



A White Paper based on
research commissioned by
Medela AG and conducted
by FMR Global Health

PRESERVING BREASTFEEDING IN THE AGE OF COVID-19

A CALL TO ACTION



Contents

3	Key points
5	Assessing the impact of COVID-19 on maternity clinical practices and breastfeeding support
8	Mothers are willing to breastfeed, and healthcare professionals continue to recommend breastfeeding
9	COVID-19 is severely disrupting clinical and breastfeeding practices
11	Women lack essential support during the first days of initiating lactation
12	Shorter hospital stays mean that problems may occur at home, where mothers have reduced support
14	COVID-19 has caused significant stress for breastfeeding mothers
16	Fear of infection and increased anxiety are affecting breastfeeding behaviours
18	Essential elements for establishing milk supply and maintaining breastfeeding are being jeopardised by the responses to the pandemic
20	Reduced breastfeeding has both clinical and economic consequences
22	A call to action: steps healthcare professionals can take to protect and promote breastfeeding during COVID-19 times and beyond
28	Conclusion
29	Methodology
31	References

Key points

COVID-19 has had a severe impact on maternity services and breastfeeding support as a result of three inter-related factors: fear of infection, initial confusion and extreme clinical and economic constraints on healthcare systems. Leading national and international organizations all recommend that **breastfeeding should be supported wherever possible, even in women with confirmed or suspected COVID-19.**

Market research conducted in Europe and the USA has shown that mothers' initial willingness to breastfeed has not decreased during the pandemic, and that the majority of healthcare professionals (HCPs) continue to recommend breastfeeding.

However, this research has also shown that, despite this commitment to breastfeeding among both mothers and HCPs, COVID-19 has had a severe impact on the actual maternity services and breastfeeding support services delivered. The effects of COVID-19 include:

- earlier discharge from maternity wards and neonatal intensive care units (NICUs)
- increased separation of mothers and babies
- restrictions on partners or other visitors
- decreased in-hospital or community support for breastfeeding
- increased use of breast-milk substitutes

Alarming, breastfeeding support is being compromised during the first days after birth, a period that is crucial for successful breastfeeding. This problem is exacerbated by the trend towards earlier discharge, which means that mothers may experience breastfeeding problems at home, with less support than before the pandemic.

In addition to the impact of COVID-19 on maternity services and breastfeeding support, there is growing evidence that the pandemic has caused significant stress to breastfeeding mothers, with high proportions showing symptoms of anxiety or depression. Coupled with fears of infection, increased anxiety can lead many women to breastfeed or pump breast milk less often than before the pandemic, or to stop breastfeeding completely.

In summary, it is clear that the COVID-19 pandemic, and responses to it, are jeopardising essential elements for establishing and maintaining an effective milk supply. Reductions in breastfeeding rates resulting from the pandemic can have both clinical and economic consequences due to increased rates of common disorders in infants, such as diarrhoea or otitis media, and the consequent demands on healthcare resources.

Healthcare professionals have a key role to play in supporting mothers throughout the critical hours and days after birth, enabling them to develop an adequate milk supply and preventing a long-term impact of COVID-19 on breastfeeding.

Ways in which healthcare professionals can support mothers to protect and promote breastfeeding during the pandemic include:

- keeping mother and baby together, in accordance with current guidelines
- ensuring maximum support during the critical period after birth
- identifying and monitoring women with risk factors for an inadequate milk supply, and initiating milk supply with pumps where necessary
- emphasizing, prior to discharge, the importance of regular and frequent breastfeeding at home during the first two weeks after delivery
- continuing support, for example through virtual support and education, during the transition from hospital to home-based care
- guidance on how to obtain a hospital-grade pump, if required.

It is now recognized that breastfeeding should be encouraged and supported for all women. Given the shortened length of maternal stay in COVID-19 times, it is imperative that community-based support and hospital-grade pump technology are prescribed as appropriate and become indications in clinical guidelines.

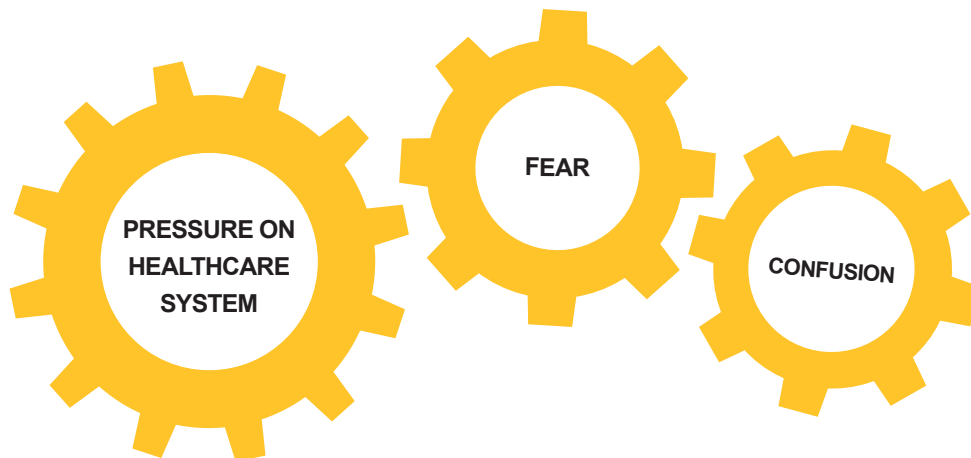
Assessing the impact of COVID-19 on maternity clinical practices and breastfeeding support

Across the world, the COVID-19 pandemic has affected all aspects of everyday life, and breastfeeding is no exception.

A global Roundtable meeting, bringing together leading clinicians and researchers from around the world, was held online in July 2020,^{1*} and highlighted three inter-related key factors contributing to the severe impact that COVID-19 has had on maternity services and breastfeeding support (**Figure 1**) and what can be done to combat them.

FIGURE 1

Fear, confusion and pressure on healthcare systems are three interrelated key factors contributing to the severe impact of COVID-19 on maternity and breastfeeding support



*Participants at this meeting were:

Professor Lars Bode, University of California, San Diego, USA;

Professor Riccardo Davanzo, Maternal and Child Health Institute, IRCCS Burlo Garofolo, Trieste, Italy;

Professor Donna Geddes, University of Western Australia, Perth, Australia;

Dr Janis Müller, Institute of Molecular Virology, Ulm University Medical Centre, Germany;

Assistant Professor Rebecca Powell, Icahn School of Medicine at Mount Sinai, New York, USA;

Dr Virginie Rigourd, Hôpital Necker Enfants Malade, Paris, France;

Professor Diane Spatz, University of Pennsylvania School of Nursing, Philadelphia, USA;

Ann Yates, International Confederation of Midwives, The Hague, The Netherlands

1. Fear of infection led many mothers to avoid hospital visits or other opportunities for breastfeeding support. Initially, fear of transmission via breast milk also drove decision-making at the clinical level.

