# Parent organizations' experiences of the pandemic response in maternity care in thirteen European countries

Daniela Drandić<sup>1,2</sup>, Katharina Hartmann<sup>3</sup>, Catarina Barata<sup>4,5</sup>, Rosa Torguet<sup>6</sup>

# **ABSTRACT**

We surveyed changes to maternity care services in the first 17 months of the COVID-19 pandemic in 13 different European countries, from the perspective of national maternity service (parent) organizations advocating for a human rights approach to maternity services. A qualitative study was conducted in November 2020. An open-question survey was sent to national maternity service (parent) organizations and members of COST Action 18211 in Europe, asking about COVID-19 measures in maternity services (antenatally, intrapartum, postnatally, and overall satisfaction). From the open answers, 16 core issues were extracted. Between February and August 2021, semi-structured interviews with the national representatives of 14 parent member organizations in Europe were conducted, collecting details on overall national situations and changes due to COVID-19 measures. The reported experiences of parent organizations from 13 European countries show wide variations in epidemiological containment measures during the first 17 months of the COVID-19 pandemic. Practices differed between facilities, resulting in emotional disquiet and confusion for parent-patients. Most countries maintained antenatal and postnatal care but restricted psychosocial support (antenatal and birth companions, visitors). Organizations from nine countries reported that women had to wear masks during labor, and all but two countries saw separations of mothers and babies. Most parent organizations described a need for more reliable information for new parents. During the pandemic, non-evidence-based practices were (re-) established in many settings, depriving women and families of many factors which evidence has shown to be essential for a positive birthing experience. Based on the findings, we consider the challenges in maternity services and propose a strategy for future crises.

Eur J Midwifery 2022;6(December):71

https://doi.org/10.18332/ejm/156902

# INTRODUCTION

Since the beginning of the pandemic, human rights, feminist, patient, and maternity advocacy groups have voiced their concern over fundamental rights violations in maternity care<sup>1</sup>. Early in the pandemic, COVID-19 was identified as a risk factor for obstetric violence<sup>2</sup>, often accompanied by rollbacks in quality of care<sup>3-5</sup>. In their commentary, our colleagues from COST Action 18211point<sup>5</sup> points to mounting evidence of adverse consequences that COVID-19 containment measures enforced in facility maternity care worldwide. They call for the priority implementation of evidence-based, human-rights-informed care, including during times of crisis such as the current pandemic. The commentary authors go on to highlight how the reaction to health services and the way they were reorganized reveals 'something about the underlying ethos of maternity care provision around the world, raising serious questions about how it should be reframed when services are rebuilt once the pandemic is finally over'<sup>5</sup>.

Patient advocacy organizations, in this case, national parents' groups monitoring and advocating for improvements in maternity services, are relevant stakeholders in healthcare<sup>6</sup> because they work at the intersection of parents' lived experiences, policies and rights, using their unique insight to catalogue and report patients' lived experiences in general<sup>7-9</sup>,

#### **AFFILIATION**

- 1 Roda Parents in Action, Zagreb, Croatia
- 2 Human Rights in Childbirth, United States
- 3 Mother Hood e.V., Bonn, Germany
- 4 Institute of Social Sciences, University of Lisbon, Lisbon, Portugal
- 5 Portuguese Association for the Rights of Women in Pregnancy and Birth, Lisbon, Portugal 6 El Parto Es Nuestro, Alicante,
- 6 El Parto Es Nuestro, Alicante Spain

### **CORRESPONDENCE TO**

Daniela Drandić. Roda - Parents in Action, Žerjavićeva 10, 10000 Zagreb, Croatia. E-mail: daniela@roda.hr ORCID ID: https://orcid. org/0000-0003-3119-7734

### **KEYWORDS**

maternity care, COVID-19, crisis response, epidemiological measures, mental health, post-COVID-19 policy

•

Received: 10 July 2022 Revised: 3 October 2022 Accepted: 25 November 2022 but also in maternity services specifically<sup>1,10,11</sup>.

As in any crisis, caution is advised when reactions include sudden practice changes to maternity services that are not grounded in the best available evidence. These can bring unforeseen consequences for women, pregnant and birthing people, and families. Respectful maternity care cannot be seen as secondary to pandemic containment measures in maternity facilities; it is imperative that all containment measures are proportionate to the threat (in this case, the spread of COVID-19) and that undue burdens are not put on pregnant, birthing, and postnatal families. Practice guidelines for maternity care during COVID-19 in Europe during the first three waves of the pandemic, in countries where they existed, revealed erratic, contradictory and inconsistent approaches to scientific evidence<sup>12</sup>. Moreover, there is emerging evidence that containment measures implemented in maternity services as a response to the COVID-19 pandemic negatively impacted maternal and perinatal outcomes 13,14, including maternal mental health<sup>15-17</sup> but also healthcare professionals' well-being<sup>18</sup>.

Although some authors have reported on parents' experiences in neonatal care <sup>11,19</sup>, to our knowledge, no other published research has used a human-rights-based approach to survey national pandemic-related changes to care for pregnant and birthing women from the perspective of parents' organizations. Organizations representing patients overall, or specific patient groups (e.g. cancer patients) have been conducting research and publishing reports using similar methodology throughout the pandemic<sup>7-10</sup>. The perspective of patient organizations, who collect and monitor information from patients receiving care directly but also through monitoring activities (e.g. social media, policy monitoring) is unique and, in a crisis, is a valuable source of real-time information.

This article aims to provide an overview of different changes made to maternity services implemented in some or all maternity facilities over the first 17 months of the pandemic, roughly corresponding to the first three waves of the pandemic in Europe, as reported by maternity service (parent) organizations who are monitoring the situation in their countries. The article reports on 16 core services and containment measures implemented in maternity services which directly impacted women, birthing people and families. Based on the findings, we propose a strategy for reimagining post-pandemic maternity services across Europe, including these 16 issues and consider the implementation challenges.

