Fundamentals of Geriatric Medicine

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Preface

The large and increasing number of Americans over age 65—and especially over 75 and even 85—means that nearly all physicians now have a substantial number of older patients. This assessment is true for almost every specialty and type of practice, and must be faced by both physicians whose education has included adequate attention to geriatrics and by those whose education in geriatrics was minimal or nonexistent. Recent advances in knowledge relevant to geriatric medicine have been extensive. In addition to improved understanding of the underlying biological processes, new tools have become available for diagnosis and management, and major new concepts in care-giving have been developed. There is growing interest and commitment to giving geriatrics appropriate attention in medical education at all levels.

As developed by the Gerontological Society of America, this book is an ideal introduction to geriatric medicine for medical students in their third-year clerkship in internal medicine, in fourth-year subinternships in family medicine and internal medicine, and for residents in these areas, who must treat an ever-increasing number of elderly patients. Every medical student and practitioner in geriatrics and family medicine will find this text to be a valuable contribution to his or her practice.

The text is designed to 1) increase physicians' awareness of the special problems of illness and disease in the elderly; 2) improve understanding of normal anatomical and physiological changes; 3) improve physicians' capacity for effective assessment and treatment of the elderly patient; 4) improve understanding of effective methods for preventing illness and disability in the elderly; and 5) enable the reader to assess his or her comprehension of the multiple factors affecting the health and well-being of the elderly.

As a self-instructional text, this volume presents information in a series of lessons on selected topics. Each concisely written section states educational objectives, includes an introductory overview, and provides multiple-choice examination questions. Also included is a set of six Patient Management Problems (PMPs)—simulated case histories that invite the reader to apply the information reviewed in the text. Each PMP briefly describes a patient's problem, then poses a series of decision-making questions regarding history-taking, physical examination, laboratory tests, and environment. The reader is asked to choose appropriate tests, procedures, or therapies, and then receives a detailed critique of his or her choices.

Fulfilling a previously neglected need in current medical education, *Fundamentals of Geriatric Medicine* offers a practical, effective way for both medical students and practicing physicians to equip themselves with the facts they need to better serve the growing geriatric population.

The Editors

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Fundamentals of Clinical Geriatrics

1

Comprehensive Care of the Elderly

Rodney M. Coe

There are at least three important reasons why physicians must become informed about gerontology and geriatrics: (a) the population of elderly persons is increasing in absolute numbers and proportionately; (b) there is a strong association between age and morbidity and disability from chronic diseases; and (c) the health care system, as it is presently organized, has not been able to meet all of the needs of the elderly. These conditions suggest (a) a continued increase in demand for health-related services by the elderly who have relatively greater health needs but fewer resources to meet those needs and (b) an expanded role for physicians in providing comprehensive care for older patients.

POPULATION INCREASES

The elderly have increased steadily in number and in proportion to the total population of the United States. In 1900 approximately 4% of the U.S. population of 76 million persons were age 65 and over. By 1950 the proportion had increased to 8% (12.4 million). In 1980 the elderly population is estimated to be 24 million, or about 11% of the total population. By 2020 the proportion is projected to be about 16% of the total population (7).

The rapid increase in the very old (those age 75 and over) is of key importance. Between 1950 and 1975 the percentage growth of persons 75 and over was 119% compared with a 65% increase for those 65 to 74 years of age. The significance of the very old group (which includes many of the "frail elderly") lies in its disproportionately high prevalence of disabilities and requirements for health services.

Other characteristics of the elderly are also important for geriatric practice because they are linked to the disabling aspects of limitations imposed by diseases of senescence and therefore to potentials for treatment effectiveness. Recent population statistics (6) reveal, for example, that

1. The number of elderly women exceeds that of elderly men (life expectancy at birth in 1978 was 7 to 8 years more for females than for males and 4 to 5 years more at age 65).
2. The majority of elderly females who were married are widowed, whereas most elderly men are still married. Men thus may have an advantage over women if therapy at home requires some assistance or supervision.
3. Ninety-five percent of all older persons live in the community. Most of them live independently in their own homes or apartments. About one in six older persons lives in a household with relatives other than their spouse.
4. About one-fourth of all elderly have incomes at or below the designated poverty limit.
5. Many urban elderly live in older parts of cities with restricted access to medical care, stores, churches, clubs, transportation, and other needed facilities.

AGE AND MORBIDITY

The dramatic increase in average length of life because of better sanitation, improved nutrition, and technological advances (e.g., immunization and antibiotics) is associated with an increased prevalence of chronic diseases and disabilities. Prevalence rates for heart disease, cancer, hypertension, diabetes, and arthritis all show marked age-related increases. Disabilities associated with these chronic conditions also are more common among the elderly. For example, the percentages of persons with limitations, by age, are shown in Table 1.

The significance of these data, of course, is that they represent information typically used as a measure of health care need. With the preponderance of chronic conditions among the elderly, the conclusion is that this age group has more health care needs than other age groups. At the same time, the elderly generally have fewer resources—economic, social, and psychological as well as physiological—to meet these needs, many of which are health-related but not strictly defined as medical so as to be provided for under health insurance programs.