2. During the early stages of the pandemic, **confusion**, resulting from the limited understanding of the nature of COVID-19 and the potential impact of the disease on pregnancy, birth and lactation, was compounded by sensationalist headlines in the press. Also, guidelines from various organizations were at times contradictory and changed throughout the course of the pandemic as more data became available, leading to confusion among both healthcare providers and mothers.

3. Extreme resource constraints in the healthcare systems (both clinical and economic) led to staff being deployed away from maternity and breastfeeding services to respond to short-term staffing needs or removed altogether in order to reduce costs.

This situation is a cause for serious concern, given the largely proven benefits of breastfeeding and its associated clinical and economic impact in both the short and long term.²

Importantly, leading organizations, including the WHO,³ UNICEF,⁴ the CDC,⁵ and the UK Royal College of Obstetricians and Gynaecologists,⁶ all recommend that breastfeeding should be supported wherever possible, even in women with confirmed or suspected COVID-19.



...all mothers are advised to continue breastfeeding, while practicing good hygiene during feeding...

(UNICEF)⁴



WHO recommends that mothers with suspected or confirmed COVID-19 should be encouraged to initiate or continue to breastfeed. Mothers should be counselled that the benefits of breastfeeding substantially outweigh the potential risks for transmission.

(World Health Organization)³



...infection with COVID-19 is not a contraindication to breastfeeding...

(Royal College of Obstetricians and Gynaecologists/
Royal College of Midwives)⁶

In combination with the global Roundtable, a market research study sponsored by Medela AG and conducted by FMR Global Health asked 276 healthcare professionals working in maternity wards or neonatal intensive care units (NICUs) in France, Germany, the UK and the USA about their professional experiences and observations on the impact of COVID-19 on breastfeeding. Together these initiatives have been aimed at highlighting the impact of COVID-19 on maternity services and breastfeeding and to provide a 'call to action' road map to protect and promote breastfeeding in this new era.

Mothers are willing to breastfeed, and healthcare professionals continue to recommend breastfeeding

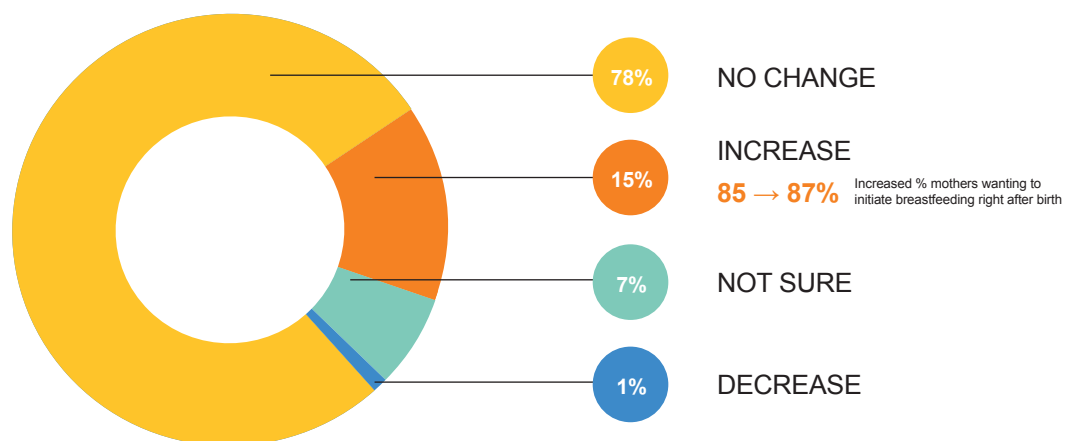
Importantly, the FMR Global Health market research study found that mothers' willingness to breastfeed has not decreased during the pandemic.⁷ Indeed, the proportion of mothers wanting to start breastfeeding immediately after delivery has actually increased slightly, from 85% to 87% (**Figure 2**).

This survey also showed that the majority of healthcare professionals - 97% of maternity ward staff and 86% of NICU staff - continue to recommend breastfeeding despite the COVID-19 pandemic.

Also, among those recommending breastfeeding, 90% and 94%, respectively, indicated that they always recommended breastfeeding because breast milk is the best source of nutrition and improves the infant's immunity to infection.

FIGURE 2

Mother's willingness to breastfeed after delivery, and healthcare providers' recommendations, remain unchanged during the pandemic.⁷



COVID-19 is severely disrupting clinical and breastfeeding practices

However, despite the recognition for high levels of breastfeeding commitment among both mothers and healthcare professionals, the FMR Global Health research revealed that COVID-19 has had a severe impact on the actual maternity services and breastfeeding support services delivered.⁷

Stays in maternity wards and NICUs are becoming shorter, and breastfeeding support is decreasing.

As shown in Table 1, both maternity ward and NICU staff are reporting earlier discharges and decreased breastfeeding support (**Table 1**).

TABLE 1

Mothers and babies are being discharged earlier, and breastfeeding support is decreasing as reported by **Maternity** and **NICU staff**.⁷

MATERNITY WARD STAFF

50%	MOTHERS WERE BEING DISCHARGED EARLIER the average time spent in the maternity ward after delivery decreased from 29 hours to 23 hours following vaginal delivery (21% reduction), and from 68 hours to 53 hours after Caesarean section (22% reduction).
30%	INCREASED SEPARATION OF MOTHERS AND BABIES
58%	ALL VISITORS WERE PROHIBITED
40%	ONLY RESTRICTED ACCESS FOR PARTNERS
33%	DECREASED BEDSIDE SUPPORT
50%	DECREASED BREASTFEEDING SUPPORT

NICU STAFF

40% **INCREASED SEPARATION OF MOTHERS AND BABIES**

27% **EARLIER INFANT DISCHARGE FROM THE UNIT**

31% **RESTRICTED ACCESS OF MOTHERS TO THE NICU**

28% **STAFF REDUCTIONS**

17% **DECREASED BREASTFEEDING SUPPORT:**
 – 29% considered that use of formula had increased
 – 21% felt that support for initiating breastfeeding had decreased

These trends were seen to varying extents but are present in all countries, and in both public and private hospitals, irrespective of size.

COVID-19 is reducing the use of pumps to initiate lactation

The reduced availability of breastfeeding and lactation support, as a result of COVID-19, is affecting the level of care being given to mothers.

