Iowa Elderly: A Policy Report to the Iowa Legislature

Prepared by
The University of Iowa Committee on Aging

January 1981

The Office of the Vice President
for Educational Development and Research
The University of Iowa
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PREFACE

As the title of the first essay in this collection suggests, the welfare of the elderly is a topic of special concern to the citizens of the state. Every eighth Iowan is sixty-five years of age or older. Only a handful of states have the proportion of elderly residents that this state does. Moreover, though the rate of growth of elderly citizens in Iowa has diminished, the aged portion of the state's population continues to grow faster than the under-sixty-five portion. In recent years the needs and problems of the elderly have been recognized as important issues in virtually all areas of the country, but here in Iowa they are especially relevant to the attention of public policy makers.

Recognizing the major impact that the needs of the elderly will have on all dimensions of Iowa's future, the Vice President for Educational Development and Research at The University of Iowa created in 1975 a special committee of faculty to coordinate and to promote research, demonstration, and educational development efforts that relate to aging and the aged. This committee draws its membership from across the campus, including representatives from disciplines in medicine, dentistry, nursing, pharmacy, education, and the liberal arts. This past year members of the committee began a dialogue with two key state legislators who shared their interest in the needs and problems of the elderly. Senator B. J. Clark, Chair of the Human Resources Committee, and Representative Greg Cusack, met on several occasions with committee members to explore the key concerns that affect the welfare of the elderly.

Out of these informal but fruitful discussions grew the papers collected in this volume. The committee determined in the course of the year that it would be useful if each interested member were to summarize in a brief essay the problems of the elderly as witnessed in his or her area of expertise. That decision resulted in the development of thirteen papers, authored by twenty-two faculty members, on subjects ranging from the hearing, speech and language problems of the elderly to problem drinking among older citizens.

While experts in many disciplines were involved in the authorship of these papers and while the range of topics is truly great, there is a remarkable focus on certain key problem areas. Nine of the thirteen papers focus on the health care of the elderly. The specific topics of these essays are different -- drug medication, acute care, long-term care, oral health, nutrition, etc. -- but in each case the papers focus on various limitations in our health-delivery system. Two of the essays are concerned with retirement, and the problems it poses both in terms of appropriate leisure and meaningful accomplishment. Only one of the essays emphasizes a mental or social problem of the aged, and that is the essay on problem drinking.

Obviously, for all the diversity present in these essays, their comprehensiveness is limited by the interests and expertise of the committee members. Other topics could have been covered, and undoubtedly would have been if a different group of professionsl were involved. There is no attempt on the part of the committee, therefore, to pretend that these essays cover all the important

problems that the elderly in Iowa are encountering. A truly comprehensive survey of current problems would require the input of many groups, including especially the observations of the Commission on Aging as well as many independent, statewide groups concerned with the welfare of the elderly. The range of topics treated in these essays should be viewed as a preliminary effort to survey the field, not as a systematic and definitive statement on the problems of the aged.

Because the essays are not a systematic review of the problems of the aged, the committee did not attempt to secure general agreement either on the priority of topics or on the conclusions of the essays. Each should be read as an individual statement, reflecting the views of a professional or a group of professionals in the field. As might be expected, many of the essays do reach identical conclusions in certain areas. Both the essay submitted by University of Iowa Hospitals and the one authored by University of Iowa nursing faculty emphasize the importance of expanding medicare benefits to cover drugs, hearing aids, dental care, eye glasses, and long-term care, for instance. The fact that these identical conclusions were arrived at independently would seem to give them special force.

In other instances, the authors of these essays may disagree on possible courses of action. It cannot be assumed that the conclusions in one essay would be endorsed by all practitioners in the field or all the authors of these papers. The point of the essays is to prompt, not to conclude discussion of the issues covered, and diversity rather than uniformity of perspective was encouraged by the committee in promoting individually authored or small-group essays.

Except for the first essay, which gives a concise statistical picture of the elderly in Iowa, the papers presented here not only describe a problem area but also offer recommendations for legislature action. This feature of the essays results from the committee's request to the authors to provide specific suggestions for legislative action. In some cases these suggestions are very specific; in other cases, they remain rather general. At a time when the economic conditions of the state are depressed and state revenues are in low supply, it is easy to dismiss recommendations that carry with them significant costs. Nonetheless, it was the committee's view that specific recommendations are a useful way of describing the problems that exist and the alternative courses of action available.

In brief, it is our hope that the attached essays and their recommendations will not be read or judged as final statements. Rather they are the first statements in what we hope will be a serious dialogue of legislators, researchers, and concerned citizens on the principal needs of the elderly of Iowa. This dialogue--both within and without the State House--may lead in some cases to studies of these issues that are comprehensive, in other cases to legislative actions that are concrete, and possibly in still other cases to issues other

than those discussed here. Whatever the specific results, these essays will have served their primary purpose, not so much by answering old questions, but perhaps rather by encouraging new ones.

On behalf of The University of Iowa Committee on Aging, I wish to thank the authors of the papers contained here. Thanks are due also to Jay Semel who edited this report and to F. Gretchen Miller and Norine Zamastil who provided secretarial assistance.

William J. Farrell
Chairman, The University of Iowa
Committee on Aging

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EVERY EIGHTH IOWAN

Woodrow W. Morris, Ph.D.

Summary

This paper provides a demographic perspective of Iowa's elderly population. It covers a variety of categories, such as population growth, age, personal income, health costs, use of health care resources, death rates, life expectancy, marital status, educational attainment, employment, population projections.

- The 1980 population of Iowans over 65 is approximately 380,000. Between 1900 and 1970, the number of older Iowans increased by 215 percent compared to a 17 percent increase in the under-65 population.
- In 1975, 28.5 percent of women living alone had incomes below the official poverty level.
- Older Iowans represent 13 percent of the total population, but account for over 20 percent of the total personal health care expenditures.
- The 65 and older population utilize hospital beds at a rate higher than than any other age group.
- In 1971, the life expectancy of Iowa males was 68.8 while that of females was 76.5. Both were greater than the national average.
- In Iowa in 1980 there probably are 226,459 older women compared to 152,884 older men.
- In 1977, 46.5 percent of all older women lived alone.
- It is expected that 21 percent (86,100) elderly persons will be in the labor force in 1981.

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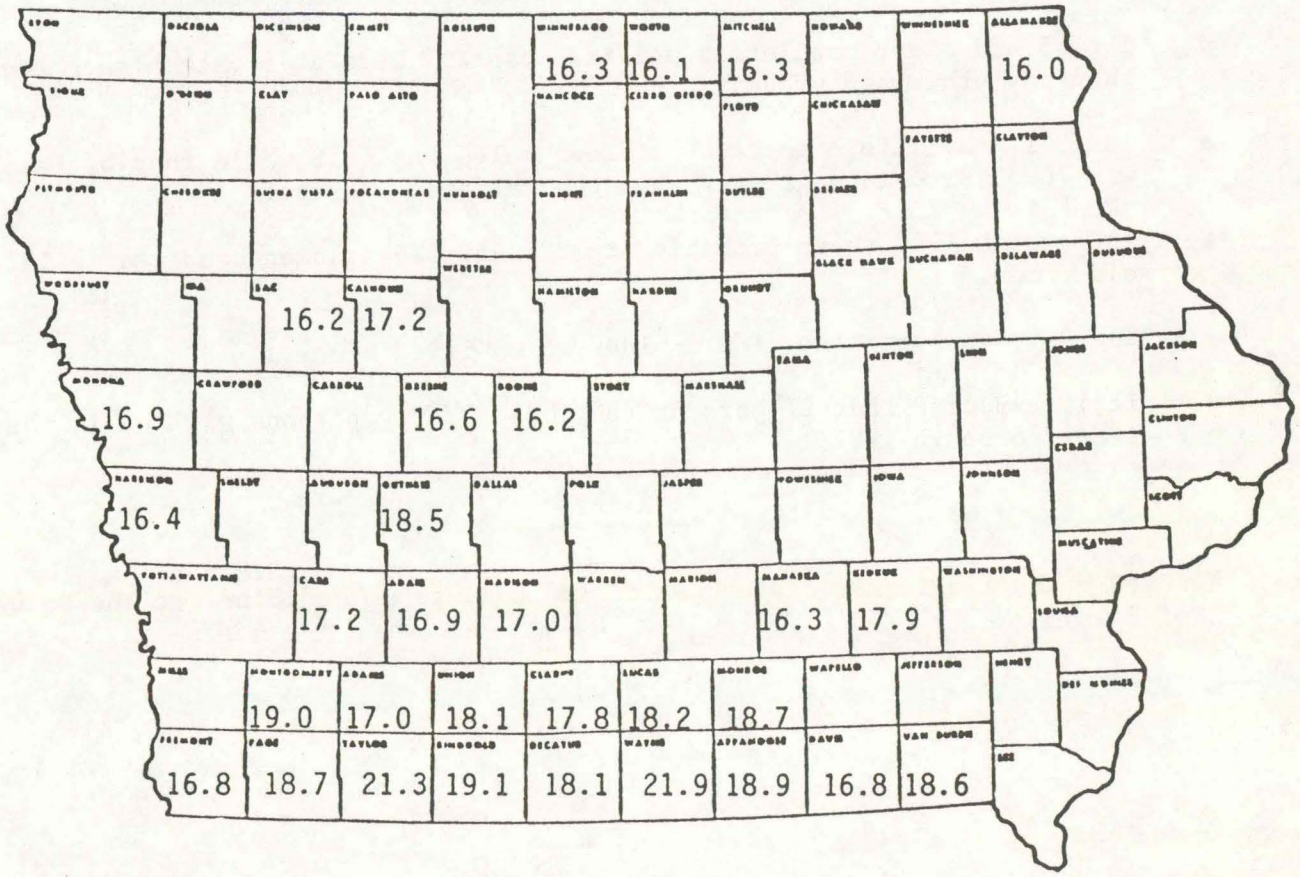
EVERY EIGHTH IOWAN

Since the proportion of elderly people in IOWA is close to one in eight, we have titled this analysis "Every Eighth Iowan." Over recent years, IOWA has ranked somewhere between first and third in the proportion of the State's population in the 65-plus age group. In, 1979, the largest concentration of older persons in the United States - 13% or more of a State's population - occurred in 6 States: Florida (18.1%), Arkansas (13.7%), IOWA and South Dakota (13.1%), and Missouri and Nebraska (13.0%), California and New York each had more than 2 million older people, while Florida, Pennsylvania, Texas, Illinois, and Ohio each had more than 1 million.

In IOWA the largest concentration of older persons - 16% or more of a county's population - occurred in 31 counties (see IOWA Map). All are essentially rural counties, only one of which includes a city with population greater than 6,500 (Boone, pop. 12,500). Fifteen of these high-elderly counties are among the 21 which comprise the lower two tiers of counties along the Missouri border.

IOWA



Counties with 16.0% of the population in the 65-plus age group - 1977

Growth in Numbers

In IOWA during the 70 years between 1900 and 1970 (the date of the last census), the population grew by a little more than one-fourth, from 2.2 million in 1900 to 2.8 million in 1970. During this period, the older part grew over twofold, from 111,000 to 350,000. By 1977 it had risen to 374,000 and will probably reach more than 380,000 during 1980. Despite a slowing of the rate of growth of the older portion of the population, the 65-plus part continues to grow faster than the under-65 portion. Between 1900 and 1970, the number of older IOWANS increased by 215 percent compared to a 17 percent increase in the under-65 population.

Turnover

The elderly are neither homogeneous nor static. The net increase in the older age group in IOWA amounts to about 9 persons a day for a total of slightly over 3,400 a year. This increase includes the data on net migration and the natural increase of those IOWANS who celebrated their 65th birthdays. It is worth noting that these "newcomers" to the older age group are quite different from and have lived through quite a different life history than those already 65-plus, and are worlds apart from the centenarians who were born shortly after the Civil War.

Age

In 1980 most older IOWANS were under 75 (56.6%); about half (47%) were under 73; and slightly less than one-third (31%) were under 70. About 165,000 IOWANS are 75 years of age or over, and in 1970 there were reported to be 1,330 IOWANS who were 100-plus. The median age of the IOWA population is 30 years.

