

## **Maternal Milk Men; An Untapped Resource**

B. Gordon, E. Dunne, A. Curley on behalf of PRIME Group

Neonatal Department, National Maternity Hospital, Holles St, Dublin 2, Ireland.

Dear Editor,

The importance of maternal milk for premature infants has been well described for protection against necrotising enterocolitis, bronchopulmonary dysplasia and other comorbidities<sup>1</sup>.

PRIME (PREterm Infants need Milk Early) is a multidisciplinary quality improvement project in the National Maternity Hospital (NMH) that has developed clinical guidelines and educated obstetric, midwifery and neonatal staff on the importance of maternal milk for premature infants. The project has improved knowledge of and attitudes regarding the importance of maternal expressed breast milk (MEBM) for premature infants amongst hospital staff and has actively promoted knowledge to mothers in the antenatal period leading to decreased median time to first maternal milk for premature babies (17 vs 35 hours).<sup>2</sup>

Mothers of infants' born very prematurely (<32 weeks' gestation) are discharged from the maternity hospital months before their baby is ready to go home. In 2019, 140 babies born <32 weeks' gestation were admitted to our NICU, 15% of whom were transferred from units outside the NMH catchment area. These mothers face additional challenges to providing MEBM including geographical separation, cost of travel and need to care for other children.

In order to overcome these challenges, the PRIME group identified the potential use of Blood Bikes for the transfer of maternal milk from mothers' homes back to the NICU. Blood Bikes East/Cu Chulainn Blood Bikes/Blood Bikes South make up a voluntary group of transport networks that service the HSE all over the country with the collection and transportation of blood, blood products, human tissue and maternal milk. Blood Bikes frequently transport donor milk to tertiary Irish Neonatal units from the Human Milk Bank in Enniskillen however they are not currently routinely used for individual patients.

In 2019, NMH utilised the Blood Bike service five times to collect maternal milk for 8 premature babies. In 2020, we increased our usage of the service to 15 'milk runs' from Donegal, Mullingar and Longford for 24-29-week gestation infants. Blood bikes are a valuable resource that can provide timely, MEBM for vulnerable infants when individual geographical or social circumstances may otherwise affect supply.

By highlighting this vital service, we hope to promote awareness to all other neonatal units nationwide.

**Corresponding Author:**

B. Gordon

National Maternity Hospital,

Holles Street,

Dublin 2.

Email: [Beth.gordon@nmh.ie](mailto:Beth.gordon@nmh.ie)

**References:**

1. Cortez, J., Makker, K., Kraemer, D. et al. Maternal milk feedings reduce sepsis, necrotizing enterocolitis and improve outcomes of premature infants. *J Perinatol* 38, 71–74 (2018)
2. M.C. Murphy, E. Dunne, R. McCarthy, L. O'Hagan, H. Batson, A. Curley, PRIME (preterm infants need milk early) - Success of a multidisciplinary quality improvement project in a tertiary neonatal unit, *Journal of Neonatal Nursing*, 2020, ISSN 1355-1841