

## CARDIOVASCULAR RISK FACTORS IN SUB-URBAN POPULATION IN MAKASSAR, INDONESIA

Nang Ei Ei Khaing<sup>2</sup>, Tai E Shyong<sup>2</sup>, Adam MS Fabiola<sup>1</sup>, John Adam<sup>1</sup>

<sup>1</sup>*Division of Endocrinology and Metabolism Department of Internal Medicine, Faculty of Medicine Hasanuddin University, , Indonesia,* <sup>2</sup>*Department of Endocrinology, National University of Singapore, , Singapore*

Free Paper 8, November 11, 2017, 2:15 PM - 3:15 PM

### Background

Cardiovascular disease is the leading cause of death worldwide, including Indonesia as one of developing country. Limited reports of population based study was reported from Indonesia. We report the cardiovascular risk factors in a sub-urban population in Makassar.

### Subjects and methods

Subjects were adults from Rappocini district Makassar, they were invited for interview, physical examinations, including blood pressure, weight-height, and waist circumference. After 12-h fasting, blood was taken for fasting plasma glucose, lipid profiles including LDL-cholesterol, HDL-cholesterol, triglycerides. All laboratory test were examined in the central laboratory PRODIA. Obesity if BMI > 25 kg/m<sup>2</sup>, and waist circumference female > 80 cm and male > 90 cm, hypertension BP >140/90 mmHg, diabetes was diagnosed fasting plasma glucose > 126 mg/dL, abnormal lipid profiles followed the NCEP-ATP III criteria.

### Results

During the study, 3502 subjects can be covered, age varied from 21 – 70 years. Obesity by waist circumference as well as BMI were the highest risk factor, 55.7% and 47.4% subsequently, high blood pressure 39.0%, followed by abnormal lipid profiles-LDL-chol 29.5%, low HDL-chol 13.8%, triglycerides 13.1% and diabetes mellitus only 9.1%.

### Conclusion

This study proved that even in sub-urban population, cardiovascular risk factors were increased , especially obesity, hypertension and high LDL-cholesterol.

**Key words:** CVD risk factors, sub-urban population