answers to the following open-ended questions provided data for this study:

- "In the place where you gave birth, what were the three most positive experiences of your care?" "What do you think could have made your experience better?" (Question 17)
- "Imagine you are talking to a very close friend or family member who is pregnant, and that she is trying to decide where to give birth to her baby. She asks you what you think about the place you gave birth. Please answer here by finishing one or both of the following sentences: I think you should give birth at the place where I did because… I think you should not give birth at the place where I did because…" (Question 18)
- "Please write any comments you want to make here. These could explain your answers in more detail or add any other information you would like us to know about your experiences with maternity care" (Question 21)

Sampling: The total number of respondents during the study period was 834. All respondents who had given birth in clinical settings in Norway from 1 March to 31 December 2020 and had given at least one response to question Q17, Q18 or Q21 were eligible for inclusion in this study. We excluded women who had answered the survey in a language other than Norwegian, Swedish, Danish, or English ($n = 7$) and women who had a planned home-birth ($n = 8$) or an unplanned out-of-hospital birth ($n = 5$).

Description of the data: Each woman could give up to nine free-text responses to the open-ended questions; accordingly, the number of units of analysis were higher than the number of respondents. The responses varied from short sentences to longer narrative accounts.

Procedure for analysis: We performed inductive thematic analysis (Braun and Clarke, 2006) with the aim of presenting a meaning based, coherent account which represents the content of the data. Initially, the whole dataset was read through several times to get a good sense of the content. In the next step, meaning units relevant to the research question were identified and coded. The initial codes were thereafter organised into main codes, and themes were subsequently generated. Two of the authors (TSE and ABVN) performed the qualitative analysis and the final themes were discussed and decided on by the whole team. Throughout the whole process we paid special attention to the discussion on disconfirming cases in the data.

Descriptive statistics were used to describe the study sample and to make comparison to a population-based sample from the Medical Birth Registry of Norway (Norwegian Institute of Public Health, 2021).

Ethical approval

Ethical approval for the B3 project was granted by the Ethics Committee of the University of Central Lancashire, UK (Ethics Committee BuSH 222, 22nd January 2014, and STEMH Ethics Committee Unique reference number: STEM 449 Amendment_1JUN20). The study was approved by the Norwegian Data Inspectorate (ref:60,547/3/HJTIRH, 4th September 2018).

Results

In all, 806 women's responses were included in this study. Table 1 gives an overview of demographic and obstetric characteristics of the 806 respondents.

The thematic analysis resulted in four themes: 1) Pregnancy as a stressful waiting period; 2) Feeling lonely, isolated, and disempowered without the partner; 3) Sharing experiences and becoming a family; and 4) Busy postnatal care without compassion. Most of the included quotes were translated to English for the purpose of the manuscript, and are presented with respondent number (R), primipara or multipara, and place of birth (obstetric unit (OU), alongside midwifery unit (AMU), freestanding midwifery unit (FMU)).

Pregnancy as a stressful waiting period

To be pregnant during a pandemic was perceived as a stressful waiting period characterised by increased vulnerability and worries concerning what lied ahead. The lack of information and not knowing what restrictions would apply at the hospital in terms of companionship, was described as stressful, burdensome, and extremely tough. Not knowing what to do or where to get updated information about the situation and regulations was described as something that took a lot of energy during the pregnancy.

> *All the insecurity surrounding the birth and that my husband could not be with me afterwards was scary and annoying and drained my energy before the birth. (R 596 primip, AMU)*

Anxiety and worry about them or their partner getting COVID-19 during the pregnancy also caused stress. Women were afraid an infection could affect the unborn baby and found it difficult to think about the risk of maybe giving birth alone, without their partner, in isolation. This led women to place restrictions on how they and their partner lived their lives during the pregnancy, for example through self-imposed quarantine. The women also worried about being infected by COVID-19 when staying in the hospital during labour and post-partum, and how such a situation could affect themselves and their baby.

