

Prevalence of metabolic syndrome and cardiovascular factors associated with its component in the agricultural and fishing population

Chia-Ling Hsu¹, Chun-Chia Chen¹ and Tao-Hsin Tung^{1,2}

¹Faculty of Public Health, School of Medicine, Fu-Jen Catholic University, Taiwan

²Cheng Hsin General Hospital, Taiwan

Objectives: This study is conducted to explore the gender difference of prevalence of metabolic syndrome and cardiovascular factors associated with its component in the Chinese occupational population.

Methods: The study participants were conducted with a total of 6,693 (4101 males and 2592 females) healthy subjects voluntarily admitted to a teaching hospital for a physical check-up in 2010. Demographic and blood samples results were collected. The definition of metabolic syndrome is according to the criteria proposed by International Diabetes Federation in 2005.

Result: The mean age of study participants is 68.78±9.31 years. The prevalence of metabolic syndrome is 23.3% and female (25.8%) is significantly higher than male (21.7%) ($p<0.01$). Based on the components of the abnormal criteria of metabolic syndrome, the results show that the highest proportion is waist circumference, higher triglyceride, and fasting blood glucose (9.1%) in male and higher waist circumference, higher triglyceride, and higher total cholesterol (13.0%) in female. From the multiple logistic regression, gender difference is found in associated factors related to metabolic syndrome after adjustment for confounding factors. The abnormal waist circumference is the most significant risk factor related to metabolic syndrome both in the male (OR=1.20, 95%CI: 1.17-1.23) and in the female (OR=1.16, 95%CI: 1.14-1.19).

Conclusion: The prevalence of metabolic syndrome showed the gender difference in this study. Higher waist circumference is the most significant risk factor related to metabolic syndrome. In order to prevent the incident metabolic syndrome, to encourage this sub-population with the exercise habit, dietary improvement, and controlled central obesity is important.

Biography

Chia-Ling Hsu, is studying in Fu-Jen Catholic University of Institute of Public Health. She is 24 years old and her research interests include occupational epidemiology, Public Health and Environmental Health.

zxcv79586@gmail.com