

**ANALISIS HUBUNGAN DERAJAT OSTEOARTHRITIS LUTUT DENGAN
OSTEOPOROSIS PADA PEREMPUAN LANSIA DI RS BHAYANGKARA TK.I
PUSDOKKES POLRI JAKARTA**

Hilmy Pradipta Lumunon

ABSTRAK

Latar Belakang: Osteoarthritis (OA) dan osteoporosis merupakan penyakit muskuloskeletal yang sering ditemukan pada perempuan lansia. Hubungan antara kedua penyakit tersebut masih kontroversial. Beberapa penelitian melaporkan adanya hubungan terbalik antara OA dan osteoporosis, sedangkan penelitian lain menunjukkan adanya keterkaitan melalui perubahan mikroarsitektur tulang subkondral dan proses remodeling tulang. Tujuan penelitian ini adalah menganalisis hubungan derajat osteoarthritis lutut dengan osteoporosis pada perempuan lansia di RS Bhayangkara TK.I Puskor Polri Jakarta. **Metode:** Penelitian ini merupakan studi observasional analitik dengan pendekatan potong lintang (*cross-sectional*). Data yang dianalisis berasal dari rekam medis pasien perempuan berusia 60 tahun atau lebih yang menjalani pemeriksaan pada periode Januari 2023 hingga Desember 2024. Hubungan antara variabel penelitian selanjutnya dievaluasi menggunakan uji korelasi Spearman sebagai analisis bivariat. **Hasil:** Sebanyak 34 subjek memenuhi kriteria penelitian. Derajat osteoarthritis 2 merupakan derajat yang paling sering ditemukan, yaitu pada 50,0% subjek. Mayoritas subjek tidak mengalami osteoporosis (88,2%). Hasil uji korelasi Spearman menunjukkan koefisien korelasi sebesar $r = 0,161$ dengan nilai $p = 0,362$, yang menunjukkan tidak terdapat hubungan yang bermakna secara statistik antara derajat osteoarthritis lutut dan osteoporosis. **Kesimpulan:** Tidak ditemukan adanya hubungan yang signifikan antara derajat osteoarthritis lutut dan osteoporosis.

Kata Kunci: *Osteoarthritis Lutut, Osteoporosis, Lansia, Derajat Osteoarthritis, Perempuan, Studi Potong Lintang*

**ANALYSIS ASSOCIATION BETWEEN KNEE OSTEOARTHRITIS SEVERITY AND
OSTEOPOROSIS AMONG ELDERLY WOMEN AT BHAYANGKARA HOSPITAL
LEVEL I PUSDOKKES POLRI JAKARTA**

Hilmy Pradipta Lumunon

ABSTRACT

Background: Osteoarthritis (OA) and osteoporosis are two musculoskeletal disorders that frequently affect older women. Although both conditions are commonly associated with aging, the nature of their relationship remains uncertain. While several studies have suggested an inverse association between OA and osteoporosis, others have proposed that both diseases may be linked through changes in subchondral bone microarchitecture and alterations in bone remodeling. This study was conducted to investigate the relationship between the severity of knee osteoarthritis and osteoporosis among elderly women treated at Bhayangkara Hospital Level I Puskor Polri, Jakarta. **Methods:** An analytical observational study with a cross-sectional design was carried out using secondary data obtained from the medical records of female patients aged 60 years and above who were treated between January 2023 and December 2024. The association between the severity of knee osteoarthritis and osteoporosis was assessed using Spearman's rank correlation test. **Results:** A total of 34 eligible subjects were included in the study. Grade 2 knee osteoarthritis was the most frequently observed severity level, representing 50.0% of all subjects. Most participants were not diagnosed with osteoporosis (88.2%). Statistical analysis demonstrated a weak positive correlation ($r = 0.161$); however, the association was not statistically significant ($p = 0.362$). **Conclusion:** The findings of this study indicate that there is no statistically significant relationship between the severity of knee osteoarthritis and osteoporosis among elderly female patients.

Keywords: Knee Osteoarthritis; Osteoporosis; Elderly Women; Osteoarthritis Severity; Cross-Sectional Study.