Personal Income

In IOWA in 1977, half of the families headed by an older person had incomes of less than $8,548; the median income of single unrelated individuals was $3,628. In the latter group, the median income of males was $5,392 which may be contrasted with that of females which was only $2,740.

In 1975, 43,000 or one-eighth of the elderly population of IOWA had incomes below the official poverty levels. This plight is most severe among those elderly living alone, among whom 27.1 percent had incomes below the pverty level. This affects about 18 percent of the men living alone, but 28.5 percent of the older women living alone. If the 125 percent level as a definition of "near poor" is employed, 75,000 or 22 percent of older IOWANS would be so classified.

It must be kept in mind that older persons, for reasons frequently beyond their control, often become poor after they reach 65 because of a sharp drop in income on retirement. They mey be poor because they have given unselfishly of their resources or because they have outlived their savings. Older persons experience low income as a cruel burden. Moreover, low income can compound other problems such as loneliness and poor health.

The theoretic retired couple budget prepared by the Bureau of Labor Statistics for a modest but adequate intermediate standard of living came to $7,846 in 1978. A lower budget came to $5,514; and a higher one to $11,596.

Income Maintenance

Old age, Survivors, and Disability Insurance. In December 1978, the Social Security Administration paid cash benefits to 487,000 older IOWANS and their dependents for a total of $113.3 million.

For retired workers and their dependents, the average monthly payment to the retired worker was $262.43; to their wives and husbands, $133.57; and to their children, $121.84. For survivors of deceased workers; the average monthly payments to children was $195.60; to widows and widowers, $241.91; and to aged parents, $159.09.

Supplemental Security Income. In July 1979 the Social Security Administration and the State of IOWA sent checks to some 12,000 IOWANS aged 65-plus, eligible because of age and need, totalling $896,520. This comprised an average monthly payment of $74.71.

Health

Total Health Costs. (Includes personal health care expenditures and costs of research, construction, and public health activities such as control of contagious diseases.) The total health bill in IOWA was $1,670 million in 1976. This is a dramatic increase over the past ten years. This increase in the cost of health care results from the vast techinical changes, very rapid price increases, the "aging" of the population, the increased utilization through public programs, and especially the utilization of expensive inpatient facilities.

Personal Health Care Expenditures. These expenditures (which exclude costs of research construction, and public health activities like contagious disease control) in IOWA rose from $469 million in 1966 to $1,529 million in 1976. Per capita care costs for health care in 1976 were $532. A conservative estimate suggests that health care expenditures of older IOWANS amounted to more than $311.8 million which is $834 per capita.

In 1979, Medicaid paid out claims of $200 million for health services to 160,000 IOWANS which amounts to $1,250 per capita. During the year, Blue Cross-Blue Shield paid its biggest client -- The Federal Government's Medicare Insurance Program -- $491.4 million in claims. While the exact figures are not known, most of these funds go to providing health care for the elderly.

Older IOWANS represent 13% of the total population, but account for over 20% of the total personal health care expenditures. Of these $311.8 million, only $110 million or about one-third came from private sources, and $201 million or two-thirds were paid by public programs.

Utilization of Health Care Resources. Older people are subject to more disability, see physicians 50% more often, and have about twice as many hospital stays that last almost twice as long as is true of younger persons. Still some

82% reported no hospitalization during the previous year.

In 1977 in IOWA, the average daily census of 65-plus patients in 132 short stay hospitals was about 3,800 compared to 2,600 in the middle-age group. Older patients' hospital stays averaged about 10 days compared to around 8 days for middle-age patients.

These data and those in the table below demonstrate that the 65 and older population utilize hospital beds at a rate higher than any other age group. Utilization rates for males 65 and older are higher than for females 65 and older. Adequate discharge planning might serve to reduce the utilization rates of expensive hospital beds.

USE AND DISCHARGE RATES
PER 10,000 IOWA RESIDENTS
SEPTEMBER 3-30, 1977

Age/Sex Category	State Use Rate	State Discharge Rate
00-14		
Total	251	62
Male	287	69
Female	213	55
15-44		
Total	679	131
Male	506	83
Female	849	178
45-64		
Total	1176	151
Male	1186	149
Female	1166	153
65+		
Total	2761	284
Male	3034	318
Female	2574	261
All Ages		
Total	941	138
Male	856	118
Female	1023	157

SOURCE: Compiled by Research and Data Management, Iowa Health Systems Agency; data from Patient Information on Hospital Service Area, Sept. 3-30, 1977, Iowa State Dept. of Health.

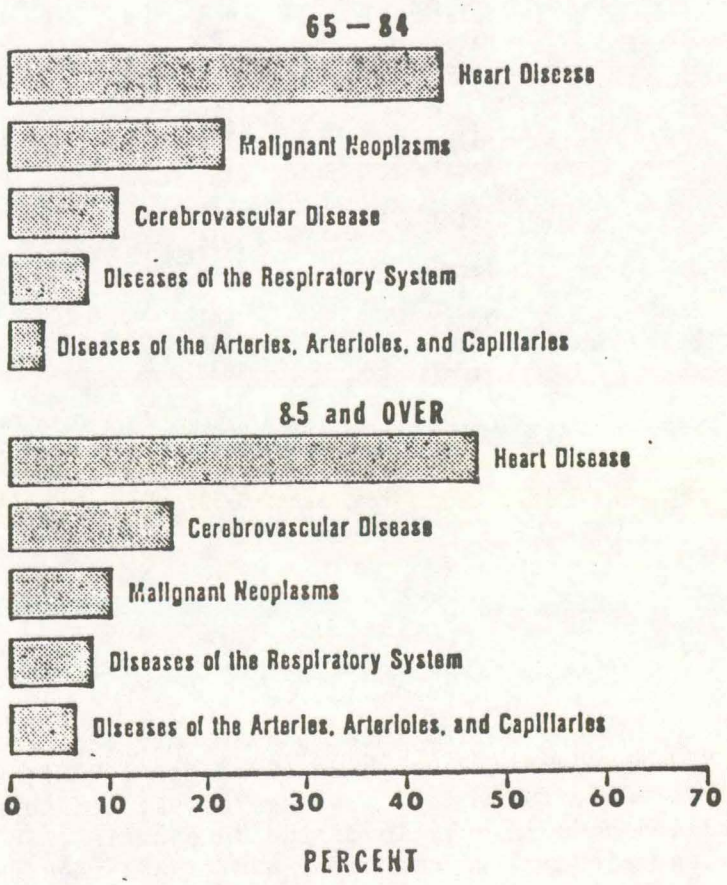
In 1980 there were 30,673 intermediate care beds (80.5 per 1,000 65-plus persons), 8,873 residential care beds (23.3 per 1,000), and 1,075 skilled care beds (2.8 per 1,000). There is a shortage of skilled nursing beds in IOWA. There are skilled beds in only 16 of the 99 counties. No doubt the explanation of this shortage lies in the costs for additional required professional staff as well as inadequate reimbursement, and the strict interpretation used in qualifying patients for skilled care. If more skilled beds were available, it

would permit earlier discharge of many patients from the more expensive acute care hospital beds.

Of the 27,839 persons estimated to be in intermediate care facilities at any one time in IOWA in 1979, 92% were in the 65-plus age group. Of these, 87% were aged 75-plus. Women outnumbered men by 2.5 to one. There were 6,769 persons at any one time living in residential care facilities, 58% of whom were 65-plus. Of these, 70% were aged 75-plus. Again, women outnumbered men by a sizeable proportion (almost 1.7 to one). The incidence of admission to skilled nursing facilities per year over the past five years has been consistently 4,000. "Incidence of admission" to skilled care facilities is used in place of "number at any one time" because there is a shorter length of stay (thus a more rapid turnover) in skilled facilities.

Death Rates. In the 10-year period between 1969 and 1978, annual death reated for older IOWANS dropped 6.7% from 6.0 to 5.6 per 100. Within the older population there were these variations: the rate for persons 65-74 dropped 15% from 3.3 to 2.8 per 100; the rate for those 75-84 dropped 10% from 7.7 to 6.9 per 100; while the rate for the 85-plus dropped 21% from 26.0 to 20.5 per 100.

The death rates of older IOWANS from heart disease declined slightly, and in 1978 it was reported to be about 2.5 per 100, and the death rate for stroke was 0.7 per 100. These three causes of death among the elderly accounted for three-fourths of the deaths. The chart shows the major causes of death among older IOWANS in 1978



Source: Vital Statistics of Iowa 1978

Life expectancy for IOWANS increased from 71.9 years in 1961 to 72.6 in 1971. The table below shows that life expectancy in IOWA in 1971 was greater than the U.S. average for all ages specified until age 85.

LIFE EXPECTANCY (YEARS OF LIFE REMAINING), 1971

	Both Sexes	
	Iowa	U.S.
At Birth	72.6	70.8
Age 25	50.1	48.4
Age 45	31.3	30.1
Age 65	15.6	15.0
Age 75	9.6	9.3
Age 85	5.3	5.3

SOURCE: Brotman, H.B., "Life Expectancy" The Gerontologist; Volume 17, #1; 2-77, p. 12.

As with the nation, the average life span of people in IOWA varies considerably according to sex, as seen below.

LIFE EXPECTANCY IN YEARS - 1971

	Total	Male	Female
Iowa	72.6	68.8	76.5
U.S.	70.8	67.0	74.6

The increase of life expectancy during this century results from the wiping out of most of the killers of infants and the young - much smaller improvement has occurred in the upper ages when chronic conditions and diseases become the major killers. Many more people now reach 65 (about 76% versus 40% in 1900) but, once there, they live only 4.1 years longer than did their ancestors who reached that age in the past. Should recent decreases in death rates continue among older persons, especially from cardiovascular conditions, life expectancy in the later years may increase further.

The following statement from the 1980-85 State Health Plan for Iowa is apropos: "More Iowans should be living to at least age 75. In 1970, in Iowa and in the United States, for persons at birth and at one year of age, the average life expectancy is about 73 years. But, since in some European countries life expectancy is well over 75 years at birth, in Iowa, 75 years is also an attainable life expectancy. . . About half of the premature deaths is Iowa are caused by lifestyle factors. Clearly, changing lifestyles would have the greatest impact on preventing premature deaths. Lifestyle changes in obese, hypertensive, unemployed, low-skilled workers will not come about without accompanying changes in his or her social and economic environments. Declines in the rates of premature mortality in Iowans will come about as a result of understanding the complex interplay of lifestyle, environmental, biological, and health care system factors, and of implementing a policy of preventive programs which reflects this complex interplay."

Sex Ratios

As a result of the yet unexplained longer life expectancy for females, most older persons are women. In IOWA there probably are 226,459 older women compared to 152,884 older men. Between ages 65 and 74, there are about 127 women for every 100 men.; between ages 75 and 84, there are 165 women for 100 men; and in the 85-plus age group the ratio is 190 women for every 100 men. The average of the 65-plus population in IOWA is 148 women per 100 men.

Marital Status

In the North Central region of the United States, of which IOWA is a part*, in 1979 most older men were married (1.8 million or 73%), but far fewer older women were married (1.3 million or 36.5%). Many older women were widows. In IOWA in 1978, among 28,000 marriages of persons of all ages, there were 224 brides and 383 grooms aged 65-plus. There was a remarkable tendency for older men to marry women younger than themselves (70%); the tendency among older women is to marry men their same age or older (69%).

Educational Attainment

Again, since IOWA data were not available, this report is based on the North Central region.* In this region half of the older people had completed at least one year of high school (9.3 grades). The median for the 25-64 age group was a high school graduation. To the extent that North Central data are applicable to IOWA, it is estimated that about 22,000 older IOWANS may be "functionally illiterate," having had no schooling or less than 5 years.

Living Arrangements

In IOWA in 1977, 8 of every 10 older men, but only 5 of every 10 older women, lived in family settings; the others lived alone or with nonrelatives except for the approximately one in 20 who lived in an institution (1 in 5 in the 85-plus age group). Almost half (46.5%) of all older women lived alone, Over four times as many older women lived alone than did older men.

