

**HUBUNGAN USIA MENOPAUSE DENGAN TINGKAT KEPARAHAN
OSTEOARTHRITIS LUTUT DI RSUD KABUPATEN BULELENG PERIODE
BULAN JULI – SEPTEMBER TAHUN 2025**

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ABSTRAK

Osteoarthritis (OA) merupakan penyakit degeneratif yang banyak dialami perempuan lanjut usia, terutama setelah penurunan hormon estrogen pada masa menopause. Penelitian ini bertujuan menganalisis hubungan antara usia menopause dan tingkat keparahan OA lutut pada pasien perempuan di RSUD Buleleng tahun 2025. Menggunakan desain analitik observasional cross-sectional dengan teknik consecutive sampling, sebanyak 33 responden diikutsertakan. Usia menopause diukur dengan Reproductive Health Questionnaire (RHQ), sedangkan derajat OA dinilai melalui radiologi menggunakan sistem Kellgren–Lawrence. Hasil penelitian menunjukkan bahwa sebagian besar responden mengalami menopause normal (63,6%) dan derajat OA terbanyak adalah grade 3 (36,4%). Terdapat hubungan yang kuat dan signifikan antara usia menopause dan tingkat keparahan OA lutut, dengan nilai korelasi Spearman $r_s = -0,602$ dan $p = 0,000$ ($p < 0,01$). Korelasi negatif tersebut mengindikasikan bahwa semakin dini seorang perempuan mengalami menopause, semakin berat derajat OA lutut yang dialaminya; sebaliknya, menopause yang terjadi lebih lambat cenderung berhubungan dengan derajat OA yang lebih ringan. Penelitian ini menyimpulkan bahwa usia menopause berpengaruh terhadap derajat keparahan OA lutut pada perempuan.

Kata kunci: usia menopause, osteoarthritis lutut, estrogen, Kellgren–Lawrence, lansia.

**THE ASSOCIATION BETWEEN AGE AT MENOPAUSE AND THE
SEVERITY OF KNEE OSTEOARTHRITIS AT BULELENG DISTRICT
GENERAL HOSPITAL DURING THE PERIOD OF JULY–SEPTEMBER 2025**

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ABSTRACT

Osteoarthritis (OA) is a degenerative joint disease that commonly affects elderly women, particularly following the decline of estrogen levels during menopause. This study aimed to analyze the association between age at menopause and the severity of knee osteoarthritis among female patients at Buleleng District General Hospital in 2025. This research employed an observational analytic cross-sectional design with a consecutive sampling technique, involving 33 respondents. Age at menopause was assessed using the Reproductive Health Questionnaire (RHQ), while the severity of knee osteoarthritis was evaluated radiologically using the Kellgren–Lawrence grading system. The results showed that most respondents experienced normal menopause (63.6%), and the most common degree of knee osteoarthritis was grade 3 (36.4%). A strong and statistically significant association was found between age at menopause and the severity of knee osteoarthritis, with a Spearman correlation coefficient of $r_s = -0.602$ and $p = 0.000$ ($p < 0.01$). This negative correlation indicates that earlier onset of menopause is associated with more severe knee osteoarthritis, whereas later menopause tends to be associated with milder disease severity. In conclusion, age at menopause significantly influences the severity of knee osteoarthritis in women.

Keywords: age at menopause, knee osteoarthritis, estrogen, Kellgren–Lawrence, elderly