# STRATEGY FOR POST-PANDEMIC MATERNITY SERVICES

We used a descriptive qualitative and participative approach to gather input from parents' organizations across Europe by preparing the protocol, research questionnaire and semi-structured interviews in a participative manner. According to Sandelowski<sup>20</sup>, a 'Qualitative description is especially amenable to obtaining straight and largely un-adorned [...] answers to questions of special relevance to practitioners and policymakers'.

In November 2020, a poll of COST Action 18211 network members was conducted online with six questions that collected information on the most significant changes in maternity services during the pandemic. Seven COST member organizations completed the survey, identifying some of the major COVID-19 containment measures implemented in their countries, which women and families had reported to them as problematic. The authors compared and analyzed the survey responses by clustering the data according to the phases of provision of obstetric care (antenatal, intrapartum and postnatal care), which identified 16 core issues from the survey for national maternity (parent/patient) organizations, as detailed in Table 1.

Based on these results, we prepared a questionnaire with the 16 core issues and conducted semi-structured interviews with representatives of national maternity service (parent) organizations, recruited through COST Action 18211 and the European Network of Childbirth Associations (ENCA). Five of the organizations from the COST Action had also participated in identifying the 16 core issues, while the others did not. The interviewees were invited to comment on the identified issues and to detail the situation in their countries, based on reports they had received from parents on the ground and information they had gathered nationally. The focus was on generalized tendencies observed in the individual countries, leaving space for single (major) facilities or regions differing from this overall trend. The information gathered through the interviews is given in Table 1. Upon completion of an interview, the information was shared with the interviewees, who were invited to review and revise the recorded responses if needed.

Data collection, processing and storage, conformed to the General Data Protection Regulation (GDPR) and the Declaration of Helsinki. Consent was given at the beginning of each interview, with the possibility of exiting the interview at any time. No financial or other incentives were offered to the interviewees.

Table 1 summarizes the data collected during the semistructured interviews for each country. A discussion on general trends across the countries continues below.

### **Antenatal care**

Interviewees reported that in-person antenatal care appointments were reduced overall across the countries studied, with the change being quite drastic in some countries. In Ireland, antenatal and postnatal visits were capped at 15 minutes regardless of the reason for the appointment, and in Slovakia, in-person appointments were banned during the first pandemic wave. Routine tests and scans remained available but were affected by shorter appointment times (Ireland) and were difficult to access during the peaks of the first three COVID-19 waves (Portugal, Spain, Slovakia).

Companions at antenatal appointments were banned in most countries, except the Netherlands and the Czech Republic, where interviewees stated that some facilities allowed companions. One country (Croatia) did not have the practice of companions at antenatal appointments prior to



Table 1. Reports on maternity care during the height of the first, second and third waves of COVID-19 in 13 European countries

	Portugal	Spain	Ireland	UK	Netherlands	Germany	Italy	Poland	Czechia	Slovakia	Hungary	Croatia	Cyprus
Antenatal care													
In-person appointments as normal	( <b>v</b> )	<b>(√)</b>	√ (+) 15 min maximum	<b>√</b>	V	✓	√	✓	✓	x* / <b>√</b>	( ✔)	✓	✓
Companion at antenatal appointment	X	X	Х	Х	( <b>v</b> )	X	X	X	<b>(√)</b>	X	X	-	Х
Access to routine tests and scans	( <b>√</b> )*	<b>(√)</b>	√ (+) 15 min maximum	√	✓	✓	<b>√</b>	<b>√</b>	✓	( <b>v</b> )* / <b>v</b>	✓	✓	✓
Antenatal mental health services available	-	-/x	✓	Reduced	( <b>v</b> )	-	-	-	-	-	-	-	-
Intrapartum care													
Companion at vaginal birth	X* / <b>√</b> **	(v) / v**	<b>√</b> **	<b>√</b> **	✓	<b>√</b> * / <b>√</b> **	x* / (v) / (v)**	Х	√*	x* / ( <b>√</b> )	√** / X	X	√** / √*
Companion at CS birth	x / -	X	<b>√</b> (+)	( <b>v</b> ) / x	✓	<b>√</b>	x / -	x / -	( <b>v</b> )	-	-	-	√ (only in private hospitals)
Doula support allowed	x / - (most hospitals only allowed one companion)	( <b>v</b> )	X	Х	( <b>v</b> )	X	x / - (most hospitals only allowed one companion)	х	X	X	X	X	x / -
Women required to wear masks during labor and birth	<b>√</b>	✓	Х	X	X	( <b>v</b> )	<b>√</b>	Only COVID-19+ women	X	√ (FTP2)	<b>√</b>	✓	✓
Visitor bans	✓	✓	<b>√</b> *	✓	( <b>√</b> )	V	✓	Х	Х	Х	✓	V	✓
Reports of women suspected or confirmed Covid-19+ being induced	(√)	Х	X	X	Х	X	No information	X	X	No information	X	( <b>v</b> )	X