Place of Residence

In 1977, 29% of older versus 37% of younger IOWANS lived in metropolitan areas of the State. Within the metropolitan areas, 70% of the older people lived in the central city as did 62% of the under-65 group. Fifty-six percent of older IOWANS lived in urban areas of the State; 32% lived in rural nonfarm areas; and 12% lived in rural areas.

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*The North Central regions includes the following States: Illinois, Indiana, Michigan, Ohio, Wisconsin, IOWA, Kansas, Minnesota, Missouri, Nebraska North Dakota, and South Dakota.

Voter Participation

In the November 1978 election, older IOWANS made up 15% of the voting age population but cast 17% of the votes. Some 59% of the older population voted, not quiet as high as the proportion of 35-64 year old group, 61% of whom voted. A higher percent of older men than women voted, but the women still outnumbered the men voters. Unlike the national figures, there was not fall-off among the 75-plus group, 59% of whom voted.

Mobility

This section reports on mobility in the North Central region of the United States since IOWA mobility data were not available. Between 1975 and 1978, 12.9% of the persons in this region, then aged 65-plus, reported that they had moved from one residence to another during the period. Some 8.3% of the elderly moved within the same county, 3.1% moved to a different county within the same State, and only 1.4% moved across a State line. Of those elderly who left the North Central region for a different region in the U.S., equal numbers and proportions (41,000 or 13%) moved to the South and West regions, respectively. Very few (6,000 or 1%) migrated to the North-east region. It should be noted that the main reasons for older people to move are climate and retirement which may relate to the migrations to the South and West.

Employment

In 1975 in IOWA, 29% of 65-plus men (41,800) and ten percent of 65-plus women (20,300) were in the labor force with concentrations in three low-earning categories: Part-time, agriculture, and self-employment.

Projections for 1981 suggest that 38% of the 65-plus males (62,200) and 10% of the 65-plus females (23,900) will be in the labor force. Thus, it is expected that a total of 21% (86,100) elderly persons will be in the labor force in 1981.

Among older people unemployment ratios are usually low partly due to the fact that in a period high employment older workers become discouraged and stop seeking jobs and are not counted as being in the labor force at all. For those remaining actively in the labor force and counted as unemployed, the average duration of unemployment is longer than for younger workers.

Licensed Drivers

In 1978 in IOWA, there were 306,485 licensed drivers in the 65-plus age group which is 82% of all persons in that age group, while in the under-65 group the proportion holding drivers license was 87%. The accident rate reveals a far lower proportion of accidents per 10,000 licensed drivers among the 65-plus group than any other group (325). The highest accident rates occurred among teen-age drivers from 16 to 19 (ca. 1,200 accidents per 10,000 licensed drivers). Aging and aged drivers were involved in 63 or 7.3% of the fatal accidents. This comprises a fatal accident rate of about 2 per 10,000 licensed drivers. Again, the highest fatal accident rate (6.27 per 10,000) occurred among teen-age drivers.

Population Projections

The population projections for IOWA through the year 2020 are shown in the table below. Comparison of the span of years from 1970 to 2000 shows a continuing increase in the IOWA polulation of 13%, and an additional 5% between 2000 and 2020. Important sex and age differences within the 65-plus group are shown in the table on the following page.

POPULATION PROJECTIONS FOR IOWA, 1980-2020

(Numbers in thousands)

		65-plus				
		Both sexes			Female	
Year	All ages	Number	Percent of all ages	Male	Number	Per 100 men
1970	2,825	349	12.4	146	203	139
1975	2,879	364	12.6	149	214	143
1980	2,933	383	13.1	154	230	150
1985	3,011	406	13.5	159	147	155
1990	3,088	425	13.8	164	261	160
1995	3,152	435	13.8	165	270	163
2000	3,202	433	13.5	161	272	169
2005	3,248	434	13.4	160	274	171
2010	3,294	450	13.7	167	283	169
2015	3,333	487	14.6	181	306	169
2020	3,356	567	16.9	219	348	159

Source: Office of Planning and Programming for Iowa, 1979.

As the table on the following page shows, it is projected that there will be a continuing increase in the number of elderly in IOWA to the year 2000, then very rapid growth from 2000 to 2020 as the post-war babies reach their later years. It is probable that there will be a sharp deceleration beyond 2020 as current low birth rates are reflected in the population of older people of that time. Significantly with the exception of the very oldest group, the traditionally more rapid growth of older women is reversed in the period between 2000 and 2020. But of even great significance is the finding that between now and 2000 the oldest part of the population is projected to grow most rapidly (The 75-plus group by +36.0%), then be reversed between 2000 and 2020, and probably return to the current trend after 2020.

POPULATION PROJECTIONS, TRENDS WITHIN THE 65-PLUS AGE GROUP, 1970-2020

(Percent change)

Sex	1970-2000	2000-20
Both sexes, 65-plus	+24.1	+30.9
65-69	+13.3	+82.4
70-74	+19.7	+25.5
75-plus	+36.0	+ 6.6
Male, 65-plus	+10.3	+36.0
65-69	+14.1	+92.3
70-74	+17.1	+21.4
75-plus	+ 9.5	+ 2.7
Female, 65-plus	+34.0	+27.9
65-69	+ 6.5	+74.3
70-74	+16.8	+28.6
75-plus	+63.0	+ 8.3

Does the age shift in the IOWA population create insurmountable "burdens"? While data were not available to make reasonably reliable projections beyond the present, it would appear that the "burden" in IOWA is greater than that in the nation as a whole. Thus, the gross dependency ratio of the combined young and old to the middle group for 1970 is 88.13 per 100 and for 1975 it was 78.1. These may be compared with the 1970 and 1977 national ratios of 78.1 and 67.9, respectively.

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AGING ISSUES: THE PERSPECTIVE OF THE UNIVERSITY OF IOWA HOSPITALS AND CLINICS

John W. Colloton

Summary

The University of Iowa Hospitals and Clinics has developed a variety of specialized programs to meet the needs of the ever increasing number of Iowa elderly, and the medical center has supported these programs with an expanding emphasis on research and education. There are, however, problems in health services delivery, especially in the areas of financing, availability of health services, and preventive health needs.

To remedy these problems, the following steps are recommended:

- Broaden Medicare benefits to cover preventive health services, hearing aids and eyeglasses, drugs, and dental care; reduce the deductible and co-insurance rates; extend benefits to adequately cover long-term health problems.
- Increase the elderly's understanding of their health coverage by clarifying available information.
- Finance the development of meals-on-wheels, homemaker, or supervised housing services which affect health status.
- Relax Medicare and Medicaid reimbursement policies so as to encourage hospital participation in community health services.
- Facilitate the development of a state continuum-of-care system.
- Improve education to aid citizens in influencing their own health by developing programming for cable or public TV and by developing outreach efforts emanating from Iowa's universities.

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AGING ISSUES: THE PERSPECTIVE OF THE UNIVERSITY OF IOWA HOSPITALS AND CLINICS

Our older population experiences a myriad of chronic illnesses with severe financial impact for both the individual and the nation. Heart disease, cancer, stroke, infections, and accidents are all prevalent, among other acute and chronic diseases, in our older population. Reduced and fixed incomes for this group have the potential for leading to malnutrition, social isolation, and a reduction in health seeking behavior. The health care system can respond to bring the technology, health manpower, and wealth of medical knowledge to attack the health problems of aging and to help older citizens maintain an acceptable quality of life. Social and economic problems must be addressed by society at large.

Tertiary Level Hospital Health Services to the Elderly

- The University of Iowa Hospitals and Clinics serves Iowa's aged population who require tertiary level services. All clinical departments at University Hospitals provide a full range of diagnostic and therapeutic services to those over 65, who are directed towards retaining the maximum health status for each patient. The older population requires increasing attention as they suffer the physical consequences of aging, change economic status and require assistance in maintenance of daily living. As a tertiary care center, University Hospitals has a variety of specialized programs to meet the high level health needs of the aging patient.

The Department of Neurology has developed an acute stroke monitoring unit to carefully observe and address the problems of patients suffering from acute cerebrovascular accidents, with many of these patients being over 65 years of age. The unit is supported by intensive physical therapy, Social Services and other ancillary services directed toward rehabilitation and improvement of the patient's quality of life.

As a second example, the Rubin H. Flocks Prostatic Disease Center in the Department of Urology concentrates many of its services on those problem areas often affecting our older male citizens. The Departments of Internal Medicine, Surgery, Orthopedics and Ophthalmology provide, along with all other clinical departments, a full range of services for Iowa's older citizens. Research also plays an important role in the University of Iowa's efforts to meet the needs of the aging, as is reflected in the Division of Behavorial Neurology study on the early detection of treatable dementia.

Problems

Iowa's tertiary care center can meet the needs of our aged population, but problems in health services delivery for these citizens are prevalent, especially in the areas of financing, availability of health services, and preventive health needs.

Financing

The first of these problems is the financing of health services for the aged. Because of increasing susceptibility to chronic and acute diseases in

older people, they often experience increased health care costs in the face of a declining income.

- The health care benefits covered by Medicare are not comprehensive.

Preventive health services, prosthetic devices such as hearing aids or eyeglasses, over-the-counter and prescription drugs as well as dental care are not covered.

In addition, the deductible and co-insurance levels for Medicare have been steadily increasing. In 1970 the deductible was $52 for inpatient services and the co-insurance rate was $13 per day for 61-90th day and 60-day reserve at $26 per day. In 1980, the deductible has increased to $180 (a 346% increase) and co-insurance is now $45 and $90 per day, respectively.

Finally, the benefit levels covered by Medicare may be inadequate to meet long-term chronic health problems. The Iowa Medicaid program may assist with some of these problem areas, but for those elderly persons who are not eligible for Medicaid the impact of declining health status can be devastating.

- To compound the financing problems, the information provided to senior citizens on Medicare is complex, involved and difficult to understand and must be improved.

Additionally, individuals who are working after age 65 often are dropped from their employer's health insurance coverage, perhaps losing benefits or broader coverage in the process. A better understanding of the health benefits and coverage is needed by our older citizens so thay can take proper steps to assure their coverage is adequate.

- Another area which is receiving growing attention falls into the realm of maintenance of a quality of life.

Many older persons could maintain themselves in their homes with some assistance.

Home health agencies can provide community health related services in areas where they are available to the aging. Yet services which are not necessarily health oriented, such as meals-on-wheels, homemaker, or supervised housing, are services in need of further development and financing in Iowa, and directly affect the health status of the elderly.

Recommendations

- Broaden Medicare benefits to cover preventive health services, hearing aids and eyeglasses, drugs, and dental care, reduce the deductible and co-insurance rates; extend benefits to adequately cover long-term health chronic problems.

- Increase the elderly's understanding of their health coverage by clarifying available information.

- Finance the development of meals-on-wheels, homemaker, or supervised housing services which affect health status.

Expanding Health Services

- Community Hospitals are discouraged from participating in outreach service programs such as meals-on-wheels or hospice programs because Medicare and Medicaid reimbursement policies penalize such involvement. Excessive costs are assessed to these outreach or service programs under Medicare cost allocation principles and such costs are deducted from the hospital's Medicare reimbursement determination.

- Another area of provider concern is the development and maintenance of a continuum of care for older patients which covers both health and social concerns.

The University Hospitals maintains a referral network with physicians, hospitals, long-term care facilities, home health agencies, and other providers throughout Iowa which seek to meet the community health needs of the aging. Health planners have been evaluating the availability and accessibility of skilled, intermediate and other long-term care facilities in the state, and are encouraging the development of new facilities in areas of greatest need. A continuum of care which brings the patient from the tertiary care level, other hospital and health care facilities to maintenance services needs to be developed and encouraged in this state.

Recommendations

- Relax Medicare and Medicaid reimbursement policies so as to encourage hospital participation in community health services.

- Facilitate the development of a state continuum-of-care system.

Patient Health Education

- Maintaining a quality of life in later years could be enhanced with appropriate action now. Preventive health education must be encouraged and financed at the state level, and this is an investment in the entire population of the state.

