Prevention and the Elderly: A Challenge for Family Medicine

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The more we know about the problems of old age, the more exciting is the potential contribution of modern health care. Many clinical problems of the elderly result not from the normal biological aging process but from disease and the resulting loss of function or from the social position of older people. The elderly need physicians who are knowledgeable about and committed to improving health care for the aged. The role at present of the primary care physician in assessing the elderly patient is often ill-defined. Physicians as a result are not so effective as they would like to be.[1]

The contribution of the family physician, in particular, to preventive care for the elderly has great potential. The clinical and economic opportunities have recently been described. Stults[2] reviewed the broad clinical scope of preventive strategies that may be of help to the elderly. Somers[3] has emphasized Medicare's limited emphasis on prevention, and advocates prevention as an effective "cost control" strategy for the federal government. Both authors emphasize that the effectiveness of many preventive interventions for the elderly have not been adequately investigated.

It is recognized that screening and outreach maneuvers, which initially appear beneficial, may frequently be of little help when implemented.[4,5] This outcome is a particular risk in the elderly. The ability of an intervention directed toward someone already old to prevent future disability is handicapped by the "narrow therapeutic window that characterizes the elderly person."[6] Prevention in the elderly must account for their susceptibility to iatrogenic consequences of the best intended actions. For example, occult blood testing for colon cancer inevitably results in a significant number of false-positive findings requiring extensive examination of the colon for benign lesions. These false positives may be acceptable in 50-year-olds, as little disability results from the invasive colon examinations. It may be, however, that in a population of those aged 80 or more years, the line between doing good and doing harm is harder to distinguish.

The paper by Hedley, Ebrahim, and Sheldon[7] in this issue of the *Journal* cautiously advocates an expanded role for the family physician in "anticipatory" care for the elderly. The authors define anticipatory care as requiring "the health worker to focus on problems that might not be recognized by the patient." They suggest that a mixture of in-office case finding and community outreach could be effective. Although based on a study population from the United Kingdom, the results reflect many similar trends in the United States. Family physicians in the United States have frequent contact with the elderly, representing at least 17 percent of all outpatient encounters.[8] Hedley et al noted that nearly 75 percent of his elderly sample were functionally independent. This finding correlates well with similar functional surveys of noninstitutionalized elderly in the United States.[9] In addition, the drugs prescribed and diagnoses are similar in the two countries. The authors emphasize the need for an improved clinical approach to preventive care for the elderly and suggest the modification of the

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TABLE 1. POTENTIALLY PREVENTABLE GERIATRIC CLINICAL PROBLEMS*

Traditional Prevention	Risk Factors or Behaviors	Case Finding	Iatrogenic
Heart disease	Smoking	Vision	Drug interactions, side effects
Hypertension	Diet and nutrition	Hearing	Nosocomial infections
Stroke	Exercise	Dentition	Disability from institutions: nursing homes, hospitals
Cancer: breast, cervix, colon	Stress and social supports	Depression	
Fractures or osteoporosis		Dementia	
Immunization		Alcoholism	
		Sleep problems	

Modified from Kane et al[6]

family physician's office records to better chart the health status of the elderly. This suggestion is excellent, and a recent text of geriatric medicine supplies the primary care physician with examples of clinically useful assessment forms.[10]

Fundamental to the successful application of preventive strategies for the elderly is a better understanding of the scope of prevention as it applies to older people. Kane and colleagues[6] have described a framework for developing and evaluating preventive interventions for the elderly. They emphasize that the traditional terminology of prevention is not easily applied to a patient group with chronic diseases. They define four groups of potentially preventable clinical problems: (1) problems that can be addressed in traditional prevention terms (diseases that fit into usual primary, secondary, tertiary prevention concepts), (2) behaviors likely to produce beneficial or adverse effects on health status (risk-factor modification), (3) problems requiring attention from caregivers (case finding and anticipatory care of common geriatric functional problems), and (4) iatrogenic problems. Table 1 lists examples in each of these four categories.

As with the application of preventive interventions in other age groups, research is urgently needed to determine the efficacy of preventive measures in the elderly. Many of the available studies do not include older people as subjects, and extrapolating to older populations the results derived from younger populations should be discouraged. The currently running treatment trial of systolic hypertension in the elderly, sponsored by the National Institutes of Health, is an example of directing important clinical research questions to elderly populations.

When traditional screening is evaluated, the results have been discouraging. A recent study of routine laboratory screening of a nursing home population (significantly more disabled than community living elderly) did not reveal any significant benefit.[11] Seventy patients were involved in annual screening through a package of 19 laboratory tests. Of the 3,903 tests only 26 (0.7 percent) led to further diagnostic evaluation. Of these 26, only 4 (0.1 percent) led to changes in patient management, none of which benefited the patient in an important way.

To progress toward a rational and effective preventive approach for primary geriatric care, family physicians must begin grappling with the complexities of applying anticipatory strategies to this age group. Hedley et al have started at the correct place. Family physicians can now expand and improve their approach to collecting and organizing useful data on their elderly patients. It has long been a principle of good primary care that patient

visits be used not only for assessment of current medical problems, but also for strengthening the physician-patient relationship, expanding the assessment to include psychosocial factors, and taking account of the likely future development of health problems.

The principles of "good" health care for the aged have been defined[12] and can serve as a useful guide. An emphasis on restoring function, avoiding iatrogenesis, and maintaining a community orientation are essential components of high-quality acute, chronic, or preventive geriatric care.

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