GERIATRIC DRUG USE—CLINICAL & SOCIAL PERSPECTIVES

Edited by
Steven R. Moore
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PREFACE

In the field of public health, few areas offer the challenge accorded in the promotion of health among the elderly population. Beginning in May with Older Americans Month, the U.S. Public Health Service and the Administration on Aging are seeking to promote health among our elderly citizens. The theme, "Health: Make It Last a Lifetime," will be energetically promoted and the area of drug use among the elderly is one of the areas that will get top priority in this promotion.

In conjunction with this effort, the Drug Information Association brought together leaders in the field of geriatric drug use from government, academia, and industry to share the latest information related to all facets of the subject. The results of the meeting are presented here in the hope that the conclusions will stimulate further effort in the field.

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Commissioner
Administration on Aging

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PART 1

OPENING

Chapter 1

AN INTRODUCTION: CLINICAL PERSPECTIVES ON GERIATRIC DRUG USE

C. Everett Koop, MD, ScD

I am delighted to be introducing this collection of papers on drug usage among the elderly. It would be difficult to think of a more timely subject than this one to be addressed by the drug industry and the pharmacy and pharmacology professions. All the demographic, social, political, and biomedical indicators tell us that the single most significant change in the character of American society is the growth of that segment of our population that is over the age of 65.

This book offers an excellent balance of concerns in the areas of social policy, patient care, biomedical research, and government-industry relations. A number of my colleagues representing these many concerns in the Department of Health and Human Services will be contributing. And I should add that, in the 3 years I've been Surgeon General, I've been impressed over and over again with the quality of leadership that is available to help attend to the social, physical, and mental health of our society. Good people are found throughout the U.S. Public Health Service and, indeed, throughout the Department of Health and Human Services itself.

Also, I've been pleased to see the degree to which the private sector has put forward its share of thoughtful, knowledgeable, and caring people who are also deeply concerned about the future course of our society. I know there are many questions in which government and the private sector disagree. And, much of the time, that's just the way it should be.

But I would say that where the issues are of consequence to the health status of our people, the public and the private sectors are not adversaries. Rather, they tend to put forward their best people to work together for what

is good for our country. Our preference is clearly collaboration and consensus when it comes to the public health.

And this book is a good illustration of that. The contributors are top-notch. I say that not only because of the information they possess – which is considerable – but also for the commitment they've made to put their knowledge and experience to work for the benefit of our citizens, especially the most vulnerable of our citizens, the aging and the aged infirm.

Frankly, with the array of talent represented here, my role is not an easy one. Nevertheless, I do want to leave a message with you, something that may lend a larger public health perspective – or a context, if you will – to our deliberations. I mentioned the word "demography," but sheer numbers, as you well know, do not tell the whole story. If anything, the gross statistics – "one in five Americans," that sort of thing – screen off many significant demographic subsets.

For example, Dr Donald Custis, the former Chief Medical Director of the Veterans Administration, has been warning us that by 1990 about 60% of all men over the age of 65 will be veterans. If, at that time, veterans seek VA health care at the rate they are now seeking it, then, says Dr Custis, about 1.8 million veterans will be looking for VA care in 1990. But 10 years after that, in the year 2000, the figure will have climbed to 2.2 million veterans seeking VA care. They will be among the estimated 9 million veterans who will be among us by the turn of the century.

Each succeeding age cohort is more literate and better educated than the previous age cohort. All signs indicate that by the year 2000, our population of persons over age 65 will be more self-sufficient and more reachable – in terms of patient education – than any previous group. Today we are exhorting every American to take more personal responsibility for his or her health status. We're making some headway, but we'd like to be making more; and we will, as the years pass and the percentage grows of Americans who have the education and training to handle more personal health responsibility.

However, we are faced with so many unknowns in the field of health for the aging that we must be careful not to generalize too quickly or too often. All our projections are based upon life as we've known it so far, not life as it *will be* in the future. Let me give just one small example.

Over the past 15 years or so, there has been a virtual revolution in eye care and vision health among young adults and older working adults. As a result of this new concern with vision – that is, as a result of the many effective ways we treat diseases of the eye today and the many ways we prevent eye disease and injury from occurring – I believe we ought to rethink many of our programs for vision health. I think we will soon be able to do much more with the same resources we now have.

And other areas of public health for the aging are just now capturing our attention. For example, one major problem among the elderly is urinary incontinence. Some preliminary U.S. data seem to indicate that about one-

half of all patients in nursing homes suffer from urinary incontinence. And if some British data are anywhere near the mark, another half million or so elderly suffer from urinary incontinence but are still living at home.

Incontinence can be a critical condition for tens of thousands of older people. It reduces their ability to live independent lives, it reduces their mobility, it is a humiliating condition and increases the potential for physical and social isolation. And incontinence can produce, of itself, other disease or disabling conditions, such as serious infections among catheterized patients.

Urinary incontinence can sometimes be a side effect from a prescription drug being taken for quite another purpose. A change of prescription, where possible, can solve the problem. Or the condition can be relieved or even reversed through surgery. But in other instances the solution may be in a combination of surgery, a drug, and new learned behavior. For instance, at the University of Michigan we are supporting research in combination behavior-and-drug therapy in clinical trials employing phenylpropanolamine and oxybutynin.

Behavior therapies hold out a great deal of hope for the incontinent elderly. As yet, however, we don't have a tested, clear idea of which therapies work and which ones do not. To help get that problem resolved, the National Institute on Aging, together with the NIH Division of Nursing, will soon be advertising a new round of grant proposals for behavioral therapies to reverse urinary incontinence.

