

ABSTRAK

Faktor Prediktor Yang Mempengaruhi *Outcome* Dan Lama Rawatan Pasien STEMI Yang Dilakukan Intervensi Koroner Perkutan Primer – Soetomo Hospital PPCI STEMI Registry

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Latar Belakang : STEMI (*ST elevation of myocardial infarction*) merupakan suatu kegawatdaruratan medis dengan komplikasi yang kompleks dan berat. Beberapa rekomendasi *guideline* saat ini berfokus pada mengurangi waktu dari pintu fasilitas emergensi ke tindakan reperfusi (*door to wire*). Namun ada perbedaan yang jauh antara rekomendasi *guideline* dan implementasi klinis pada penemuan beberapa *registry* yang dilakukan negara berkembang.

Tujuan : Menentukan faktor prediktor yang berpengaruh terhadap *outcome* dan lama rawatan pasien STEMI yang dilakukan intervensi koroner perkutan primer.

Metode : Penelitian ini merupakan penelitian analitik observasional menggunakan studi *cohort* dengan teknik pengambilan sampel secara *consecutive sampling*. Pengambilan sampel dilakukan pada seluruh pasien STEMI yang dilakukan IKP primer di RS. Soetomo periode Januari 2019- Desember 2019. Total terdapat 135 subjek penelitian yang memenuhi kriteria inklusi dan eksklusi serta telah dilakukan pengamatan setelah 1 bulan setelah rawatan. Setiap variabel dependen dianalisis menggunakan analisis regresi *binary logistic* (univariat). Variabel dengan $p < 0.25$ akan dimasukkan dalam analisis multivariat regresi logistik. Variabel yang menunjukkan nilai $p < 0.05$ dikatakan signifikan dan merupakan prediktor kuat.

Hasil : Terdapat 24 kejadian MACCE (17.3%) selama rawatan, 39 kejadian MACCE (28.1%) sampai 1 bulan setelah rawatan, dan 69 subjek dengan lama rawatan ≤ 4 hari (57%). Sebagian besar subjek penelitian dirawat dengan Killip I yaitu 108 orang (77.7 %), *time to wire* > 90 menit 104 orang (74.8%), dengan karakteristik lesi meliputi *target vessel* di RCA 70 orang (50.4 %) total lesi *double vessel* 53 orang (38.1 %) dan tipe lesi B1 51 orang (36.7 %), serta didapati hasil TIMI flow 3 setelah IKP primer sebanyak 111 orang (79.9 %). Prediktor kuat dari terjadinya MACCE saat rawatan adalah nilai Killip (Exp B 2.1; 95% CI= 1.3-3.3, $p=0.001$) dan nilai TIMI *flow* (Exp B 9.1; 95% CI= 2.7-30, $p=0.000$). Prediktor kuat dari terjadinya MACCE sampai 1 bulan setelah rawatan adalah nilai Killip (Exp B 1.7; 95% CI= 1.1-2.6, $p=0.005$) dan karakteristik tipe lesi ACC/AHA (Exp B 4.2; 95% CI= 2.3-7.3, $p=0.000$). Serta nilai Killip juga merupakan prediktor kuat semakin tingginya lama rawatan (Exp B 2.38; 95% CI=1.3-4.2, $p=0.003$).

Kesimpulan : Killip merupakan prediktor kuat terhadap MACCE saat rawatan, sampai 1 bulan setelah rawatan, dan bertambahnya lama rawatan. Prediktor MACCE saat rawatan lainnya adalah TIMI flow dan sampai 1 bulan setelah perawatan adalah karakteristik lesi tipe ACC/AHA.

Kata Kunci : *ST elevation Myocardial Infarction, Major adverse cardiac and cerebrovascular events, American College of Cardiology, American Heart Association, intervensi koroner perkutan primer*

ABSTRACT

Predictors Of Clinical Outcomes And Length Of Stay In STEMI Patients After Primary Percutaneous Coronary Intervention - Soetomo Hospital PPCI STEMI Registry

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Background: STEMI (ST elevation of myocardial infarction) is a medical emergency with complex and severe complications. Some current guideline recommendations focus on reducing the time at emergency facility doors to reperfusion actions (door to wire). However, there are large differences between the guideline recommendations and clinical implementation in the findings of several registry by developing countries.

Objective: To determine the predictors of outcome and length of stay in STEMI patients undergoing primary percutaneous coronary intervention.

Methods: This study was an observational analytic study using cohort with consecutive sampling technique. Sampling was carried out on all STEMI patients who did primary PCI at Soetomo hospital from January 2019 to December 2019. In total there were 135 research subjects who met the inclusion and exclusion criteria and were observed after 1 month treatment. Each dependent variable was analyzed using binary logistic regression analysis (univariate). Variables with $p < 0.25$ will be included in the multivariate logistic regression analysis. Variables that show $p < 0.05$ are said to be significant and are strong predictors.

Results: There were 24 MACCEs (17.3%) in hospital, 39 MACCEs (28.1%) up to 1 month after treatment, and 69 subjects with length of stay ≤ 4 days (57%). Most of the research subjects characteristics were treated with Killip I (77.7%), with time to wire > 90 minutes (74.8%), with lesion characteristics including the target vessel at RCA (50.4%), total double vessel lesions (38.1%), types of B1 lesions (36.7%), and TIMI flow 3 results after primary PCI (79.9%). Independent predictors of MACCEs in hospital were Killip (Exp B 2.1; 95% CI = 1.3-3.3, $p = 0.001$) and TIMI flow (Exp B 9.1; 95% CI = 2.7-30, $p = 0.000$). Independent predictors of MACCEs up to 1 month after treatment were Killip (Exp B 1.7; 95% CI = 1.1-2.6, $p = 0.005$) and characteristics of ACC / AHA lesion types (Exp B 4.2; 95% CI = 2.3-7.3, $p = 0.000$). Overall, Killip was also be independent predictors of the higher length of stay (Exp B 2.38; 95% CI = 1.3-4.2, $p = 0.003$).

Conclusion: Killip is a independent predictors of MACCEs in hospital, up to 1 month after treatment, and increasing length of stay. The other predictor of MACCEs in hospital is TIMI flow and up to 1 month after treatment is characteristic type lesions of ACC/AHA.

Keywords: ST elevation Myocardial Infarction, Major adverse cardiac and cerebrovascular events, American College of Cardiology, American Heart Association, Primary Percutaneous Coronary Intervention