Geriatric Medicine: It’s More Than Caring for Old People

Chronic age tells us little about the health or functional status of a single individual. We age at different rates, and interindividual variation in physiology and functional status increases with age. Hence, the defining feature of geriatric medicine is not age, but rather the intense focus on the preservation and restoration of function. Because optimizing function is central to persons of all age groups who are afflicted with chronic disease or disability, many of the fundamental principles and practices of geriatric medicine are broadly applicable across disciplines and subspecialty areas. The underlying premise of this commentary is that geriatric medicine represents more than caring for old people; it is a mind-set, a way of thinking that can be incorporated into clinical practice to improve the health and well-being of patients with chronic disease or disability across the continuum of age.

EPIDEMIOLOGY OF CHRONIC DISEASE AND DISABILITY

Chronic conditions, defined as illnesses that last longer than 3 months and that are not self-limiting, are the major cause of disability and death in the industrialized world (1). Persons with chronic conditions, including hypertension, diabetes, arthritis, asthma, cardiovascular disease, and dementia, account for three fourths of the health care costs in the United States (2). In 1995, an estimated 99 million persons had one or more chronic conditions, and 41 million of these persons were limited in their daily activities (3). Based on current projections (Figure), the number of persons in the United States with chronic conditions will increase by 50% by the year 2040 (3).

What may be surprising is that only about one quarter of persons with chronic conditions are aged 65 years or older. Furthermore, of the 9 million persons with disabilities who require help with either personal care or home management, more than 40% are under the age of 65 (3). The association between chronic conditions and adverse functional outcomes was evaluated in the Medical Outcomes Study among 9385 ambulatory patients with a mean age of 46 years. For eight of nine common chronic conditions, persons with the condition had markedly worse function across several domains (physical, social, mental health) compared with persons with no chronic conditions (4). Comorbid conditions were common, and persons with multiple chronic conditions had greater decrements in function than those with only one chronic condition.

GERIATRIC PRINCIPLES AND PRACTICES

Geriatricians are specially trained to manage patients with multiple chronic conditions. The principles and practices underlying this training, therefore, are highly relevant to a large segment of the adult population, including those under the age of 65.

Preeminence of Function

The concept of functional status refers to the behaviors necessary to maintain independence in daily life. Function is usually defined broadly to include the physical, cognitive, psychological, and social domains. These domains are often combined into a single instrument when measuring quality of life. The preeminence of function in health care has been endorsed by several diverse sources, including the Institute of Medicine, which indicated that the goal of the U.S. health system is “to improve the health and functioning of the people of the United States” (5); the Healthy People 2010 project, which identified increasing the quality and years of life as one of its two overarching goals (6); the Agency for Healthcare Research and Quality, which underscored the need for evi-
geriatricians and gerontologists have been at the forefront of the development, testing, and application of tools to assess functional status in the ambulatory setting (18) and to identify ambulatory patients with “preclinical” disability, that is, those who do not yet require personal assistance with their daily activities but who are at risk for becoming disabled (19,20). Although these tools and strategies have been developed primarily for older persons, many of them can be used or readily adapted for use in younger patients with chronic disease or disability. Evidence indicating that physicians often fail to recognize important functional decrements in their ambulatory patients, both young and old (21), highlights the need for routine assessment of functional status among patients with chronic disease.

Multidisciplinary Nature of Care
The care of patients with chronic disease and disability is inherently multidisciplinary, reaching well beyond medicine and involving, among other disciplines, nursing, social work, pharmacy, rehabilitation therapies, and nutrition. Geriatricians are uniquely trained to work as members of multidisciplinary teams, often in the context of comprehensive geriatric assessment (CGA), which is a diagnostic process intended to determine a patient’s medical, psychosocial, and functional capabilities and limitations with the goal of developing an overall plan for treatment and long-term follow-up (22). Three different models of CGA have been found to be effective in terms of improving function and reducing nursing home placement and hospital readmissions: inpatient geriatric evaluation and management units (23,24), post–hospital discharge assessment and management (25), and in-home assessment (26). The principles of CGA have also been incorporated in two successful hospital-based programs: the Acute Care of the Elderly (ACE) units (27) and the Hospital Elder Life Program (28).

The assessment and intervention approach of CGA has recently been adopted by disease management programs, which are designed to optimize the care of single chronic conditions, often in the setting of a coordinated multidisciplinary team (29). The best example is the multidisciplinary program of Rich et al., which reduced the readmission rate and cost of care among high-risk patients, aged 70 years or older, who were hospitalized with congestive heart failure (30).

Elicitation of Preferences and Goals of Care
In contrast to acute disease in which cure is usually the single goal of care, in chronic disease the goals of care can be multiple, diverse, and often conflicting. These disparate goals reflect the striking heterogeneity found among chronically ill persons with respect to physiologic function, health status, belief systems, cultural and ethnic backgrounds, values, and personal preferences. The successful management of chronic conditions therefore requires that patients and physicians work collaboratively to define the specific problems, to elicit individual preferences, and to establish the goals of care (38). Given the diverse array of potential outcomes inherent in the treatment of chronic conditions, methods for articulating multiple potential outcomes, for ascertaining the likelihood of these outcomes given various treatment options, and for eliciting patient preferences and goals are crucial to appropriate clinical decision making.

