

Prevention: A Heart Health Imperative

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Cardiovascular disease (CVD) is the number-one killer and major cause of permanent disability worldwide.

In the United States alone, one in three American adults – 80 million people – live with some form of this deadly disease. In 2009, an estimated \$475 billion will be spent on CVD treatment and related lost productivity. Treatment alone is not the answer, as the cost of care is steadily increasing as a result of insufficient preventive action.

In the US, the trends tell the story. Since the 1980s, the prevalence of overweight and obesity among our nation's children and adolescents has more than doubled, to about one-third today. Nearly one-quarter of our high school students smoke, and two-thirds do not exercise at recommended levels. Initiatives are urgently needed to reverse this tide and tackle the growing burden of CVD.

In fact, CVD can start quietly in children as young as age three and progress slowly into adulthood. Smoking, high blood pressure, blood sugar and cholesterol, and being overweight put people at risk. However, these factors stem from behaviors that can be managed.

The mandate for patient care must be expanded to include prevention. Policy makers and health care communities play a major role in changing public attitudes through implementation of health-promoting measures, including diet, physical activity and tobacco control. The Food and Drug Administration's long-overdue authority to regulate tobacco products is a victory for CVD prevention. We need equally strong, pervasive protections against the other risk factors – and for all age groups.

Cost-effective screening and treatment programs,

including education for CVD risk reduction, are critical both in the US and abroad. In Rwanda, for example, the Millennium Villages Project Cardiovascular Disease Initiative is developing a protocol to screen all patients at local health clinics for six risk factors: smoking, blood pressure, blood sugar, cholesterol, abdominal circumference, and physical activity.

Children between the ages of three and eight are especially receptive to learning lifelong heart-healthy habits. In Bogota, Colombia, we have teamed up with Sesame Workshop to create culturally specific Muppet segments that focus on nutrition, fitness, and health education. After only one year, children involved demonstrated increased awareness of health-promoting behaviors.

A program like this could benefit high-risk populations in metropolitan areas such as New York City where two of five children

are overweight or obese, including nearly a quarter of kindergarteners.

For those with a history of heart attacks, the polypill is a three-in-one drug in development that will increase patient compliance and might reduce medication cost to as little as \$2 per month.

Other measures to advance heart health include the use of electronic health records that are programmed to assess every patient's cardiovascular risk profile in all primary care settings.

Currently, the vast majority of dollars are spent treating rather than preventing CVD. Instead, through simple, low-cost efforts, we could significantly reduce the prevalence and burden of this debilitating disease and save money and lives.

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