For example, the four leading causes of death in Iowa are heart disease, cancer, cerebrovascular diseases and accidents. These four causes alone accounted for 17,637 deaths in 1977 or 76% of all deaths in the state during that year. Accidents, by their very nature, are preventable. It is estimated that by the year 2000 accidents will cost $306 billion each year. A significant amount of circulatory diseases, which include heart and cerebrovascular diseases, account for over 50% of all deaths and could also be reduced with preventive action. We must seek to make major efforts to improve the life style of all of Iowa's citizens and address those preventive-related actions, such as proper nutrition, physical examinations, appropriate dental care and immunizations, which could impact on future life expectancy and quality of life.

To reiterate, life expectancy is directly related to our life styles, even more than what medicine can or cannot do to help us maintain a high quality of life. These problems apply to the elderly, although no data on the experience of those over 65 was available. University Hospitals and The University of Iowa could have a significant impact on improving life style, reducing risk factors and preventive-oriented behavior of Iowans in the future.

Recommendations

- Expand and improve the education of our citizens with regard to their ability to determine, and to some extent control, their own destinies which could be affected by these disease processes.

- Special emphasis on concentrating on the individual's responsibility for positive action with regard to preventive health care must begin with expanding the educational initiatives of this state. As noted in the report of the Iowa 2000 Program, "Health is the primary responsibility of the individual; therefore, it should be the policy of the state of Iowa to mandate an extensive educational program aimed toward the maintenance of good health and the prevention of illness and accidents."

  In developing these programs to encourage behavioral changes and lifelong physical activity for our citizens, we suggest the following:

- Make use of specialized cable T.V. networks which will bring entertainment as well as educationally oriented programming to Iowa's citizens. Specialized programming aimed at the aging and their physical fitness, eating habits, accident prevention and use of alcohol, tobacco and drugs could impact postively upon their health status.

- Make better use of public television networks in health education. Health education initiatives on public television have been well accepted by the public, but the use of public T.V. could be expanded in the future with special emphasis on specific health problems or age groups.

- Develop outreach programs emanating from Iowa's University system and taking advantage of the scientific knowledge base which is centralized and readily available from our campuses. Teams of health educators and other health professionals could develop outreach programs extending to communities throughout the state of Iowa and bringing specific programs to the attention of population.

This paper provides an overview of the problems and concerns University Hospitals sees in the future for our older citizens. In summary, improved financing is needed for expanding health services and benefits for older citizens, health and maintenance services directed toward the special needs of the aging must be expanded, and improving the knowledge base and understanding of health insurance and preventive health behavior in our older citizens will enable this population to improve the quality of life they experience in future years.

DRUG MEDICATION AND THE ELDERLY

Michael M. Alexander, Pharm. D.
Dennis K. Helling, Pharm. D.

Summary

Studies indicate that elderly persons in both ambulatory and institutional settings suffer the undesirable effect of improper utilization and over-utilization of medication. Drug-induced problems include: a high incident of side effects and adverse drug reactions; induction of additional illness; increased frequency of hospitalization and longer duration of hospital stay; drug interactions with other drugs and food; and worsening of concurrent diseases.

There are often disincentives to pharmacy practitioners to reduce medication problems. Traditionally, reimbursement has been based on the number of medications dispensed and not on those activities which decrease medication use or promote proper drug utilization. Moreover, the skills and knowledge required to provide these services are often perceived as being possessed by specialist pharmacists only.

To improve pharmacy services to the elderly, the following recommendations are made:

- Separate the dispensing payment from the consultant payment; per diem reimbursement for patient monitoring and consultation may be feasible.
- Provide patient, third party, and state reimbursement for drug distribution systems (unit dose) which decrease medication errors.
- Provide state reimbursement for drug dispensing via a capitation reimbursement system.
- Increase federal Medicare coverage to include prescription medications purchased for use by elderly ambulatory persons.
- Increase federal and state funding to increase faculty providing interdisciplinary training for pharmacy and other health profession students.

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Drug Related Problems Faced by the Iowa Aged

Medication Problems

- Drug-induced disease in the elderly is more common than often realized. Poor drug compliance plays a substantial part in the problem.

Studies of elderly patients have indicated that from 25% to 59% of patients do not take their prescribed medications properly.[1,2] Many patients do not understand their drug regimens, omit doses or take too many doses, or take medications not currently prescribed for them or actually intended for others. In more than one-third of patients, the resulting errors actively endanger their health.[2-4] The problems of dosage schedules are aggravated because many elderly are mentally frail yet have no relative or friend to supervise drug taking. The infirm elderly are at risk since social isolation, infirmity and even the pattern of health care practice may prevent adequate contact between the patient and health care team members. In one survey, 87% of patients 75 years or older were taking medications without outside assistance.[5] One-third of this group were taking more than four different medications daily.

The misuse and abuse of prescription medications by the elderly are generally not recognized as a problem until the patient presents to an emergency room or psychiatric institution.[6-8] Sixteen to 28% of patients entering the geriatric or medical services of general hospitals displayed symptoms attributed to the effects of prescription drugs.[6,9,10] Another study of drug-induced hospitalization indicated that four percent of patients admitted aged 61 to 70 and five percent aged 71 to 80 were related to adverse drug reactions. Excluding aspirin, one-fifth of these admissions were secondary to the use of the over-the-counter (OTC) medication.[11]

Drug-induced illness is more frequent among elderly hospitalized patients. In one study, the proportion of those aged 80 or more with adverse drug reactions was almost 25%, while in the age group 41 to 50, the adverse reactions rate was 12%.[12] In addition, hospitalization stays are extended resulting from adverse drug reactions.[13]

- The presence of multiple pathologic changes is common and it fosters the practice of multiple drug therapy in an attempt to treat several disorders simultaneously.

Several studies have surveyed the number of prescription and OTC medications that are used by ambulatory elderly. In a Minneapolis area study, Lundin found that the mean number of prescription medications was 3.4 (range 0-8). This mean number of OTC products was 2.9 (range 0.9).[14] Twenty-eight percent of this population took more than one aspirin-containing product. Considering that aspirin was the most frequent cause of drug-induced hospitalization,[11] this duplication could have serious complications.

The above results are similar to those of other studies.[8,15,16] Fourteen percent of Chien's population were taking 7 to 15 drugs.[8] Institutionalized patients use more medications than ambulatory patients. In a recent review by Kidder, the mean number of medications used by nursing home patients ranged from 3.2 to 7.8 per day.[17]

This frequency of drug utilization may lead to drug-drug, drug-food, and drug-disease interactions. In a study of seven nursing homes, 23% of patients

had potential drug interactions.[18] Usually, the greater the number of drugs that patients take, the greater potential for drug interactions. A hospital study indicated that patients simultaneously receiving six to ten drugs had an adverse drug reaction rate of 7-10%. There was a least a 40% chance of a patient having an adverse drug reaction to one or more drugs as the number of medications approached 20 per day.

Polypharmacy or the use of additional drugs is often initiated to counteract the effects of previous drug therapy. In this instance, the adverse reaction may be treated with additional drug therapy. Drug interactions which negate the therapeutic effect or cause additional unwanted effects are also frequently treated with additional medications. It is, therefore, not uncommon to find patients receiving 20 different medications with the potential for more additional unwanted effects.

Per capita, the expenditures for prescribed drugs by the elderly is far above other age groups. In 1974, spending by the aged on drugs and drug sundries was estimated at $2.25 billion or more than 20% of the national total, although the elderly comprise only 10-15% of the population. According to the same study, per capita, the aged spent almost $100 for prescribed and OTC medications per year.[20] Although the increase in expenditures for medications since 1974 has not risen greatly, these medication purchases certainly must compete with the large increases in food, shelter, and heating fuel.

Problems in Provision of Pharmacy Care

The challenge of drug problems in the elderly is being partially met by Iowa pharmacists. However, several critical problems are being encountered by pharmacists as they attempt to deal with the medication problems of the elderly.

- First, there is no economic incentive to reduce the number of medications consumed by the elderly.

In fact, theroretically there can be a conflict of interest in the reduction of medications since the pharmacist's reimbursement is based on the cost of medication plus a dispensing fee. On the contrary, one might suggest that there is an incentive to have patients take more medications in order to expand the pharmacist' income.

- Second, there is no economic incentive to provide clinical pharmacy services.

Clinical pharmacy services such as patient counseling and education, patient monitoring, and other activities are not reimbursed by institutions or third-party payers, or state or federal governments. Rather, there are economic incentives for pharmacists not to provide these services in order to devote time to other activities.

- Third, many pharmacists, by the nature of their practices, may not devote effort to activities designed to aid elderly patients optimize their medication utilization.

A contributing factor may be that pharmacists may not perceive that their skills and knowledge are adequate to perform these specialized functions.

Additionally, pharmacists may perceive that the role of a clinical pharmacist should be performed by a specialist instead of the majority of pharmacists. Finally, pharmacists may perceive that the performance of clinical pharmacy services will be met with community resistance. Norwood et al studied patient and physician attitudes toward special services performed by clinical pharmacists. Their conclusion was that the enthusiasm for such services performed by the pharmacist was not shared by rural consumers and physicians in northeastern Iowa.[21] Apparently, the majority of consumers in that study were not aware of additional services which could be performed by pharmacists. Consumer expectations of the value of potential pharmacy services were relatively negative unless exposed to clinical pharmacy services. This is substantiated by a well-controlled study by Norwood in Mechanicsville, Iowa. His work convincingly demonstrated that clinical pharmacy/patient-oriented services significantly improved consumer attitudes toward pharmacy.[32] A recent study by Alexander and Helling appears to indicate that physicians exposed to clincal pharmacists were enthusiastic about pharmacists performing such services.[33] However, attitudes by physicians without such exposure were somewhat negative toward additional services which could be performed by pharmacists.

Current Means Employed to Resolve the Problem

The pharmacist's responsibility for the use and misuse of medications by the elderly is partially fulfilled in a limited number of pharmacy practice sites. Presently, there are published reports of processes by which several pharmacists in other states and in Iowa are diminishing undesirable effects of medications in the elderly.

- Presently, income is based on the number of prescriptions that patients receive; however, means are being developed to reduce prescriptions.

Recently, several studies have indicated that pharmacists, through interaction with health care teams, are successful in reducing the number of medications that nursing home patients receive. Several pharmacists in California, Minnesota, and South Carolina have also reduced polypharmacy. Kidder reviewed several studies which indicated that the number of medications utilized could be reduced through the process of ongoing drug utilization review. The mean number of medications per patient which were discontinued ranged from 0.9 to 2.44. Nationwide, this decrease corresponded to a savings to Medicare and Medicaid of $19.8 to $53.8 million per year.[17] In one study, over a seven-year period, the monthly drug cost to welfare patients in a skilled nursing facility decreased form $37.87 to $26.42.[22]

- Specialized clincal pharmacy services have also reduced potential problems associated with drug use in the elderly.

Several pharmacists in California, Minnesota, Idaho, and West Virginia have provided drug utilization review, patient monitoring, performed drug histories, monitored for adverse drug reactions, provided drug information, presented in-service education, and instructed discharge patients and families on proper use of medications. Several states (excluding Iowa) compensate pharmacists for the review of patient drug therapy, drug utilization review, and other above-mentioned activities in intermediate care facilities. This ongoing process has been associated with the previously mentioned decrease in the number of prescription medications that patients receive. However, there are other benefits.[15,22-25]

In one study of 517 patients, an estimated 69 hospitializations (13% of all patients) were avoided when potential adverse drug reactons were monitored and/or corrected.[26] In addition, there was a decrease in the number of medication administration errors from 20% to 8% even without changing the drug distribution systems.[26]

- Pharmacists-initiated patient educational counseling and supervision of medication taking-behavior also have been shown to be beneficial in hospital and ambulatory care settings.