Continued

Table 1. Continued

	Portugal	Spain	Ireland	UK	Netherlands	Germany	Italy	Poland	Czechia	Slovakia	Hungary	Croatia	Cyprus
Reports of women suspected or confirmed Covid-19+ having CS	( <b>v</b> )	х	×	Х	х	( <b>√</b> )	No information	<b>√</b>	x	Some reports, no information on scale	( <b>v</b> )	( <b>v</b> )	<b>√</b>
Home birth services	Available, private	Available, private	Available, increased due to demand	Available, reduced	Available	Available	Available, private	Available, private	-	-	Available, private	-	-
Postpartum care													
Separation of COVID-19+ or suspect mother and baby	( <b>v</b> )	<b>√</b>	Х	<b>√</b>	х	( <b>v</b> )	V* / V	✓	✓	✓	( <b>v</b> )	<b>(√)</b>	√ (until November 2020)
Visiting bans or time restrictions for premature or sick babies and parents	(V)	<b>√</b> (+)	<b>√</b> (+)	<b>√</b> (+)	Х	✓	<b>v</b> / -	1st wave: ✓* Later waves: ✓ (+)	✓	x* / ( <b>v</b> )	✓	✓	v* / (v)
Postpartum mental health services available	-	√	✓	Reduced	✓	If available, difficult to access	-	-	-	-	-	-	-
In-person postpartum care (6-week appointment) available	<b>√</b>	(√)	√ (+) 15 min maximum or via video-call	x or via phone	<b>√</b>	( <b>v</b> )	<b>v</b> / -	<b>√</b>	✓	( <b>v</b> )* / <b>v</b>	✓	✓	✓

v Practice at most facilities. (v) Practice at a minority of facilities. x Not a practice at most facilities. - Not a practice/service in pre-COVID-19 times. \*Ban in place during the first wave, but not later. \*\*Companion only allowed at the end of birth, pushing phase. (+) Restrictions and time limits were introduced. / Delimiter between the waves.

the pandemic. Overall, interviewees commented that the quality of care was compromised as a result, especially in countries where the quality of care was already low or varied before the pandemic. Antenatal mental health services, where they existed prior to the pandemic, were reduced. This is particularly problematic considering that the pandemic triggered the compromise of the mental health of all people, especially pregnant, birthing, and postnatal families<sup>21,22</sup>.

Parents' organizations reported observing higher stress levels among pregnant women in their countries because of these difficult circumstances. One organization quoted a pregnant woman's experience in Germany:

'My gyn offered me this test for malformations and my partner was not there but I just did not know what to do and how could I decide this without asking his opinion? It is his baby, too'.

# Intrapartum care

Companionship

Parents' organizations reported differences in the possibility of having a birth companion. This measure was subject to the broadest variety over time, type of facility and country. All interviewees reported a reduced possibility of having a birth companion or the institution of outright bans. Another experience from Germany showed the rapidly changing situation:

'The ward that allowed my partner with me was closed the day before I gave birth because they focused staff on COVID patients. I had to go to a hospital with a very different policy where my partner stayed in the parking lot the whole time'.

In those situations where a birth companion was allowed, interviewees reported severe restrictions, including limiting when the companion was allowed to be present or the requirement that the birth companion have a negative COVID-19 test, which before the advent of rapid tests usually meant a minimum 24-hour wait. Only one country (Netherlands) stood out for being consistent in maintaining the same level of a right to a birth companion at a vaginal birth throughout the pandemic.

Women who give birth by cesarean section are not always afforded the same rights to companionship as those who give birth vaginally. Prior to the pandemic, reports by interviewees showed that the situation regarding companionship at a cesarean varied widely across the countries. In three countries, interviewees reported having a companion at a cesarean section was not the norm before the pandemic (Slovakia, Hungary, Croatia). In four countries where companionship at a cesarean was mostly the norm prior to the pandemic, bans were introduced as part of COVID-19 containment measures (Portugal, Spain, Italy and Poland), with differences between public and private facilities in Portugal, even though companionship at cesarean section is guaranteed by law<sup>23</sup>.

Doulas have appeared as second-birth companions over the past twenty years across Western Europe. Despite the overwhelming evidence that the presence of a doula can improve birth outcomes for mothers and newborns,

especially for racialized and poor women, migrants and refugees<sup>24-26</sup>, interviewees reported that second companions, and therefore doulas were banned as part of containment measures in the majority of the countries included in the survey, with only two countries offering the possibility of doula companionship in some facilities (Spain, Netherlands).

Visitor bans were reported by most parents' organizations in the study, whereby women were not able to see their partners or other family members after birth and for the duration of their stay in-hospital, at least during the peaks of COVID-19 waves. The exception to this were three countries (Poland, Czechia, Slovakia). Later research linked these types of bans to increased postnatal traumatic stress response<sup>21,27</sup>. It is important to note that this study did not collect data on the length of the average hospital stay after vaginal or cesarean birth, which may vary across the countries and alter the long-term effects of visitor bans.

### Mode of birth

While most parents' organizations surveyed did not report that women who were suspected of having or were COVID-19 positive (COVID-19+) had their labors induced without obstetric indication, in two countries (Portugal and Croatia) there were reports of this happening in some facilities. In two countries, interviewees reported that most facilities required that women with suspected or confirmed COVID-19 give birth by cesarean section without obstetric indication (Poland, Cyprus). In Poland, women who were COVID-19+ were required to birth in special facilities, where cesarean section was mandatory for COVID-19+ mothers. In five other countries, interviewees reported mandatory cesarean for COVID-19+ women for some facilities (Portugal, Germany, Italy, Hungary, Croatia), during certain pandemic waves. This echoes results published for the United States, which showed increased medicalization of childbirth for women suspected or confirmed of having COVID-1928.

# Availability of home birth services

During the pandemic, more women sought home birth services<sup>29</sup>. In this study, organizations in six surveyed countries stated that only private-sector home birth services continued to be available as normal during the pandemic. In Portugal, where home births are only offered in the private sector, their number nearly doubled in 2020 compared to 2019<sup>29</sup>, which can partially be explained by people wanting to avoid the restrictions implemented in facilities, and perceived safety in avoiding COVID-19 infection. As the demand increased substantially, some women were not able to find midwives who could attend a home birth.

