

Worksite Lifestyle Intervention to Reduce Cardiac Risk



Valentin Fuster, MD, PhD, Director of Mount Sinai Heart and Physician-in-Chief of The Mount Sinai Hospital will be undertaking a three year study to determine the effects of a workplace-based lifestyle intervention on cardiovascular disease.

The TANSNIP-PESA (Trans-Atlantic Network to Study Stepwise Noninvasive imaging as a Tool for Cardiovascular Prognosis & Prevention-Progression of Early Subclinical Atherosclerosis) study will evaluate whether such an intervention will result in a reduction in the prevalence of cardiovascular disease risk factors that are related to lifestyle. The WHO and the EU have already stressed the importance of implementing Worksite Health Promotion programmes to encourage healthy lifestyle behaviours, both during and after work hours. Currently, Mount Sinai ranks No. 7 in the nation according to the U.S. News & World Report's list of Best Hospitals.

"Cardiovascular disease is the leading cause of death worldwide and early prevention is important for health gains and for cost reduction. I fully expect that individual awareness of cardiovascular disease based on imaging, accompanied by a comprehensive three-year work-based lifestyle intervention, will lead to a reduction in the prevalence of CV risk factors related to lifestyle," said Dr. Fuster.

The study will comprise of 40 to 60 years old employees from a Spanish corporation. The study population will be divided into two groups - one comprising of employees with high imaging-defined CV risk and the other comprising of low imaging-defined CV risk. Participants will randomly receive either the three year worksite lifestyle intervention or standard occupational care.

Each participant in the workplace-based lifestyle intervention program will receive 12 personalised lifesytle counselling sessions over a three-year period. They will also receive a Fitbit personal fitness monitor to monitor their physical activity and an Ergotron sit-to-stand station. Data will be collected at baseline, year one, year two and year three.

The analysis will be based on the newly developed FUSTER-BEWAT score and will measure blood pressure, physical activity, sedentary behaviour, body mass index, fruit and vegetable consumption and smoking. In addition, secondary outcomes such in lifestyle, smoking, body weight, diet, vitality and quality of life, and risk factor profiles, as well as changes in blood biomarkers, and work-related outcomes such as work productivity and absenteeism will also be measured.

See Also: Walking Faster, Longer Linked to Significant Cardiovascular Benefits

The study is based on the hypothesis that greater level of compliance will be found in the group with high imaging-defined CV risk as compared to the low imaging-defined CV risk. Cost-effectiveness of the intervention will also be compared with standard care.

This is the first of four studies that will be part of the TANSNIP Programme and are designed to understand atherosclerosis in different populations at different levels of risk and in different settings. Other studies include TANSNIP-H2H (heart to heart), which includes older patients and employs cutting-edge technology and cognitive dysfunction; TANSNIP-BioImage, which explores atherosclerosis progression in middle-aged people in Chicago and Florida; and TANSNIP-Genomics, which examines genomics, proteomics and metabolomics across the populations of the other three TANSNIP studies. TANSNIP seeks to develop lifestyle-changing tools based on non-invasive imaging results of subclinical atherosclerosis presence.

Source: Mount Sinai Hospital

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