For example, many mothers may need the use of a breast pump to support the initiation of lactation and, based on US birth data from 2019-2020 and data from Medela, it is estimated that in 2020, because of COVID-19, about 237,000 fewer women in the USA who need an intervention to support initiation of milk supply will use a pump while in hospital, as compared with 2019.⁸

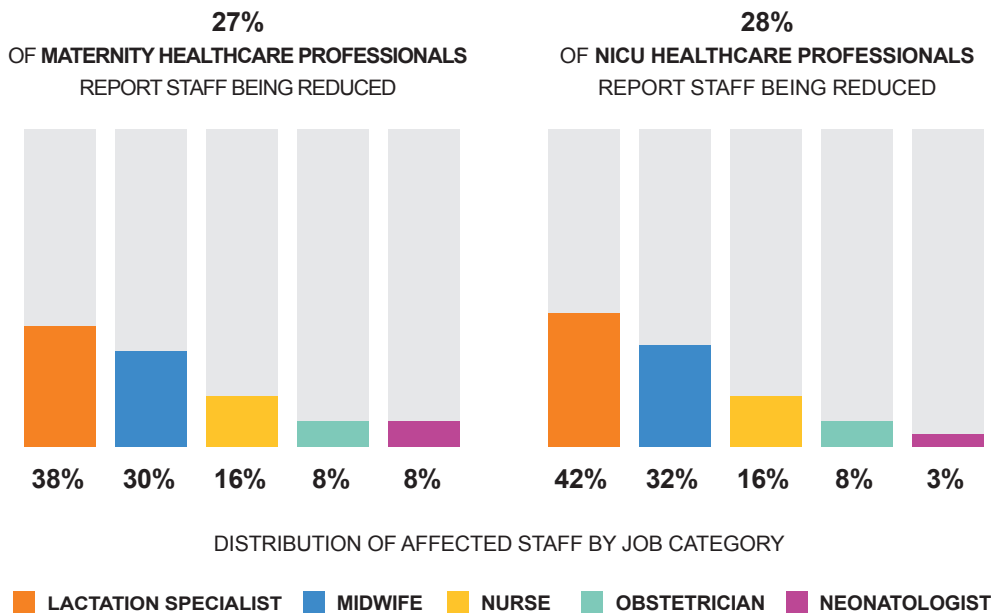
This means that 15% of mothers who need a pump to appropriately start their breastfeeding journey while in hospital are not doing so because of COVID-19.

Women lack essential support during the first days of initiating lactation

In the same FMR Global Health research, 27% of maternity staff, and 28% of NICU staff, reported reductions in staff numbers during the pandemic. In both cases, the staff most affected were midwives and lactation specialists (**Figure 3**)

FIGURE 3

Staff numbers are being cut in both maternity wards and NICUs



...and this is exacerbated by shorter hospital stays

Earlier discharge from the maternity ward means that there are fewer opportunities for support during the first days after birth - a period that is crucial for successful breastfeeding.^{9,10}



...the early postnatal period is crucial for breastfeeding success

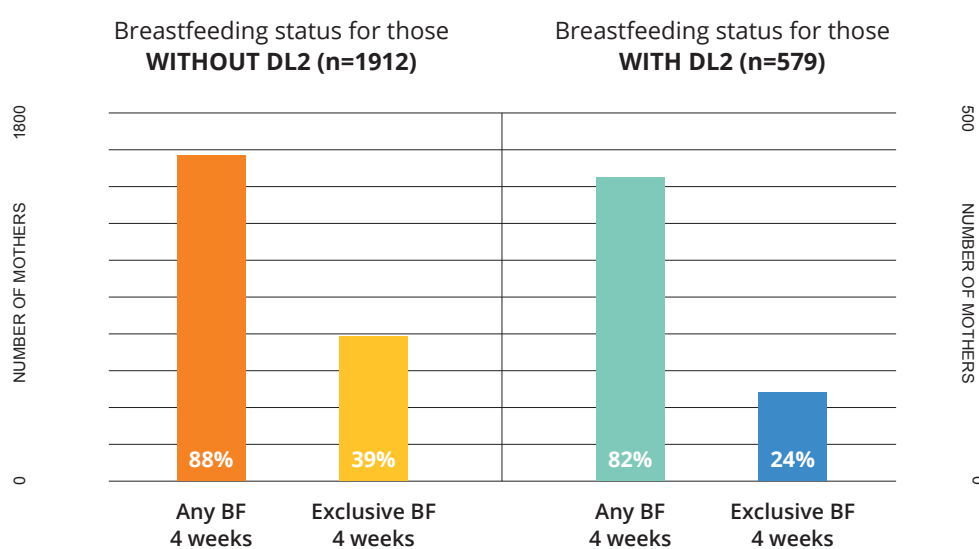
Nilsson IMS et al. *Matern Child Nutr* 2017; 13: e12432.9

Shorter hospital stays mean that problems may occur at home, where mothers have reduced support

Earlier discharge combined with reduced breastfeeding support due to COVID-19 now means that mothers have to navigate the initiation of lactation at home, with little support. This is an important consideration because any complications in reaching secretory activation or lactogenesis II, the stage of copious milk production (sometimes described as the feeling of “milk coming in”), reduce the likelihood of the mother attaining established lactation, and are associated with shorter durations of breastfeeding (**Figure 4**)¹¹⁻¹³

FIGURE 4

Delayed secretory activation can result in poor breastfeeding outcomes.¹¹



DL2 =Delayed onset of lactogenesis II

BF= Breastfeeding

The negative impact of a shortened stay in the maternity ward could be mitigated by maintaining or even increasing levels of support, including promotion of skin-to-skin contact and frequent breastfeeding, counselling on good positioning and attachment, and involvement of the partner.⁹ One-to-one support is particularly important for successful breastfeeding, but this may be difficult in the face of reduced staffing levels.¹⁴



I tell the women breastfeeding is hard and needs perseverance. One-to-one support is so important, and 30 minutes isn't enough.

UK midwife, quoted in Biggs KV et al. *Nutrients* 2018; 10: 60814

Shorter stays may reduce quality of care

It is important to note that shortening the length of stay may not be effective if the quality of care is to be maintained. Simply reducing staffing and bed capacity in proportion to the length of stay would increase the workload on each staff member, and so reduce the quality of care.^{15,16}

Indeed, reduced midwifery or nursing care during labour and delivery has been shown to result in mothers and infants missing out on skin-to-skin care and breastfeeding within the first hour after birth, at least occasionally, in turn impacting future exclusive breastfeeding. In this connection, if length of stay is to be reduced, there should be a corresponding increase in community-based services to maintain quality of care.¹⁶

COVID-19 has caused significant stress for breastfeeding mothers

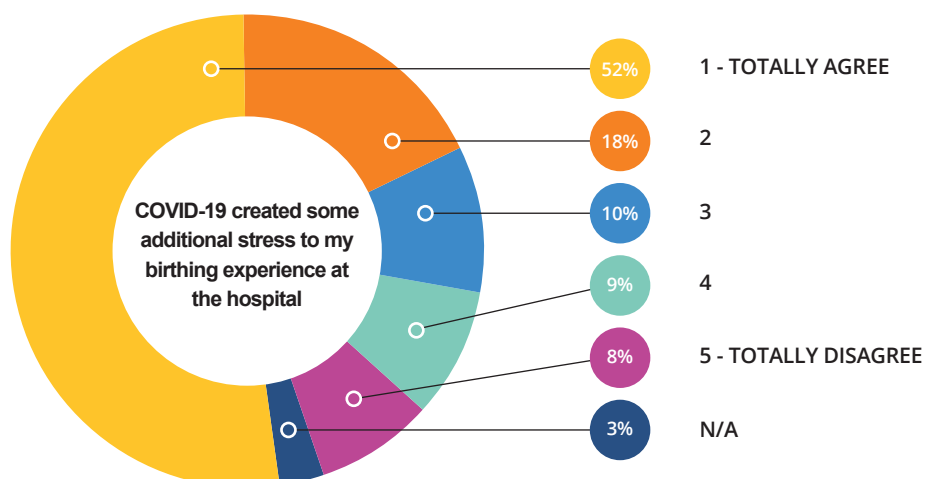
There is growing evidence that the COVID-19 pandemic has caused significant stress to breastfeeding mothers.¹⁷⁻²¹ Even in the absence of COVID-19, it has been estimated that 10-20% of mothers experience mental health problems during pregnancy or shortly after birth,¹⁷ and several studies have shown that this proportion has increased during the pandemic. For example, in a survey of 1329 mothers in the UK with an infant under 1 year of age, up to 71% reported some symptoms of poor mental health, including feeling low, irritable or worried, during lockdown.¹⁹