Several states (excluding Iowa) require that pharmacists counsel patients when new prescriptions are filled. Many pharmacists have included other patient care activities when patients refill their medications. There are many studies which indicate that such services are beneficial in reducing the often dangerous manner in which patients utilize their medications.[23,25] Various aids such as calendars, clocks, pinwheels, patient diaries, and Mediset have been used successfully. In addition to these activities, pharmacists at the Pioneer Medical Center in Mechanicsville, Iowa, have devised a system to monitor the medication taking patterns of elderly patients through a postcard medication refill reminder system.[27]

- The type of drug distribution system that is used by institutions has also proved to benefit patient care. Unit dose distribution systems reduce the rate of drug administration errors.[28]

Several states (excluding Iowa) provide additional reimbursement for dispensing medications in a unit dose format which requires additional materials such as medication carts, special medication administration forms, unit dose containers and packaging, and the additional pharmacy time required to prepare the medications for administration.

One such innovative geriatric practice exists in Mechanicsville, Iowa. The pharmacist at the Pioneer Medical Center is currently performing drug utilization reviews, counseling both institutional and ambulatory geriatric patients, monitoring patient therapy for efficacy and adverse drug reactions, and utilizing an institutional unit dose distribution system for the Mechanicsville Care Center. This pharmacist provides drug information to patients and health care professionals through individual consultation and inservice and community presentations. This pharmacy practitioner interacts with patients, physicians, and other team members at the Care Center and at the Family Practice Office, and has significant input into the decisions to initiate and alter drug therapy. This pharmacist is also a role model and educator for senior pharmacy students at The University of Iowa.

Pharmacists are providing other services in addition to traditional roles. One such pharmacy in Kentucky provides a community with hypertension screening. In addition, hypertensive patients are monitored for efficacy and adverse reactions by the pharmacist. A patient education library is also an important component of that practice.[29] The additional blood pressure monitoring service reimbursement is minimal, although patients have offered to pay more than the $1.00 professional service fee.

- Pharmacists are also providing consultant services for home health care agencies in a limited area in Kentucky and West Virginia.

This activity is especially important to aid the frail elderly who are unable

to travel to health care facilities. In several descriptive reports, pharmacists have developed services such as obtaining drug histories, maintaining drug profiles, and providing drug information to patients and other members of the team including the physician and visiting nurse. The concultant pharmacist's role is to promote rational drug therapy, evaluate the effectiveness of therapy, and improve patient drug knowledge and compliance.[30]

- The University of Iowa College of Pharmacy has also been active in providing medication information to students, residents, and practitioners in other health care fields. Presently, the pharmacy faculty are active in geriatric courses at the Colleges of Nursing and Social Work. Family Practice residents and medical students on rotation interact with the clinical pharmacists associated with the Family Practice Geriatric Team.

- Finally, there has been an ongoing program at The University of Iowa College of Pharmacy to train future pharmacy practitioners to assist elderly patients more properly utilize their medications.

Pharmacy students on a Geriatric Therapeutic Clerkship receive instruction in the provision of clinical pharmacy services such as drug utilization review and patient monitoring, drug distribution systems, consultation techniques, and communication skills with patients and other members of the health care team. However, as a result of the lack of sufficient geriatric clinical pharmacy faculty, less than one-half of senior pharmacy students are able to interact with elderly institutionalized patients on this clerkship.

Recommendations

- There is a need for state and federal governments to provide financial incentives for the provision of the highest quality of care at the lowest cost.

The present reimbursement for the cost of the medication plus dispensing fee should be separated from the fee charged for clinical pharmacy consultant services.

- There should be a separate payment for the dispensing and consultant pharmacist in institutional settings to avoid conflicts of interest. There should be additional payment for medications dispensed in a unit dose distribution. Several states encourage these practices by reimbursing pharmacists with a consulting fee on a daily per patient basis and separately for the provision of unit dose services. In addition, pharmacists need to be encouraged to participate in home health care and be reimbursed for their services.

- A system of capitation for all patients on Medicaid needs to encompass persons on ADC and Social Security Supplemental Income (SSI).

In addition, there should be a state reimbursement program designed to aid these elderly who may not be able to afford medications in addition to food, shelter, and heat. Such a capitation system is currently under study by University of Iowa research team headed by Professor G. Joseph Norwood, Director of the Health Services Research Center.[31]

In this study, pharmacists are paid approximately $2.50, $14.00, and $30.00 per capita for persons on ADC and SSI and for ICF patients, respectively. At the

beginning of each month, each participating pharmacy receives a list of eligible persons and compensation for all the patients' medication for that month. By accepting this compensation, the pharmacist is responsible for providing all the patients' medication. A financial incentive exists for the pharmacist to reduce costs below that of fee for service. This incentive encourages the pharmacist to reduce patient medication utilization, avoid polypharmacy, and provide patient education and drug monitoring to reduce costs.

- Finally, the educational effort of the College of Pharmacy in the field of geriatrics needs to be intensified.

There is a need to increase federal and state funding to enlarge the number of clinical pharmacy faculty role models to provide expanded interprofessional education to a greater number of pharmacists and other health science students. Additional efforts are needed to provide education to geriatric patients concerning their drug therapy and the types of pharmacy services they should expect.

HEARING, SPEECH, AND LANGUAGE PROBLEMS AMONG THE ELDERLY

Charles V. Anderson, Ph.D.

Summary

At least 25% of those over 65 years of age (90,000 people in Iowa), 40% of those over 75 years of age, and as high as 80% of those in nursing homes have hearing losses sufficient to interfere with communication. It is known that surgical removal of the larynx and neurological disorders with accompanying speech and language problems are more prevalent among the elderly than any other age group. Hearing, speech, and language disorders contribute to the isolation of the elderly which adversely affect health, independence, productivity, and quality of life of older citizens.

Audiology and speech-language pathology services, though readily available in Iowa, are poorly reimbursed by third-party payers, often not well known, and under-utilized.

Recommended remedial actions include the following:

On the State level:

- Fund public and professional education programs on the effects of communication disorders and the availability of remedial services.
- Fund a study to determine the prevalence of speech and language disorders among the elderly.
- Fund efficient screening programs to identify those elderly who will benefit from audiology and speech-language pathology services.
- Fund service delivery to those identified by the screening programs.
- Enforce through the Iowa Department of Social Services, compliance with regulations requiring that audiology and speech-language pathology services be available in nursing homes.

On the Federal level:

- Revise the referral and supervision system under Medicare for audiology and speech-language pathology services.
- Expand the audiology and speech-language pathology services covered by both Medicare and Medicaid.

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Communication Disorders Among the Elderly

Communication disorders (i.e. interference with communication through hearing, speech or language problems) are far more prevalent among the elderly than commonly believed.

- Although there is a relatively wide disparity in prevalence figures from one study to the next, it is commonly assumed that at least 25% of those people over the age of 65 years suffer from a hearing loss sufficient to interfere with normal conversation. This figure increases to nearly 40% for those over the age of 75 years (Metropolitan Life Insurance Co., 1976). For those elderly confined to nursing homes the prevalence jumps to as high as 80% (Schow & Nerbonne, 1976).

We have no reliable data on the incidence of speech and language disorders among the elderly; however, one need only visit a nursing home to become aware of the devastating effects of a stroke upon the communication ability of a person who has aphasia. In addition, many patients with Parkinson's disease, tardive dyskinesia, and other neurological disorders suffer from an inability to be understood. Laryngectomies (surgical removal of the voice box) are on the increase among the elderly. Such a procedure removes the sound source for speech and is thus debilitating to communication.

- One of the primary reasons the general public is often unaware of communication disorders among the elderly is simply the effect of the disorder. The primary medium for social interaction among human beings is oral communication -- speaking, listening, and understanding through conversation. Once oral communication is made more difficult, our society isolates the person with the disorder -- either through ignoring the person with a communication disorder because it is too difficult to converse or through withdrawal by the person because it is too difficult to understand or be understood.

Hearing loss is especially invisible since it cannot be detected until the person fails to respond or responds incorrectly. Even then, the person with the hearing loss may be assumed only to be ignoring the speaker or "hearing what they want to hear". The person with the hearing loss on the other hand accuses the speaker of mumbling or not speaking up. The misunderstanding which ensues from this interaction only exaggerates the breakdown in communication and exacerbates the social isolation.

The aphasic person may hear everything that is said, but because the brain is functioning improperly, is not able to process and understand the language which is being used. On the other hand, another person with aphasia may understand everything which is being said, but not able to formulate the words and sentences needed to express thoughts.

The person with Parkinson's disease will very likely understand what is said, be able to translate thoughts into appropriate words and sentences, but not able to control the muscle movements needed to form the speech sounds and words.

The eventful effect of any of these disorders is a reduction in social interaction and eventual isolation - a primary problem in keeping our older citizens active, productive, and integrated into our society.

Under-Utilization of Available Services

Adequate statistics are not yet available on the service needs, service availability, and service utilization by the elderly of Iowa who have communication disorders. The Iowa Speech and Hearing Association is currently attempting to gather data which will help us determine the above. It is commonly believed in most communities, however, that the service needs are great, that adequate services are probably available, but that the service utilization is extremely low.

- A widespread myth in our society is that everyone loses hearing as they grow older; and therefore, the elderly should not expect to hear well. This is simply not true.

Remember, 75% of those over 65 years of age and 60% of those over 75 years of age have hearing adequate for their communication needs. Yes, most of us have a diminution in our hearing acuity and sensitivity as we age; but, that does not mean we have to expect to become "deaf" and simply put up with it. Accompanying this myth is the false assumption that nothing can be done to help the person who has a communication problem accompanying old age. It is true, for instance, that dispite miraculous advances in medical and surgical treatment of hearing disorders over the last 25 years, those suffering from hearing loss associated with aging often cannot benefit from these advances. The types of hearing problems the elderly tend to have are typically not amenable to medical and surgical treatment. Nevertheless, there have been equally important advances in the design and use of hearing aids and in the development of rehabilitation techniques which the audiologist can employ in servicing the elderly and assisting them in improving their communication skills.

- Third party reimbursement policies must be improved.

Currently speech-language pathology services for which reimbursement is provided by Medicare and Medicaid are limited both in scope and in length of service. Furthermore, the services must be requested by a physician and the speech-language pathologist cannot bill directly for services provided. The support for audiologic services is even less. Medicare provides no reimbursement for audiologic services unless thay are diagnostic in nature and requested by the physician. Medicaid will reimburse for hearing aid evaluations and will purchase hearing aids. Neither agency will pay for the necessary hearing aid orientation or rehabilitation. Medicare and Medicaid are often seen as models for third party payment plans and thus the reimbursement by private plans is equally lacking.

In addition to the problems of Federal and State agencies, many service clubs and volunteer groups which provide hearing aids for those in need are reluctant to help the elderly. They are primarily interested in helping children.

- There is a lack of compliance with existing regulations.

Currently, intermediate care facilities which provide services for Medicaid recipients are required by Federal mandate to have remedial speech-language pathology and audiology services available through personnel on staff or by contract with an outside resource. The review and monitoring of the compliance with this regulation is a function of the state agency (Department of Social Services). A recent (April, 1979) survey of nursing care facilities in Iowa conducted by the Iowa Speech and Hearing Association revealed that only 57% of these facilities

had contracts or services available in both areas. Another 29% complied in one area only while 14% were in total non-compliance. When asked if they had sought such services but were unable to obtain them, 18% indicated they had not sought such services and 9% had no interest in doing so. This state of affairs is abysmal. To add to this appalling situation, many speech-language pathologists and audiologists report that even though they have contracts with such facilities they are never called upon for service. Service is provided only when the speech-language pathologist or audiologist inquires or insists.

- There is a lack of referral to appropriate services.

The professional personnel (physicians, nurses, administrators, etc.) who are responsible for the identification and referral for services often overlook communication disorders. This oversight apparently stems from reliance on the societal myths discussed earlier. There is an apparent lack of sensitivity to the needs of the people they are serving and/or an attitude which says "nothing can or need be done".

Current Resolution of Problems

- Bills (Senate HR 934 and House HR 3990) currently await action by the U.S. Congress. Both bills provide for changes in the physician referral for speech-language pathology services and expand the coverage of outpatient rehabilitation services under Medicare.

