

strategy should be designed so that all stages of the life cycle are targeted, including young children in schools and the prenatal period.

S35-3 CVD Prevention: Global Policy to Local Action

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The global epidemic of cardiovascular diseases (CVD) is rapidly advancing across the world, with the low and middle income countries (LMIC) experiencing an escalating public health threat. The Asian Pacific region too is witnessing the rise of CVD in many of its countries, as socio-demographic transitions are accompanied by epidemiologic and health transitions. The direction and determinants of the CVD epidemic in LMIC are broadly similar, even though the dimensions differ according to the present level of development. The determinants range from those that operate at the level of the individual (beliefs, behaviours, biology), at the level of the family and the community (cultural perceptions, socio-economic priorities and pathways of access to information and services) and at the level of the nation and the world (stage and speed of development, distributional issues of equity and demand-supply issues of trade). Whether tobacco or food products, trade and marketing policies influence individual behaviours. Similarly, the overall urban environment (design, transport) and the built environment of schools, worksites and public places impact upon the physical activity patterns of people. Policies at global and national level need to promote a social environment which is conducive to people making and maintaining healthy choices. Global experience shows that policies for tobacco control and promoting healthy diets are effective at the population level for impacting on individual behaviours. Simultaneously, empowerment of people through local community level interventions to enhance knowledge, motivation and skills of individuals as well as promote concerted group action. Health services too should be strengthened to provide cost-effective clinical care at all levels while increasing the outreach of preventive services.

S35-4 CVD Trends in Japan and its Future Perspectives

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Cardiovascular diseases in Japan are characterized by higher incidence of stroke and relatively lower incidence of coronary heart disease while relationships of cardiovascular risk factors (hypertension, smoking, diabetes and hypercholesterolemia) to cardiovascular incidence and mortality are similar.

Changes in stroke mortality among Japanese were striking. The mortality fell to one fifth of the highest mortality. At the same period, mortality from coronary heart diseases has also decreased significantly. These declines in mortality from cardiovascular diseases could explain half of improvement of life expectancy among Japanese.

However, recent analysis of Vital Statistics of Japan shows both decrease in stroke and coronary heart disease mortality has slowed recently. Mortality from coronary heart disease has turned to increase in middle-aged population of urban area of Japan. Trends in cardiovascular risk factors show recent increase of blood pressure, obesity and saturated fat intakes among these population and could account for the increase in advance of those changes of the rest of Japan. Nationwide activity of prevention of cardiovascular diseases should be focused on the control

of obesity, saturated fat intake and salt intake. For the prevention, establishing monitoring system of cardiovascular incidence is also important to detect the changes.

S35-5 CVD Trends in Korea and Future Perspectives

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Cardiovascular disease (CVD) was the leading cause of death worldwide in 2004. It is a major health problem in Korea and in 2007, CVD accounted for 23.5% of all deaths in the country. The pattern of the disease has changed with the epidemiologic transition during the past 20 years. Mortality changes in coronary heart disease in Korea are consistent with the changes that occur in the transition from the age of receding pandemics to the age of degenerative and man-made diseases. Coronary heart disease mortality has been declining in developed countries; however, age-adjusted mortality from the disease has increased significantly in Korea. During this period, age-adjusted mortality from hemorrhagic stroke decreased but mortality from ischemic stroke increased markedly.

Changes in risk factors for CVD in Korea observed during the same period were a decrease in hypertension prevalence (although still present at a high level), increase in serum total cholesterol level, and high (although decreasing) prevalence of cigarette smoking. CVD mortality change was closely associated with the change in CVD risk factors. An epidemic of coronary heart disease is expected in Korea and in order to avert this ongoing threat, prevention and treatment of modifiable risk factors must become a high health priority.

Symposium 36. Cardiac Rehabilitation – Cardiac Rehabilitation in Asian Pacific Region: Current Status and Future Perspective

S36-1 Use of Cardiac Rehabilitation in Japan: Current Status and Future Perspective

Yoichi Goto. *Department of Cardiovascular Medicine, National Cardiovascular Center, Suita, Japan*

(1) Implementation of Cardiac Rehabilitation in Japan: A nation-wide survey on the implementation of cardiac rehabilitation (CR) for patients with acute myocardial infarction (AMI) in Japan revealed that, in 526 cardiology-training hospitals authorized by the Japanese Circulation Society, the rate of implementation of an outpatient CR program was extremely low (9%), in contrast to the very high rate of implementation of emergency percutaneous coronary intervention (PCI; 92%).

(2) Efficacy of post-AMI Cardiac Rehabilitation in the Primary PCI Era: A multi-center retrospective study in 673 patients after AMI revealed that, compared with non-participants in a 3-month recovery phase CR program (Non-CR group, n=286), participants (CR group, n=387) had greater improvements in peak VO₂ and the coronary risk factor profiles and better event-free survival (admission due to unstable angina/AMI), despite the similar baseline clinical background.

(3) Future Perspective of Cardiac Rehabilitation: Even in the era of primary PCI for AMI, comprehensive CR programs have an important role as a secondary prevention program. In addition, CR programs are expected as "a disease management program" for patients with multiple chronic diseases such as heart failure and diabetes. Urgent efforts should be made to improve the marked underutilization of CR in Japan.