

The Relationship Between Sleep Quality and Protein Intake with the Level of Independence Among the Elderly in Nursing Homes in the Special Region of Yogyakarta

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ABSTRACT

Background: Aging in the elderly can lead to a decline in physiological functions, which affects sleep quality, nutritional intake, and independence in daily activities. Poor sleep quality and inadequate protein intake can impair musculoskeletal function and potentially reduce the independence of older adults. Therefore, it is important to investigate the relationship between sleep quality and protein intake with the level of independence among elderly individuals, particularly in nursing homes with a high elderly population, such as in the Special Region of Yogyakarta.

Objective: To determine the relationship between sleep quality and protein intake with the level of independence among elderly individuals in nursing homes in the Special Region of Yogyakarta.

Methods: This study employed an observational analytic design with a cross-sectional approach using secondary data from a primary study. The study involved 88 elderly participants from three nursing homes, selected using the total sampling method. Sleep quality was assessed using the Pittsburgh Sleep Quality Index (PSQI), protein intake was measured using the Semi Quantitative Food Frequency Questionnaire (SQ-FFQ), and the level of independence was assessed using the Katz Index. Data were analyzed using univariate and bivariate analyses with the chi-square test.

Results: Most elderly participants had good sleep quality (56.8%), inadequate protein intake (71.6%), and were categorized as independent (62.5%). Chi-square analysis showed a statistically significant relationship between sleep quality and the level of independence ($p = 0.003$), as well as between protein intake and the level of independence ($p = 0.033$).

Conclusion: There is a significant relationship between sleep quality and protein intake with the level of independence among elderly individuals in nursing homes in the Special Region of Yogyakarta. These findings highlight the importance of monitoring sleep quality and protein intake in efforts to maintain elderly independence.

Keywords: Sleep quality, protein intake, independence level, elderly, nursing home, PSQI, SQ-FFQ, Katz Index

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HUBUNGAN KUALITAS POLA TIDUR DAN ASUPAN PROTEIN DENGAN TINGKAT KEMANDIRIAN PADA LANSIA DI PANTI WREDA DAERAH ISTIMEWA YOGYAKARTA

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INTISARI

Latar Belakang: Pertambahan usia pada lansia dapat menurunkan fungsi fisiologis yang berdampak pada kualitas tidur, pemenuhan gizi, serta tingkat kemandirian dalam aktivitas sehari-hari. Kualitas pola tidur yang buruk dan asupan protein inadekuat berpotensi menurunkan fungsi muskuloskeletal yang dapat memengaruhi kemandirian lansia. Oleh karena itu, penting untuk meneliti hubungan antara kualitas pola tidur dan asupan protein dengan tingkat kemandirian pada lansia, khususnya di panti wreda yang memiliki populasi lansia tinggi seperti Daerah Istimewa Yogyakarta.

Tujuan: Mengetahui hubungan antara kualitas pola tidur dan asupan protein dengan tingkat kemandirian pada lansia di panti wreda Daerah Istimewa Yogyakarta.

Metode: Penelitian ini merupakan studi observasional dengan desain *cross-sectional* menggunakan data sekunder dari penelitian primer. Jumlah responden sebanyak 88 lansia dari tiga panti wreda yang dipilih dengan metode *total sampling*. Kualitas pola tidur diukur menggunakan *Pittsburgh Sleep Quality Index* (PSQI), asupan protein menggunakan *Semi Quantitative Food Frequency Questionnaire* (SQ-FFQ), dan tingkat kemandirian menggunakan *Katz Index*. Analisis data dilakukan secara univariat dan bivariat menggunakan uji *chi-square*.

Hasil: Sebagian besar lansia memiliki kualitas tidur baik (56,8%), asupan protein inadekuat (71,6%), dan tingkat kemandirian kategori mandiri (62,5%). Hasil uji chi-square menunjukkan adanya hubungan yang signifikan antara kualitas tidur dengan tingkat kemandirian ($p = 0,003$) dan antara asupan protein dengan tingkat kemandirian ($p = 0,033$).

Kesimpulan: Terdapat hubungan yang signifikan antara kualitas pola tidur dan asupan protein dengan tingkat kemandirian pada lansia di panti wreda Daerah Istimewa Yogyakarta. Temuan ini menunjukkan pentingnya pemantauan kualitas tidur dan asupan protein dalam upaya mempertahankan kemandirian lansia.

Kata Kunci: Kualitas tidur, asupan protein, tingkat kemandirian, lansia, panti wreda, PSQI, SQ-FFQ, Katz Index

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