> *I was rather worried before giving birth to get sick so that it would affect the birth. Not only the corona, but I was also afraid to get a common cold (R 792, multip, OU)*

The women learned that the birthing units' restrictions during the pandemic permitted the partner to accompany the woman when she had reached active labour, which contributed to anxiety and insecurity during the pregnancy in case they needed care during the latent phase of labour. Sometimes this anxiety led women to seek care later than they had planned after going into labour, because they were afraid, they would be alone without their partner. This resulted in fear that they would give birth at home or before arrival without assistance, and experiences of "chaos" if they arrived in the very late stage of labour at the birthing unit. Women who wanted a check-up during early labour described difficulties in getting permission to be admitted to the hospital because of the strict rules, which led to feelings of uncertainty and insecurity in the first phase of labour.

> *As a first-time mother during the coronavirus pandemic, there was a lot of extra stress and nervousness. It's difficult to be at home and feel that you are unwanted in the hospital. I was 5–6 cm when I finally begged to come in for a check-up. (R61, primip, OU)*

> *[Upon admittance] I was carried from the car on a stretcher as I was not able to walk, I had strong contractions and fully dilated. Due to covid-19 I waited at home as long as I could so that my husband could attend the birth, my major fear as the first-time mothers was that he was not allowed to join … (R156, primip, OU)*

Feeling lonely, isolated, and disempowered without the partner

When the partner was not allowed to attend the antenatal care sessions, it could lead to feelings of being "on your own". Some women, especially if there were complications, had received a great deal of information during antenatal check-ups, and felt unable to absorb everything by themselves. At times, they had also needed to make important decisions about their pregnancy and birth without their partner, which led to them feeling lonely and powerless.

> *I think it's absolutely terrible that my husband can't be there with me for the ultrasounds during my pregnancy. We live in the same house and have no symptoms. (R110, multip, OU)*

The feeling of loneliness and being "on your own" was reinforced by being alone at a time when they really needed someone. When arriving at the hospital, their partner had to wait either outside the entrance or in the car in the parking lot, until he/she was given permission to enter. The women described being met

Table 1
Characteristics of included women (n = 806), compared to the national Norwegian sample of births (n = 52 897) year 2020.

	B3 COVID		MFR 2020*	
Number of births	806	(%)	52 897	(%)
Maternal age				
Mean (SD)	29.8 (4.7)		31.4 (4.8)	
≤19	9	1.1	268	0.5
20–24	88	10.9	4248	8.0
25–29	296	36.7	16229	30.7
30–34	286	35.5	20318	38.4
35–39	102	12.7	9699	18.3
≥ 40	23	2.9	2135	4.1
Marital status				
Married or cohabiting	780	96.8	49812	94.2
Other	26	3.2	3078	5.8
Education				
No higher education	226	28.1	–	–
Higher education ≤4 years	271	33.6	–	–
Higher education >4 years	309	38.3	–	–
Employment				
Employed	610	75.5	–	–
Student	40	5.0	–	–
Unemployed	51	6.2	–	–
Other	106	13.2	–	–
Place of birth				
Hospital labour ward	727	90.2	49532	93.6
Alongside midwifery unit	72	8.9	3075**	5.8
Freestanding midwifery unit	7	0.9	290	0.5
Parity				
Primiparous	362	44.9	22736	43.0
Multiparous	444	55.1	30161	57.0
Mode of birth				
Vaginal birth	605	75.0	39 074	73.9
Operative vaginal birth	83	10.3	5456	10.2
Caesarean section (total)	118	1.7	8349	15.9

*The Norwegian birth cohort year 2020, Medical Birth Registry of Norway (MBRN).
**Personal communication.
(-) Numbers not available.

by guards at the entrance, and then having to find their way to the birthing unit on their own. Women with complications or who needed an induction of labour could spend hours or days alone in the hospital before labour started, which caused them to feel isolated, insecure, and afraid. Having labour induced meant spending the whole period until reaching active labour alone, rather than being at home with their partner during early labour if induction was not necessary. This could mean hours of pain from induced contractions, on their own without their partner to support them.

