

**A STUDY OF RISK FACTORS FOR CARDIOVASCULAR DISEASE IN PEOPLE  
IN A PROVINCE IN SOUTHERN PART OF THAILAND**

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SUKHONTHA SIRI Ph.D. (TROPICAL MEDICINE)**ABSTRACT**

Cardiovascular disease has become a major health problem in Thailand. Individuals with different ethnicities and religions have different cultures and lifestyles, which may eventually result in differences in the levels of cardiovascular risk factors. This cross-sectional study aimed to compare risk factors for cardiovascular disease between Islamic and non-Islamic Thai people living in the lower southern part of Thailand. Islamic and non-Islamic Thai adults aged 35 years or older who lived in Yaha district, Yala province, were randomly selected and invited to participate in the study, with the ratio of Islamic to non-Islamic participants being 2:1. Data were obtained from each participant by means of a self-administered questionnaire, physical examination and blood tests after overnight fasting. Comparisons of categorical variables between groups were carried out using the chi-square test. Continuous variables were compared using independent t-test or Mann-Whitney U test as appropriate.

Four hundred and five subjects, 270 Islamics and 135 non Islamics, participated in the study. Forty-six percent were male, and the median age of the participants was 52 years old (interquartile range 44 to 61). Subjects in the Islamic group had significantly higher proportion of diabetes mellitus compared to those in the non-Islamic group [37.4% vs. 23.7%, prevalence rate ratio (PRR) 1.57, 95% confidence interval (CI) of PRR 1.12 to 2.21,  $p = 0.006$ ]. Median waist circumference was also greater in the Islamic group than in the non-Islamic group in both sexes (87.0 cm vs. 84.5 cm in males,  $p = 0.011$ ; 85.0 cm vs. 80.0 cm in females,  $p = 0.028$ ). There were no statistically significant differences between the 2 groups with regards to systolic and diastolic blood pressures, presence of hypertension, fasting plasma glucose, lipid profiles, body mass index, and presence of the metabolic syndrome, levels of physical activities, smoking status, and presence of multiple risk factors.

In conclusion, Islamic Thai adults in the lower southern part of Thailand have higher prevalence of diabetes mellitus and greater waist circumference compared to non-Islamic counterparts. Whether these differences translate into differences in the risks of cardiovascular disease needs to be studied further.

**KEY WORDS: CARDIOVASCULAR DISEASE / CARDIOVASCULAR RISK  
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