ASSOCIATION OF GENETIC FACTORS, VEGETABLE INTAKE, AND SODIUM INTAKE WITH HYPERTENSION STAGES AMONG PATIENTS AT PUSKESMAS WRINGIN, BONDOWOSO

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ABSTRACT

Hypertension is a non-communicable disease with a high prevalence influenced by genetic factors and dietary patterns, particularly vegetable and sodium intake. This study aimed to analyze the relationship between genetic factors, vegetable intake, and sodium intake with the severity of hypertension in the Puskesmas Wringin. This study used an observational analytic design with a cross-sectional approach involving 107 hypertensive patients selected through purposive sampling. Data were collected through interviews using a respondent characteristics questionnaire and a semi-quantitative food frequency questionnaire (SQ-FFQ). Chi-Square test was used for data analysis. The results showed that the majority of respondents had a family history of hypertension (88.8%), inadequate vegetable intake (92.5%), and excessive sodium intake (80.4%). A higher proportion of respondents were classified as having stage 1 hypertension (54.2%). Bivariate analysis indicated no significant association between genetic factors (p=0.125) and vegetable intake (p=0.624) with hypertension severity. Sodium intake, however, was significantly associated with hypertension severity (p=0.024), indicating that excessive sodium intake increased the risk of more severe hypertension.. High sodium consumption was related to frequent intake of salty foods such as salted fish, boiled fish, meatballs, as part of cooking practices involving salt The study concluded that there is a significant association between sodium intake and increased severity of hypertension among patients with hypertension. Meanwhile, genetic factors and vegetable intake were not significantly related with the severity of hypertension. Therefore, limiting sodium intake needs to be a key consideration in efforts to control hypertension.

Keywords: *Hypertension, genetics, vegetable intake, sodium intake*