

VITAL SIGNS

Perspectives of the president of APHA

Family history: An important new public health strategy

THIS month I'd like to share my thoughts on what I regard as a potentially significant development in chronic disease prevention strategy and public health practice: Family history.

Why potentially significant? Because it promises to be important as an adjunct to clinical practice, in targeting public health interventions, in focusing community health promotion efforts and improving health literacy and consumer empowerment.

It's been known for years that people who have close relatives with heart disease, diabetes, cancer and other diseases are more likely to develop those diseases themselves. The number and familial proximity of affected relatives and their ages at disease onset also affect the risk. Genetic susceptibility to these diseases is largely the result of multiple genes interacting with multiple environmental factors.

It's also clear that family history is underutilized in preventive medicine and public health practice.

Family history is more than genetics. It also reflects the consequences of inherited genetic susceptibilities, shared environments, shared cultures and common behaviors. All these factors are important in estimating disease risk from both patient and population perspectives.

On a community level, people need to know that family history affects risk, and that risk is amplified by modifiable behaviors and lifestyle choices.

On the patient level, more specific applications are being developed. For example, the Centers for Disease Control and Prevention, in collaboration with the National Institutes of Health and other partners, is developing a tool for the use of family history information in assessing risk for common diseases. The tool is being designed

to support risk awareness, early detection and other prevention strategies.

A test version of the tool should be available early next year. The prototype tool covers heart disease, stroke and diabetes as well as breast, ovarian and colorectal cancer. Additional diseases will be added.

Patients will be able to use the tool in a provider's office or at home before a medical consultation. The tool includes algorithms in the software that interpret the data and provide a brief synopsis of disease risk and suggestions for follow-up.

Patients and their providers can then discuss the implications of family history information and keep it updated. People at average risk should be encouraged to adhere to standard public health recommendations for maintaining good health. People with an increased risk could be given personalized prevention recommendations such as lifestyle changes or early detection instructions. People at high risk could be referred for consultation with a geneticist or other appropriate specialist.

We must all begin thinking about how family history strategies will complement our chronic disease prevention and control efforts.

Look for a major initiative on this subject from the U.S. Department of Health and Human Services later this year. In the meantime, more information is available online at www.cdc.gov/genomics/info/perspectives/famhistr.htm. ■

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CDC Prevention Research Centers turn 20 Researchers sharing prevention lessons with their communities

HEALTH RESEARCHERS around the country are taking an active role in preventing disease and improving health in their communities, thanks to a national program that serves as a stimulus for such efforts.

From teaching school kids about nutrition to engaging seniors in physical activity, work conducted through the Prevention Research Centers Program at the Centers for Disease Control and Prevention is changing the way Americans lead their lives and take care of their health.

The program, headquartered at CDC's National Center for Chronic Disease Prevention and Health Promotion, funds Prevention Research Centers at 28 U.S. universities. First funded by Congress in 1984, the program is celebrating its 20th year of operation.

About 500 studies and projects are currently being conducted via the centers, focusing on issues such as asthma, cancer, complementary medicine, HIV/AIDS, school health, job safety, nutrition, oral health and tobacco control.

To ensure that their work does more than gather dust on a library shelf, researchers in the Prevention Research Centers Program work directly with their communities to find out what areas of prevention need to be addressed. They then design programs that target the issues, test them and track their progress.

A strength of the program is that researchers at the centers have strong ties to their communities, working closely with residents, advocates and other health professionals, according to Eduardo Simoes, MD, MPH, MSc, director of the CDC program.

"In order to have long-term results in a community that will make a difference, you have to involve a cadre of professionals," Simoes said.

The Prevention Research Centers Program has achieved far-reaching results, noted Simoes.

In Seattle, for example, an exercise program developed for seniors through

the University of Washington's Health Promotion Research Center has been such a success that it was named as an exemplary program by the National Council on Aging in 2003 and has been replicated in seven states. The program has even been translated into Chinese and is scheduled for launch by China's Ministry of Health.

Developed in the 1990s, the Lifestyle Fitness Program works to get seniors physically active, improve balance and maintain flexibility. A second program called the Health Enhancement Program has also benefited seniors.

Researchers at the Washington Health Promotion Research Center continue to monitor the progress of the programs and are now working on studies and projects addressing depression among seniors, according to APHA member James LoGerfo, MD, MPH, the center's principal investigator and a professor of medicine and health services.

In their work at the center, researchers keep close ties with community partners, which is key to creating programs that are sustainable in the long-run, LoGerfo said. The Lifetime Fitness Program, for example, is coordinated by Senior Services of Seattle/

King County, Group Health Cooperative and the Health Promotion Research Center.

"If you want to make meaningful change, you have to have strong community ownership in the project," he said.

Among the many other successful programs being carried out around the country as a result of CDC's Prevention Research Centers Program is a Boston-based middle school curriculum that addresses childhood obesity. Developed through Harvard University's Prevention Research Center, the Planet Health curriculum works to increase physical activity and consumption of fruits and vegetables. The curriculum, which has shown measurable results, has been purchased by groups in 48 states and 20 countries.

Additional projects that have arisen from the Prevention Research Centers Program include a Texas childhood physical activity program that has been expanded to multiple states, a West Virginia tobacco program that reduces smoking among teens and a Missouri program that encourages communities to address chronic disease. In each of the programs, researchers have been able to track results and show that the interventions work.

"These are really winning programs," Simoes said.

For information about CDC's Prevention Research Centers Program, visit www.cdc.gov/prc or e-mail ccdinfo@cdc.gov. For more on programs at the University of Washington, visit <http://depts.washington.edu/hprc>. ■

— Michele Lata



Photo by Chris Arredondo, courtesy Senior Wellness Program

A participant in the Lifetime Fitness Program gets a workout at Seattle's Central Area Senior Center in July 2002.