# *THE RELATIONSHIP BETWEEN DIABETIC NEUROPATHY AND BALANCE AND WALKING SPEED IN ELDERLY PEOPLE WITH TYPE II DIABETES MELLITUS AT THE KALIKOTES COMMUNITY HEALTH CENTER KLATEN*

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## *ABSTRACT*

***Background:*** *Diabetic neuropathy is a chronic complication that often occurs in people with diabetes mellitus. This condition occurs due to high blood glucose levels which cause peripheral nerve damage. Diabetic neuropathy is characterized by symptoms such as tingling, numbness and decreased sensation in the lower extremities which can affect balance and walking speed in sufferers.* ***Objective:*** *To determine the relationship between diabetic neuropathy and balance and walking speed in elderly people with type II diabetes mellitus at the Kalikotes Klaten Community Health Center.* ***Method:*** *This study used a quantitative observational design with a cross-sectional design. This study was conducted at the Kalikotes Klaten Community Health Center, with a sample of 32 respondents.* ***Results:*** *Spearman rank correlation test results indicate a significant relationship between diabetic neuropathy and balance (p-value = 0.010; p<0.05) as well as walking speed (p-value = 0.046; p<0.05).* ***Conclusion:*** *There is a relationship between diabetic neuropathy and balance and walking speed in elderly people with type II diabetes mellitus at the Kalikotes Klaten Community Health Center.*

***Keywords:*** *elderly, diabetic neuropathy, balance, gait speed*