

## INTISARI

### **Asupan *Immunonutrients* sebagai Prediktor Frekuensi dan Lama Rawat di Rumah Sakit pada Lansia di Wilayah Perkotaan dan Perdesaan Daerah Istimewa Yogyakarta**

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**Latar Belakang:** Daerah Istimewa Yogyakarta (DIY) merupakan provinsi dengan jumlah populasi lansia terbanyak di Indonesia. Proses penuaan yang terjadi pada lansia menyebabkan penurunan fungsi imun kemudian memengaruhi frekuensi dan lama rawat di rumah sakit. Respon imun pada lansia juga dipengaruhi oleh asupan zat gizi khususnya *immunonutrients*.

**Tujuan Penelitian:** Penelitian ini bertujuan untuk mengetahui peran asupan *immunonutrients* (vitamin A, C, D, E, dan seng) sebagai prediktor frekuensi admisi, lama rawat di rumah sakit, dan frekuensi kunjungan ke fasilitas kesehatan/dokter pada lansia di perkotaan dan perdesaan di DIY.

**Metode:** Penelitian ini menggunakan data sekunder dari studi *cross-sectional* yang dilakukan selama bulan Oktober-Desember 2015 pada 527 subjek lansia berusia  $\geq 65$  tahun yang telah tinggal di DIY minimal selama setahun. Variabel bebas yaitu asupan *immunonutrients*, variabel terikat yaitu frekuensi admisi, lama rawat di rumah sakit, dan frekuensi kunjungan ke fasilitas kesehatan/dokter. Data dianalisis dengan *Independent T-Test*, Uji *One-Way Anova*, dan *Spearman's Correlation*.

**Hasil:** Hasil penelitian menunjukkan asupan vitamin C memiliki hubungan signifikan dengan frekuensi admisi rumah sakit ( $p = 0,016$ ). Asupan *immunonutrients* (vitamin A, C, D, E, dan seng) memiliki hubungan signifikan dengan frekuensi kunjungan ke fasilitas kesehatan ( $p < 0,01$ ). Asupan *immunonutrients* tidak berhubungan signifikan dengan lama rawat di rumah sakit secara statistik ( $p > 0,05$ ), tetapi terlihat arah asupan yang lebih tinggi sejalan dengan lama rawat yang lebih singkat. Hasil tersebut dipengaruhi oleh beberapa faktor meliputi tempat tinggal (perkotaan / perdesaan), tingkat pendidikan, pendapatan, dan sosial-ekonomi.

**Kesimpulan:** Asupan *immunonutrients* merupakan prediktor frekuensi admisi dan frekuensi kunjungan ke fasilitas kesehatan/dokter.

**Kata kunci:** asupan *immunonutrients*, frekuensi admisi, lama rawat, lansia

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## ABSTRACT

### **Immunonutrients Intake as A Predictor of Hospital Admission Frequency and Length of Stay Among Older Adults in Rural and Urban Area of Daerah Istimewa Yogyakarta**

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**Background:** Special Region of Yogyakarta (DIY) is a province with the largest number of the elderly population in Indonesia. The occurrence of aging in the elderly leads to a decline in immune function which then may affect the hospital admission frequency and length of stay. Moreover, the immune response is also influenced by the intake of nutrients, especially immunonutrients.

**Objective:** This study aims to determine the role of immunonutrients intake (vitamins A, C, D, E, and zinc) as a predictor of hospital admission frequency, length of stay, and visits to health facilities/doctors frequency among elderly in rural dan urban area of DIY.

**Methods:** This study analyzed secondary data from a cross-sectional study conducted during October-December 2015 on 527 elderly subjects aged  $\geq 65$  years who have lived in DIY for at least a year. The independent variable is immunonutrients intake, the dependent variables include admission frequency, length of stay in the hospital, and the frequency of visits to health facilities. Data were analyzed by Independent T-Test, One-Way ANOVA Test, and Spearman's Correlation.

**Results:** The results showed that vitamin C intake had a significant association with hospital admission frequency ( $p = 0.016$ ). The intake of immunonutrients (vitamins A, C, D, E, and zinc) was associated significantly with the frequency of visits to health facilities ( $p < 0.01$ ). The immunonutrients intake was not significantly associated with the length of hospital stay, whereas, the trend showed that the higher the immunonutrients intake, the shorter the length of stay. Several factors including the place of residence (urban/rural), education level, income level, and socioeconomic status, also contributed to the aforementioned results.

**Conclusion:** The Immunonutrients intake was a predictor of the frequency of hospital admission and the frequency of visits to health facilities/doctors.

**Key Word:** immunonutrients, hospital admission, length of stay, elderly

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