

**BREASTFEEDING OF VERY PRETERM INFANTS AT DISCHARGE FROM NICU: RESULTS FROM THE ITALIAN AREA-BASED “ACTION” STUDY**

**M. Cuttini**<sup>1</sup>, M. Da Frè<sup>2</sup>, C. Corchia<sup>3</sup>, L. Gagliardi<sup>4</sup>, D. Di Lallo<sup>5</sup>, V. Carnielli<sup>6</sup>, S. Miniaci<sup>7</sup>, S. Piga<sup>1</sup>, F. Macagno<sup>8</sup>, ACTION Study Group

<sup>1</sup>*Unit of Epidemiology, Bambino Gesù Children's Hospital, Roma,* <sup>2</sup>*Epidemiology Observatory, Regional Health Agency of Tuscany, Florence,* <sup>3</sup>*International Centre on Birth Defects and Preterm Birth, Roma,* <sup>4</sup>*Department of Pediatrics and Neonatology, Versilia Hospital, Lucca,* <sup>5</sup>*Agency for Public Health-Lazio Region, Roma,* <sup>6</sup>*Maternal and Child Health Institute, Salesi Hospital, Ancona,* <sup>7</sup>*Neonatal Intensive Care Unit, Pugliese-Ciaccio Hospital, Catanzaro,* <sup>8</sup>*Neonatal Intensive Care Unit, S. Maria della Misericordia Hospital, Udine, Italy*

**Aims:** Human milk has several advantages for very preterm infants, including reduced risk of sepsis and necrotizing enterocolitis. This study aims at describing breastfeeding rates in very preterm infants at discharge from Neonatal Intensive Care Unit (NICU), and exploring predictive factors.

**Methods:** The area-based ACTION study prospectively enrolled all infants admitted for neonatal care at 22-31 weeks gestation in six Italian regions. Obstetrical and neonatological variables were recorded, including type of feeding at discharge. Parental informed consent and Ethics Committee approval were obtained. The study was supported by a grant of the Italian Health Ministry. Multivariable logistic analysis accounting for NICU clustering was adopted to study the relation between maternal and neonatal variables and feeding at discharge (exclusive and partial breastfeeding).

**Results:** Among 3040 neonates admitted to NICU in 2003-2005, 2515 were discharged alive. At discharge, 621 (25%) were fed breast milk exclusively; 875 (36%) breast and artificial milk; and 951 (39%) artificial milk only. Factors significantly associated with increased likelihood of exclusive breastfeeding in multivariable analysis were female sex, singleton birth, Italian mother, absence of chronic lung disease, and birth in northern regions, while gestational age was not. When any breast milk was considered, infant's sex, singleton birth and region were no longer significant, while gestational showed a stronger effect.

**Conclusions:** Exclusive breastfeeding of very preterm infants during hospital stay is challenging, but differences between regions emphasize the role of Unit policies. The differential effect of predictors between exclusive and partial breastfeeding provides indications to tailoring interventions.