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2 **Key points**

3 → Maternity services across Europe during the pandemic has undergone changes to limit
4 virus transmission; however, many changes are not evidence-based.

5 → While these changes were introduced to keep women, babies, and healthcare staff safe,
6 the exclusion of companions and the separation of mothers and babies is particularly
7 antithetical to a human rights-based approach to quality care.

8 → A poll of COST Action 18211 network members showed that inconsistency in the
9 application of restrictions was high, and that there were significant deviations from the
10 recommendations of authoritative bodies.

11 → Concerns have emerged that restrictions in practice may have longer term negative
12 impacts on mothers and their families, but in particular, may impact on the long-term health
13 of babies.

14 → When practice changes deviate from evidence-based frameworks that underpin quality
15 care they must be monitored, appraised and evaluated to minimize unintended iatrogenic
16 effects.

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18 **Introduction**

19 The women's right to respectful and dignified care during labour and childbirth is strategically
20 accepted [1]. As management committee members of the EU COST Action CA18211
21 network ('DEVOTION') focused on traumatic childbirth (www.ca18211.eu), we are
22 concerned with ensuring a positive birth experience for all. We work on a pan-European
23 level to ensure women's rights to give birth in a clinically and psychologically safe
24 environment [2], including during the current COVID-19 pandemic.

25 As every country reacted to the COVID-19 pandemic, the swift initial response was based on
26 the basic principles of infection control, intended to protect all citizens. However, many
27 governments and healthcare workers acted independently as they waited for emerging

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evidence and detailed guidance from authoritative organisations and professional bodies to inform appropriate action. The emerging guidance was quickly changing, with fundamental differences in the recommendations of key international bodies, such as the World Health Organisation (WHO), Royal College of Obstetricians and Gynaecologists (RCOG), American College of Obstetricians and Gynaecologists (ACOG), and Royal College of Midwives (RCM).

While grappling with the public health crisis, many institutional settings imposed significant restrictions on key aspects of maternity services, such as prohibiting a birth companion in labour, placing limitations on breastfeeding, and reducing the contact between a mother and her baby. While these interventions were introduced to keep women, babies, and healthcare staff safe, excluding companions and separating mothers from their babies are particularly antithetical to a human rights-based approach to quality care. Questions are now being raised about the appropriate balance between infection control and optimal maternity care, particularly in terms of the longer term clinical and psychosocial consequences for the mother, her baby, and the family. Women are reporting negative consequences of reduced access to professional care, and of increased interventions, designed to reduce infection risk but associated with increased levels of iatrogenic harm [2].

Accounts of restrictions have fuelled fear for some women, especially in the absence of good quality information from official sources, and in the context of alarming social media comments. As a consequence, reports emerged that substantial minorities of women across Europe have not been accessing publicly provided maternity services, either because they are no longer on offer, or for fear of infection, or because they do not want to be isolated and separated from their accompanying partner. In some cases, this has widened the gap in health equality: where affordable, private consultations were booked and in other cases services have not been accessed at all by some women. Antenatal and childbirth classes were replaced with virtual formats, excluding women without appropriate devices or broadband.

Women having ultrasound screening had to come alone, facing the possible diagnosis of a foetal anomaly, or even of intrauterine death, alone. Serious limitations were placed on community services, such as support for breastfeeding. Midwives involved in parentcraft were transferred to public health departments to assist in contact-tracing, implying that their support services to women at this critical time was not essential. Examples of the reorganisation of care from home or birth centres to hospital settings have been seen, as a perception emerged that community care was less safe.

Mapping the European response

In response to these issues, the COST Action CA18211 network undertook a poll of network members, operationalised at a virtual meeting of the network on November 25th and 26th 2021, to explore the situation of maternity care provision in Europe. There were 88 clinicians and researchers from 32 participating countries, representing different disciplines, such as midwifery, obstetrics, nursing, psychology, psychiatry, biology, as well as members of lay advocacy groups. One session focussed on the impact of COVID-19 on maternity care: representatives from 11 countries gave presentations and members from 23 countries added information via the chat. Variations in maternity care and restrictions between and within countries were highlighted. Key themes are outlined in Table 1.

These responses illustrate that inconsistency in the application of restrictions was high, and that there were significant deviations from the recommendations of authoritative bodies, such as the WHO [3], RCOG [4], and the RCM [5]. Most consistency lay in the fact that the restrictions excluded birth companions to various degrees, and women were separated from their babies or had significant limitations placed on the level of contact they could have if their baby was in the NICU. Some COST Action CA18211 network respondents were particularly concerned that locally applied restrictions deviated from international guidance (in the absence of evidence to support such restrictions), but also that some services were

reporting an increase (without evidence of clinical indication) in interventions, such as induction of labour, and caesarean section rates. Others reported an increase in unplanned out-of-hospital births, as women were delaying coming to hospital.

