

## **"Metabolic Risk Factors and Associated Morbidities among Adult Urban People in Pyin Oo Lwin Township"**

Khin Moe Aung<sup>1</sup>, Myint Myint Khaing<sup>1</sup>, Nyein Nyein Thaung<sup>1</sup>, Nanda Ko<sup>1</sup>  
Aye Min Maw<sup>1</sup>, Myitzu Tin Oung<sup>1</sup>, Kyaw Thu<sup>2</sup>, Win Aung<sup>1</sup>

Department of Medical Research (Pyin Oo Lwin Branch)<sup>1</sup>  
Department of Medical Services<sup>2</sup>

Programme and Abstracts, 45<sup>th</sup> Myanmar Health Research Congress, p.16-17.

### **Abstract**

Metabolic syndrome is a cluster of risk factors for type 2 diabetes and cardiovascular disease, with insulin resistance proposed as a linking factor. It is common and is increasing in prevalence worldwide, largely attributed to increasing obesity and sedentary lifestyles, and now is both a public health and clinical problem. This community based cross-sectional descriptive study was conducted during 2015. The purpose of this study is to identify metabolic risk factors and associated morbidities among adult urban people in Pyin Oo Lwin Township. A total of 355 people, 94 men (26.5%) and 261 women (73.5%) were enrolled. Age distribution was from 18 to 85 years with mean of 49.98 (15.22) years. Metabolic risk factors were identified according to National Cholesterol Education Programme Adult Treatment Panel III (NCEP ATP III) guideline. In this study, central obesity was the highest component 145 subjects (40.8%) followed by elevated triglycerides 129 (36, 3%), elevated blood pressure 104 (29.3%), low HDL-cholesterols 85 (23.9%), and elevated fasting glucose in only 48 individuals (13.5%). The total prevalence of metabolic syndrome was 35.2% with 26.6% in men and 38.3% in women respectively. There were statistically significant associations above all five metabolic risk factors with metabolic syndrome (p value <0.001). Regarding its associated morbidities, ECG examinations showed normal 296 cases (83.4%) and abnormal in 59 cases (16.6%) but there was no significant difference between metabolic syndrome and abnormal ECG findings. In conclusion, this study recognizes the high prevalence rate of metabolic syndrome and can be depicted about the metabolic risks as the baseline data for implementation of further activities to reduce the incidence of non-communicable diseases.