My birth was induced due to rising blood pressure and low amniotic fluid. I was alone for a day and a half in an observation ward before I came to the delivery room and was allowed to be with my husband. It was very hectic in the ward, and I felt very alone. (R26, multip, OU)

The women saw their partner as the one person they could "lean on"; who knew them and their needs and wishes. They strongly expressed the need for his/her support and help to cope with labour, also prior to the active phase, and called for it when it was lacking. Being without the partner during the stages of labour and at the postnatal ward made them feel alone, unsafe and even scared. However, if the partner was given permission to be present, this was emphasised as the best part of the care.

The midwife allowed my partner to stay the night until before 8 in the morning since the baby was born in the middle of the night. He had to leave before the change of shifts, as this was not really allowed at the hospital. (R8, multip, OU)

Feelings of loneliness and isolation are even more prominent in the accounts of the stay at the postnatal ward. The fact that their partner could not be with them throughout the stay and that they were often not allowed to leave the room at all, gave rise to difficult emotions. It could also cause women to feel imprisoned when being left alone in a small, hot room. The respondents reported feeling "on their own" and questioned whether that kind of care was even safe, and also emphasised how much they missed practical and emotional support from their partners after the birth. The women felt that the postnatal ward was understaffed and pointed out that their partner could have helped and relieved the midwives and nurses with tasks such as fetching food and drinks.

The birth was quick and, as expected, really terrible. But the midwife was good, and I felt relatively safe. The post-partum days were very lonely, and I longed for my husband. It was difficult to get help (get food, talk about the baby, get a smile from someone). I felt that the staff were avoiding me, and no one asked how I was doing. (R202, multip, OU)

Very nice birth, nothing to complain about there. Top follow-up along the way and skilled midwife. But the experience of postnatal care was cruel. I had never held a baby before and was left alone due to corona. I cried and the baby cried. I was so tired after giving birth but had to manage everything all alone and sit to google things completely exhausted and in great pain. (R208, primip, OU)

Sharing experiences and becoming a family

An aspect of becoming a parent during the pandemic was wanting to be together as a family during the whole maternity episode, through pregnancy, birth, and the post-partum period. This was a very special period with precious moments for the couple and the family. The women wanted to take the first steps of parenthood together with their partner and spend time with the newborn baby as a family. Feelings of sadness could arise if they lost the possibility of experiencing the joy and excitement of the first few hours and days as a unit, and of creating shared memories for the future. A few women continued to express grief, sorrow, and loss months after the birth if they had not been able to share the first few hours or days together.

It was quite tragic that the father was not allowed to attend the birth which was an elective C-section. This makes the birth experience difficult to think back on. We never got to experience meeting the twins together, just one of us at a time. (R68, multip, OU)

To be together as a family also meant deciding for themselves with whom they were going to share the experience of the new baby, and at which time. When visiting was restricted during the pandemic, older siblings were not allowed to come to the hospital to meet the baby. For some this was an important family moment that had been taken away from them.

I was induced and gave birth two days later. Went home after six days. For me as a mum and my family, it was absolutely awful. Not being able to share the joy, the scary experience, the ups and downs with my husband and children. It is still a crisis. The fact that we could not share this together is really painful. It hurts so much that we could not be together when we needed it the most. (R98, multip, OU)

The strong wish for a family focus is very visible; many women highlight the opportunity to spend time together with their partner and the newborn as the best part of their maternity care, and they express gratefulness about situations when this was facilitated by the staff – despite the restrictions.

