

Plenary Lecture

Cardiovascular Prevention: The Present And The Future

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Abstract

Cardiovascular disease (CVD) prevention is defined as a coordinated set of actions, at the population level or targeted at an individual, that are aimed at eliminating or minimizing the impact of CVDs and their related disabilities.^{1,2} In apparently healthy people, CVD risk is usually the product of several risk factors. At any given cholesterol or blood pressure (BP) level, risk may vary tenfold depending on the presence of other risk factors. Risk is even higher in those with established disease. Better control of risk factors, enhanced diagnostic techniques and improved medical therapies have all substantially decreased the mortality of CVD in developed countries. However, coronary artery disease (CAD) and other forms of atherosclerotic CVD are projected to remain the leading cause of death by 2030 and we face a plenty of challenges if the outcomes of CVD are to be further improved.³

As a matter of fact, a substantial fraction of high-risk subjects do not reach treatment goals for important risk factors is one of these challenges. At the same time, there is also a non-negotiable fraction of 'concealed' high-risk subjects who are not detected by current risk algorithms and diagnostic modalities. In recent years, we have started to rapidly increase our knowledge of the framework of common genetics underlying CVD in population. In conjunction with modern diagnostics and therapeutic options, this new genetic knowledge may provide a valuable tool for further improvements in CVD prevention.³

Prevention of CVD, either by implementation of lifestyle changes or use of medication is cost effective in many scenarios, including population-based approaches and actions directed at high-risk subjects. Cost-effectiveness depends on several factors, including baseline CV risk, cost of drugs or other intervention, reimbursement procedures and implementation of preventive strategies.¹

References:

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