- The Quality Assurance Board of the Iowa Speech and Hearing Association and the Title XIX (Medicaid) Audiology Advisory Committee of the Iowa Department of Social Services are currently in conference with appropriate state agencies and third-party payers in Iowa to expand coverage. Changes are slow to come about, especially in these times of fiscal restraint and retrenchment.

- The Iowa Speech and Hearing Association in cooperation with the Iowa Department of Environmental Quality and the Lions Clubs of Iowa has embarked upon a voluntary hearing screening service for the elderly in Iowa. They provide initial hearing tests and referral to community resources, without charge. This program obviously only scratches the surface, is not able to provide follow-up, is dependent upon unpaid volunteers from among the audiologists and Lions Club members, and at this point, will probably be abandoned despite a heavy demand.

- Charles V. Anderson, of The University of Iowa, is conducting research into the efficacy of using questionnaires to do initial screening of those elderly individuals who can benefit most from audiologic services. Such an approach would provide the identification of individuals at a far less expensive rate than the use of special expertise and equipment required in hearing testing.

- The manpower resources for speech-language pathology services are probably available. Medicaid recipients are serviced without delay according to the Iowa Department of Social Services. Speech-language pathologists and audiologists report they are able to meet all requests for services to the elderly. Currently, there are 336 licensed speech pathologists and 103 licensed audiologists (many of whom provide complete hearing aid services) in the state of Iowa. A vast majority wish and can provide services for the elderly and are eager to expand their coverage for this age group. Most speech-language pathologists and audiologists feel underutilized by the elderly.

Recommendations

Assuming we are committed to the premise that the elderly of our society need to remain integrated, active, and productive, we must assume a commitment to alleviating the communication disorders of this age group. Communication disorders (interference with communication through hearing, speech, or language problems) are prime contributors to social isolation among the elderly.

Future efforts should be directed to the specific areas of need in a manner which will give us the most efficient identification and remediation for those who can benefit. Three areas of prime need are the determination of the prevalence of communication disorders, the identification of service needs, and the delivery of service.

- Fund a study to determine the prevalence of speech and language disorders among the elderly.

Although we have meaningful data on the prevalence of hearing loss among the elderly, we are woefully in need of data which will help us define the scope of speech and language disorders among our older adults in Iowa. The manpower resources for conducting this research are available through the faculties of the speech pathology and audiology training programs of The University of Iowa and the University of Northern Iowa and the membership of the Iowa Speech and Hearing Association (ISHA). The ISHA Committee on Communication Problems of the Elderly has data collection on such issues as one of its primary goals. The financial resources for these efforts are currently quite slim.

- Fund public and professional education programs on the effects of communication disorders and the availability of remedial services.

The continuing education of primary service providers, such as Area Agency on Aging personnel and physicians, should include information which alerts them to the effects of communication disorders, the services available to alleviate their effects, and the need for referral to appropriate service providers (i.e. speech-language pathologists and audiologists). Manpower resources for this effort are available through the universities and professionals, but currently are utilized only minimally.

- Fund screening programs to identify those who will benefit from audiology and speech-language pathology services.

Efficient and inexpensive screening programs need to be developed and established on something more than a volunteer basis. These screening programs need to have an active and strong follow-up component to insure that those individuals identified who wish service do indeed know where to find the services and receive it. Such screening programs will not only identify individuals but the resultant data will give us a better description of the scope of the problem. In many communities, existing manpower resources can be utilized at a minimal cost since their awareness and skills can be expanded through continuing education.

- Fund service delivery to those identified by the screening programs.

The delivery and utilization of services is a least partially dependent upon

awareness by providers and the elderly themselves of the services available, the reimbursement policies of agencies and other third-party payers and follow-up. The revision of reimbursement policies with Medicare (Federal) and the Medicaid (State) especially need to be high priority. Services, which cannot or will not be paid for, soon diminish in availability. In addition, we will begin to see a diminution of efforts to improve existing or develop new, more efficient techniques of evaluation and rehabilitation. The manpower may well be available awaiting utilization. A key to alleviating the devastating effects of communication disorders among the elderly is to provide a system which will allow those who can benefit to receive rehabilitation services.

- Assure enforcement by the Iowa Department of Social Services of compliance with regulations requiring that audiology and speech-language pathology services be available in nursing homes.

Communication disorders often appear to have no life-threatening effects. They appear only to effect the quality of life which places them at a low priority. The quality of life, however, has an effect upon health and therefore, life span and need for more costly long term care. The future must promise heightened awareness of communication disorders, their effects and their remediation for our older citizens.

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ORAL HEALTH PROBLEMS IN THE ELDERLY

Robert E. Glenn, DDS, MA

Summary

Oral health problems of the elderly are widespread because of: the cumulative nature of dental disease (attacked tissues have little or no power of regeneration); the failure of the medical profession to include dental care as a part of health care; various existing barriers to delivery of dental care, such as the elderly's low health expectations of themselves, a relative lack of mobility, and the dental professions's unwillingness to treat the elderly; restrictive reimbursement policies.

To address these problems at the state level, the following recommendations are made:

- Fee reimbursement policies should be modified to permit provider reimbursement to more closely approach the federal ceiling of 75% of usual customary and reasonable fees. Fee reimbursement policies of the Medicaid program in their existing format are restrictive enough to discourage a majority of dentists from treating Title XIX patients.

- Enabling legislation should be considered to permit the use of qualified dental auxiliaries in providing some dental services now restricted to dentists.

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Description of the Oral Health Problems

Studies 1-4 have called attention to the widespread concern about the state of oral health of the elderly, particularly those as they become increasingly frail and require services in licensed care facilities. In Iowa about 10% of all residents over age 65 are in nursing homes.[5] About 85% of those individuals over 65 are troubled by one or more chronic conditions such as high blood pressure, arthritis, diabetes or arteriosclerosis.[6] An added health problem may well be present in respect to oral health. The 1977 National Health Surveys report that 45% of the elderly have not been to a dentist for at least five or more years. The rate for the balance of the population was 13.9%.[7] Reed and Kiyak have stated that "the elderly population has the greatest oral health needs of any segment of the American population and they have the lowest accessibility to and utilization of dental services". Ettinger and Beck have suggested that major barriers relevant to unfullfilled oral health needs of the elderly are expectations and attitudes of the public and the profession, and economic and physical barriers.[8]

The future may see a compounding of all of the current problems primarily because of the increase in number of frail elderly.

Commenting on the significance of the projected changes in population ratios Anderson stated, "Countries have no idea what is going to hit them." He noted that health care costs will become quite astronomical and advised that what we must do is to plan preventive measures: "We've got to keep our old people healthy, not only for their own good and not only because they want to be healthy, but because its the best and most humane way to do it."[11]

Policy decisions concerning dental health in the elderly should be made with concern for the unique nature of dental disease and with consideration of the following factors:

1) The universality of dental disease. It is estimated that 99% of the population of the United States over age 10 have suffered from dental disease at one time or another. One hundred percent of the population over age 65 have chronic destructive peridontal disease.[12]

2) The cumulative nature of dental disease. Unlike most tissues of the human body, those attacked by dental disease have little or no power of regeneration and, when destroyed, must be replaced with substitute materials. Dental conditions in the elderly, therefore, represent the result of dental problems that have accumulated over a long period of time.

3) The inseparability of the oral cavity from the rest of the human body. The dichotomy between the disciplines of medicine and dentistry has historically interfered with the inclusion of oral health care with general health care and has generally resulted in minimization of the importance of oral health care.

4) Dental problems are not isolated health problems. Poor dental health is inevitably interwoven with problems of nutrition, speech, appearance and other factors involved in the maintenance of an acceptable quality of life.

Among the barriers encountered in delivering dental care to the elderly are the following:

1) The elderly tend to have lower health expectations of themselves and a less positive attitude toward dental health and dental treatment.[13]

2) Patient mobility. Only a small percent of the residents are able to travel to the dentist alone which means that the remaining elderly must be escorted to the dentist or receive care in their residential facility.[8]

3) The unwillingness of the dental profession to provide dental treatment to the elderly. This may be partially due to the following factors:

   a) Dental students have little training in treating the geriatric patient.

   b) The common sterotyping of all elderly as being senile, ill-tempered, and uncooperative.

   c) The complex type of care needed by the elderly patient.

   d) The complications of the delivery of dental care to the already medically compromised patient.[8]

4) The economic barrier. Most of the elderly pay for dental care through either private funds or Title XIX with a very small percentage utilizing insurance or other fund. One fifth of the long term care facilities surveyed in a recent study reported that they have some residents who can not afford dental care and are not eligible for Title XIX.[14]

Current Attempts to Resolve the Problems

The above mentioned problems in providing dental care to the elderly can be categorized very broadly into:

1) motivational problems,

2) accessibility problems,

3) economic problems, and

4) provider problems.

- Because the milieu of motivational problems has such broad cultural and social aspects, society has chosen not to deal directly with the problem. Very little is being done in this area to correct the situation except for a few references to "improving the quality of life".

- Accessibility problems are being attacked at the federal level through subsidation programs designed to increase the number of practicing dentists in

the hope that some will elect to practice in remote areas and/or on isolated patients. Other federal programs are placing dentists in underserved areas and subsidizing their operation for a two year period. These efforts have been reasonably successful and at the present time there seems to be a trend of new dental graduates starting up practice in smaller communities or in areas with only a few dentists.

- The economic problems are currently and have been for the past 15 years attacked primarily through the Title XIX Medicaid program. In the state of Iowa this program provided adequate support for dental treatment to about the lower quartile of the socioeconomic structure.

- Provider problems are being approached primarily through alterations in dental education currently offered in the state of Iowa. A new program at the College of Dentistry has been funded by the federal government to design a four level educational curriculum in geriatric dentistry. It will be a broad based program covering both didactic and clinical experiences throughout the four year curriculum.

Alternative Solutions and Preferred Directions

- Policy decisions at the state level should probably be limited to the areas of economic problems and provider problems.

- Fee reimbusrement policies of the Medicaid program, in their existing format, are restrictive enough to discourage a majority of Iowa dentists (63%) from treating Title XIX patients.[15] Policies should be modified at the state level to permit provider reimbursement to more closely approach the federal ceiling of 75% of usual customary and reasonable fees.

- Enabling legislation should be considered at the state level to permit the utilization of qualified dental auxiliaries in providing some dental services now restricted to dentists. This would permit licensed care facilities who have dentists as consultants to employ baccalaureate degree dental hygienists for the purpose of conducting oral health programs. These programs should include limited independent practice, diagnosis, treatment and referral. While such a policy might precipitate the opposition of organized dentistry, it represents the most efficient, and readily available approach to the provider shortage problem.

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AGING POLICY FROM THE PERSPECTIVE OF PREVENTIVE MEDICINE

Robert B. Wallace, M.D.

Summary

The following discussion views aging policy from the perspective of preventive medicine, which includes three sub-disciplines: clinical prevention, public health and epidemiology. The latter is the basic science of preventive medicine and is concerned with the distribution and causes of disease in populations.

The scope and extent of the statewide health problems of all elderly citizens need to be adequately characterized to aid in efficient community health planning.

The following recommendations are made to improve utilization of existing data and the generation of new information about Iowa's elderly:

- Fund the design of assessments of the physical, mental and social health status of elderly citizens for clinical and community planning purposes.
- Fund the development of indicators of new risk factors which predict disease occurrence. Risk factors such as smoking or diet that predict disease occurrence in younger adults do not necessarily do so in the aged.
- Encourage the design of procedures which allow researchers access to health records without violating the standards of confidentiality.
- Encourage collaborative efforts between state data collectors and academic researchers.
- Facilitate communication between epidemiogists and decision makers so that identified environmental risk factors can be dealt with through policy measures.
- Fund the design of screening programs for early disease detection which are economic, acceptable and accessible to the elderly subject.

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AGING POLICY FROM THE PERSPECTIVE OF PREVENTIVE MEDICINE

The following four general policy areas in aging are of interest to preventive medicine: surveillance; predicting risks; screening programs; community-based preventive programs.