[The best part was] That the father was allowed to be with us for a little around 5 h even though it was in the corona period. Possibly [because] ….the birth was in the middle of the night. (R508, primip, AMU)

Busy postnatal care without compassion

Despite the partner was only being able to be present during the active stage of labour, many women described feeling safe and well cared for by competent staff during the birth. This is in stark contrast to the experiences of postnatal care.

The labour ward was very good, but the experience of the postnatal care overshadows most of it. I felt overlooked and not taken care of. (R196, primip, OU)

The women frequently pointed out that the postnatal ward was seriously understaffed, they felt that the midwives and nurses had very little time for them and that their needs had not been fulfilled. Since they were often not allowed to leave their room, and their partners were not allowed to stay, the women had to ask the staff for help with everything they needed. This experience could lead to a feeling of being a bother. For others, who were not able to get out of bed on their own after, for example, a caesarean section or to carry the crying baby themselves, it resulted in feelings of helplessness and sorrow. These experiences made women feel overlooked and not seen as a person, and they called for more compassion in the postpartum care.

Being abandoned and left to fend for myself with a newborn baby has been a very traumatic experience for me. My partner was not allowed to attend the postpartum ward due to corona, and the staff was even more overworked than usual. No one had time to help me with breastfeeding. I was clearly told that there were others who needed the staff more than me when I asked for help. I just felt like I was bothering the staff. (R7, primip, OU)

The respondents felt that the midwives and nurses signalled that they were overloaded with tasks, which made the atmosphere in the ward busy and tense. The staff was often characterised as doing the best they could in a very difficult time, but also as be-

ing brusque and not always polite, failing to demonstrate an understanding of the new mothers' situation. This was especially apparent in connection with breastfeeding consultations, which were sometimes described as cold and insensitive. Little breastfeeding help was offered, and the one or two consultations women received felt quick and abrupt. Furthermore, there was a feeling of being overruled by the staff on decisions concerning the mother and the baby, for instance when it came to breastfeeding versus bottle-feeding or using a pacifier.

> *Some of the staff at the postnatal hotel created unnecessary stress and negative thoughts by being patronising and stressed out. (R70, primip, OU)*

In contrast to the above, a few multiparous women had enjoyed not having visitors in the postnatal ward. They felt that they had enjoyed a couple of days off, without any pressure to receive visitors.

> *More relaxed, plenty of time to have lots of skin-to-skin contact, to stimulate the production of milk and get to know the new little person. No bad conscience due to not receiving visitors. (R57, multip, OU)*

Discussion

The findings of our study show that changes in the organisation of maternity care due the pandemic appear to have had affected the experiences of women in Norway, as shown in the four themes generated from the analysis.

Feelings of insecurity, anxiety, stress and worries throughout pregnancy were experienced by many. They had limited knowledge about what to expect, or what or who would be available for them, either during antenatal check-ups or at the place they were going to give birth. Furthermore, they were concerned about their own and their family's health and well-being. This is in line with other studies investigating women's experiences during the COVID-19 pandemic (Ceulemans et al., 2021; Karavadra et al., 2020; Naurin et al., 2020; Walsh et al., 2020). Self-reported worries and related feelings of anxiety during pregnancy are common even under normal circumstances (Dennis et al., 2017; PeÑAcoba-Puente et al., 2011), but there are indications that the impact on women's psycho-social wellbeing has been elevated during the pandemic, which, in turn, can increase the risk of post-partum depression (Fallon et al., 2021).

The restrictions imposed on companionship in their maternity care seem to have affected the women in this study in a range of ways. In Norway, the birth companion is usually the woman's partner and co-parent of the baby. The feeling of loneliness and being abandoned during the time they spent without their partner was particularly evident in the accounts of women who were induced, or women who needed professional care in the latent phase of labour. Likewise, women reported being alone in the postpartum ward with their newborn baby for much of the time. During the pandemic, the World Health Organisation and other national and international guidelines producers have stated that all childbearing women must have the opportunity to have a positive childbirth experience, including companionship (WHO, 2020a). The emphasis that this should be throughout the whole of labour and birth has been strong in some policy documents, including those stemming from the UK, where this point was specifically emphasised by the RCOG/RCM COVID documents, to overcome the accounts of women being abandoned during the early phases of labour and during induction (RCOG, 2021). However, the results from this study, and others that are beginning to emerge from different countries around the world, suggest that these strong and evidence-based statements have not always been put into practice.