TABLE 1. *Persons with activity limitations*

Age	Any limitation (%)	Major limitation (%)
All ages	14.3	10.8
Males, 65+	48.3	43.7
Females, 65+	43.4	36.4

From ref. 4.

ORGANIZATION OF HEALTH SERVICES FOR THE ELDERLY

Many observers have noted that the success of public health measures and medical technology in controlling many infectious diseases has not yet been duplicated for chronic diseases (2). By almost any conventional yardstick of health or illness (life expectancy at age 65, bed disability days, morbidity rates), there has been less improvement for the elderly than for other age groups. There are many reasons for this "failure of success" beyond the limitations of medical technology. One is that health services in the United States are organized and financed to deal primarily with acute illness, hence the heavy emphasis on inpatient care, episodic treatment, and specialized facilities. Care of persons with chronic conditions does involve acute care, but mostly it requires services that emphasize out-of-hospital care, continuous monitoring, and coordination of medical with support services. Thus the multifaceted demands of care for the chronically ill require a multidisciplinary approach. This can be achieved by coordination of the specialized skills of many health professionals and services of community agencies, which suggests that the therapeutic role of the physician must be expanded to include coordination of these services.

Another factor is the attitude of health care providers toward aging as a process and toward the care of the elderly. To some extent, providers share prevailing societal values, which may include negative stereotypes of elderly persons. It is important that health professionals be aware of their own attitudes and the influence they may have on providing care for elderly patients.

ROLE OF THE PHYSICIAN IN CARE OF THE ELDERLY

This kind of critique suggests the need for a more coordinated system to provide comprehensive care for the elderly. Indeed, one definition of comprehensive care involves supplementing biomedical knowledge and skills with psychosocial knowledge and skills to provide a more holistic approach to service (1). However, a definition of comprehensive care should extend beyond direct medical services; it should include services in the community and social support systems as well as the means for financing such care.

Such an "ideal type" system, to the extent that it could be developed, still leaves some unanswered questions. In what ways do the needs of the elderly, which differ from those of other age groups, impose special requirements on a comprehensive system? Many of the characteristics often associated with the concept of elderly (e.g., chronicity of illness, frailty, long-stay institutionalization) are not exclusively the province of the elderly, and many if not all conditions of the elderly can be treated. However, diseases in the elderly often do present differently and require special consideration of risks of treatment and substitution of maximizing functional independence for cure as a therapeutic goal.

A second question relates to the role of the physician in a comprehensive care program. The physician interacts not only with the patient but also with the patient's family, medical colleagues, allied health professionals, institutional managers, and

many others who could be part of the care program for any given patient. Should only specialists in geriatrics direct the activities of a health care team? Should physicians specialize in geriatrics at all? There is some controversy in the United States about the need for gerjatrics as a board-certified specialty. The Institute of Medicine of the National Academy of Sciences (3) recommended against board certification but suggested that the skills and knowledge of all physicians who care for elderly patients should be increased. Others, however, take the view that the specialist model found in some European medical care systems is adaptable and appropriate in the United States (5). Regardless of the degree of specialization, every clinician who provides care for elderly patients encounters some situations in which the age of the patient modifies the "traditional" approach to patient care. For example, a physician may be tempted not to be a therapeutic activist with a patient just because he is very old. Geriatric care certainly requires more collaboration between physician and other members of the health care team than would be necessary for a young patient, and care more often should be given in such settings as the patient's home or a long-term care institution rather than in the acute care hospital.

The community's care system often fails to provide integrated, comprehensive services for the elderly. A community's health care system includes not only health professionals who provide direct care and the settings in which they work (e.g., doctors' offices, clinics, hospitals, nursing homes) but also a host of supporting personnel and agencies that serve administrative, financial, planning, and supply functions. There are many areas of duplication as well as gaps in services at federal, state, and local levels. The lack of coordination of services prevents effective use on behalf of the elderly. The physician has the most important role in the system and is central to making the system work more effectively.

SUMMARY

This overview identifies some trends which indicate the importance of gerontology and geriatrics for physicians and other health personnel. As this and succeeding chapters in this section point out: (a) the number and proportion of elderly are still rising rapidly, increasing the demand for health-related services; (b) there are some specific characteristics of the elderly and their diseases which require special consideration in treatment; (c) physicians must acquire a better understanding of the nature of health problems of the elderly, who often require a different approach; and (d) most communities have a wide range of services available to serve the elderly, but often they are uncoordinated, expensive, and ineffective. There is much that can be done to increase the capacity to deliver comprehensive care to the elderly.

When caring for elderly patients, the physician should:

1. Know the factors which contribute to the increased importance of gerontology and geriatrics to modern medical practitioners.
2. Know the specific characteristics of older persons that can influence decisions about diagnosis and therapy.

3. Understand the significance of personal and societal factors that influence physicians' attitudes toward aging as a process and older people as patients.
4. Be familiar with the purpose, availability, and capability of services in the community to provide comprehensive care to the elderly.

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