

## ABSTRACT

### Screening for Type 2 Diabetes Mellitus in Visitors of Primary Health Care Centers in Surabaya with BMI Score Above Normal

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Diabetes mellitus is a chronic condition that occurs when the level of blood glucose increase because the body cannot produce enough sufficient insulin or use insulin ineffectively. This study targeted the visitors of primary health care centres in Surabaya who had *Body Mass Index* (BMI) above normal ( $\geq 25 \text{ kg/m}^2$ ) at the time of the study. This study aimed to identify the risk profile for developing type 2 diabetes mellitus in visitors of primary health care centres in Surabaya with BMI score above normal. This study was a cross-sectional study using the CANRISK (The Canadian Diabetes Risk Questionnaire). Respondents were recruited using accidental sampling method in several primary health care centres in Surabaya. About 121 respondents agreed to participate in this study. The results showed that 9,1% (11) respondents had low risk; 28,1% (34) had moderate risk; and 62,8% (76) had high risk for developing type 2 diabetes mellitus in the next 10 years. This study were also showed significant difference between age ( $p = 0.000$ ), gender ( $p = 0.000$ ), history of hypertension ( $p = 0.006$ ), and education ( $p = 0.002$ ) in the risk category for developing type 2 diabetes mellitus using the CANRISK questionnaire. There was no significant difference in the risk for developing type 2 diabetes mellitus and the for physical activity, fruit or vegetable consumption, history of high blood glucose, childbirth  $\geq 4,1 \text{ kg}$ , and family history of DM. In conclusion, respondents with moderate and high risk can improve lifestyle, increasing the frequency of exercise can reduce or normalize BMI and size of waist circumference. Choice of foods with low salt intake and access information related to type 2 DM prevention.

**Keywords:** Type 2 Diabetes Mellitus, The Canadian Diabetes Risk Questionnaire, Screening, BMI Score Above Normal