

ABSTRAK

Latar Belakang: Di dunia, diperkirakan terdapat sekitar 481.000 bayi baru lahir yang mengalami hiperbilirubinemia setiap tahunnya. Berdasarkan SDKI 2017, hiperbilirubinemia merupakan penyebab ke-5 terbesar dan menyumbang 5,6% terjadinya kematian bayi pada minggu pertama kehidupan di Indonesia. Salah satu faktor risiko hiperbilirubinemia adalah masa gestasi. Hiperbilirubinemia dengan kadar bilirubin indirek yang tinggi akan mengarah pada keadaan yang mengkhawatirkan karena bilirubin indirek berpotensi neurotoksik dan menyebabkan kecacatan otak permanen. Sehingga, Kadar bilirubin indirek dan masa gestasi merupakan dua kunci penting pada bayi hiperbilirubinemia.

Tujuan: Menganalisis hubungan antara masa gestasi dengan kadar bilirubin indirek pada bayi hiperbilirubinemia di RSUD Dr. Soetomo Surabaya Tahun 2018.

Metode: Penelitian retrospektif analitik observasional dengan rancangan *cross-sectional*. Sampel diambil dengan teknik *purposive sampling* dari data rekam medik bayi hiperbilirubinemia di RSUD Dr. Soetomo tahun 2018. Analisis bivariat dilakukan dengan menggunakan uji *spearman rank*.

Hasil: Dalam penelitian ini, dari 95 sampel yang didapatkan, diketahui sebanyak 52,6% bayi berjenis kelamin laki-laki, 65,3% lahir dengan *low birth weight* (<2500 gram), 75,8% lahir dengan masa gestasi *moderate to late preterm* (32 - 37 minggu), 61,1 % melalui persalinan spontan. Kadar rata-rata dan minimal bilirubin indirek yang tertinggi dimiliki oleh kelompok masa gestasi 28 - 32 minggu ($11,9 \pm 2,7$ mg/dL dan 10 mg/dL). Hasil uji statistik *spearman rank* menunjukkan adanya hubungan yang signifikan antara masa gestasi dengan kadar bilirubin indirek ($p=0,003$; $r=-0,03$; 95% CI).

Kesimpulan: Terdapat hubungan yang signifikan antara masa gestasi dengan kadar bilirubin indirek pada bayi hiperbilirubinemia di RSUD Dr. Soetomo

Kata Kunci: Masa gestasi, hiperbilirubinemia, neonatus, preterm

ABSTRACT

Background: Estimated 481,000 infants in the world suffer hyperbilirubinemia annually. Based on the SDKI 2017, hyperbilirubinemia is the 5th largest cause and of infant deaths in the first week of life in Indonesia. One of the risk factors of hyperbilirubinemia is gestational age. Hyperbilirubinemia with high levels of indirect bilirubin will lead to an alarming situation, because indirect bilirubin is potentially neurotoxic and causes permanent brain defects. Thus, indirect bilirubin levels and gestational age are two important keys in infants with hyperbilirubinemia.

Objective: To analyze the relationship between gestational age and indirect bilirubin levels in hyperbilirubinemia infants at RSUD Dr. Soetomo Surabaya in 2018.

Methods: An observational analytic retrospective study with a cross-sectional design. Samples were taken by purposive sampling technique from the medical record data of hyperbilirubinemic infants in RSUD Dr. Soetomo in 2018. Bivariate analysis was performed using the Spearman rank test.

Results: In this study, from 95 samples obtained, it was found that 52.6% of babies is male, 65.3% were born with low birth weight (<2500 grams), 75.8% were born with moderate to late preterm (32-37 weeks) gestational age, and 61.1% were born through spontaneous labor. The highest average and highest minimum levels of indirect bilirubin were found in the very preterm (28-32 weeks) gestation group (11.9±2.7 mg/dL and 10 mg/dL). However, the highest maximum level was found in the moderate to late preterm (32-37 weeks) gestation group (18.06 mg/dL). Spearman rank statistical test results showed a significant relationship between gestational age and indirect bilirubin levels ($p = 0.003$; $r = -0.03$; 95% CI).

Conclusion: There is a significant relationship between gestational age and indirect bilirubin levels in hyperbilirubinemia infants at RSUD Dr. Soetomo

Keywords: Gestational age, hyperbilirubinemia, neonates, preterm