## Characterisation of feeding patterns in infants born <33 weeks gestational age

LG Smithers<sup>1</sup>, AJ McPhee<sup>2</sup>, RA Gibson<sup>1</sup>, M Makrides<sup>1</sup>

<sup>1</sup>Child Health Research Institute, University of Adelaide Department of Paediatrics, Women's and Children's Hospital, Adelaide SA 5006

<sup>2</sup>Neonatal Medicine, Women's and Children's Hospital, Adelaide SA 5006

**Background:** The importance of feeding infants breast milk is demonstrated in decreased rates of infection and improved development. We have little understanding of the pattern or rate of breastfeeding among infants who were born premature.

**Objective:** To determine the pattern of feeding breast milk to infants born <33 weeks gestation.

**Design:** One hundred infants (from 87 mothers) were enrolled at the Women's and Children's Hospital within five days of commencing enteral feeds, 95 were followed to four months corrected age (CA). The duration and proportion of breastfeeding was categorised according to World Health Organisation criteria. Data were collected during hospitalisation, at infants estimated due date (EDD), and two and four months CA.

**Outcomes:** Eighty of 100 infants received some breast milk, similar to the initiation rates of breastfeeding among term infants. At EDD (approx 10 weeks post birth), only 18/96 (19%) infants were fully breastfed, 62 (65%) received combinations feeds and 16 (17%) were formula fed. From a total of 95 infants remaining in the study, seven (7%) were fully breastfed and 16 (17%) were formula fed through to four months CA. By four months CA, the average duration of all breastfeeding was  $11 \pm 5$  weeks, (approximately one week old CA).

**Conclusion:** The duration and extent of breastfeeding in preterm infants is less than that observed in term infants.