

FAKTOR-FAKTOR YANG MEMPENGARUHI LAMA RAWAT INAP DAN MODEL PREDIKSI PADA PASIEN INFARK MIOKARD AKUT DENGAN ELEVASI SEGMENT ST (IMA-EST) DI RSUP DR. SARDJITO: STUDI KOHORT RETROSPEKTIF

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INTISARI

Latar Belakang: peningkatan insidensi infark miokard akut di negara berkembang di era *Universal Health Coverage* (UHC) menyebabkan penyakit ini harus dikelola dengan baik dan dengan mempertimbangkan keterbatasan biaya dan sumber daya lainnya.

Tujuan: penelitian ini bertujuan menyelidiki faktor-faktor yang mempengaruhi lama rawat inap pasien IMA-EST di RSUP Dr. Sardjito.

Metode: rekam medis elektronik dan data pembiayaan rumah sakit pasien digunakan untuk mencari variabel variabel yang akan diteliti. Pasien yang diteliti adalah pasien IMA-EST di RSUP Dr. Sardjito Yogyakarta periode Juni 2014-Juni 2018. Regresi logistik dipakai untuk mengidentifikasi faktor-faktor yang secara independen mempengaruhi lama rawat inap.

Hasil: Sebanyak 1.223 pasien masuk dalam penelitian ini. Sebanyak 49,3% pasien memiliki durasi rawat yang lama (> 5 hari). tidak menerima tindakan intervensi koroner perkutan (IKP) (*adjusted OR* 2,65), penggunaan lebih dari 10 macam obat (*adjusted OR* 2,95), skor Charlson *Comorbidity Index* (CCI) ≥ 3 (*adjusted OR* 3,23) dan adanya komplikasi (*adjusted OR* 2,85) diketahui mempengaruhi lama rawat inap dengan AUC model sebesar 0,65 (0,64-0,70).

Kesimpulan: pasien IMA-EST yang dirawat inap lebih dari lima hari cenderung tidak menerima IKP, menggunakan lebih dari 10 macam obat, memiliki skor CCI ≥ 3 , dan mengalami komplikasi selama rawat inap.

Kata kunci: IMA-EST, lama rawat inap, model prediksi, regresi logistik

FACTORS AFFECTING HOSPITAL LENGTH OF STAY AND THE PREDICTIVE MODEL OF PATIENTS WITH ST-ELEVATION MYOCARDIAL INFARCTION AT A TERTIARY CARE HOSPITAL: RETROSPECTIVE COHORT STUDY

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ABSTRACT

Background: as the number of acute myocardial infarction in developing countries is projected to increase, management of this acutely ill patients in the era of universal health coverage (UHC) needs to be carefully planned, considering the limited resources.

Objective: this study sought to identify whether these following variables were independent predictors of prolonged length of hospital stay (defined as LOS > 5 days) in patients with STEMI: age, gender, insurance status, percutaneous coronary intervention (PCI), number of dispensed medicines, Charlson Comorbidity Index (CCI) score, and presence of complication.

Method: electronic medical records and hospital billing data were retrieved for each individual patient with STEMI as primary diagnosis who was admitted and discharged alive at Sardjito General Hospital, Yogyakarta, between June 1, 2014 and June 30, 2018. Stepwise backward logistic regression was performed to predict the risk of prolonged length of stay (defined as LOS > 5 days).

Results: a total of 1.223 patients were analysed in this study. Of all patients, 49,3% had prolonged LOS. Not receiving PCI during hospitalization (*adjusted* OR 2.65), number of medications used > 10 (*adjusted* OR 2.95), CCI score ≥ 3 (*adjusted* OR 3.23), presence of complication (*adjusted* OR 2.85) were independent predictors of length of stay with AUC of 0.65.

Conclusion: patients with prolonged LOS were less likely to receive PCI, more likely to receive > 10 medications during hospitalization, have more comorbidities and complication.

Keywords: STEMI, length of stay, machine learning, predictive model.