

## ABSTRAK

### **PERBEDAAN KEJADIAN *MAJOR ADVERSE CARDIOVASCULAR EVENTS* PADA PASIEN PASCA *ISOLATED CORONARY ARTERIAL BYPASS GRAFT* BERKOMORBID DIABETES MELITUS-PENYAKIT GINJAL KRONIS DENGAN DIABETES MELITUS DAN PENYAKIT GINJAL KRONIS TUNGGAL DI SILOAM HOSPITAL LIPPO VILLAGE DAN SILOAM HOSPITAL KEBON JERUK PERIODE 2020-2022**

**Latar Belakang:** Diabetes melitus dan penyakit ginjal kronis berkontribusi kepada timbulnya penyakit kardiovaskuler, salah satunya adalah penyakit jantung koroner. Pada pasien dengan kedua komorbid tersebut dianjurkan untuk melakukan revaskularisasi dengan prosedur bedah *coronary artery bypass graft* (CABG) yang berisiko terhadap kejadian *major adverse cardiovascular events* (MACE), seperti stroke, infark miokard atau sindrom koroner akut, gagal jantung, revaskularisasi ulang, dan kematian kardiovaskular.

**Tujuan Penelitian:** Mengetahui perbedaan kejadian MACE pada pasien pasca *isolated* CABG berkomorbid DM-PGK dengan DM dan PGK tunggal di SHLV dan SHKJ.

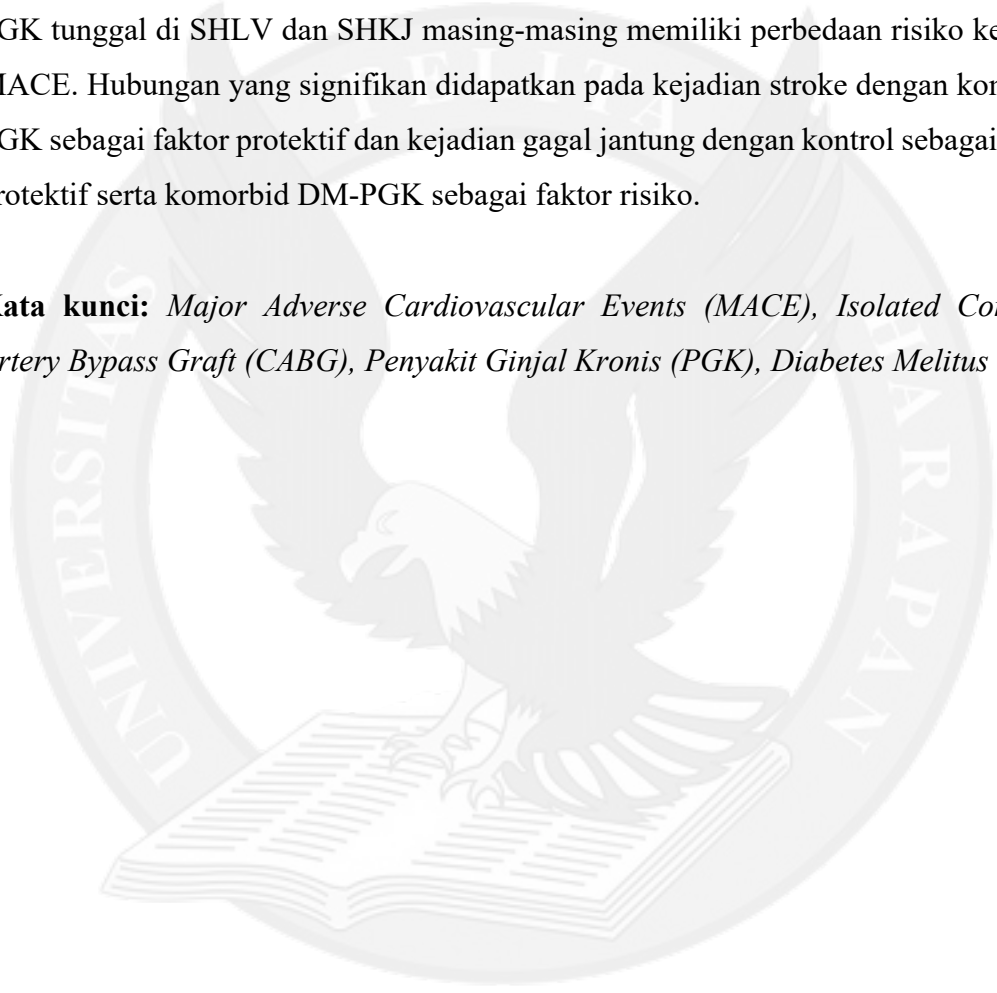
**Metode:** Penelitian ini menggunakan desain penelitian analitik komparatif kategorik tidak berpasangan dengan metode potong lintang dan dilakukan secara retrospektif menggunakan data sekunder, yaitu rekam medis SHLV dan SHKJ.

