

**POLITEKNIK KESEHATAN TANJUNGPINRANG
JURUSAN KEPERAWATAN
PROGRAM STUDI PENDIDIKAN PROFESI NERS
Karya Ilmiah Akhir Ners, Mei 2025**

Ida Bagus Putu Sanjaya Putra

ANALISIS TINGKAT NYERI PADA PASIEN *POST OPERASI TOTAL KNEE REPLACEMENT* DENGAN INTERVENSI *DEEP BREATHING RELAXATION* DAN *KNEE STRENGTHENING EXERCISE* DI RSUD JENDRAL AHMAD YANI METRO TAHUN 2025

xiii + 67 halaman, 4 tabel, 12 gambar, 5 lampiran

ABSTRAK

Menurut *World Health Organization* (WHO) terdapat sebanyak 528 juta lebih kasus Osteoarthritis (OA), 69 % diantaranya adalah OA genu. Salah satu terapi untuk kasus OA genu adalah operasi *Total Knee Replacement* (TKR). Masalah utama yang sering terjadi pada pasien post operasi TKR adalah nyeri. Kombinasi *deep breathing relaxation* dan *knee strengthening exercise* menjadi salah satu intervensi nonfarmakologi untuk menurunkan skala nyeri. Tujuan dari karya ilmiah ini adalah untuk menganalisis tingkat nyeri pada pasien *post operasi TKR* dengan intervensi kombinasi *deep breathing relaxation* dan *knee strengthening exercise* di RSUD Jendral Ahmad Yani Metro, pada 6-8 Februari 2025. Metode penelitian ini deskriptif dengan pendekatan asuhan keperawatan, menggunakan *Numeric Rating Scale* untuk mengukur tingkat nyeri sebelum dan sesudah intervensi yang diberikan 2 kali sehari selama 3 hari perawatan. Hasil asuhan keperawatan menunjukkan bahwa tingkat nyeri menurun setelah dilakukan implementasi pada hari ketiga dengan skala nyeri 2. Nyeri pada pasien dipengaruhi oleh beberapa faktor, diantaranya usia, jenis kelamin, pengalaman sebelumnya, dukungan keluarga dan kecemasan. Penurunan tingkat nyeri pada pasien dengan terapi nonfarmakologis *deep breathing relaxation* dan *knee strengthening exercise* terbukti efektif diimplementasikan pada pasien untuk mengurangi tingkat nyeri. Penulis menyarankan kepada rumah sakit untuk mengajarkan cara melakukan kombinasi *deep breathing relaxation* dan *knee strengthening exercise* untuk mengatasi nyeri pada pasien *post operasi total knee replacement* karena aman, tidak memerlukan biaya dan mudah diterapkan.

Kata Kunci: , *Deep Breathing Relaxation*, *Knee Strengthening Exercise*, Nyeri, Total Knee Replacement

Referensi : 55 (2014-2025)

**TANJUNGKARANG POLYTECHNIC OF HEALTH
TANJUNGKARANG SCHOOL OF NURSING NERS
PROFESSIONAL STUDY
Final Professional Nurse report, May 2025**

Ida Bagus Putu Sanjaya Putra

**ANALYSIS OF PAIN LEVEL IN PATIENTS POST TOTAL KNEE
REPLACEMENT OPERATION WITH DEEP BREATHING
RELAXATION AND KNEE STRENGTHENING EXERCISE
INTERVENTION AT GENERAL AHMAD YANI GENERAL
HOSPITAL METRO IN 2025**

xiii + 67 pages, 4 tables, 12 pictures, 5 attachment

ABSTRACT

According to the World Health Organization (WHO), there are more than 528 million cases of Osteoarthritis (OA), 69% of which are OA genu. One of the therapies for OA genu cases is Total Knee Replacement (TKR) surgery. The main problem that often occurs in post-TKR surgery patients is pain. The combination of deep breathing relaxation and knee strengthening exercise is one of the non-pharmacological interventions to reduce the pain scale. The purpose of this scientific paper is to analyze the level of pain in post-TKR surgery patients with a combination of deep breathing relaxation and knee strengthening exercise interventions at the General Ahmad Yani Metro Hospital, on February 6-8, 2025. This research method is descriptive with a nursing care approach, using the Numeric Rating Scale to measure the level of pain before and after the intervention given 2 times a day for 3 days of treatment. The results of nursing care showed that the level of pain decreased after implementation on the third day with a pain scale of 2. Pain in patients is influenced by several factors, including age, gender, previous experience, family support and anxiety. Reducing the level of pain in patients with non-pharmacological therapy of deep breathing relaxation and knee strengthening exercise has been proven to be effective in reducing pain levels in patients. The author suggests that hospitals teach how to perform a combination of deep breathing relaxation and knee strengthening exercises to overcome pain in post-total knee replacement surgery patients because it is safe, does not require costs and is easy to implement.

**Keywords: Deep Breathing Relaxation, Knee Strengthening Exercise, Pain,
Total Knee Replacement**

Reference: 55 (2014-2025)