Prevention in Practice

The Roots of Public Health

Thomas P. Houston, MD

Chicago, Illinois

Editor's note: With this issue of the Journal, we introduce the feature "Prevention in Practice," which will be coordinated by Thomas Houston, MD. Dr Houston is a family physician who serves as the Director of the American Medical Association's Department of Preventive Medicine. The goal of this feature is to provide timely and practical information about preventive health care. The column will be published every other month, alternating with "From Washington." Dr Houston invites questions, comments, and suggestions for future topics from the readers. Address correspondence to Dr Houston at the address below.

Public health's roots in medical history date back to the ancient Sumerian civilization, where excavations have shown that some knowledge of sanitation was present, with drains and cesspools in ancient houses that were apparently quite efficient. The Egyptians and their Hebrew neighbors had strict precepts relating to hygiene. Much of the Old Testament law expressed great wisdom regarding health, sanitation, and nutritional and dietary concepts, many of which are still sound.

Today, we concern ourselves with many of the same questions affecting public health: plagues (AIDS and venereal disease), pandemics (tobacco- and alcohol-related illness and death), poverty and its attendant health problems, and issues of priority (immunization vs transplantation, rationing of care). Although our ancestors never thought about lifestyle-related illness in quite the same way we express it today, it is clear that they knew about the concepts of moderation and temperance as they related to health.

The Institute of Medicine (IOM) recently convened an expert panel to consider future challenges facing public health in America. The IOM's definition of public health included "organized community efforts aimed at the prevention of disease and the promotion of health." The IOM report points out that the capacity of physicians enganged in traditional public health work has been

overwhelmed by the magnitude of the tasks involved in health promotion and disease prevention in our society.

The concepts of health promotion and disease prevention are two sides of the same coin. Disease prevention carries the connotation that we are attempting to keep people from doing something wrong that would have an adverse effect on health (smoking, driving while intoxicated); health promotion implies the encouragement of habits that foster improvement in health status (increased fiber in diet, vigorous exercise). Family physicians and other primary care specialists must be willing to assume responsibility for the frontline work in both areas, and cooperate with the public health community in a manner that "sustains the capacity to meet future threats to the public's health."

A new preventive care emphasis, focused on personalized interventions, is beginning to take place. Health promotion, disease prevention, counseling to effect behavior change, and patient and community education are keystones of the activity. These have been central to the mission of family practice from the beginnings of the specialty. There are indications that these efforts are beginning to work. Reductions in cardiovascular morbidity and mortality have been related to a decrease in smoking prevalence and more effective treatment of hypertension. ^{2,3} Cervical cancer mortality has fallen dramatically, mostly because of the benefits of screening provided by the Papanicolaou smear. ⁴

There is still much to be done, however. As many as half of all deaths in America have been attributed to unhealthy lifestyles.⁵ Smoking accounts for one out of every five deaths in America, including 142,000 annual deaths from cancer, 156,000 from heart disease, and 82,000 from pulmonary disease—a sobering total from all causes of over 435,000 in 1988.³ Motor vehicle accidents claimed about 50,000 lives last year, many of which could have been saved by use of seat belts and by not driving while under the influence of intoxicants. Homicide is the leading cause of death among black men from ages 15 to 34 years.⁶

Although many groups and agencies have adopted

Thomas P. Houston, MD, Director, Department of Preventive Medicine, American Medical Association, 515 N State St, Chicago, Illinois 60610.

and issued hosts of recommendations dealing with clinical preventive medicine and its implementation in practice, physicians do not perform these services faithfully. When asked about their underutilization of preventive medicine practices, many physicians cite pressures of time, lack of adequate reimbursement for prevention, and a perception that they are inadequately trained to offer these services to patients. Some do not think that their patients want preventive care counseling. The implications seem to be that physicians' awareness and attitudes substantially affect the delivery of these services. §

Family physicians should make preventive interventions a natural part of every patient encounter, and integrate prevention into every practice. We can and should be major catalysts in reaching the goals set forth in "Healthy People 2000," the US Government's compendium of prevention objectives. In his foreword, Louis Sullivan, MD, Secretary of Health and Human Services, stated: "We would be terribly remiss if we did not seize the opportunity presented by health promotion and disease prevention to dramatically cut health care costs, to prevent premature onset of disease and disability, and to help all Americans achieve healthier, more productive lives."

To do less shortchanges our patients and leaves one

of the central functions of medicine, our role as teachers, unfulfilled.

References

 Institute of Medicine. The future of public health. Washington: National Academy Press, 1988.

 The 1988 Report of the Joint National Committee on the Detection, Evaluation, and Treatment of High Blood Pressure. Arch Intern Med 1988; 148:1023–38.

 Centers for Disease Control. Smoking-attributable mortality and years of potential life lost-United States, 1988. MMWR 1991; 49(4):62-71.

 National Cancer Institute. 1987 annual cancer statistics review, including cancer trends, 1930–1985. Washington: Department of Health and Human Services, 1988. DHHS Publ No. (NIH) 882789.

 Healthy people: the surgeon general's report on health promotion and disease prevention. Washington: Department of Health, Education, and Welfare, Public Health Service, 1979, DHEM (PHS) Publication No. 79-55071.

Department of Health and Human Services. Report of the secretary's task force on black and minority health. V: homicide, suicide, and unintentional injuries. Washington: Government Printing Office, 1986.

 Lurie N, Manning WG, Peterson C, et al. Preventive care: do we practice what we preach? Am J Public Health 1987; 77:801-4.

 Davis K, Bialek R, Parkinson M, et al. Paying for preventive care: moving the debate forward. Am J Prev Med 1990; 6(suppl).

 Department of Health and Human Services. Healthy people 2000: national health promotion and disease prevention objectives. Washington: Department of Health and Human Services, Public Health Service, 1990 (conference edition).