

# The effect of workload, musculoskeletal disorders, and other risk factors of metabolic syndrome among construction workers in Taiwan

Jia Shan Wu

Email: [ymliou@ym.edu.tw](mailto:ymliou@ym.edu.tw)

National Yang-Ming University, Taiwan

## Abstract

### Aim:

The top ten causes of death in Taiwan are listed in the top four in terms of cerebrovascular and cardiovascular diseases. However, in the past, the public rarely understood that it may be caused by work overload; The contribution of circulatory system diseases is 23%, and empirical epidemiological studies have shown that shifts, night work and long hours are related to the risk of many diseases.

### Method:

Perform health check data analysis, check items include height, weight, waist circumference, pulse, blood pressure, total cholesterol, high-density cholesterol, low-density cholesterol, triglycerides, fasting blood sugar, and "overwork scale" as workplace workers. The self-assessment tool for overwork issues includes six questions about "personal related overwork" and seven questions about "work-related overwork".

### Result:

The total number of cases is 99, 86 males and 13 females.

Height: male 171.3 cm (SD= 5.33), female 160.3 cm (SD= 6.07); weight, male 77.0 kg (SD=13.05), female 57.2 kg (SD=9.51); body mass index (BMI):

male is 26.1 (SD=4.2), which is overweight, female is 22.0 (SD= 3.02), which is within the standard range of posture

According to the indicators of metabolic syndrome diagnosis: Abdominal obesity, the overall waist circumference is greater than the standard of 31 people (37.3%), and all are male; blood pressure is greater than the standard (SBP $\geq$  130mmHg or DBP $\geq$  85mmHg), the overall blood pressure is 41 People (45.1%), of which 38 were men; fasting blood glucose, 23 of the total blood glucose abnormalities (29.1%), and all were men; triglycerides, 22 of the total abnormalities (25.6%), and all For men.

### Conclusion:

Healthy employees are the most precious assets of an enterprise. The enterprise should provide high-quality working environment, welfare and health promotion services, and be concerned about the healthy life and pressure of employees to improve the quality of work, efficiency and vitality, so that the enterprise can grow and develop continuously.