For many women, the time they spent alone during labour and birth far exceeded the time they were accompanied by their partner. It is well documented that continuous support for women during childbirth is beneficial and may improve outcomes for women and infants alike (Bohren et al., 2017). Childbirth is also a neuro-psycho-social event, comprising a complex interplay between maternal experiences and neurohormonal events (Olza et al., 2020). The neurohormonal processes, in particular oxytocinergic mechanisms, not only control the physiological aspects of labour and birth, but also contribute to the subjective psychological experience of birth. The neurobiological processes induced by the release of endogenous oxytocin during birth influence maternal behaviour and feelings in order to facilitate birth (Olza et al., 2020). The release of oxytocin is promoted by a warm and positive environment and gentle touching of the skin. The lack of a supportive partner for shorter or longer periods during labour and birth might lead to a disturbance in these neurobiological processes, thereby missing out on some of the factors that contribute to an optimised process of labour and the first interaction between mother and baby. Our data also indicate that women perceived the lack of companionship as a safety issue. Some differentiated between the impression of the staff available to them during labour and birth being skilled and providing safe care, and that of feeling unsafe, psychologically and emotionally, from being abandoned, alone and lonely during many hours of labour before they were permitted to have a companion. These experiences may have unknown consequences, given that a "sense of security" is an important aspect of childbirth care for women in Norway (Vedeler et al., 2021).

More profoundly, our findings also show that the notion of companionship is far more than being a supporter or even just being a visitor to the woman. In the Norwegian context and in the context of many other European countries, being accompanied through the labour and birth journey by the co-parent of the baby sets the stage for the rest of family life together. The women in the study expressed grief and sadness when they had to experience these important first hours and days of their new family life alone. Some couples, for example after a complicated birth, were unable to meet their baby together for the first time. The mother had been alone with the newborn baby for most of the time spent in the postnatal ward, without the possibility of sharing experiences and thus creating shared memories for the future with the co-parent. Shared remembering has important social benefits for couples and remembering the past together plays a crucial role to couples' identities, plans and relationships (Harris et al., 2014). This finding is in line with a study performed in the UK during the pandemic, where women describe distress when their families missed out on experiences that could never be regained (Vazquez-Vazquez et al., 2021). In a family perspective, it is important to take care of the partner as well as the new mother during and after childbirth (Vedeler et al., 2021). The partners of pregnant women have worried more about their partner's and their baby's health, as well as their own health, during the COVID-19 pandemic (Naurin et al., 2020). Research concerning fathers' psychological health shows that the experience of unpredictable complications gives rise to the need for additional support (Vallin et al., 2019), raising the question of whether the unpredictable nature of becoming parents during the COVID-19 pandemic might have similar consequences.

The findings of our study show that postnatal care was experienced as busy, cold, and lacking compassion. Women reported feeling like a bother when they asked for help and felt that the postnatal wards were critically understaffed. Similar findings are presented in a recent study from UK, were women reported feeling isolated and sad in the postnatal period and frustrated and upset by a lack of staff to help them care for the new baby (Sanders and Blaylock, 2021). Our findings indicate that individ-

ual breastfeeding support was one of the aspects of early postnatal care that suffered the most. This is in line with a study from the UK, where breastfeeding support was found to be one of the biggest concerns for women who gave birth during the pandemic (Karavadra et al., 2020). Current evidence suggests that there is a low risk of mother-child transmission through breastfeeding, and immediate postpartum breastfeeding is recommended and supported (WHO, 2020b). Other countries have found that the rate of breastfeeding has decreased during the COVID-19 pandemic (Vazquez-Vazquez et al., 2021), and it has been indicated that social isolation and resulting psychosocial stress can have a negative impact on bonding between mothers and their babies (Tscherning et al., 2020). In the early postpartum period, it is important to provide breastfeeding support tailored to the individual needs of the mother (Swerts et al., 2019).