Similarly, a survey of 5866 pregnant or breastfeeding women in Belgium found that almost half experienced symptoms of depression or anxiety during the lockdown period.¹⁷

COVID-19 has also imposed significant additional stress during the birthing period. In a survey of 1473 mothers who gave birth in the USA during July 2020, about 70% felt that COVID-19 had created additional stress during their stay in the hospital (**Figure 5**).²²

FIGURE 5

Market research highlights COVID-related stress to mothers during the birthing period ²²



Many factors contribute to the additional stress imposed by COVID-19 on pregnant or breastfeeding women (**Figure 6**).^{17,19,21}

Together, these factors can adversely affect the thoughts and emotions of new mothers, leading to worsening depressive symptoms.²¹

FIGURE 6

COVID-related stress has many causes



**GIVING BIRTH WITHOUT
THE SUPPORT OF A
PARTNER**



**FEAR OF
INFECTION**



**REDUCED ACCESS TO
SUPPORT FOR MATERNAL
HEALTH AND
BREASTFEEDING**



**CONFUSING CHANGES IN
BREASTFEEDING AND
BIRTHING RECOMMENDATIONS**



**PHYSICAL DISTANCING
AND CONTAINMENT
MEASURES**



**FINANCIAL CONCERNS
DUE TO LOSS OF
INCOME DURING
LOCKDOWNS**



The loneliness, stress, and depression or anxiety of the mother is a problem that we should address.

Professor Riccardo Davanzo, Medela Global Roundtable, July 2020¹

Fear of infection and increased anxiety are affecting breastfeeding behaviours

Research conducted by Innofact in several European countries and the USA has shown that the disruption caused by COVID-19 to maternity practices and breastfeeding support, coupled with the depression and anxiety experienced by many women due to the pandemic, has had a marked impact on breastfeeding behaviours.²³ Despite women's initial willingness to breastfeed (see page 8), a proportion have ultimately decided not to breastfeed, breastfeed less after having started to breastfeed, or stop breastfeeding or pumping specifically because of COVID-19 (**Figure 7, Table 2**).²³ The impact of COVID-19 is highlighted by the fact that, before the pandemic, 66-89% of women in the different countries had intended to breastfeed or pump breast milk (**Table 2**)

FIGURE 7

Fear of infection and increasing anxiety are negatively affecting breastfeeding behaviours.²³

“I decided not to breastfeed, breastfeed less or stop breastfeeding or pumping because of Corona”

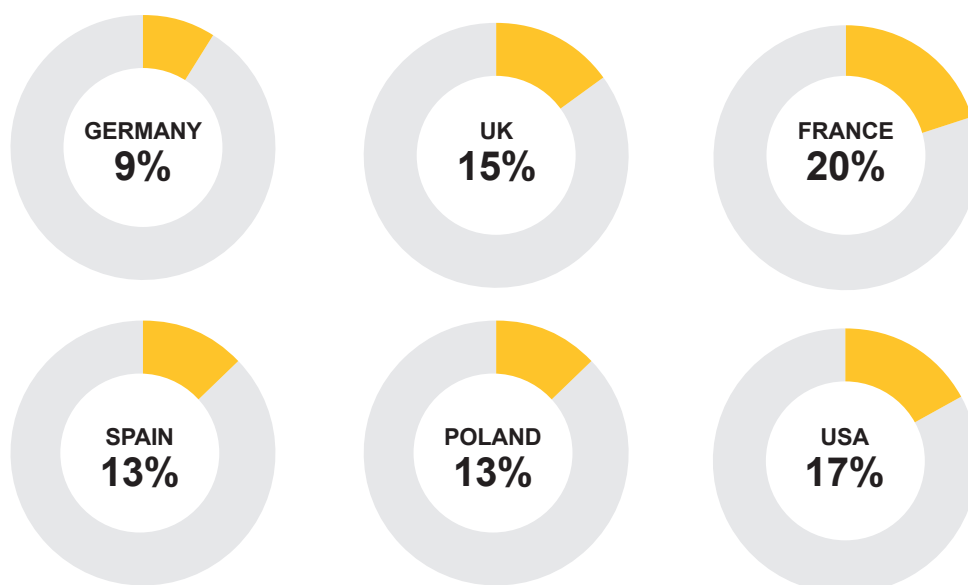


TABLE 2

COVID-19 is affecting breastfeeding decisions despite initial willingness.²³

Note: the remaining % are women who decide not to breastfeed for other reasons than COVID-19

	GERMANY (n=129)	UK (n=110)	FRANCE (n=110)	SPAIN (n=102)	POLAND (n=119)	USA (n=210)
BEFORE BIRTH						
Intended to breastfeed and/or pump breast milk	89%	79%	66%	89%	91%	81%
AFTER BIRTH						
Decided to breastfeed/pump breast milk despite COVID	82%	75%	64%	88%	89%	74%
Decided not to breastfeed/pump breast milk because of COVID	2%	5%	12%	1%	0%	4%
Breastfeed/pump milk less frequently because of COVID	3%	7%	5%	11%	8%	9%
Stopped breastfeeding/pumping breast milk because of COVID	3%	3%	4%	1%	6%	4%

The women who decided not to breastfeed, or to breastfeed less because of COVID-19 gave a number of detailed factors (**Figure 8**)

FIGURE 8

Factors affecting breastfeeding choices



Lack of midwifery support, or midwife home visits, due to COVID-19



Fear of infection, and of infecting the baby



General concern about lack of breastfeeding support



Advice from doctors, family members or friends

Essential elements for establishing milk supply and maintaining breastfeeding are being jeopardised by the responses to the COVID-19 pandemic

The wide-ranging effects of the COVID-19 pandemic on maternity practices, breastfeeding support, and mothers' mental health combine to jeopardise the establishment of a good milk supply and long-term breastfeeding.

Reduced length of stay

Shortening the length of stay in the maternity ward reduces the ability to provide effective breastfeeding support during the first critical hours and days after birth.¹⁰ Such support is essential to initiate and build an adequate milk supply.

