

Human Milk Insights

November 2017

The Human Milk Insights newsletter presents the latest breastfeeding topics and clinical practice solutions, addresses coding issues challenging the lactation community, features a lactation service, as well as announces upcoming webinars and conferences.

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FEATURED STORIES THIS MONTH

NEWS YOU CAN USE

- Human Milk & Clinical Practice
- Benefits of Human Milk
- Benefits of Preterm Human Milk
- Human Milk & Returning to Work
- Human Milk & Public Policy
- Human Milk & The NICU Infant

HUMAN MILK EDUCATION

- Education Opportunities

TOOLS YOU CAN USE

- Medela's Innovative Practice Series

CLINICAL PEARLS IN LACTATION

- Prematurity Awareness Month

SPOTLIGHT ON PRACTICE

- Mary M. Lussier RN, BSN, IBCLC

NEWS YOU CAN USE

HUMAN MILK & CLINICAL PRACTICE

Lactational Abscess: How Deep Can It Go?

Carol Chamblin, DNP, APN, RN, IBCLC
Carol Chamblin discusses sore nipples, mastitis and breast abscess.

<http://blog.neonatalperspectives.com/2017/10/09/lactational-abscess-how-deep-can-it-go/>

Obesity as a Predictor of Delayed Lactogenesis II

Pre-pregnancy obesity and excessive gestational weight gain are associated with an increased risk of delayed lactogenesis II.

<http://journals.sagepub.com/doi/abs/10.1177/0890334417727716>

Pumping Milk Without Ever Feeding at the Breast in the Moms2Moms Study

Pumping without feeding at the breast is associated with shorter milk feeding duration and earlier introduction of formula compared with feeding at the breast with or without pumping. Establishing feeding at the breast, rather than exclusive pumping, may be important for achieving human milk feeding goals.

http://online.liebertpub.com/doi/abs/10.1089/bfm.2017.0025#utm_source=ETOC&utm_medium=email&utm_campaign=bfm

Herbal Use During Breastfeeding

Article highlights concerns regarding the use of herbal products during breastfeeding.

<http://online.liebertpub.com/doi/full/10.1089/bfm.2017.0150>

NICU Product Research: A Best Practice

Kathy Quellen RN, BSN discusses the evidence levels for evaluating research when considering selecting products for use in the NICU.

<http://blog.neonatalperspectives.com/2017/10/17/nicu-product-research-a-best-practice/>

BENEFITS OF HUMAN MILK

Breastfeeding Protects Moms from Breast Cancer

The American Institute for Cancer Research (AICR) is highlighting one of the findings from its latest report: Mothers who breastfeed have lower risk of breast cancer. The lower risk is modest, but it is one additional motive to breastfeed for moms who are able.

http://www.aicr.org/cancer-research-update/2017/10_4/cru_breastfeeding-protects-moms-from-breast-cancer.html

BENEFITS OF PRETERM HUMAN MILK

Cellular Components, Including Stem-Like Cells, of Preterm Mother's Mature Milk as Compared with Those in Her Colostrum: A Pilot Study

This pilot study looked at preterm mature milk was found to possess higher expressions of hematopoietic stem cells, mesenchymal stem-like cells, immune cells, few cell adhesion molecules, and side population cells than colostrum. The increased level of these different cell components in mature milk may be important in the long-term preterm baby's health growth.

http://online.liebertpub.com/doi/abs/10.1089/bfm.2017.0063#utm_source=ETOC&utm_medium=email&utm_campaign=bfm

HUMAN MILK & RETURNING TO WORK

Supporting Breastfeeding Moms at Work: How a Doctor's Note Can Make the Difference

One tangible way to offer support for continued breastfeeding upon return to work is to provide notes for lactation accommodation in the workplace.

http://online.liebertpub.com/doi/abs/10.1089/bfm.2017.0107#utm_source=ETOC&utm_medium=email&utm_campaign=bfm

For more tips on supporting breastfeeding in the workplace, visit: www.medelaatwork.com.

