Even the sickest babies benefit from breast-feeding
27 October 2010

Pediatric researchers at The Children's Hospital of Philadelphia describe a successful program in which nurses helped mothers attain high rates of breast-feeding in very sick babies--newborns with complex birth defects requiring surgery and intensive care.

Many of these highly vulnerable newborns immediately experience a paradoxical situation. Their mother's milk helps to fend off infection and provides easily digestible, nutritious ingredients that can reduce the infant's stay in the neonatal intensive care unit (NICU). But because the babies are often in critical condition, breast-feeding may not be considered a priority, or even be feasible, when compared to urgent medical problems.

"Human milk is important for all newborns, but especially for sick infants," said project mentor Diane L. Spatz, Ph.D., R.N.-B.C., nurse researcher, of The Children's Hospital of Philadelphia. Breast milk protects an infant in the NICU from necrotizing enterocolitis, a devastating disease of the bowel and from a host of infectious diseases. "It is of critical importance that all mothers make the informed decision to provide human milk for their infants, and that nurses provide evidence-based lactation care and support in order for mothers to achieve success," added Spatz.

The study, a continuous quality improvement (CQI) project, appears in the July/September 2010 issue of the Journal of Perinatal & Neonatal Nursing.

Spatz and co-author Taryn M. Edwards, B.S.N., R.N.-B.C., also of Children's Hospital, describe a series of steps called the Transition to Breast Pathway, in which NICU nurses systematically guide the mother in breast-feeding practices, which culminated in a majority of the infants in the study (58 out of 80) feeding at their mother's breast before being discharged from the hospital.

The 80 newborns in the CQI project were patients in the Children's Hospital NICU during 2008 and 2009. All were born with complex surgical anomalies, such as abdominal wall defects, abnormalities in the esophagus, or congenital diaphragmatic hernia (a defect in the diaphragm, the muscle separating the chest cavity from the abdomen).

"This project was driven by bedside nurses, who carried out a goal of systematically integrating evidence-based lactation support and education as part of standard nursing care," said Spatz. Edwards and Spatz note in their study that Children's Hospital strongly supports breast-feeding, but for these medically fragile newborns, mothers may have to wait days or weeks before they are able to even hold their babies.

Therefore, the nurses followed a step-wise system called the Transition to Breast Pathway, which begins with the mother learning to pump breast milk shortly after delivery. Before the baby is able to nurse at the breast, mothers learn to provide mouth care-supplying the infant with a bit of human milk on a cotton swab or a pacifier. Nurses also teach skin-to-skin care, letting the mother hold the child close to her body. The skin-to-skin contact reduces stress in both child and mother, increases the mother's milk supply, and nurtures the mother-infant bond.

Although not all the mothers were willing or able to transition to breast-feeding, 58 of the 80 infants were breast-feeding before they were discharged. For each step of the pathway, success rates improved in the second nine months of the project compared to the first six months.

"This CQI project demonstrates that even the most vulnerable infants can transition to at-breast feeds prior to discharge," said Spatz. "This pathway can be replicated in intensive-care nurseries throughout the world, allowing infants to achieve improved..."
health outcomes, and their mothers to have the opportunity to follow the natural path of bonding that breastfeeding allows for.


Provided by Children's Hospital of Philadelphia


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