HYPERTENSION, BODY MASS INDEX, AND THEIR ASSOCIATIONS WITH TYPE 2 DIABETES MELLITUS IN DELI SERDANG, NORTH SUMATERA

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ABSTRACT

**Background:** Diabetes mellitus (DM) is a major public health problem worldwide. Current global estimates indicate that this condition affects 415 million people and is set to escalate to 642 million by the year 2040. Type 2 DM is a metabolic disease that occurs due to abnormalities in insulin secretion. This study aimed to analyze the associations of hypertension and body mass index with type 2 DM in Deli Serdang, North Sumatera.

**Subjects and Methods:** This was a case-control study conducted in Deli Serdang, North Sumatera. A sample of 92 patients was selected for this study consisting 46 patients with type 2 DM and 46 patients without type 2 DM. The dependent variable was type 2 DM. The independent variables were hypertension and body mass index. Type 2 DM and hypertension data were obtained from the medical record. The other data were collected by questionnaire. The data were analyzed by multiple logistic regression.

**Results:** Type 2 DM was associated with hypertension (OR= 3.56; p= 0.004) and BMI ≥25 (OR= 5.66; p<0.001).

**Conclusion:** Type 2 DM is associated with hypertension and BMI ≥25.

**Keywords:** type 2 DM, hypertension, body mass index

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