

INTISARI

Beban penyakit DSS di rumah sakit tersier masih cukup tinggi akibat syok yang belum teratasi, kelebihan cairan, dan komplikasi disfungsi multi organ yang menyebabkan mortalitas masih tinggi. Skor *pediatric logistic of organ dysfunction* (PELOD-1) dapat digunakan untuk memprediksi mortalitas berdasarkan disfungsi multi organ yang terjadi pada pasien. Tatalaksana resusitasi di rumah sakit tersier yang komprehensif menentukan luaran DSS. Tujuan penelitian ini adalah menilai hubungan antara skor PELOD-1 dengan mortalitas dan pemberian obat resusitasi yang digunakan di *pediatric intensive care unit* (PICU).

Penelitian rancangan kohort retrospektif dilakukan pada DSS anak yang dirawat di PICU RSUP Dr. Sardjito tahun 2011-2017. Pasien dengan serologi dengue positif baik yang datang sendiri ke IGD, rujukan, maupun dari bangsal dilakukan penilaian skor PELOD-1. Analisis bivariat Chi-Square dan multivariat digunakan untuk menilai hubungan skor PELOD-1 dengan mortalitas dan penggunaan obat resusitasi.

Terdapat 243 subyek berusia 1 bulan – 18 tahun. Hubungan bermakna terdapat pada Skor PELOD-1 ≥ 20 terhadap mortalitas DSS dan penggunaan obat resusitasi lebih dari 1 jenis dengan RR 18,9 IK 95% 8,4-42,6 dan RR 3,1 IK 95% 2,0-4,7 ($p < 0,05$). Variabel yang memengaruhi mortalitas DSS berdasarkan analisis multivariat adalah gangguan neurologi, kardiovaskular, renal, respirasi, dan hematologi ($p < 0,05$). Kesimpulan penelitian adalah skor PELOD-1 ≥ 20 meningkatkan mortalitas DSS anak dan penggunaan obat resusitasi lebih dari 1 jenis.

Kata Kunci: *Dengue shock syndrome, skor PELOD-1, mortalitas, obat resusitasi*

PELOD-1 SCORE AS A PREDICTOR FOR MORTALITY IN CHILDREN WITH DENGUE SHOCK SYNDROME AT DR. SARDJITO HOSPITAL, YOGYAKARTA

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ABSTRACT

The burden of dengue shock syndrome (DSS) disease in tertiary hospital is still high because of unresolved shock, fluid overload and multi-organ disorder complication that cause high mortality. Pediatric logistic of organ disorder (PELOD-1) score can be used to predict DSS mortality based on multi-organ disorder. Comprehensive resuscitation management in tertiary hospital determines DSS outcome. The aim of this study was to assess the correlation of PELOD-1 score with mortality and the use of resuscitation drugs in pediatric intensive care unit (PICU).

A retrospective cohort study was conducted in pediatric DSS who were admitted to PICU in Sardjito Hospital from 2011 – 2017. DSS patients with positive dengue serology, either came to emergency room as a referral and non referral case or came from the ward, were assessed for PELOD-1 score. Bivariate and multivariate analysis were used to assess the association between PELOD-1 score and mortality and the use of resuscitation drugs.

Two hundred and forty three subjects aged 1 month – 18 years old were included in this study. There was significant difference ($p < 0,05$) between PELOD-1 score ≥ 20 and DSS mortality (RR 18.9; CI 95% 8.4-42.6) and the use of resuscitation drugs > 1 (RR 3.1; CI 95% 2.0-4.7). Multivariate analysis showed variables that influenced the DSS mortality were neurologic disorder, cardiovascular disorder, renal disorder, respiratory disorder, and hematology disorder ($p < 0,05$). This study concluded that PELOD-1 score ≥ 20 had high mortality and number of resuscitation drugs in pediatric DSS.

Keywords: Dengue shock syndrome, PELOD-1 score, mortality, resuscitation drugs