

ABSTRACT

**THE CORRELATION BETWEEN THE RISK LEVEL OF
DIABETES MELLITUS USING *THE AUSTRALIAN TYPE 2
DIABETES RISK ASSESSMENT TOOL (AUSDRISK)*
QUESTIONNAIRE WITH RANDOM BLOOD GLUCOSE
TEST
(Study in Staffs of Universitas Airlangga)**

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Diabetes mellitus is a metabolic disorder due to lack of insulin or the inability of the body to use insulin efficiently. This studied targeted healthy people who have a high risk of developing type 2 diabetes mellitus. This study aimed to see the relationship between risk factors for diabetes mellitus (DM) with Random Blood Glucose test in staffs in Universitas Airlangga Surabaya.

This study was a cross-sectional study using simple random sampling. The risk level of DM was measured using the questionnaire The Australian Type 2 Diabetes Risk Assessment Tool (AUSDRISK). The AUSDRISK questionnaire predicts the risk for having type 2 DM in the next five years.

About 327 staffs from non health science faculties in Universitas Airlangga in Surabaya participated in this study. The results show that there was a positive correlation between age ($p=0,000$; $r=0,446$), waist circumference ($p=0,000$; $r=0,640$) with the total scores of AUSDRISK. The results were also showed significant difference between GDA ($p=0,000$), gender ($p=0,000$), family history of diabetes mellitus ($p=0,000$), high blood sugar ($p=0,000$), antihypertensive drugs ($p = 0,001$), smoking ($p=0,000$), physical activity ($p=0,000$) and vegetable fruit consumption level ($p=0,003$) with the total score of AUSDRISK. This study also showed that there was a positive correlation between random blood Glucose ($p=0,000$; $r=0,227$) with the total score of AUSDRISK.

In conclusion, the higher the total score obtained based on the AUSDRISK questionnaire, the higher the risk for developing type 2 diabetes mellitus in the next five years. The development of diabetes for the next five years can be predicted through screening using AUSDRISK.

Keywords: Type 2 Diabetes Mellitus, Risk Assessment, Screening, The Australian Type 2 Diabetes Risk Assessment Tool