HUMAN MILK & PUBLIC POLICY

Academy of Breastfeeding Medicine 2017 Summit Summary

The tremendous consensus among the speakers and participants at this Ninth Annual Summit on Breastfeeding serves to underscore the Summit tagline: The Essential Role of Breastfeeding. Most of the presentations at the conference are featured in this issue of Breastfeeding Medicine.

http://online.liebertpub.com/doi/pdf/10.1089/bfm.2017.0129#utm_source=ETOC&utm_medium=email&utm_campaign=bfm

HUMAN MILK & THE NICU INFANT

Nutrition Resource for NICU Infant Caretakers, from Hand to Hold

Hand to Hold has released a resource entitled, "NICU Nurturing and Nutrition." The resource was developed for the NICU community to provide information about meeting the nutritional needs of fragile infants. Key topics include infant feeding cues, skin-to-skin contact, breastfeeding, pumping, human milk fortification, and donor breast milk.

<http://premiebabies.wpengine.netdna-cdn.com/wp-content/uploads/2017/08/Nurturing-and-Nutrition-short-version-for-website-FINAL-2.pdf>

Protecting Developing Brains with Human Milk

Sandra Sundquist Beauman, MSN, RNC-NIC

Sandy Beauman discusses the role of human milk as part of developmental care and brain development.

<http://blog.neonatalperspectives.com/2017/10/13/protecting-developing-brains-with-human-milk/>

HUMAN MILK EDUCATION

Missed a webinar that was presented earlier this year? Interested in getting CEUs? Visit www.MedelaEducation.com and click on the 24/7 Online Courses icon. There, you will find a variety of our online courses as well as our recorded webinars. Email education@medela.com and mention this edition of Human Milk Insights, for a promo code and enjoy \$15 off the registration fee!

November is Prematurity Awareness Month! We are working on a webinar for November and registration will be open soon at www.MedelaEducation.com.

TOOLS YOU CAN USE

MEDELA'S INNOVATING PRACTICE SERIES

This month is Prematurity Awareness Month and in keeping with the theme, we want to make others aware of the value of using human milk in the NICU. We know that it reduces the incidence of handicapping morbidities in premature infants. It's also crucial in reducing infant mortality. We know this because research has shown time and time again that mothers' milk is life-giving.

Are you aware that Medela Education has a resource for healthcare professionals that highlights clinically relevant research articles and is available on Medela's website? It's Medela's Innovating Practice series. Our goal is to share current research to improve your practice and impact the outcomes of your patients.

Each installation in the series focuses on a specific clinical practice theme and provides a downloadable and printable research overview, research summary, additional resources as well as links to the journal articles. This collection of research topics is a useful tool to keep updated on current lactation-related research; some NICU units use the series for staff continuing education or journal club discussions.

Current topics available include:

- Initiating Maternal Milk Supply
- CMV Transmission and Breast Milk
- Value of Human Milk: Reducing Morbidities and Necrotizing Enterocolitis
- Cognitive and Neurodevelopmental Effects of Human Milk in Preterm Infants
- Cost Benefits of Breastfeeding and the Use of Human Milk
- Topic Updates and Promising Research
- Term Infant Feeding
- Colostrum

Upcoming installations in the series:

- Current Issues in Enteral Feeding Administration
- Enteral Feeding of Human Milk – Series 2
- Collection & Storage of Human Milk – Updated
- Preterm Infant Human Milk Feeding

We hope you find this series to be a useful adjunct to your practice. Let us know how you've found this resource to be helpful and we'll share your idea with your professional colleagues.

Here's the link:

<http://www.medelabreastfeedingus.com/professionals/education-innovating-practice>

November is Prematurity Awareness Month[®], an observance led by March of Dimes to focus the nation's attention on the leading cause of death in children under the age of five worldwide. Follow our healthcare professional [Facebook](#) and [Twitter](#) accounts to see how we are supporting this important observance, and help us share information about the integral role breast milk plays in the treatment of these high-risk infants.

