PATTERNS OF PHYSICAL ACTIVITY AND METABOLIC SYNDROME AMONG ADULT KOREANS: A CROSS SECTIOINAL STUDY

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Abstract. The purpose of this study was to determine whether leisure time physical activity (PA) affects risk for developing metabolic syndrome (MetS) among Korean adults. We studied 1,728 Korean adults over age 20 years who visited a public health promotion center in Seoul, Korea. All subjects completed an International Physical Activity Questionnaire, and were examined for MetS criteria as defined by National Cholesterol Education Program’s Adult Treatment Panel III criteria. The association between PA and MetS was assessed using multivariate logistic regression analysis. The odds ratios (95% confidence interval) for having MetS and engaging in vigorous PA, moderate PA or light PA (walking) compared with having MetS and not engaging in vigorous PA, moderate PA or light PA (walking) were 0.482 (0.322-0.721, \(p < 0.001\)), 0.547 (0.370-0.810, \(p = 0.003\)) and 0.482 (0.318-0.731, \(p < 0.001\)) for PA once a week; 0.763 (0.468-1.243, \(p = 0.277\)), 0.697 (0.419-1.160, \(p = 0.165\)) and 0.674 (0.403-1.128, \(p = 0.134\)) for PA twice a week; 0.449 (0.248-0.815, \(p = 0.008\)), 0.568 (0.338-0.954, \(p = 0.033\)) and 0.451 (0.260-0.780, \(p = 0.004\)) for PA 3 times a week; 0.321 (0.123-0.835, \(p = 0.020\)), 0.737 (0.362-1.502, \(p = 0.401\)) and 0.411 (0.185-0.916, \(p = 0.030\)) for PA 4 times a week; and 0.216 (0.064-0.727, \(p = 0.013\)), 0.390 (0.166-0.915, \(p = 0.031\)) and 0.318 (0.181-0.558, \(p < 0.001\)) for PA 5 or more times a week, respectively. These findings indicate vigorous PA, moderate PA and light PA may reduce the risk of MetS among Korean adults.

Keywords: physical activity, metabolic syndrome, Korean adults

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