Close mother-baby contact

There is good evidence that close contact between mother and baby - particularly skin-to-skin contact during the period immediately after birth - is essential for successful breastfeeding.^{10,24,25} Compared with women who do not practise skin-to-skin contact, those with skin-to-skin contact early after birth are more likely to:

- be still breastfeeding 1-4 months after birth
- breastfeed for longer
- be exclusively breastfeeding from hospital discharge to 1 month after birth, and from 6 weeks to 6 months after birth
- breastfeed successfully during the first feed.²⁴

Provision of lactation support

Reduction in breastfeeding support during the pandemic could potentially have a serious effect on breastfeeding rates. Studies have shown that individual counselling, immediate breastfeeding support at delivery, and lactation management increase breastfeeding by 66%, and exclusive breastfeeding by 49%.²⁶ Similarly, community-based interventions have been shown to increase rates of timely breastfeeding initiation and exclusive breastfeeding by 86% and 20%, respectively.²⁶

Mothers' mental health

Several studies have shown that postnatal depression or anxiety can adversely affect the initiation and duration of breastfeeding.²⁷⁻²⁹

Conversely, early difficulties with breastfeeding can lead to symptoms of postnatal depression.²⁷ Such findings underline the importance of recognizing the potential impact of COVID-19 on mothers' mental health.

Many of those elements are key components of the '10 Steps to Successful Breastfeeding' which form the basis of the WHO/UNICEF Baby-Friendly Hospital Initiative (BFHI).³⁰ Adherence to the BFHI has been shown to improve rates of breastfeeding initiation, exclusive breastfeeding at hospital discharge, and duration of any or exclusive breastfeeding.²⁵

Conversely, jeopardizing skin-to-skin contact, separation of mother and baby and disruptions to other clinical practice can affect the BFHI accreditation, and subsequent breastfeeding rates.³⁰



Around the world, women are receiving less tangible breastfeeding assistance.

Professor Diane Spatz, Medela Global Roundtable, July 2020¹

If these COVID-related changes become the new normal, breastfeeding rates and duration will decrease, despite mothers' good intentions and recommendations by healthcare professionals.

Reduced breastfeeding has both clinical and economic consequences

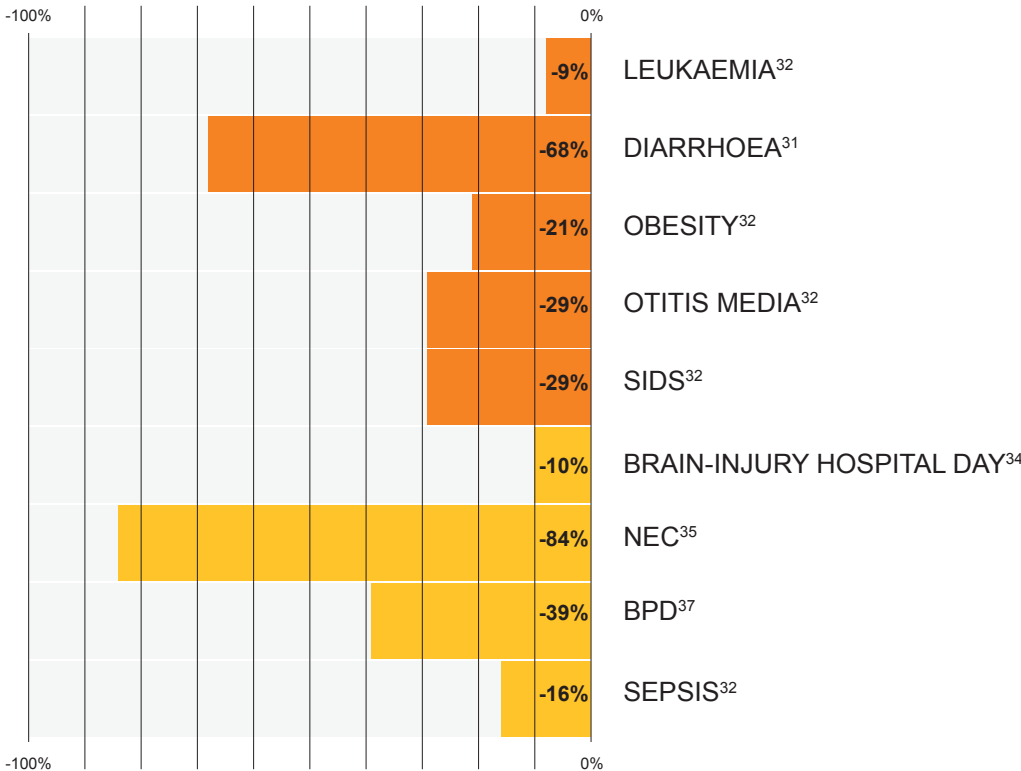
Exclusive feeding with own mother’s milk reduces the risk of a number of childhood disorders, including diarrhoea, obesity, otitis media, leukaemia and sudden infant death syndrome (**Figure 9**)^{31,32} Because diarrhoea and otitis media are common childhood conditions that affect most infants during their first year of life, they account for significant healthcare costs, particularly in primary care.

In addition, exclusive breastfeeding in USA, UK, Germany, France, Spain and Italy could avoid an average of 3 primary care visits, at an average cost of €51 per child.^{33*} Additional burden on healthcare resources at national levels are shown in **Table 3**. Similarly, it has been estimated that, in the USA, exclusive breastfeeding for up to 6 months could reduce the costs of childhood disorders by at least \$312 million.²⁶

FIGURE 9

Risk reduction by exclusive own mother's milk feeding over the first month of life vs formula feeding for both the **term** and **the very low birth weight infants**

SIDS: SUDDEN INFANT DEATH SYNDROME; NEC: NECROTIZING ENTEROCOLITIS; BPD: BRONCHOPULMONARY DYSPLASIA



*Medela. Clinical and economic impact of lost breastfeeding calculator. 2020.



Improved breastfeeding practices would prevent 823,000 annual deaths in children younger than 5 years of age and 20,000 annual deaths in women caused by breast cancer. Breastfeeding also reduces morbidity and improves the educational potential of children and probably their earnings as adults.

