UNIVERSITI TEKNOLOGI MARA

ASSOCIATION OF DEPRESSION, ANXIETY AND STRESS ON INDICES OF METABOLIC SYNDROME AMONG ADULTS IN PUNCAK ALAM

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DECLARATION

I hereby declare that this submission thesis entitled Association of Depression, Anxiety and Stress on Indices of Metabolic Syndrome among Adults in Puncak Alam, Malaysia, is my own work and the best of my knowledge. This is the result of my research except as cited in the references. The thesis has not been accepted for any other degree and is not concurrently submitted in the candidature from other degree.

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ABSTRACT

Depression, anxiety or stress is the most common psychiatric disorder worldwide. The burden of diseases for this psychiatric disorder goes beyond functioning and quality of life and extends to somatic health. Commonly, the risk factors such as dyslipidemia, hypertension, and hyperglycemia are clustered together. This clustering of risk factors also known as metabolic syndrome. This study was conducted to see the association of depression on indices of metabolic syndrome. Apart from that, this study was done to see the association of anxiety on indices of metabolic syndrome. Moreover, this study also conducted to see the association of stress on indices of metabolic syndrome. This study was performed through cross sectional study design and conducted in Puncak Alam, Selangor, Malaysia. The method of selecting the sample is convenient sampling. The subjects in this study involved adults aged from 25 to 64 years old. In this research, the inclusion and exclusion criteria were decided which are subjects comprise from both man and women from Puncak Alam. Tools that used to do this research are demographic data questionnaire, Depression, Anxiety and Stress (DASS 21) questionnaire and International Physical Activity Questionnaire (IPAQ). In this study, Pearson correlation were used to analyze the relationship between those two variables. From the result obtained, systolic BP and diastolic BP were significantly correlated with depression. These result indicate that, within the total sample, those participants experiencing higher level of depression tend to have high systolic and diastolic blood pressure level. For anxiety, there is no correlation with the indices of metabolic syndrome. Within the total sample, systolic and diastolic blood pressure were negatively and significantly correlated with anxiety. These result indicates that, those participants with high stress level tend to have high systolic and diastolic blood pressure level.

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CHAPTER 1

INTRODUCTION

1.1 RESEARCH BACKGROUND

There are a few components of metabolic syndrome that identified by ATP III. These components are prothrombotic state, proinflammatory state, insulin resistance, raised blood pressure, atherogenic dyslipidemia and abdominal obesity. Based on ATP III, the elemental risk factors for CVD are physical inactivity, obesity (especially abdominal obesity) and atherogenic diet; the major risk factors are hypertension, cigarette smoking, low HDL cholesterol, elevated LDL cholesterol, cigarette smoking, family history of premature coronary heart disease (CHD), and aging. Apart from that, the emerging risk factors include elevated triglycerides, small LDL particles, glucose intolerance, insulin resistance, proinflammatory state and prothrombotic state (Canuto, Garcez, & Olinto, 2013).

The National Cholesterol Education Program adult Treatment Panel III (ATP IIII) reported the metabolic syndrome as a multiplex risk factor for cardiovascular disease (CVD) that need extra clinical attention. Most individuals who have CVD have multiple risk factors. Commonly, the risk factors such as dyslipidemia, hypertension, and hyperglycemia are clustered together. This clustering of risk factors also known as metabolic syndrome. Most of individual with this syndrome have insulin resistance, which can increased risk for type 2 diabetes.