

## **Achievements and Challenges in Hypertension Control**

The inclusion in this issue of PUBLIC HEALTH REPORTS of several successful research and community projects dealing with hypertension control is timely for several reasons. July 1982 marks the 10th anniversary of the National High Blood Pressure Education Program. Although incontrovertible proof of cause and effect is not possible, there are a number of associations that point to a strong temporal relationship between the efforts of the program—leading to improved hypertension control—and the decline in hypertension-associated deaths. Through the actions of many, in this decade the nation has achieved a high level of public awareness about high blood pressure, a marked increase in the number of patients under treatment for hypertension, more appropriate treatment regimens, and a greater proportion of hypertensive patients achieving long-term control. These achievements have been associated with the desired objective of reducing the occurrence of cardiovascular disease. During the past decade the age-adjusted mortality has declined 37 percent for stroke and 25 percent for coronary heart disease. This outcome is one in which the nation as a whole, the large number of high blood pressure researchers and health care providers, and the National Heart, Lung, and Blood Institute may take great pride.

A second reason these articles are timely is that strong emphasis is now being placed on disease prevention at the national level. Earlier the predominant voices were those of people in the health professions and in the general public who were skeptical about preventive methods. With successful application of the results of scientific investigation and implementation of control programs, it appears that chronic disease prevention can be effective nationwide. This possibility increases the likelihood that additional chronic diseases may be prevented in comparable fashion.

A last, though hardly a final, reason that these articles are timely is that they demonstrate how much more we still have to learn and to achieve. Perhaps the most important point of all, especially in the face of sizeable recent progress, is that we are far from finished with the task of controlling hypertension. We must assiduously avoid any sense of complacency. The progress we have achieved thus far may be the easier part of the job. Many difficult questions still have to be answered before we can consider the hypertension problem solved. We know little about, and have made relatively little progress in overcoming the barriers to hypertension control in hard-to-reach segments of the population. Although weight reduction and salt restriction are effective for many, we currently lack adequate scientific evidence of benefit and prac-

tical methods to implement non-pharmacological intervention for large numbers of people. We need better methods to disseminate information that is convincing to providers, patients, and the public. Dietary factors are strongly implicated in hypertension and in the etiology of cardiovascular disease in general. High relative weight and high sodium intake are significantly associated with hypertension in population studies; and in the clinical setting, lowering of body weight and sodium consumption is associated with decreases in blood pressure. The connection between cause and effect in clinical studies—the proof of efficacy in preventing hypertension—is very plausible, but it remains incompletely proven; this fact has tempered the firmness with which we have made recommendations to the public.

Primary prevention of hypertension is an ultimate objective, but this will likely require better understanding of the mechanisms that control high blood pressure. Much remains for researchers at the bench and in the field.

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