Two organizations stated that home birth services remained available as normal in both public and private sectors (Netherlands, Germany). Interestingly, the Irish parent-organization reported that the health service increased the availability of home birth services as a result of increased demand. In four of the countries, organizations reported that home birth services were not available before

the pandemic, and were therefore not available during the pandemic either (Czechia, Slovakia, Croatia and Cyprus). Despite not being officially available, the number of home births in Croatia increased by 30% between 2019 and 2020, although the number remained low<sup>30</sup>.

### Separation from newborn and visiting bans

Early in the pandemic, the WHO issued recommendations clearly stating that if the mother is COVID-19+, the mother and newborn should be kept together, provided the mother feeling well enough to care for the newborn<sup>31</sup>, a recommendation mirrored by the guidelines by the Royal Colleges of Midwifery and Obstetrician-Gynecologists<sup>32</sup>. Despite this, one of the major problems with COVID-19 response policies was the separation of mothers who were suspected or confirmed COVID-19+ and their newborns, especially in the first three to nine months of the pandemic; this was reported by most interviewees. Notable exceptions to these were reports from organizations from Ireland and the Netherlands, which stated that mother-newborn dyads were kept together as normal, regardless of the mother's COVID status.

In some countries, the health authorities were slow to issue evidence-based recommendations. In Portugal, the first recommendation by the College of Obstetrics and Gynecology in March 2020 stated that women who are COVID-19+ must be separated from their infants and prevented from breastfeeding<sup>33</sup>. As more evidence and international guidelines were published resulting in increased pressure from advocacy groups, the General Directorate of Health updated the guidelines, albeit one full year later (March 2021). Despite the new guidance, the previous policies continued across facilities<sup>34</sup>. In Croatia, women who gave birth before the results of their routine PCR test were available, were separated from their newborns as a precautionary measure until a negative result was returned. This practice was prevalent in some facilities throughout the pandemic waves but also between waves, and was especially a problem in smaller facilities where PCR tests took longer to analyze.

Visiting restrictions for premature or sick newborns were also reported by most national organizations, with some interviewees reporting the implemented total visitation bans in most facilities (Czechia, Hungary, Croatia, and Cyprus). These measures were implemented despite a lack of evidence that they contribute to containing the spread of COVID-19 and despite being in contradiction with readily available professional and WHO guidelines that were being updated in real-time<sup>32,35</sup>.

Visitor bans were also reported for hospitalized mothers and newborns by all interviewees except those from three countries (Poland, Czechia, Slovakia), where parents' organizations reported that visitation of mothers was the same as in pre-pandemic times. In the other countries, organizations reported that women hospitalized during pregnancy did not have visitation from the time of their hospitalization to post-partum, regardless of the duration of that stay (from two days to several weeks, in the case of

complications). A mother from Germany stated:

'I stayed at the hospital because of late pregnancy complications but after my cesarean birth I left as soon as they let me - I missed my older daughter so much! I hadn't seen her in 2 weeks'.

Evidence shows that these visiting restrictions can have a negative effect on postnatal mental health<sup>14,21,36</sup>.

### Postnatal maternal mental and physical health

Despite increasing awareness about the importance of perinatal mental health during the pandemic, interviewees reported that mental health support services were only rarely available, either because they did not exist pre-pandemic, because they were restricted due to containment measures or because demand was so high that services were not accessible.

Interviewees reported that in-person postnatal care, usually organized around six-weeks after birth continued to be mostly available as normal, much as antenatal care was. However, they also reported that pandemic measures resulted in increased use of telehealth consultations, which depend on women and families having access to reliable, affordable internet and devices capable of video calls, which is not always possible. Later evidence about the efficacy of telehealth maternity care during the pandemic showed that this type of care was not always optimal<sup>5,37</sup>.

The results we found were similar to those described by others<sup>19,38,39</sup>, who defined similar themes: less family involvement, reduced emotional and physical support for women, compromised standards of care, increased exposure to medically unjustified cesarean section, and staff overwhelmed by rapidly changing guidelines and enhanced infection prevention measures<sup>40</sup>, as well as a decrease in respectful care due to fears surrounding COVID-19 transmission<sup>2,38,41</sup>. At the same time, interviewees reported that facilities that were known for providing more motherfriendly and baby-friendly care made great efforts to maintain that level of quality, sometimes at considerable staff effort, whilst otherwise less friendly facilities more rapidly downgraded their services.

# Maternity care guidelines from international and national organizations

Throughout the pandemic, international and national organizations have made efforts to create and regularly update guidelines for COVID and maternity care starting. Even the European Parliament was concerned about rollbacks in maternity care in member states<sup>42</sup>. Despite these efforts, our data have shown that facility policies did not change much between the first and third waves of the pandemic, even after more evidence was available.

A specific example is the benefits of labor and birth companions, which have been widely studied and recognized<sup>22,24</sup>. Guidance available very early in the pandemic and updated in real-time as new evidence became available<sup>31,32</sup> clearly stated that companionship at vaginal birth was important and could safely continue with the implementation of basic pandemic practices. Despite

this, the political will to maintain proportionally appropriate limitations to companionship among policymakers and professional organizations varied widely throughout the various countries and pandemic waves. An example of good midwifery practice was the UK during the second wave, where professional organizations reiterated that attendance of partners during labor and birth must be a priority, with reliable testing and appropriate PPE available to both, ensuring the safety of all those using maternity services, and must be proportionate to policies being used in other departments of the facility<sup>32,43</sup>.

A second good practice came from France, which did not have a parents' organization representative included in this study but is a major European country. There, the Ministry of Health issued guidance for hospitals in the first month of the pandemic outlining how to include companions in labor and childbirth, while lowering the risk of infection<sup>44</sup>. The German Society for Gynecology and Obstetrics issued a similar statement<sup>45</sup> on the inclusion of fathers, also in the first month of the pandemic.

