The Prevention Challenge And Opportunity

A former surgeon general renews his prescription for the American people.

by David Satcher

ABSTRACT: In the United States, more money is spent on treating diseases and their complications than on preventing them in the first place. Prevention is both undervalued and poorly supported in our health system. In this Perspective I discuss how the McKinlay model can be used to illustrate the three levels at which we need to increase our investment in prevention. I recognize the many challenges in implementing programs of prevention, but I also note that these programs represent opportunities to improve health, prevent unnecessary pain and suffering, and, in time, develop a health system that is balanced and affordable. [Health Affairs 25, no. 4 (2006): 1009–1011; 10.1377/hlthaff.25.4.1009]

We have all heard that “an ounce of prevention is worth a pound of cure.” However, during my tenure as director of the Centers for Disease Control and Prevention (CDC), we would often add to that, “An ounce of prevention is a TON of hard work.”

Prevention is indeed hard work. It is undervalued and poorly supported in our health system. We spend well over 90 percent of our national health budget treating diseases and complications—many of which could have been prevented in the first place.1

During the time that I served as surgeon general and assistant secretary for health, I had the opportunity to represent the United States as a lead delegate to the World Health Assembly for several years. In 2000 the World Health Organization (WHO) released a much-heralded report on “health system efficiency.”2

It pointed out that when compared with 189 other countries, the United States was ranked thirty-seventh overall in health system efficiency, primarily for two reasons. First, more than forty-eight million Americans were uninsured, and many more were underinsured and left out of the system for various reasons. Second, our spending lacked balance with population-based prevention (which is less than 2 percent of our health budget).3

There are three levels at which the United States needs to increase its investment in prevention. They follow closely the McKinlay model developed for child nutrition and are labeled downstream, midstream, and upstream.4

Downstream, the focus is on the individual and his or her lifestyle or behavior. Regular physical activity, good nutrition, and compliance with immunization schedules are empha-
sized here, as well as the importance of avoiding toxins such as tobacco and excessive alcohol. Here we have the challenge of educating and motivating people to achieve healthy lifestyles and of cooperating with the program of disease prevention. Changing individual behavior is never easy; it remains one of the greatest challenges to medicine and public health.

The midstream focus is on community and institutions within communities. The availability of safe streets; walking and biking trails; and safe, well-equipped parks is critical for prevention. Schools are urged to provide physical education in grades K–12 and to educate and model good nutrition. Environments free of toxins are especially important for developing children. Positive social environments that, among other things, give children hope for the future as opposed to hopelessness are critical. The availability of supermarkets with affordable fresh fruits and vegetables is equally important. The challenge here is that many communities do not have resources to make available safe streets with sidewalks, walking and biking trails, or even well-kept public parks.

Upstream is where policies that support prevention must be made. School boards and legislators can mandate physical education in grades K–12 and limit vending machines at schools to healthy foods or at least a balance of foods. The U.S. Department of Agriculture (USDA) can require schools that participate in federal food programs to make available healthy foods beginning with the breakfast program. Those same schools can be required to create programs to help children to develop lifetime habits of physical activity and good nutrition.

Last year Congress passed legislation requiring all school districts receiving federal funds to have wellness policies in place by the end of this academic year. At the policy level, there are many other issues that compete for time, attention, and resources. Well-intentioned school boards might be reluctant to endorse new initiatives for fear of taking resources away from others. Also, some people are still unaware of the relationship between physical fitness and academic performance.

There is a growing urgency for more emphasis on prevention for children and adults. The burden of chronic disease is increasingly making the U.S. health system unaffordable and causing much unnecessary pain and suffering. Also, the epidemic of overweight and obesity threatens to undo much of the progress we made in controlling cardiovascular disease, diabetes, and cancer in the last half of the twentieth century.

In 1999, while surgeon general, I developed a “Surgeon General’s Prescription for the American People” and distributed it wherever I traveled during my tenure; I continue to do so since leaving government. The “Surgeon General’s Prescription” involves no medication but nevertheless required approval by the Food and Drug Administration (FDA) to avoid its misuse. My prescription includes the following four recommendations:

1. Moderate physical activity (for example, walking, jogging, swimming, aerobic dancing, and rowing) at least thirty minutes per day, five days a week. The benefits of regular physical activity are tremendous, including reducing deaths from cardiovascular disease by 50 percent and the onset of diabetes by almost 60 percent.7

2. At least five servings of fruits and vegetables per day, as a major ingredient of good nutrition. Again, the benefits are well documented despite continuing debate in some circles about what constitutes good nutrition.

3. The avoidance of toxins with a focus on tobacco, the abuse of alcohol, and illicit drugs. Smoking is still the leading cause of death in the schools.9
the United States, killing in excess of 400,000 Americans per year. 8

(4) Responsible sexual behavior, beginning with the importance of abstinence for young people not involved in a committed relationship. This recommendation calls for adequate protection against unplanned pregnancies and sexually transmitted infections in people who are sexually active, regardless of their age.

I hope that the day will come when all health care providers will write prescriptions for prevention for patients; that communities will support healthy behavior; and that policies on the local, state, and federal levels will support prevention. Implementing programs of prevention faces many challenges, but these programs represent opportunities to improve health and prevent unnecessary pain and suffering and, in time, to develop a health system that is balanced and affordable.

NOTES
3. Ibid.
5. The Child Nutrition and WIC Reauthorization Act of 2004, P.L. 108-265, sec. 204, states that by the first day of the 2006 school year, beginning after 20 June 2006, all schools must develop a local wellness policy that involves parents, students, a representative from the School Food Authority, school board, school administrators, and the public. The Local Education Authority (LEA) will establish a plan for measuring implementation of the local wellness policy.