

**PENERAPAN MANAJEMEN ENERGI DALAM PEMENUHAN
KEBUTUHAN AKTIVITAS: INTOLERANSI AKTIVITAS PADA
PASIE *CORONARY ARTERY DISEASE* POST PCI
DI RUANG ICCU RSUP DR. SARDJITO**

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ABSTRAK

Latar Belakang: *Coronary Artery Disease* (CAD) merupakan penyakit kardiovaskular yang ditandai oleh penyempitan arteri koroner akibat proses aterosklerosis sehingga menyebabkan penurunan perfusi miokard. Salah satu tindakan revaskularisasi yang sering dilakukan adalah *Percutaneous Coronary Intervention* (PCI). Meskipun efektif memperbaiki aliran darah koroner, pasien CAD post PCI masih berisiko mengalami intoleransi aktivitas yang ditandai dengan kelemahan, cepat lelah, sesak, berdebar, serta keterbatasan dalam melakukan aktivitas sehari-hari. Kondisi tersebut memerlukan intervensi keperawatan yang tepat untuk meningkatkan toleransi aktivitas pasien.

Tujuan: Menganalisis penerapan manajemen energi dalam pemenuhan kebutuhan aktivitas pada pasien CAD post PCI dengan masalah keperawatan intoleransi aktivitas di Ruang ICCU RSUP Dr. Sardjito.

Metode: Metode yang digunakan adalah studi kasus deskriptif pada dua pasien CAD post PCI dengan intoleransi aktivitas. Asuhan keperawatan dilakukan selama 3×24 jam dengan penerapan *evidence-based nursing* manajemen energi meliputi *deep breathing exercise*, aktif-pasif *exercise*, dan latihan aktivitas harian bertahap sesuai kemampuan pasien. Evaluasi dilakukan melalui pemantauan respons fisiologis, tingkat kelelahan, dan kemampuan melakukan aktivitas.

Hasil: Hasil menunjukkan adanya peningkatan toleransi aktivitas pada kedua pasien setelah penerapan manajemen energi. Peningkatan tersebut ditandai dengan berkurangnya keluhan lelah, sesak, dan berdebar saat beraktivitas, meningkatnya kemampuan mobilisasi secara bertahap, serta membaiknya respons fisiologis seperti frekuensi nadi, frekuensi napas, saturasi oksigen, dan skor *Borg Rating of Perceived Exertion* (RPE).

Kesimpulan: Penerapan manajemen energi melalui *deep breathing exercise*, aktif-pasif *exercise*, dan latihan aktivitas harian bertahap dapat meningkatkan toleransi aktivitas pada pasien CAD post PCI sehingga dapat digunakan sebagai salah satu intervensi keperawatan pemulihan fungsi aktivitas pasien.

Kata kunci: *Coronary Artery Disease*, *Percutaneous Coronary Intervention*, intoleransi aktivitas, manajemen energi, toleransi aktivitas.

**CLINICAL APPLICATION OF ENERGY MANAGEMENT STRATEGIES
IN MANAGING ACTIVITY INTOLERANCE AMONG PATIENTS
WITH CORONARY ARTERY DISEASE POST PCI
AT ICCU WARD RSUP DR. SARDJITO**

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ABSTRACT

Background: Coronary artery disease (CAD) is a cardiovascular condition characterized by narrowing of the coronary arteries due to atherosclerosis, leading to reduced myocardial perfusion. One of the most common revascularization procedures is Percutaneous Coronary Intervention (PCI). Although effective in restoring coronary blood flow, post-PCI CAD patients remain at risk of exercise intolerance, characterized by weakness, fatigue, shortness of breath, palpitations, and limitations in performing daily activities. This condition requires appropriate nursing interventions to improve patients' exercise tolerance.

Objective: To analyze the application of energy management in meeting activity needs in post-PCI CAD patients with the nursing issue of exercise intolerance in the ICCU Ward at Dr. Sardjito General Hospital.

Methods: A descriptive case study was conducted on two post-PCI CAD patients with activity intolerance. Nursing care was provided over 3×24 hours using evidence-based energy management, including deep breathing exercises, active-passive exercises, and gradual daily activity training tailored to the patients' capabilities. Evaluation was conducted through monitoring of physiological responses, fatigue levels, and activity performance.

Results: The results showed an increase in exercise tolerance in both patients following the implementation of energy management. This improvement was characterized by a reduction in complaints of fatigue, shortness of breath, and palpitations during activity, a gradual increase in mobility, and improvements in physiological responses such as heart rate, respiratory rate, oxygen saturation, and Borg Rating of Perceived Exertion (RPE) scores.

Conclusion: The implementation of energy management through deep breathing exercises, active-passive exercises, and gradual daily activity training can improve exercise tolerance in post-PCI CAD patients, making it a viable nursing intervention for restoring patients' functional activity.

Keywords: Coronary Artery Disease, Percutaneous Coronary Intervention, exercise intolerance, energy management, exercise tolerance.