

DELAYED ARRIVAL AS PREDICTOR OF PROLONGED LENGTH OF STAY OF REFERRED PEDIATRIC CRITICALLY ILL AT Dr. SARDJITO GENERAL HOSPITAL, YOGYAKARTA
Annisa Mulyandini¹, Titis Widowati², Desy Rusmawatingtyas³

¹Pediatric Resident, Department of Child Health, Faculty of Medicine, Public Health and Nursing, Gadjah Mada University, Yogyakarta, Indonesia

²Division of Pediatric Gastroenterohepatology, Department of Child Health, Faculty of Medicine, Public Health and Nursing, Gadjah Mada University, Yogyakarta, Indonesia

³Division of Pediatric Intensive Care and Emergency, Department of Child Health, Faculty of Medicine, Public Health and Nursing, Gadjah Mada University, Yogyakarta, Indonesia

Abstract

Background: Nowadays, referral system of pediatric critically ill children does not receive adequate concern from certain authority. The problem of referral system itself is sourced from several aspects, including the origin hospital, trouble of communication system, transportation modality, and specified problem in destination hospital. Referral system of pediatric critically ill patient needs fast response and definite answer about the availability of PICU bed in destination hospital.

Aim: To identify whether time arrival is predictor of prolonged length of stay (as primary outcome) and mortality (as secondary outcome) of critically ill pediatrics patient which were referred to PICU of Dr. Sardjito General Hospital in Yogyakarta Province.

Patients and methods: A retrospective cohort study design was conducted from August 1st, 2022 – January 31st, 2023. The data were collected from case report form (CRF), referral note, medical record and manual communication via chat application and telephone between two hospitals.

Result: There were 526 pediatric patients (85.5%) based on whole SISRUITE data accepted to transport the patient to Dr. Sardjito General Hospital. Three hundred and fifty-nine patients (68.2%) were genuinely arrived at emergency room (ER). From total 188 patients who were admitted to PICU, we found 129 patients (68.6%) experiencing delayed arrival, whose time was more than 224.5 minutes by Youden Index (AUC=0.518; p=0,70; CI 95% 0.43-0.61; cut off = 224.5). Fifty-four patients (28.7%) were having prolonged length of stay, while 41 patients (21.8%) were both having delayed arrival and prolonged length of PICU stay. There is no relation between delayed arrival and prolonged length of stay of referred PICU patients (p= 0.17; OR=1.65; CI 95% 0.80-3.38).

Conclusion: Delayed arrival at ER is not a predictor of prolonged length of stay of referral critically ill pediatric patient in PICU ward at Dr. Sardjito General Hospital.

Keywords: Referred pediatric critically ill patient, Emergency room, PICU admission, Delayed arrival, Prolonged length of stay

KETERLAMBATAN KEDATANGAN PASIEN RUJUKAN ANAK SAKIT KRITIS SEBAGAI PREDIKTOR RAWAT INAP LAMA DI RSUP Dr. SARDJITO HOSPITAL, YOGYAKARTA

Annisa Mulyandini¹, Titis Widowati², Desy Rusmawatiningtyas³

¹Residen Ilmu Kesehatan Anak, Fakultas Kedokteran, Kesehatan Masyarakat dan Keperawatan Universitas Gadjah Mada, Yogyakarta, Indonesia

²Divisi Gastroenterohepatologi, Ilmu Kesehatan Anak, Fakultas Kedokteran, Kesehatan Masyarakat dan Keperawatan Universitas Gadjah Mada, Yogyakarta, Indonesia

³Divisi Emergensi dan Rawat Intensif Anak, Ilmu Kesehatan Anak, Fakultas Kedokteran, Kesehatan Masyarakat dan Keperawatan Universitas Gadjah Mada, Yogyakarta, Indonesia

Intisari

Latar belakang: Sampai saat ini masalah rujukan anak sakit kritis masih belum banyak mendapat perhatian dari pihak berwenang. Permasalahan proses perujukan dapat terjadi mulai dari rumah sakit (RS) perujuk, sistem komunikasi yang digunakan, modalitas transportasi maupun masalah di RS tujuan rujukan. Rujukan anak sakit kritis memerlukan respon yang cepat dan jawaban yang pasti adanya ketersediaan *bed* PICU di RS rujukan.

Tujuan: Untuk mengidentifikasi apakah waktu yang dibutuhkan untuk tiba di rs PERUJUK berhubungan dengan pemanjangan *length of stay* (LOS) (sebagai luaran primer) dan mortalitas (sebagai luaran sekunder) pada populasi pasien rujukan anak sakit kritis di PICU RSUP Dr. Sardjito, Yogyakarta.

Pasien dan metode: Penelitian menggunakan desain studi kohort retrospektif dan dilaksanakan pada 1 Agustus 2022 – 31 Januari 2023. Data berasal dari pasien anak rujukan sakit kritis lalu rawat inap di PICU RSUP Dr. Sardjito. Data berasal dari *case report form* (CRF), lembar rujukan RS asal dan komunikasi manual menggunakan aplikasi percakapan dan telepon kedua RS.

Hasil: Terdapat 526 pasien anak rujukan sakit kritis yang diterima PICU RSUP Dr. Sardjito berdasarkan data SISRUITE. Pasien yang benar-benar tiba di IGD RSUP Dr. Sardjito berjumlah 359 pasien. Dengan perhitungan Indeks Youden, dari total 188 pasien PICU, 129 pasien (68,6%) dikategorikan terlambat tiba (AUC=0,518; $p=0,701$; IK-95% 0,43-0,61; *cut off* terlambat tiba = 244,5 menit). Lima puluh empat pasien (28,7%) rawat inap lama, 41 pasien (21,8%) mengalami baik terlambat tiba di IGD maupun rawat inap lama di PICU. Tak ada hubungan antara terlambat tiba dengan rawat inap lama PICU ($p=0,17$; OR=1,65; IK-95% 0,80-3,38).

Kesimpulan: Keterlambatan kedatangan ke IGD RS tujuan rujukan bukan prediktor rawat inap lama pasien anak rujukan sakit kritis PICU RSUP Dr. Sardjito.

Kata kunci: Pasien anak rujukan sakit kritis, terlambat tiba, rawat inap lama.