

## The clinical investigation of association between metabolic syndrome and chronic kidney disease among elderly occupational population

Meng-Yen Lin<sup>1</sup> and Tao-Hsin Tung<sup>1,2</sup>

<sup>1</sup>Faculty of Public Health, School of Medicine, Fu-Jen Catholic University, Taiwan

<sup>2</sup>Cheng Hsin General Hospital, Taiwan

**Purpose:** We examined the relationship between the metabolic syndrome and risk of chronic kidney disease (CKD) in Taiwanese elderly occupational population.

**Methods:** A cross-sectional survey was conducted in a 3856 Taiwanese elderly aged over 65 years. The metabolic syndrome was defined as the presence of three or more of the following risk factors: elevated blood pressure, high density lipoprotein (HDL)-cholesterol, high triglycerides, elevated plasma glucose and abdominal obesity. CKD was defined as an estimated glomerular filtration rate <90 ml/min/1.73m<sup>2</sup>.

**Results:** The prevalence of CKD was 74.9%, 75.8%, 74.0%, 70.8%, and 68.5% in 1, 2, 3, and 4 or 5 metabolic components, respectively. The multivariate-adjusted odds ratios (95% confidence interval, CI) of CKD in participants with compared to those without the metabolic syndrome was 1.28 (95% CI: 1.08-1.51). Compared to participants without metabolic syndrome components, the multivariate-adjusted odds ratios of CKD were 1.12 (95%CI: 0.92-1.36), 1.31 (95%CI: 1.06-1.61), 1.44 (95%CI: 1.14-1.82) and 1.37 (95%CI: 1.04-1.80) for those with 1, 2, 3, and 4 or 5 metabolic components, respectively.

**Conclusions:** These findings suggest that the components of metabolic syndrome might increase the likelihood for CKD in this sub-population.

### Biography

Meng-Yen Lin currently studying in Fu Jen Catholic University, the Institute of Public Health, Health Promotion group. The research interests are occupational epidemiology, biostatistics and health promotion.

jajh10383@yahoo.com.tw