Many of the respondents described their birth care and birth care providers in a positive light and placed this experience in strong contrast to what they perceived as bad quality care in the postpartum ward. National surveys of women's experiences of the whole course of maternity care in Norway show that women are least satisfied with the quality of postpartum care compared to antenatal care and care during labour and birth, also before the pandemic (Holmboe and Sjetne, 2018; Sjetne et al., 2015). The findings of the present study indicate that this has been further aggravated during the COVID-19 pandemic.

In retrospect, the rules were unnecessarily strict in limiting partners/co-parents to be present during the maternity episode, and the focus on preventing the spread of covid-19 infection led to distress, anxiety and losses amongst women and their partner. Asking women and staff for their views about what could have worked best as the pandemic rolled forward, might have provided important ideas and knowledge on better ways to handle the situation. It became clear that the medical society seems to regard childbearing mainly as a medical event. The pandemic has pinpointed the immense importance of recognising the psychological and social part of childbirth to a greater extent.

Strengths and limitations

One strength of this study is the large sample of women who gave birth during the COVID-19 pandemic ($n = 806$). The data includes the women's own accounts and consists of rich and extensive descriptions of their experiences of the care they received at the place they gave birth. No limitations were placed on the length of responses when answering the survey. A further strength is that women who have given birth at nearly all 45 available birthing units in Norway have answered the survey: only three small units with less than 50 births per year were not represented. Furthermore, the sample comprises both primiparous and multiparous women. Another strength of the study is the short time span of one to nine months from giving birth to providing a response to the survey, which may contribute to low recall bias.

However, several limitations need to be taken into consideration. Self-selection bias, which can be an issue in self-recruiting surveys, may have contributed to recruiting women who had experienced dramatic episodes or who wanted to promote certain views. The survey was not designed to explore experiences during the pandemic explicitly, so there were no questions directly relating to experiences of the COVID-19 virus. The sample was restricted to women who responded in a Nordic language or English, and 14 respondents were excluded for this reason.

Conclusion

Based on this study, we conclude that the COVID-19 pandemic seems to have affected women's experiences of being pregnant, giving birth and becoming a parent in Norway. The restrictions placed on companionship by the healthcare facilities varied between hospitals. However, the restrictions seem to have affected a range of aspects related to women's experiences of pregnancy, labour and birth and the early postpartum period. Postnatal care was already poor, and the pandemic has highlighted the shortcomings, especially where companionship was banned

Ethical approval

Ethical approval for the B3 project was granted by the Ethics Committee of the University of Central Lancashire, UK (Ethics Committee BuSH 222, 22nd January 2014, and STEMH Ethics Committee Unique reference number: STEM 449 Amendment_1JUN20). The study was approved by the Norwegian Data Inspectorate (ref:60,547/3/HJTIRH, 4th September 2018).

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Clinical trial registry

Not applicable.

Data statement

The dataset used and analysed during the current study is available from the corresponding author on reasonable request.

Declaration of Competing Interest

The authors report no conflicts of interest.

CRediT authorship contribution statement

Tine S. Eri: Conceptualization, Data curation, Investigation, Methodology, Writing – original draft. **Ellen Blix:** Data curation, Methodology, Writing – review & editing. **Soo Downe:** Data curation, Methodology, Writing – review & editing. **Carina Vedeler:** Data curation, Methodology, Writing – review & editing. **Anne Britt Vika Nilsen:** Conceptualization, Data curation, Methodology, Investigation, Writing – original draft.

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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.2022.103321.

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