**Hasil:** Jumlah sampel penelitian terdiri dari 220 sampel yang terbagi menjadi kelompok DM-PGK, DM dan PGK tunggal, serta kontrol. Hasil analisis menunjukkan terdapat hubungan yang signifikan kejadian stroke pada pasien berkomorbid PGK dengan risiko 10,07% ( $P=0,023$ ) serta kejadian gagal jantung pada pasien berkomorbid

DM-PGK dan kontrol dengan risiko 78,28% ( $P=0,017$ ) dan 14,6% ( $P=0,041$ ). Sedangkan, tidak terdapat hubungan yang signifikan ( $P>0,05$ ) pada kejadian MACE lainnya.

**Kesimpulan:** Pasien pasca *isolated* CABG berkomorbid DM-PGK dengan DM dan PGK tunggal di SHLV dan SHKJ masing-masing memiliki perbedaan risiko kejadian MACE. Hubungan yang signifikan didapatkan pada kejadian stroke dengan komorbid PGK sebagai faktor protektif dan kejadian gagal jantung dengan kontrol sebagai faktor protektif serta komorbid DM-PGK sebagai faktor risiko.

**Kata kunci:** *Major Adverse Cardiovascular Events (MACE), Isolated Coronary Artery Bypass Graft (CABG), Penyakit Ginjal Kronis (PGK), Diabetes Melitus (DM).*



## ABSTRACT

### ***DIFFERENCES IN MAJOR ADVERSE CARDIOVASCULAR EVENTS OCCURRENCE IN POST-ISOLATED CORONARY ARTERY BYPASS GRAFT PATIENTS WITH COMORBID OF DIABETES MELLITUS-CHRONIC KIDNEY DISEASE WITH SINGLE DIABETES MELLITUS AND CHRONIC KIDNEY DISEASE IN SILOAM HOSPITAL LIPPO VILLAGE AND SILOAM HOSPITAL KEBON JERUK PERIOD 2020-2022***

**Background:** Chronic kidney disease and diabetes mellitus contribute to the to the development of cardiovascular diseases, one of which is coronary heart disease. In patients with both comorbidities, it is recommended to undergo to revascularization using the coronary artery bypass graft (CABG) surgical procedures, which carries a risk of major adverse cardiovascular events (MACE), such as stroke, myocardial infarction or acute coronary syndrome, heart failure, repeat revascularization, and cardiovascular death.

**Objective:** Comparing the incidence of MACE in post-isolation CABG patients who have comorbid of DM-CKD with single DM and CKD in SHLV and SHKJ.

**Method:** This research uses unpaired categorical comparative analytical research design with cross sectional method and was conducted retrospectively using secondary data, namely SHLV and SHKJ medical records.

**Result:** The study consisted of 220 samples divided into DM-CKD, single DM and CKD, and a control group. The analysis revealed a significant relationship between stroke events in patients with comorbid of CKD with a 10,07% risk ( $P=0,023$ ) and between heart failure events in patients with DM-CKD comorbidities and controls,

with respective risks of 78,28% ( $P=0,017$ ) and 14,6% ( $P=0,041$ ). However, no significant association ( $P>0,05$ ) was found in other MACE.

**Conclusion:** Post-isolated CABG patients with comorbid of DM-CKD and single DM and CKD in SHLV and SHKJ respectively have different risks of MACE events. Significant associations were found in stroke events with the CKD comorbid as a protective factor, and in heart failure events, with the control group as a protective factor, while DM-PGK comorbid was identified as a risk factor.

**Keywords:** Major Adverse Cardiovascular Events (MACE), Isolated Coronary Artery Bypass Graft (CABG), Chronic Kidney Disease (CKD), Diabetes Mellitus (DM).

