ABSTRAK

Luaran Fungsional Anak dengan Status Epileptikus Berdasarkan Derajat Keparahan Menurut Skor *Status Epilepticus In Pediatric Patient Severity Score (STEPSS)*

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Latar Belakang: Status epileptikus (SE) merupakan kegawatan neurologis dengan mortalitas dan morbiditas tinggi pada anak. Penentuan prognosis SE memerlukan instrumen yang valid. *Status Epilepticus in Pediatric Patients Severity Score* (STEPSS) dikembangkan untuk memprediksi luaran pasien anak dengan SE. Penelitian ini bertujuan menganalisis hubungan skor STEPSS dengan luaran fungsional anak pada 30 hari dan 1 tahun setelah kejadian SE.

Metode: Penelitian kasus-kontrol retrospektif pada 80 anak dengan SE di rumah sakit rujukan tersier periode 2019–2024. Subjek dibagi menjadi kelompok kasus dan kontrol berdasarkan luaran fungsional menggunakan *Pediatric Overall Performance Category* (POPC) pada 30 hari dan 1 tahun. Hubungan skor STEPSS dengan luaran dianalisis menggunakan uji *Fisher's exact* dengan tingkat kemaknaan $p<0,05$.

Hasil: Subjek terdiri atas 43 laki-laki (53,8%) dan 37 perempuan (46,3%); Mayoritas berusia >24 bulan (68,8%) dan memiliki STEPSS 0-3 (93,8%). Pada 30 hari, STEPSS >3 ditemukan pada 7,5% kasus dan 5,0% kontrol (p=1,000; OR 1,541; IK95% 0,243-9,754). Pada 1 tahun, STEPSS >3 ditemukan pada 10,0% kasus dan 2,5% kontrol (p=0,359; OR 4,333; IK95% 0,462-40,608). Usia ≤24 bulan (p=0,008; OR 3,857) dan PCI >2 (p=0,003; OR 4,636) berhubungan dengan luaran buruk 30 hari. Tidak ditemukan hubungan bermakna antara skor STEPSS dan luaran fungsional pada kedua periode evaluasi.

Kesimpulan: Skor STEPSS tidak berhubungan secara bermakna dengan luaran fungsional anak berdasarkan POPC pada 30 hari maupun 1 tahun pasca-SE. Usia muda dan komorbiditas tinggi berhubungan signifikan dengan luaran jangka pendek. STEPSS sebaiknya tidak digunakan sebagai prediktor tunggal luaran fungsional SE pada anak.

Kata kunci: status epileptikus, STEPSS, *Pediatric Overall Performance Category*.

ABSTRACT

Functional Outcomes in Children with Status Epilepticus Based on Severity According to the *Status Epilepticus in Pediatric Patients Severity Score (STEPSS)*

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Background: Status epilepticus (SE) is a neurological emergency associated with high mortality and morbidity in children. Determining the prognosis of SE requires valid assessment tools. The Status Epilepticus in Pediatric Patients Severity Score (STEPSS) was developed to predict outcomes in pediatric patients with SE. This study aimed to analyze the association between STEPSS and functional outcomes in children at 30 days and 1 year following an SE episode.

Methods: This retrospective case–control study included 80 children with SE treated at a tertiary referral hospital between 2019 and 2024. Subjects were classified into case and control groups based on functional outcomes assessed using the Pediatric Overall Performance Category (POPC) at 30 days and 1 year. The association between STEPSS and outcomes was analyzed using Fisher's exact test, with statistical significance set at $p < 0.05$.

Results: The study population consisted of 43 males (53.8%) and 37 females (46.3%). Most subjects were older than 24 months (68.8%) and had a STEPSS of 0–3 (93.8%). At 30 days, a STEPSS >3 was observed in 7.5% of cases and 5.0% of controls ($p = 1.000$; OR 1.541; 95% CI 0.243–9.754). At 1 year, a STEPSS >3 was found in 10.0% of cases and 2.5% of controls ($p = 0.359$; OR 4.333; 95% CI 0.462–40.608). Age ≤24 months ($p = 0.008$; OR 3.857) and Pediatric Comorbidity Index (PCI) >2 ($p = 0.003$; OR 4.636) were associated with poor functional outcomes at 30 days. No significant association was found between STEPSS and functional outcomes at either evaluation period.

Conclusion: STEPSS was not significantly associated with functional outcomes in children, as measured by POPC, at either 30 days or 1 year after SE. Younger age and greater comorbidity burden were significantly associated with poor short-term outcomes. STEPSS should not be used as the sole predictor of functional outcomes in pediatric SE.

Keywords: status epilepticus, STEPSS, Pediatric Overall Performance Category.