Victora CG et al. Lancet 2016; 387: 475-90²

The economic impact of not breastfeeding is particularly important in very low birthweight infants. Several studies have shown that exclusively feeding the milk of the infant's own mother results in better outcomes than formula feeding, with lower rates of disorders such as necrotizing enterocolitis, bronchopulmonary dysplasia, and sepsis.³⁴⁻³⁷

It has been estimated that, compared with exclusive formula feeding, exclusive own mother's milk feeding in very low birthweight infants could:

- reduce mortality due to prematurity-related complications by 54%*
- shorten NICU stays by an average of 11 days, reducing the healthcare costs by an average of €22,286 per child (based on an average NICU cost per day of €2,140 for the countries in **Table 3**).^{38*}

TABLE 3

Additional burden on healthcare resources per 10% reduction in exclusive BF rates*

Country	PRIMARY CARE	HOSPITAL CARE	
	Visits	Readmission stay days	NICU stay days
US	681,432	808,797	29,829
UK	74,174	87,941	3,243
Germany	174,348	206,610	7,620
France	78,021	8,938	3,410
Spain	52,115	5,980	2,280
Italy	68,007	7,840	2,990

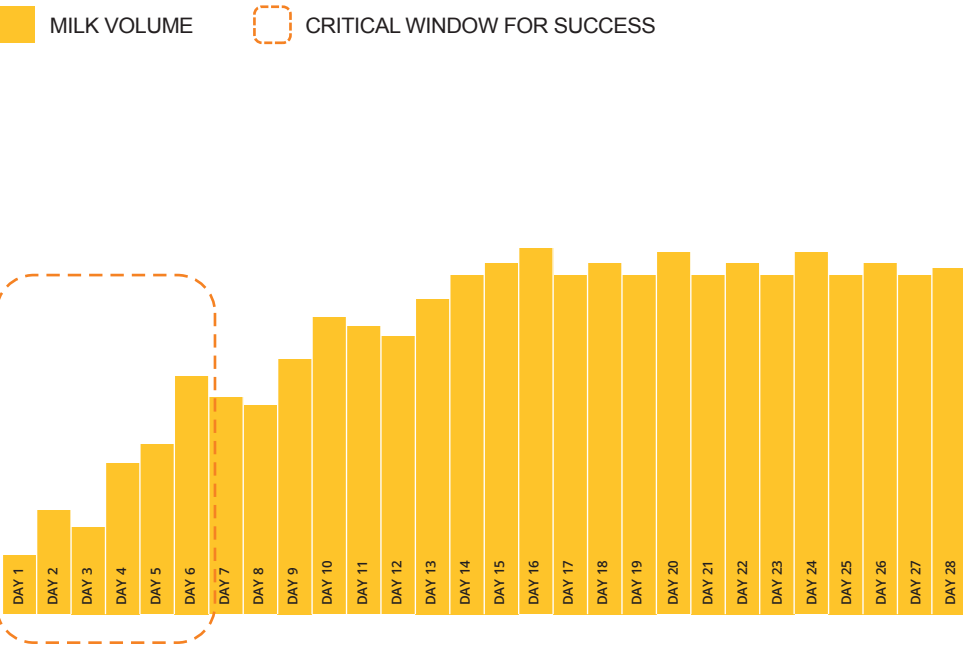
Overall, reductions in breastfeeding rates due to the COVID-19 pandemic increase the incidence of frequent infant conditions and therefore increase the associated economic and healthcare burden.

*Medela. Clinical and economic impact of lost breastfeeding calculator. 2020.

A call to action: steps healthcare professionals can take to protect and promote breastfeeding during COVID-19 times and beyond

Healthcare professionals - doctors, midwives, nurses and lactation specialists - have a key role to play in supporting mothers throughout the critical hours and days after birth (**Figure 10**), enabling them to develop an adequate milk supply and preventing a long-term impact of COVID-19 on breastfeeding.

FIGURE 10
The critical window of opportunity to promote successful breastfeeding.



PREGNANCY — BIRTH — FIRST MONTH

DEVELOP
SECRETORY
DIFFERENTIATION

INITIATE
SECRETORY
ACTIVATION

BUILD

MAINTAIN
ESTABLISHED
LACTATION

The First Day

Keeping mother and baby together

One important way in which healthcare professionals can support mothers is to ensure that skin-to-skin contact is established as early as possible. Ideally, the baby should go to the breast within the first hour after birth. This recommendation reflects the latest guidelines from the CDC³⁹ and the American Academy of Pediatrics (AAP),⁴⁰ which recommend that all mothers - even those with COVID-19 - should stay with their babies (ideally rooming-in), with appropriate precautions to minimize the risk of infection (face coverings, hand washing, etc).



...the ideal setting for the care of a healthy, full-term newborn during the birth hospitalization is within the mother's room ("rooming-in").

(CDC)³⁹



Mothers with suspected or confirmed COVID-19 can room-in with their newborns when precautions are taken to protect the infants from maternal infectious respiratory secretions...

(AAP)⁴⁰

Ensuring maximum support during the critical period after birth

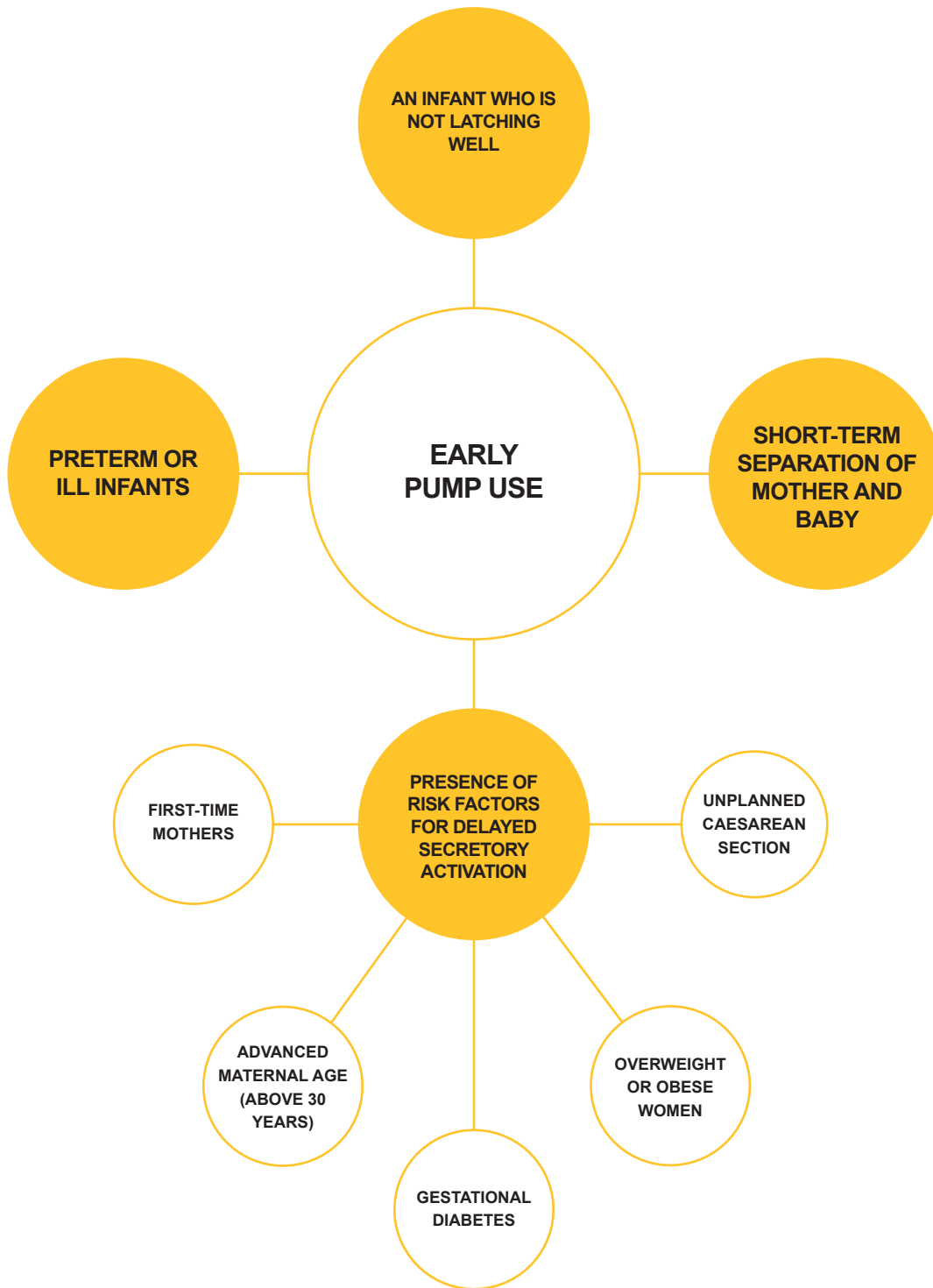
The first hours and days after birth are critical for successful breastfeeding.^{9,10} Providing mothers with appropriate support and counselling during this period is imperative to help them initiate and maintain an adequate milk supply.

