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What is This?
Cardiovascular Diseases and the Work Environment

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The International Commission on Occupation Health, Scientific Committee on Cardiology in Occupational Health, organized the recent International Conference on the Work Environment and Cardiovascular Diseases on the theme “Total Prevention of Cardiovascular Disease—From Social, Organizational and Clinical Perspectives,” held in Tokyo, Japan, in March 2013. Worldwide, cardiovascular disease (CVD) is a pandemic and a significant public health problem. The prevalence of CVDs is increasing because of epidemiological transitions, increasing urbanization, and globalization. CVDs are the number one cause of death and disability globally: More people die annually from CVDs than from any other cause.¹² An estimated 17.3 million people died from CVDs in 2008, representing 30% of all global deaths.¹ Of these deaths, an estimated 7.3 million were due to coronary heart disease and 6.2 million were due to stroke.³ CVDs are responsible for 151 377 million disability-adjusted life years, of which 62 587 million are due to coronary heart disease and 46 591 million due to cerebrovascular disease.³⁴ More than 80% of the world’s deaths from CVDs occur in low- and middle-income countries as these populations are more exposed to the various risk factors leading to other noncommunicable diseases and not benefiting from prevention programs. They are less accessible to effective and equitable health care services.¹ Some 9.4 million deaths each year, or 16.5% of all deaths can be attributed to high blood pressure.⁵ This includes 51% of deaths due to strokes and 45% of deaths due to coronary heart disease.⁴ It is projected that the number of people who die from CVDs, mainly from heart disease and stroke, will increase to 23.3 million by 2030.¹²

The transformation of society and the work environment has led to the increase in CVDs. Stressful and unhealthy working conditions, precarious work, overcrowding, high workload demands, long working hours, machine-based labor that does not involve much physical activity and leisure-time physical inactivity, depression, and anxiety, all lead to CVDs, coronary heart diseases, obesity, and metabolic syndrome. Stress, job strain, and undesirable lifestyles are known triggers of coronary heart disease events among vulnerable individuals.⁶⁻¹⁴ Stress at work is a major public health risk and thus strategies and intervention for stress reduction should be made for workers’ health so as to improve their quality of life. In this issue of the journal, majority of the articles are related to CVDs, namely, obesity and overweight, social determinants of CVDs, systematic review on the relationship between active transport to work and school, and cardiovascular health. Most CVDs can be prevented by addressing behavioral risk factors, such as tobacco use, unhealthy diet and obesity, physical inactivity, high blood pressure, diabetes mellitus, and

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raised lipids.\textsuperscript{1,2} Cost-effective community-based interventions, such as health promotions, primary prevention interventions, and appropriate legislations exist for prevention and control of noncommunicable diseases, including CVDs.\textsuperscript{1} In dealing with the effects of psychosocial work-related factors on CVDs and in promoting healthy lifestyles and well-being of workers in this region, this involves a multisectoral and a multidisciplinary program. Furthermore, more comprehensive and integrated CVDs research is needed on the social determinants of health and consequences of CVDs related to the working environment.

References