



## **FAKTOR PROGNOSTIK KEMATIAN PADA ANAK DENGAN SEVERE DENGUE**

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### **Intisari**

**Latar belakang.** *Severe* dengue masih merupakan manifestasi berat dari infeksi dengue dan merupakan salah satu penyebab kematian pada anak. Pencarian faktor-faktor prognosis terjadinya kematian pada *severe* dengue berdasarkan pedoman WHO 2009 dapat membantu memberikan tatalaksana yang tepat sehingga dapat mengurangi angka kematian.

**Tujuan.** Mengidentifikasi faktor prognostik kematian pada pasien anak dengan *severe* dengue yang dirawat di RSUP dr. Sardjito Yogyakarta

**Metode.** Penelitian ini adalah studi observasional analitik dengan metode kohort retrospektif. Populasi penelitian adalah anak dengan *severe* dengue di RSUP Dr. Sardjito sejak Januari 2017 sampai Desember 2022 yang memenuhi kriteria dan kriteria eksklusi. Analisis bivariat dan multivariat dilakukan untuk menentukan faktor prognostik yang berkaitan secara signifikan dengan luaran kematian. Analisis data dilakukan dengan SPSS for Window versi 26.

**Hasil.** Terdapat 120 pasien *severe* dengue yang memenuhi kriteria eligibilitas dalam periode penelitian dengan 17 subjek (14,2%) memiliki luaran meninggal dunia dan 103 subjek (85,8%) dengan luaran hidup. Analisis multivariat menunjukkan ventilator mekanik (OR 422,861 (IK95% 20,88-8562,650); p <0,001), *fluid overload* >10% (OR 67,626 (IK95% 3,934-1162,532); p=0,004), VIS  $\geq$ 13,75 (OR 47,067 (IK95% 4,837-458,03); p=0,001), skor PELOD  $\geq$ 5,5 (OR 8,562 (IK95% 1,312-55,890); p=0,025) merupakan faktor prognostik kematian pada anak dengan *severe* dengue.

**Kesimpulan.** Faktor prognostik kematian pada *severe* dengue adalah pemakaian ventilator mekanik, *fluid overload* >10%, VIS  $\geq$ 13,75, skor PELOD-2  $\geq$  5,5.

**Kata kunci.** *severe* dengue , faktor prognostik, kematian, anak



## PROGNOSTIC FACTORS FOR MORTALITY IN CHILDREN WITH SEVERE DENGUE

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### Abstract

**Background:** Severe dengue remains a profound manifestation of dengue infection and is one of the leading causes of death in children. Identifying prognostic factors for mortality in severe dengue based on the WHO 2009 guidelines can help provide appropriate management and reduce mortality rates.

**Objective:** To identify prognostic factors for mortality in pediatric patients with severe dengue admitted to Dr. Sardjito General Hospital, Yogyakarta.

**Methods:** This study was an analytical observational study with a retrospective cohort design. The study population consisted of pediatric patients with severe dengue admitted to Dr. Sardjito General Hospital from January 2017 to December 2022, who met the inclusion criteria and exclusion criteria. Bivariate and multivariate analyses were conducted to determine significant prognostic factors associated with death. Data analysis was performed using SPSS for Windows version 26.

**Results:** There were 120 eligible patients with severe dengue during the study period, with 17 subjects (14.2%) experiencing death as the outcome and 103 subjects (85.8%) surviving. Multivariate analysis showed that mechanical ventilation (OR 422.861, 95% CI 20.88-8562.650; p <0.001), fluid overload >10% (OR 67.626, 95% CI 3.934-1162.532; p=0.004), VIS  $\geq$ 13.75 (OR 47.067, 95% CI 4.837-458.03; p=0.001), and PELOD-2 score  $\geq$ 5.5 (OR 8.562, 95% CI 1.312-55.890; p=0.025) were prognostic factors for death in pediatric patients with severe dengue.

**Conclusion:** Prognostic factors for mortality in severe dengue included mechanical ventilation, fluid overload >10%, VIS  $\geq$ 13.75, and PELOD-2 score  $\geq$ 5.5.

**Keywords:** severe dengue, prognostic factors, death, children.