The real-time guidelines by the Royal Colleges of Obstetrics and Gynecology and the Royal College Midwives and World Health Organization, referred to earlier in this article, stated that elective induction or cesarean should be avoided for women who have symptoms of or are positive for COVID-19, without obstetric indication<sup>31,32</sup>. Other European professional societies issued similar statements, including the German Obstetric Society<sup>46</sup> and the Italian Obstetric Society<sup>47</sup>. Conversely, the Portuguese College of Obstetrics and Gynecology recommended a shorter threshold for the decision in the use of epidural analgesia and instrumental birth, meaning that women were more likely to have either of these interventions if they were suspected of or confirmed to be COVID-19+<sup>33</sup>.

# Maternity evidence-based human-rights care

The differing responses to the COVID-19 crisis have shown that national and local decision-makers' opinions often impact maternity facility policies more than scientific evidence and international guidelines. As a result, there must be a significant change to the prevailing paradigm and overmedicalization of maternity care in Europe, especially during crises, to one where a proportional, evidence-based response prevails. A healthier perinatal period sets babies and families on a long-term beneficial health trajectory<sup>48</sup>. So, while 'classic' impediments to system changes such as financial and human resources must not be underestimated, it seems that the biggest challenge to good quality services lies in an ethical decision: 'Is the well-being, physical and mental health of mothers, babies, and families important to our societies?'; and 'Is an evidence-based, human-rights informed, salutogenic approach to maternity care politically desired?'. If so, policymakers need to take appropriate steps to enforce such an approach, as the current political and medical establishments alone seem unable or unwilling to birth the necessary change.

A woman-centered, positive birth experience (with no unnecessary interventions, in a space that feels physically

and emotionally safe to the mother) is a valuable, long-term investment for any society. These birth experiences protect the physical and mental health of mothers<sup>49</sup>, and result in higher breastfeeding rates<sup>50</sup>, which should be an integral part of public health planning.

### Limitations

All the countries included in the survey have a mix of public and private facilities and insurance, which may have had different policies during the peaks of the pandemic waves. These have been noted where appropriate, but the mix of public and private facilities varies widely across the countries. Additionally, the results reflect general national trends, as they were reported to and collected by parent (patient) maternity rights organizations with a national presence in their countries. Although most of the organizations are large, experienced organizations with national networks, there is a potential for reporting bias. The multi-national nature of the data collection and importance of collecting these experiences, which may never be reported in official data, make them a valuable source of information. Future quantitative research will shed more light on the nuance in changes in maternity services during the pandemic. Furthermore, the research questions did not take into consideration access to medical abortion or medically assisted fertility services, and therefore did not map these aspects of reproductive healthcare. Finally, the research only includes information for the first 17 months of the pandemic, roughly corresponding to the first three COVID-19 waves in Europe, with data collection happening from May to July 2021, and for this reason does not include information on vaccines, rollout to pregnant individuals or data on the fourth wave, which began in Europe in September-October 2021.

# CONCLUSION

Crises such as pandemics are a litmus test for health services and societies, requiring a balance between containment measures and quality care. The responses to the COVID-19 pandemic mapped in this article have shown that in some countries, pregnant, birthing and postnatal women and their families were expected to bear a disproportionate burden of the pandemic response. From a parents' perspective, the solution lies in a paradigm change, towards a respectful, woman-centered and familycentered approach<sup>51</sup>. The prevailing biomedical model of maternity services focused on pathology, must give way to a neuro-psycho-social model of care where maternity care services are shaped according to woman's needs, based on scientific evidence, and focused on the promotion of human health<sup>52</sup>. The long-term mental and physical health of mothers, newborns and families must be considered when measuring outcomes and reshaping services, and mothers and their families must be recognized as stakeholders and be involved in all levels of decision-making. This is critical as countries are still dealing with, and will likely continue to deal with COVID-19 waves and new variants of the disease, which may disproportionately affect pregnant women. Other

countries are already planning and implementing post-COVID-19 health system reforms.

This pandemic has been a magnifying lens for the existing harmful policies in maternity services but should also be an important impetus for a radical rethinking of the way maternity services are delivered in the future.

### **REFERENCES**

- Human Rights Violations in Pregnancy, Birth and Postpartum During the COVID-19. Human Rights in Childbirth; 2020. Accessed October 3, 2022. http://humanrightsinchildbirth.org/wp-content/ uploads/2020/05/Human-Rights-in-Childbirth-Pregnancy-Birth-and-Postpartum-During-COVID19-Report-May-2020.pdf
- 2. Sadler M, Leiva G, Olza I. COVID-19 as a risk factor for obstetric violence. Sex Reprod Health Matters. 2020;28(1):1785379. doi:10.1080/26410397.2020.1785379
- Lazzerini M, Covi B, Mariani I, Giusti A, Pessa Valente E; IMAgiNE EURO Study Group. Quality of care at childbirth: Findings of IMAgiNE EURO in Italy during the first year of the COVID-19 pandemic. Int J Gynaecol Obstet. 2022;157(2):405-417. doi:10.1002/ijgo.14119
- Otelea MR, Simionescu AA, Mariani I, et al. Women s assessment of the quality of hospital-based perinatal care by mode of birth in Romania during the COVID-19 pandemic: Results from the IMAgiNE EURO study. Int J Gynaecol Obstet. 2022;159(suppl 1):126-136. doi:10.1002/ijgo.14482
- Lalor J, Ayers S, Celleja Agius J, et al. Balancing restrictions and access to maternity care for women and birthing partners during the COVID-19 pandemic: the psychosocial impact of suboptimal care. BJOG. 2021;128(11):1720-1725. doi:10.1111/1471-0528.16844
- 6. Jones K, Baggott R, Allsop J. Influencing the national policy process: the role of health consumer groups. Health Expect. 2004;7(1):18-28. doi:10.1111/j.1369-7625.2004.00238.x
- 7. The perspectives of 1,720 patient groups during the Covid-19 pandemic. PatientView. September 29, 2020. Accessed October 3, 2022. https://patientview.createsend1.com/t/ViewEmail/j/77D6B016BF55F92 62540EF23F30FEDED/18FF0CA117D940731C65CA 3F48968C2E?alternativeLink=False
- Global Cancer Coalitions Network. COVID-19: Impact on Cancer Patient Organisations Worldwide in 2020. Global Cancer Coalitions Network; 2021. Accessed October 3, 2022. https://worldbladdercancer.org/wpcontent/uploads/2021/02/GCCN-COVID19-Impact-Report-2021.pdf
- European Patients Forum. The Impact of the COVID-19 Pandemic on Patients and Patient Organisations. European Patients Forum; 2021. Accessed October 3, 2022. https://www.eu-patient.eu/globalassets/ covid19-survey-report\_final.pdf
- Debrecéniová J, Kotríková-Rašmanová M, Marošiová L. CHILDBIRTH – RIGHTS – PANDEMIC: Monitoring Report on Violations of the Human Rights of Women in the

