KOMORBIDITAS SEBAGAI PREDIKTOR UNTUK READMISI RUMAH SAKIT SELAMA 30 HARI PADA PASIEN GAGAL JANTUNG: ANALISIS DATA SEKUUNDER MENGGUNAKAN *BIG DATA ACADEMIC HEALTHCARE SYSTEM*

INTISARI

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Pendahuluan: Gagal jantung merupakan penyebab utama rawat inap ulang dan beban pelayanan kesehatan. Meskipun berbagai komorbiditas sering menyertai pasien gagal jantung, kontribusi independennya terhadap readmisi dini dalam 30 hari di Indonesia masih belum jelas.
Tujuan: Menentukan komorbiditas yang secara signifikan memprediksi readmisi rumah sakit dalam 30 hari pada pasien yang dirawat karena gagal jantung.
Metode: Studi kohort retrospektif dilakukan menggunakan basis data Big Data AHS dari dua rumah sakit tersier di Yogyakarta periode 2017–2021. Pasien yang dirawat dengan diagnosis utama gagal jantung diikutsertakan. Pasien yang meninggal selama perawatan indeks, memiliki penyakit ginjal tahap akhir dengan hemodialisis, atau tidak memiliki data tindak lanjut lengkap dikeluarkan. Luaran utama adalah readmisi semua sebab dalam 30 hari. Regresi logistik multivariat digunakan untuk mengevaluasi hubungan antara komorbiditas dan readmisi.
Hasil: Dari 2.113 pasien gagal jantung yang memenuhi kriteria, 139 pasien (6,6%) mengalami readmisi dalam 30 hari. Setelah penyesuaian, fibrilasi atrium merupakan satu-satunya komorbiditas yang berhubungan secara independen dengan readmisi 30 hari (aOR 1,72; IK95% 1,14–2,58). Lama rawat inap menunjukkan efek terkuat, dengan perawatan 1–2 minggu (aOR 2,04) dan ≥2 minggu (aOR 2,55) meningkatkan risiko readmisi. Diabetes melitus, penyakit arteri koroner, penyakit ginjal kronik, dan hipertensi tidak berhubungan secara independen setelah penyesuaian. Kelas BPJS yang lebih rendah (II dan III) berhubungan dengan risiko readmisi yang lebih rendah.
Kesimpulan: Di antara komorbiditas utama, hanya fibrilasi atrium yang secara independen memprediksi readmisi 30 hari.

Kata kunci: gagal jantung; readmisi rumah sakit; fibrilasi atrium; komorbiditas; basis data klaim; Indonesia

COMORBIDITIES AS PREDICTORS FOR 30-DAY HOSPITAL READMISSION IN HEART FAILURE PATIENTS: SECONDARY DATA ANALYSIS USING BIG DATA ACADEMIC HEALTHCARE SYSTEM

ABSTRACT

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Background: Heart failure is a major cause of hospital readmission and healthcare burden. Although multiple comorbidities commonly coexist in HF, their independent contribution to early 30-day readmission remains unclear in Indonesia.
Objective: To determine which comorbidities significantly predict 30-day hospital readmission among patients hospitalized for heart failure.
Methods: A retrospective cohort study was conducted using the Big Data AHS database from two tertiary hospitals in Yogyakarta (2017–2021). Patients admitted with heart failure as the primary diagnosis were included. Patients who died during index admission, had end-stage renal disease on haemodialysis, or had incomplete follow-up were excluded. The primary outcome cause of 30-day readmission. Multivariable logistic regression was used to evaluate the association between comorbidities
Results: Among 2,113 eligible heart failure admissions, 139 patients (6.6%) were readmitted within 30 days. After adjustment, atrial fibrillation was the only comorbidity independently associated with 30-day readmission (aOR 1.72, 95% CI 1.14–2.58). Length of stay showed the strongest effect, with hospitalization of 1–2 weeks (aOR 2.04) and ≥2 weeks (aOR 2.55). Diabetes mellitus, coronary artery disease, chronic kidney disease, and hypertension were not independently associated with readmission after adjustment. Lower BPJS class (II and III) was associated with lower readmission risk.
Conclusion: Among major comorbidities, only atrial fibrillation independently predicts 30-day readmission.

Keywords: heart failure; hospital readmission; atrial fibrillation; comorbidity; claims database; Indonesia