

**Medela's Global Breastfeeding Symposium Convenes Community
Focused on Establishing a Perpetual and Holistic Model
to Advance Breastfeeding and Lactation Research**
*Call to Action for Researchers and Healthcare Professionals to Improve Infant Health Outcomes
by Protecting and Promoting Breastfeeding*

**the English version shall prevail.*

Baar, Switzerland, September 23, 2021 – Medela, a leading breast pump brand and medical device manufacturer, concluded its 15th Global Breastfeeding and Lactation Symposium with 1,400 people tuning in virtually from around the world. Medela convened a diverse group of global health leaders and lactation experts to share the latest research and insights in lactation and human milk, empowering the lactation and breastfeeding community with key information to support a strong call to action: respond to future pandemic threats with lactation needs in mind, improve clinical practice, better care for breastfeeding families and drive change.

“There is power in bringing the top minds together to focus on improving infant and women’s health. Over the past two days, leading scientists from six countries shared the latest research insights and discussed their views on current challenges with healthcare professionals from around the world,” said Annette Brüls, CEO of Medela worldwide. “We deliberately focused this year's symposium on the pandemic and the NICU to demonstrate the importance of building a strong community and establishing a research-based approach. Only together can we ensure the promotion and protection of breastfeeding and human milk to combat disparities as a shared responsibility. We are grateful to every expert and healthcare professional who helped make our first-ever virtual global education event a success, but even more so, for their work continuously advancing breast milk and lactation research and practice.”

At the symposium, Medela celebrated its 60th anniversary by building on its commitment to research, advocacy, and mothers. Announced at the event, Medela shared its intention to support up to 60 Ronald McDonald House[®] locations around the world funded by the Symposium registration fees and further support through the company’s Medela Cares programme. This donation will include hospital-grade (multi-user) Symphony[®] breast pumps, kits, and breastfeeding accessories for use by families with breastfeeding needs to ensure parents staying at a Ronald McDonald House[®] have one less thing to worry about.

The Symposium featured diverse research sessions focused on:

Protecting Human Milk and Breastfeeding in a Covid-19 World

Focusing on the protection and promotion of breastfeeding, experts emphasized the importance of a multidisciplinary and coordinated response to the global threat. Based on knowledge and scientific data on the impact of Covid-19 on human milk and breastfeeding related clinical practices around the world, experts presented a clear roadmap for healthcare professionals to preserve and promote breastfeeding in times of a pandemic.

- “In times of crisis like the COVID pandemic, we need to quickly assemble the most capable teams to generate robust data that allows us to make evidence-based recommendations and ultimately save lives”, says **Prof. Lars Bode (USA)**, who presented the [Safety evaluation of human milk at the onset of the COVID-19 pandemic](#). He demonstrated scientific evidence revealing that transmission of SARS-CoV-2 from mother to infant through breastfeeding and the use of human milk is highly unlikely.^{1,2} Furthermore, the current pandemic has uncovered the urgent and immediate need to invest in research that establishes the safety of human milk at crisis onset, and the need for governments, public health agencies, and the scientific community at large to establish a ‘response task force’ capable to rapidly

and rigorously monitor and assess the safety of human milk and breastfeeding at the onset of the next global health crisis.

- [Dr. Rebecca Powell \(USA\)](#) highlighted research she conducted on breast milk collected through the pandemic. Findings revealed that 95% of pandemic samples from COVID-19-recovered donors had SARS-CoV-2-specific sIgA activity, and 75% of samples were also positive for specific IgG. All milk samples from COVID-19-recovered donors with significant levels of sIgA also exhibited robust SARS-CoV-2 neutralization capacity. Importantly, in all milk samples, the specific sIgA persisted as long as 7-10 months after infection, demonstrating the value of human milk to combat future threats.
- [Dr. Dani Dumitriu \(USA\)](#) focused on the threat to vulnerable populations during a pandemic. The COVID-19 Mother Baby Outcomes (COMBO) study seeks to understand the long-term impact of the COVID-19 pandemic and prenatal exposure to SARS-CoV-2 infections on babies and their mothers, for early identification of potential risks and development of interventions. The data highlight an additional example of health inequities brought to light and exacerbated by the pandemic.
- “My timely presentation analyses the factors contributing to Nigeria’s low rates of exclusive breastfeeding while exploring how investments made in creating and strengthening the continuum of care have stood the test of resilience during COVID-19, and proved to be the enabler for a strong start to building back better,” said [Her Excellency Mrs. Toyin Saraki \(NGA\)](#). Her Excellency presented the Sub-Saharan effect; COVID-19, maternal and neonatal health and community-centred approaches and the instrumental role midwives and other healthcare workers play in advancing the continuum of care.
- “Every effort should be made to inform and help parents provide optimal nutrition for their child,” said [Prof. Hans van Goudoever \(NLD\)](#). Prof. van Goudoever presented [recommendations for clinical practices to preserve and promote breastfeeding, now and in the future](#). The public health impact of COVID-19 around the world has been profound, with studies reporting a decline in breastfeeding rates worldwide due to measures like infant-parent isolation, fear for transmission of SARS-CoV-2 through breastfeeding, rapid discharge from hospital and lack of in person counselling in the postnatal period. Delivery care providers should have a comprehensive breastfeeding plan in place to support breastfeeding. When managed with practices known to be positive for the initiation of lactation (i.e. informed decision making, skin-to-skin care, etc.), a comprehensive breastfeeding plan will allow for an increase in the rates of human milk usage at discharge. “Perhaps now, more than ever, it is important for healthcare professionals to acknowledge the value of such antenatal planning as well as staff education related to policy and protocol development,” says Prof. Hans van Goudoever.

