RISK FACTORS FOR HYPERTENSION AMONG RURAL THAIS

Lwin-MM-Khin¹, Silawan Tassanee², Pacheun Oranut² and Boonshuyar Chaweewon³

¹Myanmar Medical Association, Yangon, Myanmar; ²Department of Community Health, ³Department of Biostatistics, Faculty of Public Health, Mahidol University, Bangkok, Thailand

Abstract. A community based case-control study was conducted to determine the risk factors for hypertension among a rural population in Nakhon Ratchasima Province, Thailand. Seventy-two subjects diagnosed with hypertension (BP≥140/ 90 mmHg) were randomly selected. Seventy-two controls with normal blood pressure (BP <120-80 mmHg) were also randomly selected from the same or nearest house to the subjects. Data collection was carried out in February 2010 using a structured questionnaire. Statistics used were percentages, arithmetic means, standard deviations, odds ratios (OR), adjusted odds ratios (aOR), confidence interval (95% CI) for the OR and logistic regression. After adjusting for the effect of other variables in the study, significant risk factors for hypertension were age ≥50 years old (aOR 5.67, 95% CI 1.98-16.24), education level of primary school or lower (aOR 8.09, 95% CI 2.17-30.20), occupation of farmer or unemployed (aOR 2.88, 95% CI 1.14-7.30), body mass index \ge 30.0 kg/m² (aOR 7.43, 95% CI 1.68-32.87), presence of high cholesterol (aOR 11.26, 95% CI 2.55-49.75), and having mild stress to high stress (aOR 5.33, 95% CI 1.45-19.61). Forty percent of the variation in the presence of hypertension is explained by the developed model for the above risk factors. These findings are useful for health education and health promotion program development in order to prevent hypertension among rural Thai populations.

Keywords: hypertension, risk factors, rural Thais

Correspondence: Silawan Tassanee, Department of Community Health, Faculty of Public Health, Mahidol University, 420/1 Ratchawithi

Road, Bangkok 10400, Thailand. E-mail: tsilawan@gmail.com