CLINICAL PEARLS IN LACTATION

This column is for lactation practitioners to share clinical challenges and successes, observations and pearls with colleagues. To share a clinical pearl, [submit it here](#). If your submission is selected for publication in future issues of Human Milk Insights, you will receive a \$25.00 VISA gift card.

PREMATURITY AWARENESS MONTH

Prematurity Awareness Month is observed each November to raise awareness of preterm birth and the concerns of preterm babies and their families. World Prematurity Day is observed November 17.

The rate of premature births in the US increased slightly in 2016 to 9.6%. Nearly one in 10 babies are born less than 37 weeks gestational age. The U.S. preterm birth rate is among the worst of high-resource nations. Much is being done to research the causes of the increasing premature birth rate and programs to prevent preterm birth.

Here are some resources that you may find helpful as you care for your tiny patients and their families:

From UC San Diego Health

Supporting Premature Infant Nutrition (SPIN) Staff Resources

The SPIN Program at the University of California San Diego has a mission to create a Center of Excellence in neonatal nutrition focused on the provision, analysis, and research of human milk to improve nutritional and neurodevelopmental outcomes in preterm babies. They provide resources to both parents and NICU staff, available for downloading and printing from this website. Other hospitals are welcome to use or adapt these materials. Contains videos, forms and other excellent tools available on the website.

<https://health.ucsd.edu/specialties/obgyn/maternity/newborn/nicu/spin/staff/pages/default.aspx>.

Fact Sheet

How Doctors Can Help: The Surgeon General's Call to Action to Support Breastfeeding

https://www.cdc.gov/breastfeeding/pdf/actionguides/doctors_in_action.pdf.

From: Florida Perinatal Quality Collaborative

Mother's Own Milk (MOM) Initiative

Project Aim: To increase the number of very low birth weight infants in Florida's NICUs who receive at least 50% of their feedings as mothers' own milk at discharge. The foci are: Intent, Establishing Supply, Maintaining Supply, Transitioning to the Breast. Excellent resources for both health professionals and mothers.

<http://health.usf.edu/publichealth/chiles/fpqc/resources>.

From the National Association of Neonatal Nurses

Baby Steps to Home: A Guide to Prepare NICU Parents for Home

Baby Steps to Home was created to standardize the discharge pathway and parent teaching that happens during the baby's stay in the NICU. It is designed to provide parents with information appropriate for their baby's condition and progress toward discharge.

<http://babystepstohome.com/nicu-discharge-module.pdf>.

Agency for Healthcare Research and Quality

Transitioning Newborns from NICU to Home: A Resource Toolkit

This toolkit includes resources from hospitals that wish to improve safety when newborns transition home from their neonatal intensive care unit (NICU) by creating a Health Coach Program, tools for coaches and information for parents and families of newborns who have been in the NICU.

https://www.ahrq.gov/professionals/systems/hospital/nicu_toolkit/nicu-toolkit1.html.

We hope you will find these resources helpful in your practice.

SPOTLIGHT ON PRACTICE

This month we are spotlighting Mary M. Lussier RN, BSN, IBCLC at Connecticut Children's Hospital in Hartford, CT.

The provision of human milk for fragile infants in the NICU at Connecticut Children's Medical Center in Hartford, CT is a prioritized, medical treatment. Clinicians recognize the robust evidence and benefits of a human milk diet for their compromised infants. They enthusiastically encourage and support mothers to express milk for their infants. No mother is discharged without a multi-user, hospital grade breast pump in hand. Skin-to-skin care is standard practice. Multiple research projects to improve patient outcomes are ongoing.

The description of this NICU, focused on the delivery of human milk, resulted from the passion and dedication of many clinicians and did not develop overnight. This interview with the facility's lead lactation consultant and Program Coordinator, Mary M. Lussier tells the story of how the transformation took place.