- Provision of Childbirth Care in Healthcare Facilities in Slovakia During the COVID-19 Pandemic. Občan, demokracia a zodpovednosť, Ženské kruhy; 2021. Accessed October 3, 2022. http://odz.sk/en/wp-content/uploads/porod-prava-pandemia\_EN\_web.pdf
- Kostenzer J, Hoffmann J, von Rosenstiel-Pulver C, et al. Neonatal care during the COVID-19 pandemic - a global survey of parents' experiences regarding infant and family-centred developmental care. EClinicalMedicine. 2021;39:101056. doi:10.1016/j.eclinm.2021.101056
- 12. Barata C, Neves DM, Santos MJ. COVID-19 Containment Measures, Perinatal Experiences, and the Fight for Childbirth Rights in Portugal. Medical Anthropology Quarterly Blog. August 11, 2020. Accessed October 10, 2021. https://medanthroquarterly.org/rapid-response/2020/08/covid-19-containment-measures-perinatal-experiences-and-the-fight-for/
- 13. Brislane Á, Larkin F, Jones H, Davenport MH. Access to and Quality of Healthcare for Pregnant and Postpartum Women During the COVID-19 Pandemic. Front Glob Womens Health. 2021;2:628625. doi:10.3389/fgwh.2021.628625
- 14. Iyengar U, Jaiprakash B, Haitsuka H, Kim S. One Year Into the Pandemic: A Systematic Review of Perinatal Mental Health Outcomes During COVID-19. Front Psychiatry. 2021;12:674194. doi:10.3389/fpsyt.2021.674194
- 15. Davenport MH, Meyer S, Meah VL, Strynadka MC, Khurana R. Moms Are Not OK: COVID-19 and Maternal Mental Health. Front Glob Womens Health. 2020;1:1. doi:10.3389/fgwh.2020.00001
- 16. Chmielewska B, Barratt I, Townsend R, et al. Effects of the COVID-19 pandemic on maternal and perinatal outcomes: a systematic review and meta-analysis. Lancet Glob Health. 2021;9(6):e759-e772. doi:10.1016/S2214-109X(21)00079-6
- 17. Kotlar B, Gerson E, Petrillo S, Langer A, Tiemeier H. The impact of the COVID-19 pandemic on maternal and perinatal health: a scoping review. Reprod Health. 2021;18(1):10. doi:10.1186/s12978-021-01070-6
- 18. lorga M, Soponaru C, Socolov RV, Cărăuleanu A, Socolov DG. How the SARS-CoV-2 Pandemic Period Influenced the Health Status and Determined Changes in Professional Practice among Obstetrics and Gynecology Doctors in Romania. Medicina (B Aires). 2021;57(4):325. doi:10.3390/medicina57040325.
- 19. Kostenzer J, von Rosenstiel-Pulver C, Hoffmann J, et al. Parents' experiences regarding neonatal care during the COVID-19 pandemic: country-specific findings of a multinational survey. BMJ Open. 2022;12(4):e056856. doi:10.1136/bmjopen-2021-056856
- 20. Sandelowski M. Focus on Research Methods: Whatever happened to qualitative description? Res Nurs Health. 2000;23(4):334-340. doi:10.1002/1098-240x(200008)23:4<334::aid-nur9>3.0.co;2-g
- 21. Mayopoulos GA, Ein-Dor T, Li KG, Chan SJ, Dekel S. COVID-19 positivity associated with traumatic stress response to childbirth and no visitors and infant separation in the hospital. Sci Rep. 2021;11(1):13535.