We are talking about doing something to help a million or more older persons who are incontinent. It may not be as complicated or as dramatic a problem as heart disease, but it certainly affects the lives of at least as many people.

The Office of Surgeon General has taken a special interest in this problem and in one other, also a widespread but poorly understood problem of the elderly, osteoporosis, the loss of bone strength.

As with so many problems that affect the health of older people, we have suspicions about how important and far-reaching the problem of osteoporosis may be, but we have very little reliable, hard data to go on. Some experts say that as many as 15 million Americans suffer from osteoporosis, but – absent a tight and generally acceptable definition of "osteoporosis" – such numbers are not reliable. And the disease itself is not thoroughly understood. Hence, there is as yet no accepted, safe, effective treatment for osteoporosis. Nevertheless, as little as we know, we still know enough to feel we must move ahead and do what is possible.

The second issue I would call to your attention is hip fractures. An estimated 200,000 hip fractures occur each year among persons of all ages. Of course, the great majority of fractures occur among the elderly: The typical age among persons reported to have had a hip fracture is in the mid to late 70s.

But the nature of the event is not clear. Does a person fall down and fracture the hip, which is the common notion, or does a person fracture a hip

and then fall down, which is the sequence I believe is more typical? As yet, we don't know the answer. Is it important? Very much so.

At least one of every four hip fractures causes in some way the death of the person with that fracture, usually within 1 year. It is a contributing factor to the deaths of many more persons. Current estimates put the total at about 35,000 premature deaths each year, a considerable number. According to other data, almost as many victims – another 26,000 – go on living but can no longer walk. They represent an enormous burden to their families, their communities, and to themselves.

It seems quite clear in just these two areas alone – urinary incontinence and osteoporosis – that we can save many thousands of lives and many millions of dollars with well-placed investments of time, interest, and money. And those are the kinds of investments we are making. I have concentrated on these two areas because they represent not only the possibilities of our gaining new biomedical knowledge, but they also are among the costliest conditions affecting the nation's elderly: Incontinence and hip fractures cost Medicare alone in excess of $2 billion each year.

There is so much public distress at the high cost of care for the elderly that I am truly concerned about our country maintaining its political will to support this kind of insurance. A great deal of thought and effort is going into research and demonstration programs that tinker with the funding and the reimbursement mechanisms. And all that is important, to be sure. But to my way of thinking, the real solution will come when we have the means to control, reverse, or prevent the major, more costly disease and disability conditions of older people.

Readers of this volume will be hearing from Dr T. Franklin Williams, the Director of the NIA and a strong supporter of all the research initiatives that hold out hope for the aging. His agenda, of course, is central to many of your individual interests, I am sure. I have great respect for him and his staff and I am sure you will feel as encouraged as I do, once you have read his message.

But let me offer this word of caution to those of you who would focus on the disease conditions of the elderly *to the exclusion of* the health concerns of all other age groups: You can't do it. It just doesn't work. We have become so specialized in medicine, as in so many other things, that we sometimes truly believe that human growth moves from one neat little category to the next: One day we are known as "infants," the next, we are in early childhood, then, prepubescence, followed by adolescence and young adulthood. Then we are "working adults," as opposed to the other kind, who are fortunate enough not to have a category of their own.

And then, of course, we become "older people" and the "aged."

It is certainly a handy way to deal with the normal life span. But this kind of pigeonholing tends to give the impression that health problems occur for the individual – almost spontaneously – as soon as he or she leaves one category and enters the next one. And that's just not so.

The fact of the matter is that many disease conditions of the elderly can be traced to the kind of care they received as infants – in their diet and their immunization records as children. Many young people suffer trauma on the highway or in sports, and we know that the effects linger and become aggravated as old age sets in. The stress of a bad marriage, the effects of being an abused child and an abusing parent, alcoholism, drug abuse – all these and many, many other conditions of the body, the mind, and the spirit, experienced early in life, have profound effects on the individual as she or he enters the fifth and sixth decades.

How much better off many of our older persons would be, if, as adolescents, they had been exposed to – and had taken seriously – the kind of health promotion and disease prevention message that today is carried far and wide by virtually every responsible health agency, public or private. The toll taken by tobacco alone – the lung and heart and gastrointestinal diseases generated by cigarette smoking – that toll would not be suffered by millions of Americans and their families.

And the terrible damage from alcohol – not just the collapse of diseased internal organs, but the interpersonal damage, the homicides, and the family violence that so frequently accompany alcohol – that damage would not be borne by so many of our elderly if they had been impressed in their youth with the dangers of heavy drinking.

And the weak bones and muscle groups, the loss of teeth, the gastrointestinal diseases, the blunting of many mental processes, all these and other phenomena might occur with much less frequency or intensity – or not at all – had the individual paid closer attention to his or her daily nutritional needs.

The same can be said of such behaviors as compliance, or following directions for taking medicines. So many physicians have told me that one of the most discouraging aspects of treating the elderly is their cavalier attitude toward the regimens for drug-taking. Many elderly patients don't fill the prescriptions they are given. Others fill but then ignore them, or they get refills of medicines that have become favorites but are no longer safe and effective for their condition.

Some older patients obtain prescriptions – quite legally – from two or three different physicians who are often unknown to each other, and may therefore be getting drugs that ought not be taken together. Still others fill prescriptions and then decide for themselves what the regimen should be – how much to take and when to take it.

Of course, some older people respond this way because they feel financial pressure and try to cut a corner here or there – including the medicine corner. No, I'm talking about the older person who, in earlier years, had little experience with – or respect for – pharmaceuticals and has not changed, even though life itself can be riding on the proper use of these drugs.

We are fairly positive that one of the best behaviors an older person can cultivate is that of being aware of his or her own body – what it is doing