



## INTISARI

*Enteral feeding* pada bayi kurang bulan dimulai dalam jumlah kecil ("trophic"). *Trophic feeding* adalah pemberian susu dalam jumlah kecil dimulai dari 10-25 ml/kg/hari yang diberikan melalui selang orogastric. Kolostrum mengandung efek protektif seperti anti inflamasi, imunodulasi, dan anti mikroba. Aplikasi kolostrum di mulut merupakan terapi aman, efektif, dan ekonomis. Frekuensi aplikasi kolostrum di mulut paling optimal belum konklusif. Tujuan penelitian ini untuk mengetahui pengaruh frekuensi aplikasi kolostrum di mulut tiap 4 jam dan aplikasi tiap 2 jam dalam tercapainya *trophic feeding* pada bayi kurang bulan.

Kami melakukan penelitian eksperimental menggunakan desain RCT (*randomized controlled trial*) *open label*. Sampel penelitian adalah seluruh bayi kurang bulan yang memenuhi kriteria inklusi dan dirawat di RSUP Dr. Sardjito pada bulan Maret-Agustus 2023. Analisis data dilakukan menggunakan SPSS.

Penelitian ini dilakukan analisis pada 40 subjek yang mencapai *trophic feeding* terdiri dari 20 subjek diberikan aplikasi kolostrum tiap 2 jam dan 20 subjek lainnya tiap 4 jam. Analisis bivariat variabel independen yakni aplikasi kolostrum, variabel luar yakni enterokolitis nekrotikan, sepsis, *hemodynamically significant Patent Ductus Arteriosus* (hsPDA), dan jenis kelamin dengan variabel dependen yakni tercapainya *trophic feeding*. Hasil analisis ini menunjukkan bahwa hasil analisis bivariat, aplikasi kolostrum tiap 4 jam 0,47 hari lebih cepat dibanding aplikasi kolostrum tiap 2 jam dalam tercapainya *trophic feeding* dan secara statistika tidak memiliki perbedaan rerata yang signifikan ( $p=0,703$ ).

Kesimpulan dari penelitian ini bahwa frekuensi aplikasi kolostrum di mulut tiap 4 jam tidak memiliki perbedaan dengan frekuensi aplikasi kolostrum di mulut tiap 2 jam dalam tercapainya *trophic feeding* pada bayi kurang bulan <34 minggu.

**Kata kunci:** kolostrum, bayi kurang bulan, *trophic feeding*



## ABSTRACT

Enteral feeding in preterm neonates starts with trophic feeding, which is the practice of feeding minute volumes of enteral feeds (starting at 10-25mL/kg/day) through an orogastric tube. Colostrum has protective effects, such as anti-inflammatory, immunomodulatory, and antimicrobial effect. The oral colostrum application is a safe, effective and economical therapy. However, the most optimal frequency of the oral colostrum application is not yet conclusive. Therefore, this research aims to evaluate the effects of applying colostrum orally every 4 and 2 hours in order to achieve trophic feeding in preterm infants.

We conducted the experimental study applying the RCT (*randomized controlled trial*) *open label* design. The study samples were all very-low-birth-weight neonates admitted to RSUP Dr. Sardjito from March to August 2023 who fulfilled the inclusive criteria. The data analysis was performed with SPSS.

Among 40 subjects who achieved trophic feeding, 20 received oral colostrum application every 2 hours, and the other 20 subjects were fed every 4 hours. The bivariate analysis of the independent variable was the colostrum application; the extraneous variables were necrotizing enterocolitis, sepsis, hemodynamically significant Patent Ductus Arteriosus (hsPDA) and gender; while the dependent variable was the achievement of trophic feeding. This analysis showed the result of the bivariate analysis, which was the colostrum application every 4 hours achieved the trophic feeding 0.47 day faster than the colostrum application every 2 hours. Moreover, the two feeding methods did not show a significant difference statistically ( $p=0.703$ ).

To summarize, the result of this research stated that there is no significant difference in achieving trophic feeding in preterm neonates (less than 34 weeks) whether the colostrum was given every 2 or 4 hours.

**Keywords:** colostrum, very low birth weight, trophic feeding