- doi:10.1038/s41598-021-92985-4
- 22. Bohren MA, Hofmeyr GJ, Sakala C, Fukuzawa RK, Cuthbert A. Continuous support for women during childbirth. Cochrane Database Syst Rev. 2017;7(7):CD003766. doi:10.1002/14651858.CD003766.pub6
- 23. Law No. 15/2014, of March 21: RIGHTS AND DUTIES OF USERS OF HEALTH SERVICES. Website in Portuguese. Procuradoria-Geral Distrital de Lisboa. Accessed October 3, 2022. http://www.pgdlisboa.pt/leis/lei\_ mostra\_articulado.php?nid=2292&tabela=leis&so\_ miolo
- 24. Fortier JH, Godwin M. Doula support compared with standard care: Meta-analysis of the effects on the rate of medical interventions during labour for low-risk women delivering at term. Accouchement standard ou assisté d'une doula : une comparaison. Can Fam Physician. 2015;61(6):e284-e292. Accessed October 3, 2022. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4463913/pdf/061e284.pdf
- 25. Gruber KJ, Cupito SH, Dobson CF. Impact of Doulas on Healthy Birth Outcomes. J Perinat Educ. 2013;22(1):49-58. doi:10.1891/1058-1243.22.1.49
- 26. Balaam MC, Kingdon C, Haith-Cooper M. A Systematic Review of Perinatal Social Support Interventions for Asylum-seeking and Refugee Women Residing in Europe. J Immigr Minor Health. 2022;24(3):741-758. doi:10.1007/s10903-021-01242-3
- 27. Mayopoulos GA, Ein-Dor T, Dishy GA, et al. COVID-19 is associated with traumatic childbirth and subsequent mother-infant bonding problems. J Affect Disord. 2021;282:122-125. doi:10.1016/j.jad.2020.12.101
- 28. Debrabandere ML, Farabaugh DC, Giordano C. A Review on Mode of Delivery during COVID-19 between December 2019 and April 2020. Am J Perinatol. 2021;38(4):332-341. doi:10.1055/s-0040-1721658
- 29. Live births at home (No.), Portugal, 1995-2020. Website in Portuguese. Nascer. 2021. Accessed October 10, 2021. https://nascer.pt/indicadores/#toggle-id-9
- Number of home births in 2018-2021. Website in Croatian. RODA. March 3, 2021. Updated August 6, 2022. Accessed October 10, 2021. https://www. roda.hr/udruga/dokumentacijski-centar/reakcije/brojkucnih-poroda-u-hrvatskoj-u-2018.-2019.-2020.html
- 31. World Health Organization. Clinical management of COVID-19: Interim guidance, 27 May 2020. WHO; 2020. Accessed October 3, 2022. https://apps.who.int/iris/bitstream/handle/10665/332196/WHO-2019-nCoV-clinical-2020.5-eng.pdf?sequence=1&isAllowed=y
- 32. Coronavirus (COVID-19), pregnancy and women's health. Royal College of Obstetricians and Gynaecologists. Accessed April 4, 2021. https://www.rcog.org.uk/globalassets/documents/guidelines/2021-02-19-coronavirus-covid-19-infection-in-pregnancy-v13.pdf
- Ordem dos Médicos. COVID-19: ATUAÇÃO NA GRÁVIDA. Ordem dos Médicos; 2020. Accessed October 10, 2021. https://ordemdosmedicos.pt/wp-content/ uploads/2020/03/COVID-19-Atuação-na-gravida.pdf
- 34. Serviço Nacional de Saúde. COVID-19: Gravidez e Parto.

- Serviço Nacional de Saúde; 2020. Updated October 27, 2021. Accessed October 10, 2021. https://www.sip-spp.pt/media/x4sjjcia/gravidez\_parto\_dgs\_10\_2021. pdf
- 35. World Health Organization. Maintaining essential health services: operational guidance for the COVID-19 context: interim guidance. WHO; 2020. Accessed October 3, 2022. https://apps.who.int/iris/bitstream/handle/10665/332240/WHO-2019-nCoV-essential\_health\_services-2020.2-eng. pdf?sequence=1&isAllowed=y
- 36. Suwalska J, Napierała M, Bogdański P, et al. Perinatal Mental Health during COVID-19 Pandemic: An Integrative Review and Implications for Clinical Practice. J Clin Med. 2021;10(11):2406. doi:10.3390/jcm10112406
- 37. Galle A, Semaan A, Asefa A, Benova L. Telehealth use in antenatal care? Not without women's voices. Lancet. 2021;398(10309):1405-1406. doi:10.1016/S0140-6736(21)01956-5
- 38. Reingold RB, Barbosa I, Mishori R. Respectful maternity care in the context of COVID-19: A human rights perspective. Int J Gynaecol Obstet. 2020;151(3):319-321. doi:10.1002/ijgo.13376
- 39. Silverio SA, De Backer K, Easter A, von Dadelszen P, Magee LA, Sandall J. Women's experiences of maternity service reconfiguration during the COVID-19 pandemic: A qualitative investigation. Midwifery. 2021;102:103116. doi:10.1016/j.midw.2021.103116
- 40. Asefa A, Semaan A, Delvaux T, et al. The impact of COVID-19 on the provision of respectful maternity care: Findings from a global survey of health workers. Women Birth. 2022;35(4):378-386. doi:10.1016/j.wombi.2021.09.003
- 41. Coxon K, Turienzo CF, Kweekel L, et al. The impact of the coronavirus (COVID-19) pandemic on maternity care in Europe. Midwifery. 2020;88:102779. doi:10.1016/j.midw.2020.102779
- 42. Drandic D. HRIC INFORMS EUROPEAN PARLIAMENT ACTION ON MATERNITY CARE DURING COVID-19. Human Rights in Childbirth. April 23, 2020. Accessed July 7, 2021. http://humanrightsinchildbirth.org/index.php/2020/04/23/hric-informs-european-parliament-action-on-maternity-care-during-covid-19/
- 43. Midwives call for common sense on maternity visiting guidance. Royal College of Midwives. December 15, 2020. Accessed April 4, 2021. https://www.rcm.org.uk/media-releases/2020/december/midwives-call-for-common-sense-on-maternity-visiting-guidance/
- 44. COVID19 Accompagnement lié à la grossesse et l'accouchement. Ministère de la Santé et la Prévention. March 31, 2020. Accessed October 10, 2021. https://solidarites-sante.gouv.fr/actualites/presse/communiques-de-presse/article/COVID19-accompagnement-lie-a-la-grossesse-et-l-accouchement
- 45. Deutsche Gesellschaft für Gynäkologie und Geburtshilfe e. V. DGGG empfiehlt: Begleitung bei der Geburt zulassen auch in Zeiten der Corona-Pandemie. March 26, 2020. Accessed October 10, 2021. https://www.

