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HUBUNGAN ANTARA STATUS GIZI, MASSA OTOT, AKTIVITAS FISIK,
ASUPAN ENERGI PROTEIN, ASUPAN ZAT GIZI MIKRO (KALSIMUM,
ZAT BESI, ZINC) DAN KEKUATAN GENGAM TANGAN PADA
LANSIA WANITA DI WILAYAH KERJA PUSKESMAS PORIS GAGA
LAMA

VI Bab, 93 Halaman, 19 Tabel, 0 Gambar, 7 Lampiran

Latar Belakang : Kekuatan genggam tangan merupakan salah satu pengukuran dan penilaian terhadap fungsi otot seseorang. Penting untuk menjaga kekuatan otot guna menjaga mobilitas dan produktivitas seseorang. Pada lansia akan terjadi proses penuaan yang mengakibatkan penurunan fungsi otot. Penurunan fungsi otot ini, disebabkan oleh banyak faktor diantaranya status gizi, massa otot, asupan zat gizi, serta aktivitas fisik.

Tujuan : Menganalisis hubungan antara status gizi, massa otot, aktivitas fisik, asupan energi protein, asupan zat gizi mikro (kalsium, zat besi, dan zinc) dan kekuatan genggam tangan pada lansia wanita.

Metode Penelitian : Desain penelitian ini adalah *cross sectional* dengan sampel sebanyak 65 responden. Data status gizi menggunakan Indeks Massa Tubuh, massa otot menggunakan alat BIA, serta data aktivitas fisik menggunakan PAL. Data asupan energi protein menggunakan *food recall 2x24jam*, dan asupan zat gizi mikro menggunakan form SQ-FFQ. Data Kekuatan genggam tangan menggunakan alat digital *handgrip dynamometer*. Analisa data menggunakan uji Korelasi *Pearson dan Spearman*.

Hasil Penelitian : Ada hubungan antara status gizi ($p=0.030$, $r=0.26$), massa otot ($p=0.0001$, $r=0.71$), aktivitas fisik ($p=0.0001$, $r=0.72$) dan kekuatan genggam tangan. Pada variabel asupan, ada hubungan antara asupan energi ($p=0.0001$, $r=0.75$), asupan protein ($p=0.0001$, $r=0.80$), asupan kalsium ($p=0.0001$, $r=0.74$), asupan zat besi ($p=0.0001$, $r=0.62$), serta asupan zinc ($p=0.0001$, $r=0.77$) dan kekuatan genggam tangan.

Kesimpulan : Ada hubungan antara status gizi, massa otot, aktivitas fisik, asupan energi protein, asupan zat gizi mikro dan kekuatan genggam tangan lansia wanita.

Kata kunci : Lanjut usia, kekuatan genggam tangan, massa otot

ABSTRACT



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RELATIONS BETWEEN NUTRITIONAL STATUS, MUSCLE MASS, PHYSICAL ACTIVITY, PROTEIN ENERGY INTAKE, MICRONUTRIENT INTAKE (CALCIUM, IRON, ZINC) AND THE GRIP STRENGTH OF ELDERLY WOMEN IN THE WORK AREA OF THE PORIS GAGA LAMA HEALTH CENTER

VI Chapter, 93 Pages, 19 Tables, 0 Pictures, 7 Appendices

Background: The strength of a hand grip is one of the measurement and assessment of muscle function. It is important to maintain muscle strength in order to keep mobility and productivity. There will be aging process, that can affect in decreasing the muscle function in elderly. Decreasing of this muscle function is caused by many factors including nutritional status, muscle mass, nutrient intake and physical activity.

Objective: Analyzing the relations of nutritional status, muscle mass, physical activity, protein energy intake, micronutrient intake (calcium, iron, zinc) and the grip strength of elderly women.

Methods: The design of this study is cross sectional with a sample of 65 respondents. Nutritional status data is taken with body mass index, muscle mass with the BIA tool, as well as physical activity with PAL. Protein and energy intake use 2x24h food recall form, and micronutrient intake uses SQ-FFQ form. Hand grip strength is taken with a digital handgrip dynamometer. Data analysis use Pearson and Spearman correlation test.

Result: There are relations between nutritional status ($p=0.030$, $r=0.26$), muscle mass ($p=0.0001$, $r=0.71$), physical activity ($p=0.0001$, $r=0.72$) and the grip strength. In the intake variable, there is a relation between energy intake ($p=0.0001$, $r=0.75$), protein intake ($p=0.0001$, $r=0.80$), calcium intake ($p=0.0001$, $r=0.749$), iron intake ($p=0.0001$, $r=0.62$), and zinc intake ($p=0.0001$, $r=0.77$) and the grip strength.

Conclusion: There are relations between nutritional status, muscle mass, physical activity, protein energy intake, micronutrient intake and the grip strength of elderly women

Keywords: Elderly, Hand grip strength, muscle mass,

