

ABSTRACT

THE CORRELATION BETWEEN AGE, SEX, BODY MASS INDEX, AND PHYSICAL ACTIVITIES WITH KNEE OSTEOARTHRITIS GRADE IN ELDERLY AT ADVENT HOSPITAL BANDAR LAMPUNG

By

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Background: Osteoarthritis (OA) is the most common form of arthritis in the community and a leading cause of disability in older adults. The main risk factors for OA are age, sex, obesity, excessive or insufficient physical activity, genetic factors, occupation, and prior trauma. The aim of this study was to determine the correlation between social status and knee OA grade among elderly people in Bandar Lampung.

Methods: This was an analytical observational study with a cross-sectional design. Sampling was carried out using total sampling technique with a population of 53 subjects. Data were analyzed using Pearson, Spearman, and Mann–Whitney tests.

Results: The study found that 6 subjects (11.3%) had a mild WOMAC score, 24 subjects (45.3%) had a moderate WOMAC score, 18 subjects (34%) had a severe WOMAC score, and 5 subjects (9.4%) had a very severe WOMAC score. Bivariate analysis between variables showed p-values of 0,265 for age, 0,158 for sex, 0,022 for BMI, and 0,000 for physical activity.

Conclusions: There was a significant correlation between BMI and physical activity with OA grade, but no correlation between age and sex with OA grade among elderly people in Bandar Lampung.

Keywords: Age, Body Mass Index, Elderly, Knee Osteoarthritis, Physical Activity, Sex, WOMAC Score

ABSTRAK

HUBUNGAN USIA, JENIS KELAMIN, INDEKS MASA TUBUH, DAN AKTIVITAS FISIK TERHADAP GRADE OSTEOARTHRITIS LUTUT PADA LANSIA DI RUMAH SAKIT ADVENT BANDAR LAMPUNG

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Latar Belakang: *Osteoarthritis (OA)* merupakan bentuk arthritis yang paling sering dijumpai di masyarakat dan menjadi penyebab utama kecacatan pada usia lanjut. Faktor risiko yang utama pada OA yaitu usia, jenis kelamin, obesitas, aktivitas fisik yang berlebihan atau kurang, faktor genetik, pekerjaan, dan trauma sebelumnya. Tujuan penelitian ini adalah untuk mengetahui hubungan status sosial terhadap *grade* OA lutut pada lansia di Bandar Lampung.

Metode: Penelitian ini bersifat analitik observasional dengan pendekatan *cross sectional*. Pengambilan sampel dengan teknik *total sampling* dengan populasi 53 orang. Pengolahan data menggunakan uji *Pearson*, *Spearman*, dan *Mann-Whitney*.

Hasil: Hasil penelitian terdapat 6 orang (11,3%) pada kategori skor WOMAC ringan, 24 orang (45,3%) pada kategori skor WOMAC sedang, 18 orang (45,3%) pada kategori skor WOMAC berat, dan 5 orang (9,4%) pada kategori skor WOMAC sangat berat. Hasil bivariat antar variabel yaitu usia ($p\text{-value} = 0,265$), jenis kelamin ($p\text{-value} = 0,158$), IMT ($p\text{-value} = 0,022$), dan aktivitas fisik ($p\text{-value} = 0,000$).

Kesimpulan: Terdapat hubungan signifikan antara IMT dan aktivitas fisik dengan *grade* OA, tetapi tidak terdapat hubungan antara usia dan jenis kelamin dengan *grade* OA pada lansia di Bandar Lampung.

Kata Kunci: Aktivitas Fisik, Indeks Masa Tubuh, Jenis Kelamin, Lanjut Usia, Osteoarthritis Lutut, Skor WOMAC, Usia