Provision of Care Across Multiple Sites
Patients with chronic conditions often require care across multiple sites. A patient with severe chronic obstructive lung disease, for example, might require acute hospital care for influenza pneumonia, followed by subacute care in a nursing home for rehabilitation, followed by home care for assistance with activities of daily living, followed by or concurrent with ambulatory care for ongoing medical management. Such a patient might eventually require long-term care in a nursing home or end-of-life care in a hospice facility. Geriatricians are trained to care for patients in each of these sites and, along with gerontologists, are evaluating transitions in care across many of these sites (31–33). Residents in internal medicine, on the other hand, receive relatively little training at sites outside the hospital and traditional ambulatory settings (34–36); and medical students may receive even less. A survey of U.S. medical schools in the early 1990s found that only one half devoted even a single hour to home care in the course of a 4-year curriculum, and only three of 123 schools required five or more home visits during the clinical years (37).

According to a recent report from the Institute of Medicine (5), the current health care system remains overly devoted to managing acute, episodic disorders and is poorly organized to meet the challenges of chronic care. Bringing state-of-the-art care to persons with chronic conditions and disabilities will require improved coordination and continuity of care across multiple sites, including the home, the nursing home (subacute and long term), and hospice. Given their expertise in these settings, geriatricians are ideally suited to work with primary care physicians, specialists, policymakers, and other health care professionals to improve the care of persons with chronic conditions and disabilities.
Goal setting, the process by which physicians, patients, and families set targets for treatment and desired outcomes, is used routinely in geriatric rehabilitation (39) and has been advocated in other settings to enhance the care of patients with chronic disease and disability (40). Geriatricians and gerontologists have also played a leading role in eliciting preferences for care (41), often in the setting of a terminal illness (42,43). Treatment plans that include patients’ preferences have been shown to enhance adherence and increase satisfaction and have the potential to improve patient outcomes (38).

APPLICATION OF GERIATRIC PRINCIPLES AND PRACTICES

The aforementioned principles and practices of geriatric medicine, namely, the preeminence of function, the multidisciplinary nature of care, the provision of care across multiple sites, and the elicitation of patient preferences and goals of care, are highly relevant to the care of patients with chronic disease and disability, regardless of age. Because many chronic conditions are managed by subspecialty physicians (Table 1), either alone or with general internists, family physicians, or geriatricians, these principles are broadly applicable across subspecialty areas as well. In some cases, these principles have already been incorporated into routine clinical practice. Attention to functional outcomes, for example, is one of the cornerstones of care for patients with arthritis; and multidisciplinary teams are commonly formed to manage patients with cancer and human immunodeficiency virus/acquired immune deficiency syndrome.

Strong evidence now exists to support the application of these geriatric principles to “nongeriatric” populations. Multidisciplinary programs, for example, have been shown to improve outcomes for several chronic conditions, including coronary artery disease (44), diabetes (45), and depression (46). Functional outcomes, moreover, are increasingly being included in prominent clinical trials of chronic conditions, including osteoporosis (47,48), coronary artery disease (49), osteoarthritis (50,51), and heart failure (52,53). Patient preferences have successfully been incorporated into treatment decisions across a wide array of chronic conditions, including diabetes (54), benign prostatic hyperplasia (55), chronic stable angina (56), and breast cancer (57). Although the benefit of care in nontraditional sites has not been demonstrated for individual chronic conditions, rehabilitation in subacute settings appears to be effective for common disabling disorders (58), and home care, in the aggregate, appears to reduce hospital utilization (59). As economic forces continue to move care out of the hospital, these alternative sites of care will only grow in importance (60).

NEW INITIATIVES FOR GERIATRICS TRAINING

There is a clear recognition that most physicians currently lack adequate training in the principles and practices of geriatric medicine (61). In response to this deficiency, the Donald W. Reynolds Foundation recently launched a major initiative to strengthen geriatrics training for medical students, residents, and practicing physicians. After a rigorous application and review process, 10 institutions were awarded grants, totaling about $20 million, in April 2001 (Table 2). A broad array of training activities are being supported across several different disciplines, including the medical and surgical subspecialties. The Reynolds Foundation expects to issue additional calls for proposals later this year and in 2004 and to award as many as 20 additional grants, totaling up to $40 million.

During the past decade, the John A. Hartford Foundation of New York City, which has had a deep and longstanding commitment to improving the health of older persons, has launched several important initiatives to enhance geriatrics training, including “Integrating Geriatrics into the Sub-Specialties of Internal Medicine,” “Increasing Geriatrics Expertise in the Surgical and Medical Specialties,” “Geriatric Interdisciplinary Team Training Initiative,” “Enhancing Geriatrics in Undergraduate Medical Education,” and “Increasing Education and Research Capacity to Improve Care of Older Americans.” It is hoped that these initiatives, which are described in greater detail at http://www.dwreynolds.org/Programs/National/Aging/AboutAging.htm and http://www.jhartfound.org/, will lead to a series of innovative educational programs that can be widely disseminated to strengthen the training of medical students and physicians (across disciplines) in the principles and practices of geriatric medicine.

SUMMARY

The overall goal of chronic care is not to cure, but rather to help persons with chronic conditions maintain inde-
dependence and a high level of functioning. Geriatricians bring special expertise to the management of patients with chronic conditions across multiple sites of care. As the health care system evolves to meet the many challenges of chronic care (3,5), geriatricians, in collaboration with primary care physicians, specialists, policymakers, and other health care professionals, will be ideally positioned to improve the health and well-being of persons with chronic conditions and disabilities across the continuum of age.

Thomas M. Gill, MD

Dr. Gill is Associate Professor of Medicine at the Yale University School of Medicine and Director of the Yale Research Fellowship in Geriatric Medicine and Clinical Epidemiology.

REFERENCES

Table 2. Target of Enhanced Geriatrics Training among Institutions That Were Awarded the First Set of Reynolds Foundation Grants

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* Also includes residents in Anesthesiology, Ophthalmology, Orthopedic Surgery, Urology, Physical Medicine and Rehabilitation, and Radiation Oncology.
† Also includes Orthopedic Surgery residents.


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