

UNIVERSITAS MUHAMMDIYAH JEMBER  
PROGRAM STUDI PROFESI NERS  
FAKULTAS ILMU KESEHATAN

Karya Ilmiah Akhir, 2025  
Wulan Purbowati, S. Kep

Evaluasi Tindakan Primary Percutaneous Coronary Intervention Pada Pasien Infark Miokard Akut Stemi Dengan Diagnosa Penurunan Curah Jantung di Ruang ICCU RSD dr. Soebandi Jember

xiv-85 halaman + 8 tabel + 7 gambar + 6 lampiran

## Abstrak

**Pendahuluan:** Infark miokard akut (IMA) merupakan salah satu penyebab kematian terbanyak di dunia, dipengaruhi oleh faktor genetik dan gaya hidup. *Percutaneous Coronary Intervention* (PCI) adalah terapi pilihan utama untuk pasien IMA presentasi klimis Elevasi Segmen ST (STEMI) dalam 12 jam sejak timbul gejala, dengan elevasi ST persisten atau *left bundle branch block* (LBBB). **Tujuan:** penelitian ini bertujuan untuk mengevaluasi hasil tindakan PCI pada pasien IMA dengan diagnosis penurunan curah jantung di ruang ICCU RSD dr. Soebandi Jember. **Metode:** desain studi yang digunakan adalah studi kasus berdasarkan asuhan keperawatan di ruang ICCU RSD dr. Soebandi Jember. **Hasil:** ketiga pasien menunjukkan ketidakstabilan tekanan darah, dengan peningkatan tekanan sistolik sebesar 20–39 mmHg dan diastolik 10–20 mmHg dibandingkan nilai awal, terutama pada pasien 1 frekuensi nadi stabil pada hari pertama. Frekuensi napas seluruh pasien berada dalam rentang 21–30 kali/menit. Pasien 1 mengalami hipotermia ringan (suhu <35,9°C) dan ekstremitas akral yang dingin. Saturasi oksigen terjaga baik pada seluruh pasien karena mendapatkan terapi oksigen (nasal kanul 3 lpm pada pasien 1 dan 2, simple mask 8 lpm pada pasien 3). Pada hari ketiga, tekanan darah pasien 1 mengalami peningkatan sistolik 10–25 mmHg dan diastolik 4–21 mmHg dari nilai sebelumnya. Pasien 2 dan 3 menunjukkan tekanan darah mendekati normal dalam rentang 110–130/60–70 mmHg dan frekuensi nadi stabil sekitar 80x/menit. Pada salah satu pasien mengalami oliguri. **Kesimpulan:** berdasarkan hasil penelitian pada periode 16–22 Juni 2025 di ruang ICCU RSD dr. Soebandi Jember, pasien yang menunjukkan ketidakstabilan tekanan darah, denyut jantung (HR), saturasi oksigen ( $SpO_2$ ), dan produksi urine tidak normal memiliki risiko tinggi mengalami penurunan curah jantung setelah menjalani PCI.

**Kata kunci:** infark miokard akut STEMI, *percutaneous coronary intervention*, penurunan curah jantung

**MUHAMMADIYAH UNIVERSITY OF JEMBER**  
**NURSING PROFESSIONAL PROGRAM**  
**FACULTY OF HEALTH SCIENCES**

Karya Ilmiah Akhir, 2025  
Wulan Purbowati, S. Kep

*“Evaluation of Primary Percutaneous Coronary Intervention in Acute STEMI Patients with Diagnosed Reduced Cardiac Output in the ICCU of RSD dr. Soebandi Jember”*

xiv-85 pages + 8 table + 7 picture + 6 appendices

### **Abstract**

**Introduction:** Acute myocardial infarction (AMI) remains one of the leading causes of death worldwide, driven by genetic predispositions and lifestyle factors. Primary percutaneous coronary intervention (PCI) is the preferred reperfusion therapy for patients presenting with ST-segment elevation myocardial infarction (STEMI) within 12 hours of symptom onset, evidenced by persistent ST elevation or new left bundle branch block (LBBB). **Objective:** This study aims to evaluate the outcomes of PCI in AMI patients diagnosed with reduced cardiac output in the intensive cardiac care unit (ICCU) of RSD dr. Soebandi Jember. **Methods:** A descriptive-analytic design was used, involving all eligible patients treated in the ICCU at RSD dr. Soebandi Jember. **Results:** All three patients showed blood pressure instability, with an increase in systolic pressure of 20–39 mmHg and diastolic pressure of 10–20 mmHg compared to baseline, especially in patient 1 whose pulse rate was stable on the first day. All patients' respiratory rates were in the range of 21–30 times/minute. Patient 1 experienced mild hypothermia (temperature <35.9°C) and cold extremities. Oxygen saturation was well maintained in all patients due to oxygen therapy (nasal cannula 3 lpm in patients 1 and 2, simple mask 8 lpm in patient 3). On the third day, patient 1's blood pressure increased by 10–25 mmHg systolic and 4–21 mmHg diastolic from the previous value. Patients 2 and 3 showed near-normal blood pressure in the range of 110–130/60–70 mmHg and a stable pulse rate of around 80x/minute. One patient experienced oliguria. **Conclusion:** In the cohort treated from June 16 to 22, 2025, instability in blood pressure, heart rate,  $\text{SpO}_2$ , and abnormal urine output were correlated with a significantly increased risk of reduced cardiac output post-PCI. These clinical indicators should be closely monitored to mitigate adverse outcomes.

### **Keywords:**

*STEMI, percutaneous coronary intervention, reduced cardiac output*