

**PERBEDAAN ASUPAN ENERGI, PROTEIN,  
AKTIVITAS FISIK DAN STATUS GIZI  
PADA LANSIA DI PANTI DAN NON PANTI**

**Artikel Penelitian**

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# THE DIFFERENCES BETWEEN ENERGY-PROTEIN INTAKE, PHYSICAL ACTIVITY AND NUTRITIONAL STATUS OF THE ELDERLY LIVING IN NURSING HOME IN COMMUNITY

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## ABSTRACT

**Background:** Elderly was tend to inevitable risk of protein-energy malnutrition whether in nursing home or in community. One of influencing factors of malnutrition were due to the living arrangement that affect energy and protein intake and also physical activity. Protein-energy malnutrition should be assessed as soon as possible to initiate interventions in preventing any further health impairment. The objective of this study was to compare the differences of energy-protein intake, physical activity and nutritional status between elderly living in nursing home and in community.

**Method:** A cross sectional study was designed in 2 different places: Wening Wardaya Ungaran nursing home and in Purwosari north Semarang purposively. A total of 44 samples in each place were taken by using purposive. The data was collected including general characteristic, specific characteristic in nursing home and in community also health status were also collected using questionnaires. Nutritional status was measured using MNA (Mini Nutritional Assessment), BMI-knee height, BMI-arm span. Energy-protein intake and physical activities were collected using method record. The data analyses were using Independent t test, Mann Whitney and ancova.

**Result:** Multivariate analyses showed that there were no significant differences of energy in nursing home and in community ( $101 \pm 8,6$  %individual recommended compared to  $103 \pm 10,6$  %individual recommended) ( $p=0,434$ ). There were no significant differences of protein in nursing home ( $101 \pm 16,9$  %individual recommended compared to  $100 \pm 18,3$  %individual recommended) in nursing home and in community ( $p=0,502$ ). There were significant differences of physical activity in nursing home ( $1385 \pm 307,3$  Calories) compared to in community ( $1933 \pm 324,8$  Calories) ( $p=0,000$ ). There were significance differences of BMI-knee height ( $19 \pm 3,4$  kg/m<sup>2</sup> compared to  $22 \pm 3,7$  kg/m<sup>2</sup>) ( $p=0,000$ ), and BMI-arm span ( $20 \pm 3,7$  compared to  $23 \pm 4,0$ ) ( $p=0,000$ ), and MNA ( $21 \pm 4,1$  compared to  $24 \pm 3,2$ ) ( $p=0,001$ ) in nursing home and in community.

**Conclusion:** There were no significant differences of energy, and protein intake, but there were no significant differences of physical activity and all nutritional status in nursing home and in community after controlled by health status.

Keyword: elderly, nutritional status, protein energy malnutrition, nusing home

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# PERBEDAAN ANTARA ASUPAN ENERGI, PROTEIN, AKTIVITAS FISIK, DAN STATUS GIZI PADA LANSIA DI PANTI DAN NON PANTI

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## ABSTRAK

**Latar Belakang:** Lansia cenderung rawan malnutrisi energi dan protein baik di panti maupun non panti. Salah satu faktor penyebabnya adalah faktor tempat tinggal yang dapat mempengaruhi asupan energi, protein dan aktivitas fisik. Adanya malnutrisi tersebut harus segera dideteksi agar dapat dilakukan intervensi sedini mungkin dalam mencegah penurunan berat badan lebih lanjut. Untuk itu perlu dilihat apakah terdapat perbedaan asupan energi, protein, aktivitas fisik dan status gizi pada lansia di panti dan non panti dan apakah asupan energi, protein, aktivitas fisik dan status gizi pada lansia di panti lebih kurang dibanding non panti.

**Metode:** Penelitian ini termasuk penelitian observasional dengan pendekatan belah lintang yang dilaksanakan di 2 tempat secara purposif, yakni: Panti wredha Wening Wardaya Ungaran dan Kelurahan Purwosari Semarang Utara. Jumlah sampel sebesar 44 di tiap tempat dan diambil secara purposif. Data yang diambil meliputi karakteristik umum, karakter khusus di panti dan non panti, serta data status kesehatan diambil melalui wawancara dengan kuesioner. Status gizi diukur dengan menggunakan MNA (Mini Nutritional Assessment), IMT-Tinggi Lutut, dan IMT-Panjang Rentang Tangan. Asupan energi-protein dan aktivitas fisik diukur menggunakan metode *record* 3x24 jam. Analisis yang digunakan yakni *independent t test*, *Mann Whitney* dan *ancova*.

**Hasil:** Analisa multivariat menunjukkan tidak terdapat perbedaan asupan energi di panti ( $101 \pm 8,6$  %AKE) dan non panti ( $103 \pm 10,6$  %AKE) ( $p=0,434$ ). Tidak terdapat perbedaan rerata asupan protein di panti ( $101 \pm 16,9$  %AKP) dan di non panti ( $100 \pm 18,3$  %AKP) ( $p=0,502$ ). Terdapat perbedaan rerata aktivitas fisik di panti ( $1385 \pm 307,3$  Kal) dan di non panti ( $1933 \pm 324,8$  Kal) ( $p=0,000$ ). Terdapat perbedaan rerata status gizi menurut IMT-TL di panti ( $19 \pm 3,4$  kg/m<sup>2</sup>) dan non panti ( $22 \pm 3,7$  kg/m<sup>2</sup>) ( $p=0,000$ ), IMT-PRT di panti ( $20 \pm 3,7$  kg/m<sup>2</sup>) dan non panti ( $23 \pm 4,0$  kg/m<sup>2</sup>) ( $p=0,000$ ), dan MNA di panti ( $21 \pm 4,1$ ) dan non panti ( $24 \pm 3,2$ ) ( $p=0,001$ ).

**Kesimpulan:** Tidak terdapat perbedaan asupan energi dan protein, namun terdapat perbedaan aktivitas fisik dan status gizi menurut IMT-TL, IMT-PRT dan MNA di panti dan non panti setelah dikontrol status kesehatan.

Kata kunci : lansia, status gizi, malnutrisi energi protein, panti

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