

TITLE - Does breast feeding preterm babies within the first 24 hours, lead to better outcome

Abstract and Summary

Introduction: Breastfeeding is the optimal method of nutrition in preterm neonates. Studies done in other parts of the world suggest that babies who are breastfed within the first 24 hours have better outcomes. This is the first Sri Lankan study done about the outcomes of preterm babies who received breast milk within the first 24 hours.

Objectives: To compare the outcome of preterm neonates who received breast milk within the first 24 hours of life with those who received breast milk after 24 hours of age.

Method: Prospective, observational study was conducted on all neonates between 26-34 weeks gestation born at De Soysa Hospital for Women from 01.01.20 – 30.06.20. Ethics approval was obtained from the Sri Lanka College of Paediatricians. Data were collected using an interviewer administered questionnaire and data recording form. Babies, breastfed within 24 hours of life were considered 'early' and after 24 hours were considered 'late'. Late breastfeeding occurred due to maternal medical conditions. Comparison between the groups was done using Chi-square test (SPSS version 22).

Results: Fifty-eight neonates with 17.2%, 13.8%, 31.1% and 37.9% at 26-27, 28-29, 30-31 and 32-34 weeks of gestation and 1.7%, 27.6%, 56.9%, 12.1% and 1.7% with birth weights of 500-750g, 751-1000g, 1001-1500g, 1501-2000g and >2000g were included. Ten babies were excluded due to severe congenital abnormalities and contraindications to breastfeeding. Thirtyfour (58.6%) babies were breastfed 'early' and 24 (41.4%) were breastfed 'late'. Duration of central lines ($p=0.003$, $p<0.01$), phototherapy ($p=0.001$, $p<0.01$), hospital stay ($p=0.001$, $p<0.01$), neonatal unit stay ($p=0.003$, $p<0.01$) and late onset sepsis ($p=0.001$, $p<0.01$) was significantly lower in the 'early group'. The 'early group' achieved their birth weight faster ($p=0.003$, $p<0.01$) and had increased weight gain (g/kg/day) on discharge ($p=0.001$, $p<0.01$). There was no significant difference in bone mineral status ($p=0.366$) and incidence of necrotizing enterocolitis ($p=0.771$) between the 2 groups.

Conclusions: Commencing breastmilk within the first 24 hours of life led to significantly better clinical outcomes in preterm babies between 26-34 weeks gestation.