

ABSTRAK

Debora Omega Ratu Manurung: Hubungan Asupan Asam Folat dan Kalium dengan Hipertensi pada Pra Lansia di Puskesmas Duri Kota. Skripsi. Program Studi Gizi, Jurusan Pendidikan Kesejahteraan Keluarga, Fakultas Teknik Universitas Negeri Medan, 2025.

Hipertensi adalah kondisi dimana tekanan darah sistolik ≥ 140 mmHg dan tekanan darah diastolik ≥ 90 mmHg. Penelitian ini bertujuan untuk mengetahui: 1) Karakteristik responden (45-59 tahun) yaitu jenis kelamin, pendidikan terakhir responden, status pernikahan, pekerjaan suami/ istri, pendapatan responden dan besaran keluarga; (2) Asupan asam folat responden; (3) Asupan kalium responden; (4) Hipertensi pada usia pra lansia; (5) Hubungan asupan asam folat dengan hipertensi pada usia pra lansia; (6) Hubungan asupan kalium dengan hipertensi pada usia pra lansia; (7) Hubungan asupan asam folat dan kalium dengan hipertensi pada usia pra lansia. Tempat penelitian ini di Puskesmas Duri Kota. Waktu penelitian ini dimulai pada bulan Agustus-Oktober 2024. Populasi penelitian ini adalah seluruh pra lansia hipertensi di Puskesmas Duri Kota sebanyak 85 orang. Teknik pengambilan sampel menggunakan *total sampling*. Teknik pengumpulan data asupan asam folat dan kalium menggunakan kuisioner *Semi Quntitative Food Frequency Quistionnaire* (SQ-FFQ) dan pengukuran tekanan darah menggunakan alat *spghymomanometer*. Teknik analisis data menggunakan deskriptif data uji *rank spearman* dan analisis regresi linier berganda.

Hasil analisis uji Rank Spearman, terdapat hubungan negatif dan signifikan antara asupan asam folat dengan hipertensi dengan koefisien korelasi sebesar -0.572 dan p-value sebesar 0.000 pada taraf signifikan 0.05 artinya semakin baik asupan asam folat maka resiko mengalami hipertensi semakin rendah. Hasil analisis uji Rank Spearman, terdapat hubungan negatif dan signifikan antara asupan kalium dengan hipertensi dengan koefisien korelasi sebesar -0.499 dan p-value sebesar 0.000 pada taraf signifikan 0.05 artinya semakin baik asupan kalium maka resiko mengalami hipertensi semakin rendah. Hasil analisis regresi linier berganda menunjukkan terdapat hubungan yang signifikan antara asupan asam folat dan kalium dengan hipertensi. Persamaan yang diperoleh $Y = 167.160 + (-0.9970) X_1 + (1.129) X_2$. Nilai Koefisien regresi variabel asupan asam folat (X_1) yaitu sebesar -0.997 artinya asupan asam folat memiliki hubungan negatif dengan hipertensi. Nilai Koefisien regresi variabel asupan kalium (X_2) yaitu sebesar 1.129 artinya asupan kalium memiliki hubungan positif dengan hipertensi. Hasil penelitian menunjukkan bahwa asupan asam folat dan kalium berhubungan dengan hipertensi. Asupan kalium merupakan variabel yang paling dominan hubungannya dengan hipertensi karena nilai koefisien regresinya 1.129 lebih besar dari pada asupan asam folat dengan nilai koefisien regresi -0.997. Nilai *Adjusted R Square* yang diperoleh adalah sebesar 0.438 yang setelah dikalikan 100 persen menjadi 43.8 persen. Hal ini menunjukkan variabel asam folat dan kalium mampu menjelaskan 43.8 persen variabel hipertensi, sedangkan 56.2 persen sisanya dijelaskan faktor lain.

ABSTRACT

Debora Omega Ratu Manurung: Relationship between Folic Acid and Potassium Intake and Hypertension in Pre-Elderly at Duri Kota Health Center. Thesis. Nutrition Study Program, Department of Family Welfare Education, Faculty of Engineering, State University Of Medan, 2025.

Hypertension is a condition where systolic blood pressure is ≥ 140 mmHg and diastolic blood pressure is ≥ 90 mmHg. This study aims to determine: 1) Characteristics of respondents (45-59 years), namely gender, respondent's last education, marital status, husband/wife's occupation, respondent's income and family size; 2) Respondent's folic acid intake; 3) Respondent's potassium intake; 4) Hypertension in pre-elderly age; 5) Relationship between folic acid intake and hypertension in pre-elderly age; 6) Relationship between potassium intake and hypertension in pre-elderly age; 7) Relationship between folic acid and potassium intake and hypertension in pre-elderly age. The location of this research is at the Duri Kota Health Center. The time of this research began in August-October 2024. The population of this study was all pre-elderly hypertensive patients at the Duri Kota Health Center totaling 85 people. The sampling technique used total sampling. Data collection techniques for folate and potassium intake used the Semi Quantitative Food Frequency Questionnaire (SQ-FFQ) questionnaire and blood pressure measurements used a sphygmomanometer. Data analysis techniques used descriptive data Spearman rank test and multiple linear regression analysis.

The results of the Spearman Rank test analysis, there is a negative and significant relationship between folic acid intake and hypertension with a correlation coefficient of -0.572 and a p-value of 0.000 at a significance level of 0.05, meaning that the better the folic acid intake, the lower the risk of experiencing hypertension. The results of the Spearman Rank test analysis, there is a negative and significant relationship between potassium intake and hypertension with a correlation coefficient of -0.499 and a p-value of 0.000 at a significance level of 0.05, meaning that the better the potassium intake, the lower the risk of experiencing hypertension. The results of multiple linear regression analysis showed that there was a significant relationship between folic acid and potassium intake with hypertension. The equation obtained was $Y = 167.160 + (-0.9970) X1 + (1.129) X2$. The regression coefficient value of the folic acid intake variable ($X1$) was -0.997, meaning that folic acid intake had a negative relationship with hypertension. The regression coefficient value of the potassium intake variable ($X2$) was 1.129, meaning that potassium intake had a positive relationship with hypertension. The results showed that folic acid and potassium intake were related to hypertension. Potassium intake was the most dominant variable related to hypertension because the regression coefficient value of 1.129 was greater than folic acid intake with a regression coefficient value of -0.997. The Adjusted R Square value obtained was 0.438 which after being multiplied by 100 percent became 43.8 percent. This shows that the folic acid and potassium variables explain 43.8 percent of the hypertension variable, while 56.2 percent is explained by other factors.