Preventive Medicine in Family Practice: A Reassessment

John P. Geyman, MD
Seattle, Washington

The role of preventive medicine in medical practice has received increasing attention in recent years but remains controversial and confused. The public has been sold on the value of health screening in the absence of demonstrated evidence on the effectiveness of cost benefit of these efforts. Enthusiasts for health screening, for example, point to the frequency of early diagnosis of treatable problems in screened patients, while critics are concerned with the frequently poor cost benefits of health screening and its lack of impact on mortality and morbidity. Sackett and his colleagues have cautioned that limited health care resources may be wasted on worthless preventive interventions at the expense of valid clinical efforts unless expanded randomized clinical trials are carried out to document their value.[1]

Breslow and Somers have proposed the use of eight criteria for the selection of preventive procedures. These were derived partly from those adopted by the National Conference on Preventive Medicine in 1975[2] and partly from the work of Frame and Carlson in family practice.[3] Together these criteria suggest the complexity of the issues involved:

1. The procedure is appropriate to the health goals of the relevant age group (or groups) and is acceptable to the relevant population.
2. The procedure is directed to primary or secondary prevention of a clearly identified disease or condition that has a definite effect on the length or quality of life.
3. The natural history of the disease (or diseases) associated with the condition is understood sufficiently to justify the procedure as outweighing any adverse effects of intervention.
4. For purposes of screening, the disease or condition has an asymptomatic period during which detection and treatment can substantially reduce morbidity or mortality or both.
5. Acceptable methods of effective treatment are available for conditions discovered.
6. The prevalence and seriousness of the disease or condition justify the cost of intervention.
7. The procedure is relatively easy to administer, preferably by paramedical personnel with guidance and interpretation by physicians, and generally available at reasonable cost.
8. Resources are generally available for follow-up diagnostic or therapeutic intervention if required.

The application of these reasonable criteria to preventive medicine as practiced today by most physicians would call into serious question the impact and value of many of these efforts.

Although the emphasis upon preventive medicine in general/family practice varies quite widely by practice setting and by individual physician, there is considerable evidence that the commitment of time and resources to this area is quite high. The National Ambulatory Medical

Dr. Geyman is Professor and Chairman, Department of Family Medicine, University of Washington, Seattle, Washington.

0094-3509/79/070035-02$00.50
© 1979 Appleton-Century-Crofts

Care Survey (NAMCS) studied an estimated 234,660,000 visits to general/family physicians in the United States during 1975. The leading coded diagnosis, comprising 6.3 percent of all visits, was "medical or special examination."[5] A statewide study of the practices of 118 family physicians in Virginia between 1973 and 1975 showed the leading diagnosis (8.35 percent of all visits) to be "other medical exam for preventive and presymptomatic purposes."[6] Concern for preventive care is one of the fundamental premises of family practice, and this area is addressed with variable effectiveness in family practice residency programs.

Since preventive care is an integral part of the family physician's role, and since the state of the art in preventive medicine is confused and imperfect at best, it is timely to reassess this subject from the viewpoint of family practice. The overall goals of this monograph are threefold:

1. To review the basic issues concerning the role of potential benefits of preventive medicine in family practice;
2. To describe several preventive approaches in various family practice settings; and
3. To present some of the implications of current developments in preventive medicine in family practice with regard to patient care, education, and research.

That these are not new issues is highlighted by the following statement attributed to Galen in the second century AD:

> But since, both in importance and in time, health precedes disease, so we ought to consider first how health may be preserved, and then how one may best cure disease.[7]

References

1. Bombardier D, McClaran J, Sackett DL: Medical care policy rounds: Periodic health examinations and multiphasic screening. Can Med Assoc J 109:1123, 1973
2. Theory, practice and application of prevention in personal health services; and, Quality control and evaluation of preventive health services. In Preventive Medicine USA. Task Force reports for the National Conference on Preventive Medicine, Bethesda, Md, 1975. New York, Prodist, 1976
3. Frame PS, Carlson SJ: A critical review of periodic health screening using specific screening criteria. J Fam Pract 2:29, 123, 189, 283, 1975
4. Breslow L, Somers AR: The lifetime health-monitoring program: A practical approach to preventive medicine. N Engl J Med 296:601, 1977
5. National ambulatory medical care survey of visits to general and family practitioners: January-December 1975. In National Center for Health Statistics (Rockville, Md): Advance Data From Vital and Health Statistics, No. 15, December 14, 1977. DHEW publication No. (PHS) 78-1250. Government Printing Office, 1977, pp 1-11
6. Marsland DW, Wood M, Mayo F: A data bank for patient care, curriculum, and research in family practice: 526,196 patient problems. J Fam Pract 3:25, 1976
7. Galen; Green RM (translator): Hygiene. Springfield, Ill, Charles C Thomas, 1951