Psychologist cites effective programs that help promote healthful lifestyles

By JANET BASU

There is ample evidence that changes in lifestyle and personal habits can enhance people's health. Programs that promote healthy habits and prevent disease ought to mean a healthier population, with reduced costs for health care. But there are two sets of obstacles to changing the health habits of large numbers of people, Stanford psychologist Albert Bandura said in a keynote address at the annual meeting of the Society of Behavioral Medicine in San Diego, Calif., on Thursday, March 23.

One set of obstacles is political and societal. "The quality of health of a nation is a social matter, not just a personal one "Bandura said. "It requires changing the practices of social systems that have detrimental effects on health."

Large-scale changes are essential but often slow in coming, he said, but the encouraging news is that people don't need to wait for leaders at the top to act. There are many ways that a local community can change its people's health for the better.

As health and behavior experts work to develop new programs to meet that goal, though, they have created a different sort of obstacle – a proliferation of theories about what motivates people to change.

Bandura, a professor of psychology at Stanford University, is past president of the American Psychological Association. In a wide-ranging critique, he told his audience – including many of the experts who have developed those theories and put them to use – that most models are more concerned with predicting health habits than changing them. Many also have become unnecessarily complex and redundant, he said. "We are in the era of cafeteria-style theorizing. Constructs are plucked from divergent theories and strung together in the name of theoretical integration."

Bandura said it is important to base a program on knowledge about what motivates and enables people to change. Traditional biomedical approaches to promoting health, where a doctor simply tells a patient, "You should quit smoking," or "You real-

'School-based models of health promotion should operate in concert with the home, community and the society at large,' Bandura said.

ly ought to exercise more," do not, work for most people.

"Health promotion and risk reduction programs are often structured in ways that are costly, cumbersome and minimally effective," he said. "The net result is minimal prevention and costly remediation."

Programs that work

Bandura gave several examples of health promotion programs that do work, because they are based on a solid understanding of change, and because they support individuals in making changes.

A solid health-promotion theory, he said, should be based on knowledge about self-regulation: why people acquire harmful health habits, how those habits operate, and how to modify them to enhance human health. "The variables that form the prediction model should inform the intervention model," he said.



Psychology Professor Albert Bandura calls for a comprehensive approach to mounting social and policy health initiatives.

One good example is social cognitive theory which "provides guidelines on how to structure goals and incentive systems to heighten motivation for personal change. It supplies a body of knowledge on how to build resilience to the demoralizing effects of difficulties and setbacks."

Among Bandura's contributions to the theory of social change has been the concept of self-efficacy. People's beliefs about their capabilities influence almost every aspect of behavior change, he said, beginning with their willingness to acquire knowledge about health.

Beliefs about how much individuals can achieve by their own efforts will influence whether they even consider changing health habits, whether they enlist the motivation and perseverance to succeed, how well they maintain the habit changes they have achieved, their vulnerability to relapse and their success in restoring control after a setback.

As an example of health promotion projects using principles from social cognitive and self-efficacy theories, Bandura described a self-management program developed at Stanford Medical Center for patients with chronic, disabling arthritis.

Pioneered by researcher Kate Lorig and rheumatologist Dr. Halstead Holman, the program is centered around group meetings where people with arthritis learn from others who have the disease how to monitor and evaluate fluctuations in their physical condition. Patients learn to reduce pain and to enhance their level and quality of functioning, to exercise some control over their physical condition.

In a four-year follow-up, patients in the self-management program experienced increased efficacy to manage their condition, reduced pain and a slower biological progression of their disease, Bandura said. "They also decreased their use of medical services by 45 percent over the four-year period. These changes represent huge reductions in health costs, with large health benefits."

Another example is an individualized health promotion system tested at Stanford's Center for Research in Disease Prevention. In this "self-regulatory" system, a single implementer uses a computer to track the progress of hundreds of individuals as they set interim goals for exercise, nutrition change and smoking cessation.

The computer schedules mailings of detailed guides about

how to meet new sets of goals, and how to surmount difficulties. With mailed responses from participants, telephone follow-up from the implementer, and periodic clinical checkups, the participants have an individualized, self-regulatory health promotion system.

"It provides them with continuing personalized guidance and informative feedback that enables them to exercise considerable control over their own change," Bandura said.

In a study of 1,000 post-coronary patients, the self-regulatory system helped participants lower dietary fat, improve their cholesterol ratio and increase their cardiovascular capacity – lowering their risk factors for another heart attack significantly more than patients receiving standard medical care, he said.

Society's responsibilities

Americans need to broaden their perspective on disease prevention, Bandura said. "Many health habits are deeply embedded in people's social lives. The newest generation of interventions requires an expanded social perspective to human adaptation and change. Because of our individualistic bias, our knowledge base and models for effecting social change are stunted."

The most successful treatments for health problems like alcoholism, drug abuse and preventing the spread of HIV have been based in local communities or self-help groups. But success in one city is not often translated to the next problem site, he said.

In the medical field, new knowledge is quickly translated into marketable drugs and devices, Bandura said, but behavior change is not as easy to spread. "In the psychosocial field, we have no social mechanisms for diffusing effective programs."

The logical place to start would be school-based health promotion efforts that could raise children on good health habits and teach them how to resist bad ones. Such programs, however, will not work if they are simply dumped on the schools as another responsibility, he said.

"We need a national policy of commitment to children's health," Bandura said. "A serious commitment must provide the personnel and the resources needed to foster the health of our youth... school-based models of health promotion should operate in concert with the home, community and the society at large."

Self-efficacy has a role in this social approach to health. Bandura said that a colleague had linked self-efficacy with self-indulgence, dubbing it "the California self." He joked that his friend "must have written this during a miserable Philadelphia winter, with visions of bacchanalian Californians, frolicking amidst the balmy palms.

"Contrary to this view, personal efficacy contributes just as importantly to group-directedness as to self-directedness," he said. "A strong sense of personal efficacy is vital for success regardless of whether it is achieved individually or by people working together. A comprehensive approach to health must provide people with the knowledge, skills and sense of collective efficacy to mount social and policy initiatives that affect human health."

He cited the collective actions that led to local laws in California and across the nation, requiring smoke-free workplaces and smoke-free restaurants. At the same time, lawmakers under the influence of the tobacco industry were fending off state and federal regulation of tobacco products.

The smoking ordinances are an example of the type of successful local action that will be needed more in the future, he said. "With lobbyists and gridlock ruling our central systems, the social battles over health protection will shift increasingly to local levels."

"We do not lack sound policy prescriptions. What is lacking is the collective efficacy to realize them. All too often, good public policy means self-jeopardizing politics for heavily-lobbied lawmakers."

Another successful community self-help program, in an impoverished community in Texas, enlisted the media, churches, schools and neighborhood leaders to reduce infant mortality resulting from unsanitary conditions.

The residents learned to install a plumbing system, sanitary sewage facilities and refuse storage. They were taught how to secure the financing needed from local and government sources. "This enabling self-help program greatly improved sanitation and markedly reduced infant mortality," Bandura said.

"Achievement of structural changes is a slow, arduous process," Bandura said. Until such changes are achieved, he said, "people need to improve the life circumstances over which they command some control. We need to develop organizing principles and implementation models on how best to enable people to work together to change their lives for the better."