25 Years of Research – Learnings & Future Innovation

Reflecting on decades of breastfeeding and lactation research and collaboration with industry and academia, experts are pushing for greater recognition of the value of human milk, paired with a desire to translate that value with the support and development of a strong scientific community. A holistic view and an engaging approach must underpin this to comprehend research and generate impact for mothers and babies.

- “Translational research is essential in the field of human lactation if we are to engage science to solve the issues that breastfeeding women and their babies face,” explains [Prof. Donna Geddes \(AUS\)](#), who reviewed a [quarter century journey in human lactation from discovery to translation](#). Geddes presented on the importance for human lactation research to be conceptualised as a biological

framework where maternal and infant factors impacting human milk are studied along with relationships to infant growth, development, and health. By summarising seminal findings of their research programme using a biological systems approach, it allowed for the translation of the findings with respect to education, and clinical practice and sets a foundation for improved study design for future investigations in human lactation.

- **Prof. Paula Meier (USA)** presented twice during the event, first speaking on [Initiation breast pump technology: Integrating clinical scholarship and basic science research](#), which outlined the collaboration between academia and industry, leading to breakthrough innovations in the initiation of lactation in pump dependent mothers. Her second discussion followed up on the practical outcomes of her research and focused on [Best practices for initiation of lactation in the NICU](#). “The initiation of lactation is a short, critical postpartum window that is linked to subsequent outcome measures of achievement of secretory activation, achievement of coming to volume, and receipt of mothers’ own milk at NICU discharge for breast pump-dependent NICU mothers and their vulnerable infants,” said Prof. Meier.

Progressing Clinical Standards of Care for Lactation

Establishing and advancing clinical standards of care for breastfeeding in the NICU is critical given the benefits of human milk in improving health outcomes for preterm infants. Quality improvement programmes play a central role in this regard in today's neonatal intensive care unit. Medela has worked with leading global experts to outline 10 key areas clinicians can focus on to improve the dose of human milk. Of equal importance is infant nutrition and the need to get each mother’s milk production off to the best start possible. With both fields still not optimally managed today, the experts provide clear roadmaps and reasoning as to why it is important, pointing out that feeding remains one of the last fields to be optimised, with standards for individualisation needing to be developed to ensure preterm nutrition is in line with term breastfeeding, giving each infant what they need.

- The importance of human milk, particularly own mother’s milk (OMM), is even more profound for infants in the Neonatal Intensive Care Unit (NICU). “Quality improvement projects clearly demonstrate the feasibility of increasing the dose of human milk in the NICU,” said **Dr. Rosalina Barroso (PRT)**. This “will have a positive impact on reducing morbidity and infant mortality, especially in preterm infants.” Barroso discussed [increasing the dose of own mother’s milk in the NICU: A quality improvement approach](#), based on data showing that substantial improvements in the dose of OMM can be achieved by implementing evidence-based lactation practices.^{3,4,5}
- “In Nanjing, China, our NICU centre serves 1000+ pre-term and sick infants annually,” said **Prof. Shuping Han (CHN)** who presented on [continuous quality improvement practices on human milk feeding of very low birth weight](#). “By consistently implementing quality improvement for mother’s own milk feeding since 2015, we have achieved some promising outcomes.” Recent studies found that the dosages and timing of human milk feedings play a critical role in reducing the risk of morbidities during hospitalization in preterm infants. By consistently implementing the QI protocol, researchers achieved infant feeds composed of 80% MOM on average during the first 28 days’ post-birth and during hospitalization. More importantly, there were reductions in incidence of feeding intolerance, necrotizing enterocolitis (NEC), bronchopulmonary dysplasia (BPD), late-onset sepsis (LOS) in preterm, and shortened hospital stays.^{6,7} With COVID, they designed a digital lactation consultant intervention on WeChat to promote MOM feeding of premature infants in the NICU. The effect of digital lactation consultation through the WeChat mini-program increased the ratio of MOM feeding in premature infants in the NICU.

