Urban Air Pollution and Cardiovascular Health

1:30-2:30 P.M
2012-06-25
Language: Chinese

Ta-Chen Su, MD, PhD
Attending Physician and Clinical Associate Professor,
Department of Internal Medicine, National Taiwan
University Hospital, National Taiwan University
College of Medicine

About the speaker

Dr. Su is a clinical associate professor at National Taiwan University College of Medicine (NTUCM) and Attending Physician (cardiologist) of Department of Internal Medicine, National Taiwan University Hospital. He graduated from Department of Public Health, NTUCM in 1983 and received the degree of Doctor of Medicine in National Cheng-Kung University College of Medicine in 1990. He gained Ph.D. degree in Occupational Health and Industrial Hygiene at NTU College of Public Health in 2005.

He has 18 years of experience of teaching and conducting research in cardiovascular disease, vascular biology, dyslipidemia, and occupational and environmental health. He joined the Chin-Shan Community Cardiovascular Cohort Study, the most famous prospective community-based epidemiological study in Taiwan since 1993. Since 2001, he joined the team of air pollution and health led by Prof. Chan Chang-Chuan and conducting a series of studies associated with cardiovascular effects of air pollution. As a physician scientist in cardiology, he devotes his career to study environmental cardiology.

About the lecture

Numerous epidemiological studies have consistently reported that ambient air pollution is associated with cardiovascular morbidity and mortality. The scientific statement of the American Heart Association proposed the plausible mechanisms of particulate matter air pollution exerting on the cardiovascular morbidities and mortalities, including the autonomic dysfunction, systemic inflammatory and oxidative stress, thrombosis and coagulation, vascular dysfunction, and elevated blood pressure.

Asian countries experiencing a rapid economic growth and a big socioeconomic transition during past decades, the major cities in Asia, particularly in China also suffered from air pollution from urbanization and motorization. The increasing cardiovascular morbidity and mortality has become a major concern of public health among Asian countries. Many premature cardiovascular deaths come from unhealthy lifestyle and diets; however, the environmental (air) pollution may play an important role in cardiovascular health. In this talk, I will present some new evidences of cardiovascular effects of air pollution in Taiwan.