

Risk Factors of Known Hypercholesterolemia among Malaysians

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The aim of this study is to examine the odd ratios of modifiable and non-modifiable risk factors of known Hypercholesterolemia among individuals in Malaysia. A nationally representative secondary data consisting of 18,586 respondents was employed. Odds ratio with 95% confidence interval was estimated using binary logistic regression to identify the risk factors affecting the level odds of Known Hypercholesterolemia (HC) in Malaysia. From this study, significant predictors include modifiable risk factors on the odds of Known Hypercholesterolemia: physically inactive respondents (odds ratio [OR] = 1.160; 95% confidence interval [CI]=1.066-1.264), respondents with inadequate fruit and vegetables consumption (OR=1.195; 95% CI=1.007-1.418), unclassified drinkers (OR=1.261; 95% CI=1.045-1.523), ex-drinkers (OR=6.381; 95% CI=3.928-10.364) and current drinkers (OR=1.190; 95% CI=1.014-1.396), smoking status (current smokers OR=1.457, 95% CI:1.209-1.756), and underweight respondents (OR=2.678, 95% CI:2.401-2.987) and overweight respondents (OR=1.953, 95% CI:1.770-2.156). From the non-modifiable risk factors of this study, respondents with all education levels (unclassified: OR=1.895, 95% CI:1.648-2.180, no formal: OR=2.021, 95% CI:1.716-2.381, primary: OR=1.329, 95% CI: 1.052-1.679, secondary: OR=2.711, 95% CI:2.170-3.387), private employees (OR=1.435, 95% CI:1.209-1.702), household income earners include: RM1501-3000 (OR=1.400, 95% CI:1.203-1.630), RM3001-5000 (OR=1.335, 95% CI:1.144-1.559), RM5001-7000 (OR=1.138, 95% CI:1.012-1.280), Other Bumiputra (OR=1.223, 95% CI:1.052-1.421); Others (OR=1.161, 95% CI:1.032-1.305), females (OR=1.102, 95% CI:1.006-1.264) are found to be more likely to be known Hypercholesterolemia. However, married respondents (OR=0.482, 95% CI:0.377-0.617), widows (OR=0.500, 95% CI:0.423-0.590), obese respondents (OR=0.647, 95% CI:0.549-0.762), Chinese respondents (OR=0.711, 95% CI:0.569-0.888), home makers (OR=0.608, 95% CI:0.523-0.706), retirees (OR=0.386, 95% CI:0.335-0.446), all age groups (>65 years old OR=0.091, 95% CI:0.078-0.107 ; 55-64 years old OR=0.013, 95% CI:0.010-0.017; 45-54 years old OR=0.072, 95% CI:0.057-0.091; 35-44 years old OR=0.091, 95% CI:0.072-0.114; 25-34 years old OR=0.031, 95% CI:0.024-0.040; and 15-24 years old OR=0.068, 95% CI:0.052-0.088) were less likely to be known Hypercholesterolemia. It is suggested the implementation of prevention programme by the Government should tackle specific modifiable risk factors to address the prevalence issues on known Hypercholesterolemia among Malaysians.

Keywords: *Known Hypercholesterolemia, Modifiable Risk Factors, Non-Modifiable Risk Factors*