A nurse for 28 years, Ms. Lussier has spent her professional career in the NICU at Connecticut Children's. She recalls a time when the delivery of human milk was not an expected practice but rather a nice addition to infants' care. There was no emphasis on using human milk or encouraging mothers to pump milk. Fueled by scientific evidence on the value of human milk in reducing morbidities and improving infant outcomes, human milk champions began to surface within the unit. Scientific papers were shared among the staff, some more interested than others in reading and applying the research. Mary, a certified IBCLC, and Dr. Kathy Marinelli (a neonatologist at Connecticut Children's) presented a business plan to the NICU leadership that would increase and standardize staff knowledge about human milk and the ability to assist pump dependent mothers. With the support and encouragement from management, they developed a mandatory, eight-hour education program consisting of six hours of didactic instruction and two hours of lab work learning how to manage common assistive technologies. Dedicated lactation hours gradually increased.

There were many factors that helped create the paradigm shift within the unit. A particularly poignant staff reaction resulted from a panel discussion that was held during the eight-hour mandatory training, of mothers whose infants were hospitalized in the NICU. The mothers related their emotional stories having infants born prematurely and hospitalized. They related the tender and compassionate care they and their infants received from staff but also spoke about less than positive responses from some staff members in their reluctance to assist them with breastfeeding efforts. The mothers specifically said they dreaded having certain clinicians assigned to their infants knowing they would not receive the support they needed. Saddened and troubled to hear the mothers' accounts, the staff universally decided it was time for them to modify their perceived ambivalence about breastfeeding, to learn more about the value of human milk and to be more supportive of mothers desiring to breastfeed their infants.

Today, the culture within the NICU is totally committed to the delivery of human milk for all compromised infants. The team works diligently to get mothers to provide milk for their infants. Donor milk is available for the sickest infants whose mothers are unable to provide milk or have insufficient milk volumes to meet their infants' nutritional needs; ongoing research exists to

analyze mothers' milk. New staff continues to receive evidence-based education about human milk, learns how to help mothers with pumping and spends four hours shadowing a lactation consultant.

The Connecticut Human Milk Research Center at Connecticut Children's Medical Center was established in 2012. Mary has partnered with the Center's Executive Director, Dr. Elizabeth Brownell, as well as others, in multidisciplinary roles to conduct over 10 studies published in peer reviewed journals, present numerous poster presentations of their research at internationally acclaimed conferences and develop policies that benefit infants all over the world, not just at Connecticut Children's. Mary was the lead author on a journal article appearing in *Breastfeeding Medicine* comparing breast milk volumes obtained with hand expression versus with electric breast pumps and a contributing author on eight other articles.

Challenges still exist for the NICU and Lactation staff. In addition to the NICU, the four lactation consultants cover the PICU, three inpatient units, the Emergency Department and an outpatient feeding clinic. The NICU is located at Hartford Hospital, a separate structure that houses a birthing suite. This unique setting allows the NICU staff to attend high risk deliveries and easy access for mothers to visit their infants, but has separate leadership, lactation and nursing staffs. This is a blended team that strives to meet the needs of their patients despite diverse organizational structures. Mary recognizes that it is her amazing team of lactation consultants who work tirelessly with mother-infant dyads in all areas of the hospital who are the backbone of this program. Their hard work as well as the visionary leadership at Connecticut Children's have been instrumental in the overall success of the program.

Mary and her husband, Marc were high school sweethearts and have three young adult children. Mary agrees it has been amazing to witness the changes that have taken place at Connecticut Children's but knows future growth is needed to continue the expansion of the lactation program. She envisions an outpatient center where mothers would receive care for breastfeeding challenges that could be billed to insurance for reimbursement. She envisions a continued expansion of the research center's work and ongoing research projects to help other clinicians. Considering Mary's past successes, her determination and spirit, she will witness such developments.

This column is for lactation practitioners and facilities who wish to acknowledge the work of others. We invite you to submit suggested practitioners or facilities you would like to spotlight. If you have a suggestion, [submit it here](#).