What is evident from this network internal poll is that despite the lack of evidence to justify severe restrictions, they were continuing in many maternity services, even though emerging research confirms they are not necessary or helpful to protect mothers, babies, and healthcare staff from transmission of the virus. Such restrictions may contribute to an environment in which women may be more at risk of experiencing a traumatic birth and raise questions about the extent to which women are exposed to human rights violations due to the continued implementation of potentially harmful practices. Data from a systematic review and meta-analysis [6] shows that rates of perinatal mental health disorders such as anxiety and depression are higher during the pandemic and may be partially attributed to modifications to maternity services. The MBRRACE-UK rapid report [7] highlighted two instances where women died by suicide, as referrals to perinatal mental health teams were refused or delayed because of restrictions related to COVID-19.

Furthermore, the restrictions may lead maternity staff to engage in clinical practices in direct contravention with evidence, professional recommendations, or deeply held ethical or moral beliefs and values, as services attempt to control the risk of Covid-19 infection. These changes in clinical practice may result in increasing levels of occupational moral injury, making staff more vulnerable to mental health problems. This may lead to reduced working hours, increased turnover, and adversely impact service user care [8].

Getting the balance right

Given the scale and scope of the restrictions that have been imposed across maternity care facilities, it is important now more than ever to ensure that authoritative guidelines are evidence-based, and that restrictions in practice are appropriately aligned to evidence-based policy recommendations. To enable this to happen, 'new' approaches to care during a

pandemic crisis must be delivered within a quality framework, founded on evidence and analysis of the potential unintended consequences. The current guidance from the WHO [3, 9] continues to emphasise that quality care includes ensuring a woman's right to a safe and positive childbirth experience. When practice changes deviate from evidence-based frameworks that underpin quality care they **must** be monitored, appraised and evaluated to minimize unintended iatrogenic effects.

The COVID-19 pandemic continues with new variants of the virus, resulting in increasing infection rates and hospital admissions. However, as more evidence has emerged relating to COVID-19 and pregnancy and newborn care, evidence-based principles to ensure equitable, safe, effective, quality maternal and newborn care in a pandemic have been developed by a group of midwifery professors in the UK. These clearly outline that care providers **must:**

- *“Continue to provide evidence-based, equitable, safe, compassionate and respectful care for physical and mental health, wherever and whenever care takes place, by remote access if necessary*
- *Protect the human rights of women and newborn infants, as far as possible*
- *Ensure strict hygiene measures and social distancing when possible*
- *Follow national guidance on use of personal protective equipment (PPE)*
- *Ensure birth companionship*
- *Prevent unnecessary interventions*
- *Do not separate a woman from her newborn infant(s) unless absolutely necessary*
- *Promote and support breastfeeding”*
- *Protect and support staff, including their mental health needs” [5, p.5]*

Why getting it right is particularly important for maternity care

Unlike trauma during other life periods, the perinatal period is particularly crucial, as it not only affects the mothers but their neonates, birth companions and families. Some events

during pregnancy, labour, birth, and the early life period appear to have exaggerated life-long consequences. There is now strong evidence that short, highly stressful exposures that last for weeks are enough to set some individuals on such a negative trajectory and emerging evidence that the COVID-19 pandemic has increased significantly levels of maternal stress for some women during late pregnancy and the immediate post-partum period in a manner reminiscent to the 1998 Quebec Ice Storm. Twenty years later children exposed to it either in the immediate antenatal period, through chaotic intrapartum maternity care or immediately post-partum, had altered metabolic parameters (BMI, insulin resistance) and increased HPA axis reactivity (indicator of increased levels of stress) [10]. Furthermore, the mother-infant bond is established in the immediate post-partum period, and any negative psychological or psychosocial event may alter this bond, as well as early interactions and parenting [11]. Evidence is growing that maternal perinatal stress has thus long-term impacts on aspects of child development and health. The importance of this perinatal period for the lifelong health of the infant was highlighted in a recent retrospective study [12]: Adults aged between 47 and 83 that were breastfed as children had a 12% lower chance of contracting COVID, whilst those exposed to maternal smoking around birth had a 20% higher risk of infection and 24% higher risk of hospitalisation due to COVID-19 after adjustment for later-life socioeconomic and environmental factors.

Extrapolating these data to the current maternity care situation suggests that the actions taken to reduce risks due to COVID-19 may negatively impact maternal psychosocial functioning, early parenting and, consequently, child developmental outcomes. It is thus important to document these deviations from best practice, and to reverse them as soon as possible.

Conclusion

Across Europe commentators on the current pandemic have noted the critical need for health and social care providers to balance reduction of infection risk and loss of life with

maintaining compassionate human relationships. The concerns within maternity care echo those in other areas. The difference in maternity care is the potential of ‘just in case’ interventions to have long term, and even life-course, impacts on both mother, baby, and the wider family. Variation in maternity care policy or guidelines for practice at a country, regional, or facility level cannot be justified. Variation in particular practices for particular women and pregnant people may be justified, but only in relation to their specific values, and clinical and psychological needs. It has been notable that variance from the evidence has disproportionately restricted human contact between pregnant and childbearing women and professionals, partners, and neonates (limiting social, emotional and informational support), and/or to increase unnecessary or unwanted intervention (risking high levels of adverse psychological, physical, and/or emotional consequences). This raises serious questions about an underlying ethos of maternity care provision and how it should be reframed when services are rebuilt, once the pandemic is finally over.

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Table list

Table 1 “Key practice changes in thirty-two European countries”