Initiating milk supply with pumps where necessary

Many mothers stop breastfeeding because they feel that their milk supply is inadequate.^{41,42} It is helpful to identify women who could benefit from early pump use, to initiate and build an adequate milk supply in a timely fashion (**Figure 11**).^{43,44}

FIGURE 11

Early pump use can be beneficial in a variety of situations.^{11, 43-45}



On discharge from hospital

Healthcare professionals should discuss with mothers the importance of regular, frequent breastfeeding at home during the first two weeks after delivery, so they understand the importance of building an adequate milk supply for the long term. If direct breastfeeding is not effective or not possible during those early days, it is necessary to use a hospital-grade double breast pump to ensure proper initiation, building and maintenance of adequate milk volumes.⁴⁶

Transitioning from hospital to home-based care

This may include guidance and advice on continuing breastfeeding, ongoing counselling, and the provision of information about available resources. In the FMR Global Health research study of maternity ward and NICU staff described previously, both groups identified virtual follow-up and education about precautionary measures to reduce the risk of infection as key elements in supporting mothers with their breastfeeding at home.⁷ Such support may take various forms (**Figure 12**), including:

- virtual support for any problem, or for lactation counselling
- advising on precautionary measures to minimize the risk of infection
- recommending support networks of family or friends
- encouraging mothers to breastfeed and/or pump at home.

In the same study, 39% of maternity ward staff, and almost half (47%) of NICU staff reported changes in the support offered to mothers on discharge (**Figure 13**). In particular, both groups reported that personal breast pumps were being provided to a higher proportion of breastfeeding mothers and maternity ward staff were providing more hospital-grade rental pumps as a result of the pandemic. It would be beneficial to ensure that women who need to pump in the early days know how to obtain a hospital-grade breast pump once at home.⁴⁶