- dggg.de/presse/pressemitteilungen-und-nachrichten/dggg-empfiehlt-vaeter-bei-der-geburt-zulassen-auchin-zeiten-der-corona-pandemie
- 46. Deutsche Gesellschaft für Gynäkologie und Geburtshilfe e. V. Aktualisierte Empfehlungen zu SARS-CoV2/COVID-19 und Schwangerschaft, Geburt und Wochenbett. Accessed October 10, 2021. https://www.dggg.de/fileadmin/data/Presse/Pressemitteilungen/2021/COVID-19\_\_Kreisssaalempfehlungen\_der\_DGGG\_\_FAQ\_fuer\_Schwangere\_und\_weitere\_Informationen/Aktualisierte\_Empfehlungen\_SARS-CoV-2\_COVID-19. pdf
- 47. Giusti A, Zambri F, Marchetti F, et al. Indicazioni ad interim per gravidanza, parto, allattamento e cura dei piccolissimi di 0-2 anni in risposta all'emergenza COVID-19: Aggiornamento del Rapporto ISS COVID-19 n. 45/2020. Istituto Superiore di Sanità; 2021. (Rapporto ISS COVID-19 n. 2/2021. Accessed October 10, 2021. https://www.iss.it/documents/20126/0/Rapporto+ISS+COVID-19+2\_2021.pdf/73969e59-08d9-3257-5cbe-649528d61788?t=1613387397571
- 48. Didikoglu A, Maharani A, Pendleton N, Canal MM, Payton A. Early life factors and COVID-19 infection in England: A prospective analysis of UK Biobank participants. Early Hum Dev. 2021;155:105326. doi:10.1016/j.earlhumdev.2021.105326
- 49. Hoffmann L, Banse R. Psychological aspects of childbirth: Evidence for a birth-related mindset. Eur J Soc Psychol. 2021;51(1):124-151. doi:10.1002/ejsp.2719
- 50. Caldwell K, Brimdyr K. Intrapartum Administration of Synthetic Oxytocin and Downstream Effects on Breastfeeding: Elucidating Physiologic Pathways. Annals of Nursing Research and Practice. 2017;2(3):1024. Accessed October 3, 2022. http://skin2skin.org/PDF/ ItrapartumAdminofSynthOxytocin.pdf
- 51. Morano S, Calleja-Agius J. Giving birth and dying alone in hospital during the COVID-19 pandemic a time for shifting paradigm toward continuity of care. J Perinat Med. 2020;48(6):551-552. doi:10.1515/jpm-2020-0220
- 52. Olza I, Uvnas-Moberg K, Ekström-Bergström A, et al. Birth as a neuro-psycho-social event: An integrative model of maternal experiences and their relation to neurohormonal events during childbirth. PLoS One. 2020;15(7):e0230992. doi:10.1371/journal.pone.0230992

#### **ACKNOWLEDGEMNETS**

We thank the EU COST Action 18211 for funding this Open Access publication. We also thank Olga Gouni from COST Action 18211 for participating in the original mapping of key indicators. We also thank the following European maternity service (parent) organizations for contributing to the evidence table: ADRESAM - Asociación por los Derechos Reproductivos y Salud Maternoinfantil (Spain), Aperio (Czech Republic), Associação Portuguesa pelos Direitos da Mulher na Gravidez e Parto (Portugal) Association for Improvements in Maternity Services Ireland (AIMSI, Ireland), BirthForward (Cyprus), Birth Trauma Association (UK), El Parto es Nuestro (Spain), Fundacja Rodzić po Ludzku (Poland), Geboorte Beweging (Netherlands), Másállapotot a szülészetbe! (Hungary), Mother Hood e.V. (Germany), Rinascere al Naturale (Italy), Roda - Roditelji u Akciji (Croatia), Ženské Kruhy (Slovakia)

### **CONFLICTS OF INTEREST**

The authors have each completed and submitted an ICMJE form for disclosure of potential conflicts of interest. The authors declare that they have no competing interests, financial or otherwise, related to the current work. DD reports receiving a virtual mobility grant to complete the research on this article (COST Action DEVOTION CA18211) and being a member of board of Human Rights in Childbirth (unpaid) and being a paid employee and an unpaid member of board of Roda – Parents in Action. KH reports receiving grants from Mother Hood e.V. (National Guideline project (AWMF No. 015-083), CEDAW dissemination project) and payment for lectures and presentations from University of Cologne and First Emotional Aid conference (Brixen, Italy). KH also reports being an unpaid science officer and responsible for international network for Mother Hood e.V. CB reports receiving a virtual mobility grant to complete the research on this article (COST Action DEVOTION CA18211) and being an unpaid member of board of Associação Portuguesa pelos Direitos da Mulher n Gravidez e Parto (APDMGP). RT reports receiving consulting fees for Project: 'Transitioning motherhood, mother2mother support' under the registration number 2021-2-HU01-KA210-ADU-000050329 to the call entitled Strategic Partnerships announced in the framework of the Eramus+ as part of the project team from 'El Parto es Nuestro' in delivering the research services to run the fieldwork activities in Spain.

### **FUNDING**

This research was partly financed through a grant from EU COST Action 18211.

# ETHICAL APPROVAL AND INFORMED CONSENT

Ethical approval was not required for this study. Participants gave informed consent.

### **DATA AVAILABILITY**

The data supporting this research are available from the authors on reasonable request.

### **AUTHORS' CONTRIBUTIONS**

DD, CB and KH worked together to conceive the article's premise and to collect initial information, based on a survey by Olga Gouni, who participated in the initial mapping. DD and KH mapped indicators based on survey responses and conducted interviews with parents' organizations. DD, CB, KH and RT collaborated on writing the manuscript.

### **PROVENANCE AND PEER REVIEW**

Not commissioned; externally peer reviewed.