- “I believe in human milk as the best nutritional source to feed premature infants,” explains **Prof. Christoph Fusch (DE)**, who discussed the [optimisation of nutrient intake in the NICU](#). Human milk is the best nutrition for term born neonates. Its protein content supports typical term growth rates. In addition, human milk protein is better tolerated by the newborn gut when compared to formula and contains a number of “special substances” like immunoglobulins, enzymes, bio-factors like hormones and cytokines, cells (including stem cells) and bacteria. “Mother nature did invent human milk for term babies, and extreme preterm babies have different needs”, said Prof. Fusch. “Recent research shows that nutrient intake of human milk is by far not meeting recommendations and – even more critical – random changes in human milk composition puts preterm infants at substantial risk for unbalanced intakes. Hence, neonatal teams need to know about the preterm infant’s human milk needs and how best to achieve these. The importance of my talk is to bring nutritional facts and physiology to the NICU team and to delineate ways to overcome and make human milk a successful and safe nutrition for preterm infants.”

Translating Evidence to Practice

Risk factors appear to cut through all demographic groups, meaning that breastfeeding outcomes are worse for African American and BIPOC women, regardless of traditionally supportive parameters such as education. Some of the identified biases, such as dismissive attitudes towards pain and long waiting times, are known risk factors for breastfeeding success. Experts recommend the importance of assessing the known risk factors to determine the anticipatory guidance needed. This is in addition to previous comments about the value of providing tailored, personalised support to mothers and infants, that must be constantly reassessed to improve outcomes and ensure that all breastfeeding parents receive the right support they need.

- Implicit bias has been well documented as directly linked to the black maternal mortality crises and high rates of black infant deaths.⁸ **Kimberly Seals Allers (USA)** discussed [Understanding experiences of bias in hospital lactation support from African American and BIPOC women: Data from an 18-month study of the IRTH project](#). The study, conducted through a new digital project, Irth (as in birth, but without the B for bias), captured the lived experience of maternity and infant care by BIPOC women, including feedback on their specific interactions with lactation support professionals in hospital settings. Using a reproductive justice framework, Irth centers on the communities most burdened by the problem of biased care.
- Many families around the world are not able to meet their personal breastfeeding goals. Only 41% of infants worldwide receive exclusive human milk for the first six months (UNICEF & WHO, 2018). Currently, only 42% of infants are breastfed within one hour of birth (UNICEF & WHO, 2018). As such, **Prof. Diane Spatz (USA)** closed the event with [A call to action: Ensuring coming to volume for all lactating parents](#). Sharing research that identifies a critical window of opportunity for lactation initiation: the time between the infant’s birth and the feed/milk expression, as well as the patterns of feeding/milk expression during the postpartum hospital stay, are key drivers for maternal milk supply. Health care providers should provide anticipatory guidance to educate and emphasize the importance of early and frequent feedings/milk expression so that all women can reach their personal breastfeeding goals.

All registered attendees have on-demand access to all the event presentations and poster sessions through June 2022. Those interested can get on-demand access to the recorded event for 40 EURO, beginning in October by registering at www.medela.com/symposium.

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About Medela

Through advancing research, observing natural behavior and listening to our customers, Medela turns science into care while nurturing health for generations. Medela supports millions of moms, babies, patients and healthcare professionals in more than 100 countries all over the world. As the healthcare choice for more than 6 million hospitals and homes across the globe, Medela provides leading research-based breast milk feeding and baby products, healthcare solutions for hospitals, and clinical education. Medela is dedicated to building better health outcomes, simplifying and improving life, and developing breakthroughs that help moms, babies and patients live their life to the fullest. For more information, visit www.medela.com.

¹ Chambers C, Krogstad P, Bertrand K, Contreras D, Tobin NH, Bode L, Aldrovandi G. Evaluation for SARS-CoV-2 in Breast Milk From 18 Infected Women. *JAMA* 2020;324(13):1347-1348

² Krogstad P, Contreras D, Ng H, Tobin N, Chambers CD, Bertrand K, Bode L, Aldrovandi G. No Evidence of Infectious SARS-CoV-2 in Human Milk: Analysis of a Cohort of 110 Lactating Women. *medRxiv*. 2021 Apr 7:2021.04.05.21254897.

³ Spatz DL, Froh EB, Schwarz J, et al. Pump early, pump often: a continuous quality improvement project. *J Perinat Educ* 2015; 24: 160–170.

⁴ Takako H, Mizue M, Izumi H, et al. Improving human milk and breastfeeding rates in a perinatal hospital in Japan: a quality improvement project. *Breastfeed Med* 2020; 15: 538–545.

⁵ Parker MG, Patel AL. Using quality improvement to increase human milk use for preterm infants. *Semin Perinatol* 2017; 41: 175–186.

⁶ Feng Liu, Shu-Ping Han, Zhang-Bin Yu, et al. Effect of breastfeeding quality improvement on breastfeeding rate in very low birth weight and extremely low birth weight infants. *Zhongguo Dang Dai Er Ke Za Zhi*. 2016 Oct;18(10):937-942.

⁷ Liu Feng, Han Shuping, Yu Zhangbin, et al. Evaluation of continuous quality improvement on breastfeeding in very/extremely low birth weight infants *Chin J Perinat Med*, Jul. 2019, Vol. 22, No. 7:451-455

⁸ Alkema L, Chou D, Hogan D, et al. Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: A systematic analysis by the UN Maternal Mortality Estimation Inter-Agency Group. *Lancet*. 2016;387(10017):462-474.