The Feeding of Sick and Vulnerable Newborns: Urgent Call for an Independent Inquiry

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No single vaccine or medicine has the life-saving power of breastmilk, which has been described as, "the most specific personalized medicine" babies are ever likely to receive. (1) If all babies were breastfed within an hour of birth and then exclusively for the next six months, estimates suggest that more than 800,000 deaths among children under five could be prevented every year. (2)

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Breastfeeding's greatest benefits accrue to the most vulnerable babies, (2) including the 22 million babies who are born too small, (3) the 15 million who are born too soon, (4) the 8 million born with congenital anomalies, (5) and the 47 million born in fragile settings. (6) The risk of death for these newborns is higher. Low birth weight is a factor in 70% of the estimated 1.8 million newborn deaths, 649,000 babies die from preterm birth complications, and 502,000 from congenital defects every year. (7)

Despite these stakes, not much is known about feeding practices among sick and vulnerable newborns. To date, the major breast-feeding policies and programs, including the International Code of Marketing of Breastmilk Substitutes, the Baby-friendly Hospital Initiative, and the Bill & Melinda Gates Foundation-funded Alive & Thrive initiative, have not prioritized sick and vulnerable newborns. Even the landmark Lancet Breastfeeding Series was released in 2016 without a focus on sick and vulnerable newborns.

This lack of attention is all the more concerning as new evidence emerges of breastfeeding's significant benefits for sick and vulnerable babies, (8) alongside reports of the harsh realities of feeding these newborns in low resource and fragile settings. Recent evidence of extremely low levels of breastmilk feeding among babies in Neonatal Intensive Care Units (NICUs) in South Asia, babies born with disabilities in sub-Saharan Africa, and newborns in refugee populations in the Middle East are deeply disturbing. (9)

To rally governments and all stakeholders to invest in a deeper understanding of this issue and to advance new solutions, there is now a global effort calling for a large-scale, independent inquiry into sick and vulnerable newborn feeding practices. This research would provide the world's first assessment of how sick and vulnerable newborns are fed in the days and weeks following birth, and of the health and wellbeing of their mothers during this critical period, across several different settings.

Under the umbrella of the <u>Breastfeeding Innovations Team</u>, a global network of more than 400 individuals committed to the development and adoption of innovations with the greatest potential to break down barriers to breastmilk feeding, more than 40 organizations have signed an <u>Open Letter</u> (10) calling for an independent inquiry which would:

- Document maternal lactation and expression behaviors and feeding behaviors and practices among sick and vulnerable newborns in different settings;
- 2. Determine the breastfeeding/breastmilk initiation rate and typical daily diets for babies during hospital stays;
- 3. Describe the infant-feeding "eco-system" in the hospital and the level of lactation support:
- Assess the amount of breastmilk that mothers are expressing and infant milk intake to determine how ef-fectively mothers are able to initiate, build, and maintain their milk supplies;
- Report mothers' own experience of feeding support in facilities;
- Describe relevant government and hospital policies and their implementation both helping and inhibiting access to breastmilk for sick and vulnerable newborns; and
- Recommend specific strategies to improve access to breastmilk for the sickest and most vulnerable new-borns appropriate for the various settings.

It is anticipated that the results of such a multi-year, multi-country inquiry would encourage national, state, and local governments to mandate ambitious goals for optimal feeding of sick and vulnerable newborns, and require hospitals and health facilities in both the public and private sectors to invest in new programs that ensure sick and vulnerable babies receive priority access to breastmilk and that their mothers are supported to achieve their breastfeeding goals during this challenging period.

The inquiry should also seek clear statements backed by policy guidelines from global health authorities that optimal access to breastmilk for sick and vulnerable newborns (11) is critical to achieving the new Sustainable Development Goals, especially reducing newborn deaths (Goal 3.2), ending child malnutrition (Goal 2.2), and reducing deaths from noncommunicable diseases by one third (Goal 3.4), and should be a new priority in all breast-feeding policies and programs.



Several new players and initiatives are emerging with innovations that make it easier and more cost-effective to increase breastfeeding rates among the most vulnerable babies. In 2016, Laerdal Global Health announced "Helping Babies Grow," a family of training and therapy products to help save lives of newborns, especially low birth weight babies through breastfeeding and skinto-skin contact. The tools include MamaBreast (hand breastmilk expression), PreemieNatalie (care of the newborn), the Nifty cup (breastmilk for babies who can't suckle), and CarePlus (for skin to skin care).

The <u>All India Institute of Medical Science</u> (AIIMS) recently released the results of an experiment to increase breastmilk feeding in their own NICU from a very low baseline of 12%. Following the introduction of a new education and training program and technologies that enabled pumping, they increased the breastmilk feeding rate to 83% in just four weeks. Health technology NGO, <u>PATH</u>, just released the first Resource Toolkit for Establishing and Integrating Human Milk Banks into routine newborn care in hospitals, with a special focus on low resource settings.

WHO and UNICEF are also starting to take a closer look at breast-feeding and newborn survival. The <u>Global Breastfeeding Collective</u> has highlighted the importance of early initiation of breastfeeding and a new <u>Field Guide</u> (12) in partnership with Save the Children offers special guidance on feeding newborns in humanitarian settings. There have also been efforts (<u>Neo-BFHI</u>) to update the Baby-friendly Hospital Initiative so that it addresses the needs of sick and vulnerable newborns. (13)

Increasing breastfeeding rates and access to breastmilk among the newborns most at risk of death and disability is an urgent need - arguably the top priority on the global breastfeeding agenda. Ultimately, however, little will change until governments set ambitious goals for optimal feeding of sick and vulnerable newborns and invest in programs that make sure these babies have access to the most lifesaving — and too often the only — "medicine" available: breast milk.

To support the Open Letter, please email the Chair of the Breast-feeding Innovations Team, Leith Greenslade (leith@justactions.org).

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Editor's Note:

Neonatology Today and Loma Linda Publishing Company endorse the Open Letter. Mitchell Goldstein, MD Editor-in-Chief