

# PHYSICAL ACTIVITY, OBESITY, FAMILY HISTORY, AND THEIR ASSOCIATIONS WITH HYPERTENSION AMONG THE ELDERLY IN ACEH SINGKIL, ACEH

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## ABSTRACT

**Background:** Hypertension is an important global health challenge due to its high prevalence and resulting cardiovascular disease and chronic kidney disease. This study aimed to examine the associations of physical activity, obesity, family history, with hypertension among the elderly in Aceh Singkil, Aceh.

**Subjects and Method:** This was a case control study carried out in Aceh Singkil, Aceh. A sample of 132 elderly was selected for this study, consisting 66 elderly with hypertension and 66 elderly without hypertension. The dependent variable was hypertension. The independent variables were physical activity, obesity, and family history. Hypertension data was measured by sphygmomanometer. The other data were collected by questionnaire. The data were analyzed by a multiple logistic regression model.

**Results:** Hypertension was associated with physical inactivity (OR= 5.12; 95% CI= 2.41 to 10.86;  $p < 0.001$ ), obesity (OR= 3.30; 95% CI= 1.61 to 6.74;  $p < 0.001$ ), and family history (OR= 7.73; 95% CI= 3.56 to 16.78;  $p < 0.001$ ).

**Conclusion:** Physical inactivity, obesity, and family history, are associated with an increased risk of hypertension.

**Keywords:** physical activity, obesity, family history, hypertension

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