The Surveillance of Health Problems in the Elderly

Statement of the Problem

In order to develop policy for various governmental jurisdictions on health problems of the aged, it is essential to have appropriate data available to make sound judgments. Preventive medicine is concerned with the acquisition and analysis of such data for use in decision-making.

The initial data base usually begins with basic demographic characteristics such as the age, sex, race, and income distribution of the population at hand--data quite useful for predicting health needs. We are concerned with the quality and utilization of existing data. We are interested in the value and pitfalls of vital records, as well as hospital and other institutional and health records which may yield information on health status.

When existing data sources have been exhausted and the available information is still inadequate, our discipline is concerned with the appropriate survey techniques to obtain the necessary information. These techniques would include sample household surveys, study of the elderly in institutional settings, and related activities. We are interested in the special problems that occur in surveying the elderly for health status. Such problems include the impaired recall of health events, limited attention span, and a changed health survey orientation from one of discrete disease entities toward a more global evaluation of physical, psychological and social function.

Recommendations

Techniques are being developed and tested to acquire information of the health status of the elderly. These activities are in their infancy but basic tools are available to yield worthwhile information.

- Special survey methods require considerable resource expenditure, and it is necessary that the policy issues seeking quantitative input be clearly definded before such surveys are conducted.

- Logistics for the acquisition of existing data are established and the challenge is to have access to institutional and other health records for planning and evaluative purposes without violating standards of confidentiality.

- Reduce excessive restriction on the availability of health records to qualified investigators and planners.

Predicting Health Risks in the Elderly

Statement of the Problem

One of the basic goals of preventive medicine is to identify healthy people who are at greater risk of developing various diseases and dysfunctional conditions so that appropriate programs may be selectively applied and clinical judgments can be more informed.

Most of the prior work in risk estimation for chronic illnesses has been conducted for persons under 65 years. It is quite likely, for example, that the heart disease or cancer risks associated with smoking, family history, blood cholesterol and certain occupational exposures may be somewhat different in a person over 65 than in someone younger. Very little work has been done in risk estimation for the elderly.

Recommendations

- Develop risk measures for chronic diseases in the elderly. This is of immediate pragmatic value and application, but must be supported by research funds.

- Encourage collaboration of state data collectors, policy makers, with epidemiologists and preventive medicine scientists.

The Department of Preventive Medicine is currently engaged in certain risk measurement areas related to both cancer and heart disease. On the one hand, some descriptive elderly health data bases used in planning and policy-making would also be a useful analytic substrate for developing risk functions. On the other hand, it would be the duty of the epidemiologist to immediately inform policy-makers of risk data that would be useful in defining high risk populations.

Screening and Early Detection Programs for the Elderly

Statement of the Problem

One of the major functions of preventive medicine is to conduct screening programs to detect early asymptomatic diseases in population, and this is also true in the elderly.

Again, the health problems of the elderly are somewhat different than in younger persons and elderly screening, despite a high potential, is only partially developed and evaluated.

Problems include the fact, mentioned above, that data are not available to delineate those who might be in special high-risk groups.

Some of the screening tests may require a physical effort that cannot be sustained by many of the elderly. Should early chronic disease be identified, the treatment procedures such as surgery may not be as well tolerated in the elderly as they are in younger persons.

It is not clear that the identification of early chronic illness in the elderly will have the same import on salvage of personal health or medical care expenditures as in a younger person. The natural history of chronic illness in the elderly may be quite variable, in part because other chronic conditions may co-exist and medical and social support systems may differ.

Recommendations

- The role of preventive medicine in this case would be to suggest appropriate screening programs that can be applied to elderly populations.

- It would be necessary to identify screening techniques that are economic, acceptable and accessible to the elderly subject, lead to treatments which are tolerable and in themselves budgetarily sound, and which are proven to be able to extend the useful, functional life of the individual.

- Aside from the major chronic illnesses such as heart disease, cancer, diabetes and stroke, screening for the presence of other conditions might be useful, not so much because they can be modified or cured but in order to prepare the family educationally for ensuing events and for planning appropriate dispositions and social services as the disease processes become more fuliminant.

Design and Evaluation of Community-Based Preventive Programs

Statement of the Problem

One of the functions of preventive medicine is to interdigitate preventive programs with existing community services and to assist in the application of new programs to large populations. Such considerations include amalgamation of preventive activities into institutional and ambulatory medical services, existing public health programs, the evaluation of the cost-effectiveness of such activities, the evaluation of the net health impact of such a program on its recipients, and the evaluation of the health impact on the community as a whole. Ancillary activities would include the evaluation of community acceptance of such programs and the effect of related programs already in existence.

Recommendations

Assistance in the design and evaluation of community-based programs is reasonably well developed in preventive medicine and public health.

- It would involve the combined effort of those already given jurisdiction in public health departments and those voluntary and private agencies and individuals with requisite skills. There would be an important communication function in organizational activity before any community-based program can be initiated and there is considerable experience in this regard.

- Assistance from preventive medicine can help in making policy decisions about fiscal and logistic feasibility of programs and design automatic evaluation mechanisms within such programs.

HEALTH PLANNING FOR IOWA ELDERLY: NURSING PERSPECTIVES

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Summary

To a large extent, the health and service needs of the Iowa aged depend on whether they reside at home or in institutional settings. Because the majority of elderly people in Iowa (95%) still reside at home in the community, this summary will focus on the needs and services of older Iowans who live at home. Most of the health care needs of these individuals are associated with their activities of daily living and can be met through organized community services.

To promote the health of older Iowans still living in their home communities, the state should consider the development and support of a number of health related programs.

- Allocate additional state funds for the development or expansion of such support services as day care centers, hospices, food and home maintanence programs in order to reach elderly in all areas of Iowa.

- Develop and expand health teaching and health screening programs. At the county level, allocate funds for building space, supplies and personnel so that programs such as the well-elderly clinics can be provided to older residents in all parts of the state. In addition, because public health nurses are responsible for so much of the primary health care given to elderly Iowans, each Iowa county should have a geriatric nurse on its staff or available as a consultant.

- Extend Medicare benefits to cover drugs, hearing aids, dental care, glasses, long term care. These health aides should be incorporated into a plan of national health insurance. If Congress is unresponsive, an Iowa supplemental program should be initiated.

- Support the development of programs or courses that would assist in the preparation of nurses to assume the primary responsibility for care of the aged. Provide tuition inducements for nurses taking college courses or continuing education programs in geriatric nursing. This would help alleviate the shortage and maldistribution of all types of geriatric health care professionals in Iowa

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HEALTH PLANNING FOR IOWA ELDERLY: NURSING PERSPECTIVES

The number of individuals age 60 and over residing in Iowa has increased in the past decade; currently, over 16% of the total state population fall in this age group. Chronic illness is found in at least 39% of this group. However, contrary to popular belief, most (about 95%) of these individuals still reside in the community and are dependent on community resources and services for their survival.

The elderly are unique individuals who exhibit varying physical conditions and lifestyles. While there is no physical condition that is inevitable among the aged, neither is there any illness that is unique to the elderly. A variety of residential and care options (ranging from home to institution) are available for Iowa aged. In each of these settings, there is a range of care needs of the elderly ranging from total independence to total dependence (requiring 24 hour care).

Thus, because Iowa elderly are heterogenous individuals with widely varying needs and resources, health care must be individualized for each client in order to be effective. This necessitiates the existence and operation of a variety of health promotion and treatment modalities.

- The following discussion focuses on the health needs of Iowa elderly as they reside in two types of locations: their own homes and institutional care facilities.

Home Care for the Elderly

Home Care Nursing Services

- To promote and maintain optimum health of the elderly, one goal of nursing is to keep the aged residing in their own homes. The rationale for this goal are:

1. Individuals tend to live longer in the home setting than in institutions. (Research studies have generally shown an increased health risk upon relocation of aged individuals to institutional settings.)

2. Remaining in the home tends to promote psychological and social well-being. (Social investigations have demonstrated that life satisfaction and self-esteem of the aged are highest when they can continue an active autonomous life, maintaining family and community relationships.)

3. Economically, studies have shown that home care quality tends to be less expensive than institutionalized care.

- Approximately 95% of the elderly are residing in the community and not in institutions as popularly believed. Therefore, the health care problems and needs of elder individuals revolve around organizing and services in the community to meet their needs for daily living. Public health nurses (PHN's) attempt to meet some of these needs through health promotion and maintenance activities.

Preventive services constitute a system for assuring the continuing optimum health of the elderly. That is, they are aimed at early detection of and prevention of disease and illness. These services generally fall into three

major categories: screening, teaching and advocacy.

Although inconsistent in type and amount of services offered, some screening measures are being done by almost all community nurses. They range from taking blood pressure measurements in home environments to operating well-elderly clinics. Clinics can provide such services as complete health histories and physical assessments, and are currently being offered by The University of Iowa College of Nursing in at least ten different counties.

Public health nurses also do teaching to inform the elderly of measures which help promote health. The elderly individual or another member of his family may be taught some aspect of physical care such as hygiene measures, good nutritional practices, exercise programs, safety measures, first aid, techniques and self examination for breast cancer. Teaching is done primarily in the home, at congregate meal sites and at day care centers.

Nurses also serve in an advocacy capacity. They act as liaisons between the aged individual and his family and such helping professionals as health services, social and legal services, transportation services and pastoral care. In addition nurses support the elderly in assisting them to meet their own needs. Maintenance services consist of professional nurse supervisory assistance to elderly and chronic illnesses, enabling the elderly to maintain their home life style.

Nursing services are also directed at monitoring, teaching and adherence to medical regimes, (medication, diet or excerise). Examples of these nursing services are teaching self administration of insulin, checking the effects of medication for therapeutic or adverse reactions. Supportive services also provided consist of direct nuring care in the home which assists both patient and family. Some areas provide on call coverage for emergencies 24 hours per day, seven days per week.

Additional services are provided by paraprofessionals with supervision by the professional nruse. These include homemaker services, day care centers, and hospices.

Problems Related to Home Care

To foster maintaining the individual in the home, the State of Iowa needs to further develop a number of specific programs. Statistics published by the Department of Health, Education and Welfare suggest that as many as one-fourth of the patients in skilled and intermediate nursing care facilities reside there because no other alternatives were available. There are also three million noninstitutionalized elderly who are bedridden or home bound. If these persons are to remain in the community, provisions must be made for their care. Presently home health care for the elderly receives only one percent of the total expenditures for Medicare and Medicaid. If better home care of the aged is to be provided, the following problems must be resolved:

- Casefinding efforts must be improved.

There are many elderly in need of existing health care services. Yet, studies have indicated that those in greatest need remain unidentified. Also, Medicare procedures create barriers to casefinding, i.e., in order for Medicare to pay third party payment to public health nurses, referrals must first come from the

physician. Physicians refer for medical needs/problems but many do not recognize or acknowledge nursing care problems.

- Delivery of services to the elderly is hindered by shortages, maldistribution and lack of preparation of all types of personnel, including nurses.

About a fourth of Iowa's counties have fewer than 80% of the physicians needed; many have only one public health nurse. Other members of the health team, e.g. social workers, alcoholism counselors, home health aides, are often missing altogether. This poses a serious problem for the elderly because their problems tend to cluster and require a team approach to address the complications of isolation, poverty and loneliness which often accompany chronic illness.

The public health nurse plays a vital role in providing home care for Iowa's elderly. She is in an ideal position to coordinate the services of various members of the health team as well as deliver nursing care. For these reasons, as well as for optimum functioning as community health nurses, it is important that nurses in public health agencies have as their miminum preparation, baccalaureate education. Formal preparation in gerontological nursing is also needed. In this regard, it should be noted that most of Iowa's public health nurses are diploma prepared and most have had no coursework in gerontological nursing. Similarly, training for ancillary personnel needs to be upgraded.

- Many support services which can or should promote health are offered minimally (i.e., transportation, day care, hospices, rehabilitation, and referral centers).

- Facilities are inadequate.

Frequently in Iowa, county PHN agencies are offices in a single room of the county courthouse. Screening sites are often dependent on existing community resources. Standard equipment such as teaching aids (pamphlets, books, films) and diagnostic equipment (opthalmoscopes, urine tests, hemoglobinometers), are minimal, if available at all.