FIGURE 12

Breastfeeding support can take many forms.⁷



Reported steps taken by healthcare professionals in Maternity and NICU

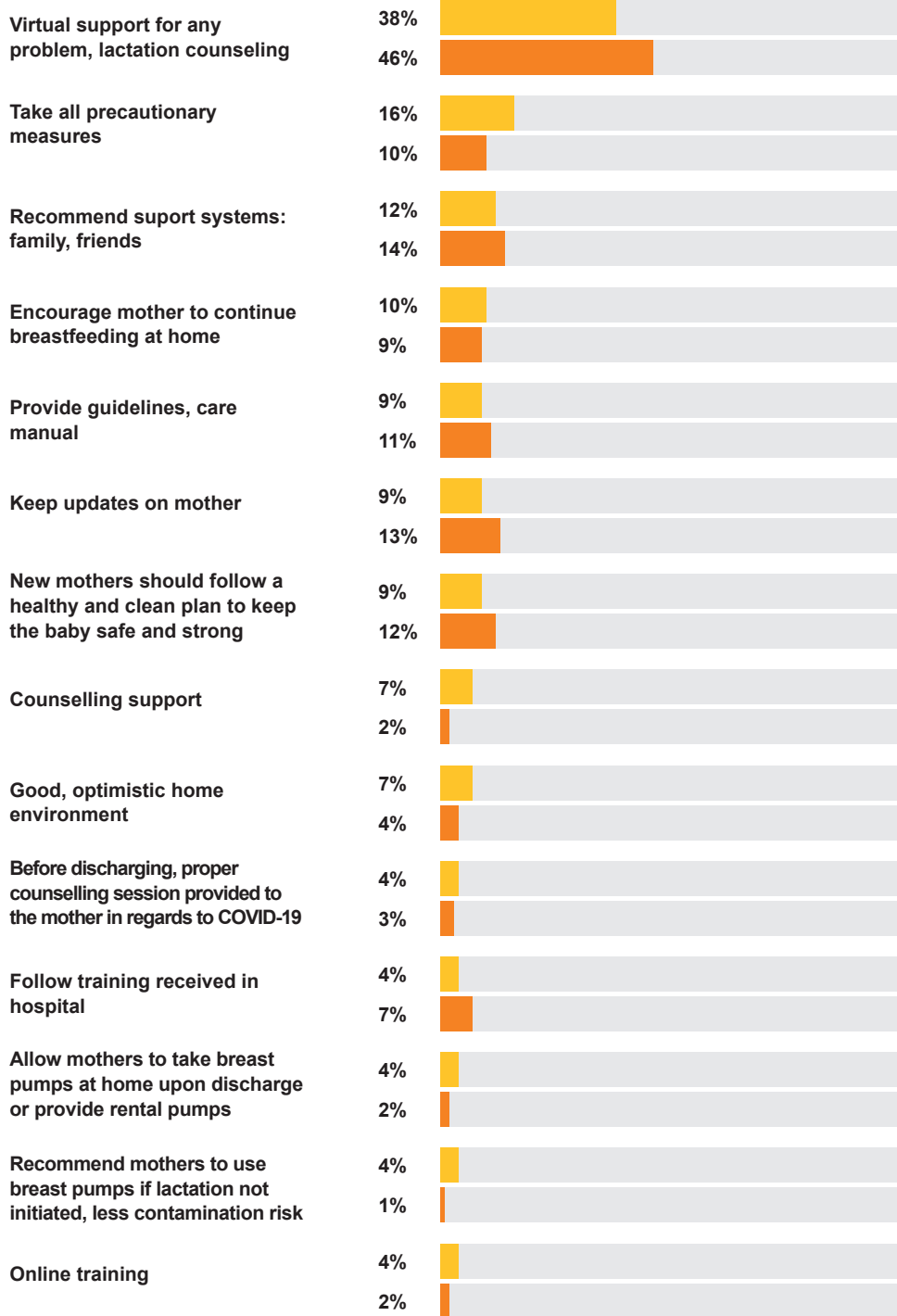
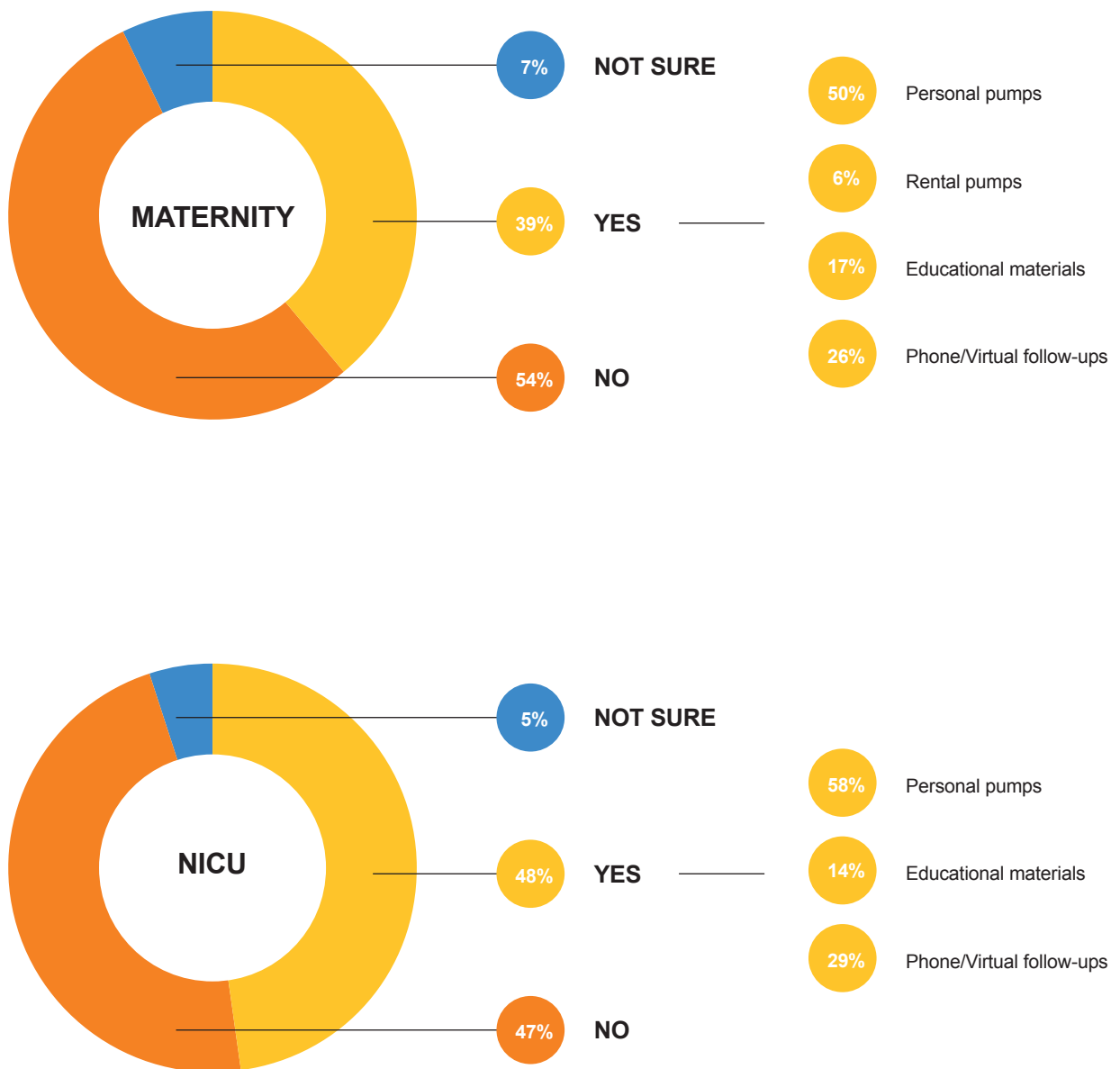


FIGURE 13

COVID-19 is changing the type of support provided by healthcare professionals upon discharge.⁷

Have you implemented new or different kind of support during the COVID-19 pandemic that you were not doing before?



Conclusion

It is clear that the COVID-19 pandemic has had a marked impact on maternity and breastfeeding practices. As the pandemic has progressed, our understanding of the lack of any risk of transmission of infection from mothers to their infants via breast milk has been confirmed.⁴⁷ Evidence also showed the protective value of human milk against the virus, with neutralizing antibodies being detected in milk from previously infected women.⁴⁸⁻⁵¹ It is therefore largely recognized that breastfeeding should be encouraged and supported even in women infected with COVID-19.

Healthcare professionals can provide invaluable guidance and support to help mothers breastfeed successfully, despite the challenges posed by the pandemic and infection control measures. During the mother's hospital stay, mothers and babies should be kept together and supported to initiate lactation appropriately. Given the shortened length of maternal stay in COVID-19 times, it is imperative that community-based support and hospital-grade pump technology are prescribed as appropriate and become indications in clinical guidelines.

A word about language

Throughout this document, we have used feminine language, referring to "mothers" and "women." However, we recognize and respect the fact that some individuals giving birth may not identify as female. We recommend that all involved in the management of pregnancy, childbirth and breastfeeding should use the language and terminology preferred by the person under their care.

Methodology

Roundtable

In July 2020 Medela AG invited 8 of the world's leading breastfeeding clinicians and researchers to discuss the impact of COVID-19 on maternity services and breastfeeding. Perspectives from key stakeholder groups, including lactation researchers, virologists, neonatologists, paediatricians, midwives and nursing professionals were sought in order to identify and highlight key issues.

Market Research Design

- Countries: US, UK, FR, DE
- Respondents:
 - 276 respondents in total
 - Primary Specialty: 27% Nurse; 27% Midwife; 20% Lactation Consultant; 15% Paediatrician; 6% NICU Specialist; 5% Neonatologist
 - A mix of 50% NICU / 50% Maternity and hospital size
 - Experience/Years of Practice
 - 42% 10-14 years
 - 37% 15 years and more
 - 20% less than 10 years

Type of Hospital

- 23% Large Public
- 21% Medium Public
- 17% Large Private
- 14% Small Private
- 13% Medium Private
- 12% Small Public

(Large= >800 beds; Medium= 400-800 beds; Small=<400 beds)

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Founded in 1986, Medela, headquartered in Baar (Switzerland) is one of the world's leading companies in the development of breast milk feeding products and solutions and medical healing technologies. In cooperation with renowned researchers, experts and universities, Medela conducts basic and exploratory research to improve future patient care and the quality of life of our customers with a portfolio of medical vacuum technologies, including award-winning breast pumps, and also breastfeeding accessories as well as nursing apparel. Medela has 21 subsidiaries across Europe, the Americas, the Middle East, Asia, and a sales network of independent partners in more than 100 countries. The company runs production and warehouse facilities in Switzerland, the US and China and employs over 1,800 people worldwide.

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