

THE ASSOCIATION BETWEEN FAMILY HISTORY, OBESITY, PHYSICAL ACTIVITY, AND HYPERTENSION, IN REPRODUCTIVE WOMEN: A NEW EVIDENCE FROM MEDAN, NORTH SUMATERA

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ABSTRACT

Background: World Health Organization reported that in 2013 the number of death attributable to hypertension complication was 9.4 million deaths. The prevalence of hypertension in Indonesian women (28.8%) tend to exceed that of men (22.8%). The prevalence of hypertension in North Sumatera in 2013 was (6.6%). This study aimed to estimate the association between family history, obesity, physical activity, and hypertension, in reproductive women in Medan, North Sumatera.

Subjects and Method: This was a case-control study conducted at community health center Kedai Durian, Medan, North Sumatera, from December 2017 to January 2018. A sample of 90 women aged 15-49 years was selected for this study, consisting of 45 women with hypertension and 45 women without hypertension. The dependent variable was hypertension. The independent variables were family history, obesity, and physical activity. Body Mass Index was measured by weight scale and microtoise. Blood pressure was measured by sphygmomanometer. Physical Activity Level and other variables were measured by questionnaire. The data were analyzed by a multiple logistic regression.

Results: The risk of hypertension in women of reproductive age increased with family history (OR= 8.86, 95% CI= 3.37 to 23.26, $p < 0.001$), obesity (OR= 5.50, 95% CI= 2.22 to 3.61; $p < 0.001$), and lack of physical activity (OR= 4.01; 95% CI = 1.67 to 9.67; $p = 0.002$).

Conclusion: Family history, obesity, and lack of physical activity increase the risk of hypertension in women of reproductive age.

Keywords: hypertension, family history, obesity, physical activity, women of reproductive age

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