- Medicare benefits provide less than half the medical expenses of the elderly. Major health expenses of the elderly--long-term care, drugs, hearing aids, dental care, eye glasses, podiatry, etc. are not covered by Medicare.

Recommendations for Home Care

- Services currently offered to the elderly need to be publicized for increased public awareness.

- Expand health education to the mass media (TV, radio, newspapers, pamphlets) to aid in information dispersal for home bound and unidentified elderly.

- Revise Medicare laws so that physician referrals are not required for third party payment of nursing care.

- Improve personnel resources for home care of the elderly. For long-term solutions, support is needed to establish baccalaureate preparation as the minimum needed for public health nursing positions.

- Provide each county with at least one geriatric nurse practitioner on the public health nursing staff. Support geriatric nurse practioner programs.

- Provide continuing education for existing personnel. Continuing nursing education programs (a series) should be offered to Iowa's public health nurses in the areas of the community health-nursing and geriatric nursing. Ideally, some of these diploma prepared nurses who complete this training will also complete baccalaureate program requirements and remain in their posts. These nurses should also be prepared to recruit, train and supervise home health aids in providing necessary home care services to Iowa's elderly.

- Expand existing services to assure that they are offered routinely in every county of the State (i.e., well-elderly clinics). Additional funding needs to be allocated for the development of non-existent programs (i.e., day care, hospices, rehabilitation).

- We could wait for the Federal government to organize the country, or we could as a State, build a comprehensive health program for the elderly of Iowa.

Institutionalized Care for the Elderly

Problems Related to Institutionalized Care

For these persons who cannot be maintained at home despite adequate community resources, long-term institutions do fulfill a real need. However major problems exist in these institutions as identified in the Iowa Health Systems Five Year Plan proposal. These are a lack of skilled nursing care beds and an overabundance of intermediate nursing care beds.

- One major problem in this area is the misallocation of beds to individuals. In support of this problem, Robert Morris, in a study of persons admitted to long-term care institutions, found of 100 nursing home patients, only 37 required the full services of the institutions. He concluded that unnecessary care costs more in public funds than it would cost to develop a system of home health services for the aged. The reasons identified as the cause of misplacement were:

  1. existing sources of money for care are directed <u>toward</u> institutions

  2. alternatives are in short supply

  3. overbuilding of nursing homes for profit in those parts of the country where regulations makes this possible has resulted in a concentrated effort to fill these institutions.

- The primary care provider in the long-term care facility is the nurse. However, the regulations presume that the primary provider of care is the physician, who may only see the resident briefly every 2 to 3 months. The nurse has little or no control (or opportunity for consultation) over the admissions to the nursing home. During the resident's stay in the institution, the nurse continues to have minimal decision making power.

- The fact that nursing homes and similar institutions for the care of the elderly have often been staffed as inexpensively as possible has led to

the establishment of standards to assure a minimum level of care. These standards have resulted in a complex and convoluted battery of national and state regulations which nursing homes must meet. The state health department is accountable for the quality of care in such settings instead of nursing being accountable for internal regulation of the quality of care in long term care settings.

- Qualified professional nurses have often not been attracted to long-term care facilities because financial reimbursement and professional recognition for such employment has been lacking. Too often, nursing care is provided by untrained professionals with adequate nursing supervision.

- Because there is little incentive to work in a long-term care facility, educational programs have not been developed in this state to prepare these geriatric nurse practitioners. We need to improve our assessment and counseling of the aged and their families when they are considering residential institution. We need research to determine what factors enter into the decision to select one type of care over another. McClelland, et al. have already found that there are not many physical differences between individuals who are discharged from the hospital to the home than there are in those discharged to a long-term care institution. This indicates that it is not the physical problem that determines where the aged goes, but sociocultural and family preferences, and the presence and absence of family and community resources needed to maintain these people in their own homes.

Recommendations for Institutionalized Care

We realize that many of the problems relating to long-term care institutions cannot be solved by legislative action. Until qualified gerontological nurses can be attracted to long-term care institutions, little progress will be made in dealing with the identified problems. To provide the opportunities and atmosphere conducive to adequate staffing, and to assure more effective utilization of existing facilities the following recommendations are made:

- Modify level nursing home regulations to allow qualified nurses to participate in decisions that will improve the quality of care provided.

- Provide supplemental programs to Medicare to meet special needs of the elderly not presently covered.

- Provide financial support for graduate education in gerontological nursing.

PRIMARY HEALTH CARE OF THE IOWA AGING

Glenys O. Williams, M.D.

Summary

Primary health care emphasizes first contact care and assumes responsibility for the patient in both health maintenance and therapy of illness.

Current problems include: the shortage and maldistribution of primary care physicians; the perceived negative attitude of physicians toward the aged patient; inadequate Medicare and Medicaid reimbursements; and insufficient funding for home care services.

To improve primary health care of Iowa's aged, the following steps are recommended:

- Increase geriatric education for all health professionals.
- Increase use of specially trained physician extenders, such as geriatric visiting nurses.
- Increase focus on the elderly at Community Mental Health Centers.
- Establish geriatric assessment teams to help physicians identify health and social needs and appropriate care level (home, institutions, etc.).
- Expand day care and day hospital programs.
- Broaden Medicare and Medicaid coverage, and mandate a uniform health insurance claim method.
- Improve pharmacy services.
- Increase availability of physical, speech, and occupational therapy in nursing homes.

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PRIMARY HEALTH CARE PROBLEMS OF THE IOWA AGING

Primary health care is a form of medical care delivery which emphasizes first contact care and assumes ongoing responsibility for the patient in both health maintenance and therapy of illness. It is personal care involving a unique interaction and communication between the patient and the physician. It is comprehensive in scope, and includes the overall coordination of the patient's health problems, be they biological, behavorial or social. The appropriate use of consultants and community resources is an important part of effective primary care.

1. It is first-contact care, serving as point-of-entry for the patient into the health-care system;

2. It includes continuity by virtue of caring for patients over a period of time in both sickness and in health;

3. It is comprehensive care, drawing from all the traditional major disciplines for its functional content;

4. It serves a coordinative function for all the health-care needs of the patient;

5. It assumes continuing responsibility for individual patient follow-up and community health problems; and

6. It is a highly personalized type of care.[1]

In Iowa, primary care for elderly patients is provided by family physicians, internists, and osteopathic physicians.

Family Physicians and Elderly Patients

The complexity of the health problems of older people is due to several factors: the presence of the effects of aging, multiple diseases which have accumulated over a lifetime, many of them chronic, and psychological, social, and functional problems. None of these can be considered an isolation. Each has a major effect on the "wellness" or "illness" of the eldery person.

The nature of these health problems requires considerable family and community support, without which many older people would have to be cared for in institutions. Family practice is community-based and many community services often need to be coordinated by the physician on the spot. Older patients have to contend with chronic diseases which require health maintenance, and their main source of care needs to be conveniently located near their home. Many of the disabling conditions affecting older people are aggravated by their social situation, and family physicians presently in training are oriented to participating in, and coordinating a mix of medical and social support sytems. During Family Practice residency training programs, the community nurse, social worker, and clinical pharmacist are introduced as part of the team which best meets the needs of the elderly. The ideal provider of primary care for older people is thus the family physician.

Locations Where Primary Care is Provided

Ninety-two percent of Iowa's elderly over 65 live at home, and approximately 8 percent live in nursing homes. However, 19 percent of the over-85's are in institutions. Primary care physicians provide patient care in their offices, long-term care facilities, and patients' homes, as well as in community health centers, hospital in-patient wards and out-patient clinics. Primary care physicians also are responsible for indirect supervision of Well Elderly Clinics.

The term "primary care" does not generally include special services for mental health and alcoholism problems, but Community Mental Health Centers and Alcoholism Treatment Units accept and treat some elderly patients. Closer liaison between them and primary care providers would be beneficial. Anecdotal reports suggest that certain centers prefer to treat patients "who have some likelihood of recovery", and the emphasis is on younger people's problems. In Scott and Cedar counties, the elderly are under-represented as recipients of Mental Health Center Services.

Current Problems

Distribution.

A random sample of persons 60 years of age and older in rural Iowa County showed that 91 percent had a regular doctor.[2] The same year, in Scott and Cedar counties, 38 percent of all aged had no source of regular health care, and could not identify a family physician; in addition, 50 percent of people over 65 had no health care in the year before the survey.[3] By contrast, in Iowa County 38.4 percent of elderly had seen a doctor within the previous month, and 33.3 percent within the previous 6 months. Generalizations about this aspect of care throughout the state are not possible.

Elderly people have reported difficulty in finding physicians willing to accept them as patients, particularly when they move into a new community. Such people may obtain episodic care in time of crisis from hospital emergency rooms, rather than from personal physicians.

In addition, there are a number of small towns which have been trying for years to attract a physician, with out success.

Attitudes

Health care services were considered by 60 percent in Hageboeck's study[3] to be inadequate for the low income population, which includes many elderly people. Nearly half of the Area Agency directors in 1977 considered health services "relatively inadequate" in quality, and nearly all the Area Agency directors viewed the quantity of health care as "relatively inadequate" or "deficient".[4] Health care was also considered to be not well-located, generally unavailable, and poorly utilized. However, Advisory Council members were less dissatisfied with health services than Area Agency or Department of Social Services respondents. District offices of the Iowa Department of Social Services evaluated physicians' service as inadequately available in 12 of 13 responding districts.[4] The reasons quoted are: a lack of adequate number of physicians and a negative attitude toward the elderly on the part of physicians. This attitudinal problem was regarded as serious. However, in Iowa County, only 5 percent of the over-60s questioned thought, "doctors don't seem to care about older people."[2]

Welsh and Hageboeck[4] deduced that inadequate utilization of available services by the elderly is affected by the perceived "negative attitude" of physicians toward the elderly. In addition, the Department of Social Services considered that the willingness of health service providers to change their orientation and to improve services was fair to poor.

The attitudes of Iowa family physicians toward their older patients have been studied by Williams and Clements.[5] The Physicians identified their main problems with elderly patients as difficulty in communicating with them, a feeling that they had not been properly trained to treat the problems of geriatric patients, and shortage of time. Some characteristics of elderly people which make their health care time-consuming are their multiple physical problems, and the frequency of psycho-social problems. Their slowness in re-sonding to questions in interviews, undressing, and climbing onto examining tables add to the time required. In addition, mandatory re-examination and re-certification of nursing home patients on Medicaid every 60 days is time-consuming, and, although not often enough for some patients, it is unnecessarily frequent for others. House calls are more often required for old than young patients.

Reimbursement

A full study of Medicare as it affects primary care for the elderly will not be undertaken here. The most important deficit in the present programs, both public and private, is that coverage has been limited largely to hospital in-patient care and doctors' bills.

The following services that the elderly frequently require are excluded: prescription drugs, routine eye and dental care, dentures, hearing aids, routine physicals, immunizations and foot care.[6]

"Medicare places the responsibility for initiating medical care on the old people themselves; and that is precisely what they are unable to do. What old people really need is a system that will generate appropriate medical attention, as well as implement and pay for the needed health and welfare services."[7] Medicare does not cover outreach, case-finding, nor assessment of needs.

- It has not been proved to all researchers' satisfaction that home health care is definitely cheaper than institutional care, but there is no doubt that the vast majority of older people prefer to stay in their homes as long as possible. In the 1977 two county survey,[3] Hageboeck reported that the perceived barriers to needed home health service included the three-day prior hospitalization requirement, skilled care, and the home-bound requirement.

Although the federal government has promoted the concept of home health care, expenditure for home health care by Medicare in 1975 was 1.27 percent of the total funds, and by Medicaid was 0.60 percent of total funds. Since the majority of funds are for institutional care, there are very limited funds for non-institutional settings. Ambulatory health care services and local providers have difficulty adjusting to the needs and demands of the growing number of chronically ill and disabled persons in communities by providing alternate service systems because of lack of funds.[3]

- The level of reimbursement for nursing home patients is inadequate, leading to subsidization of Medicaid patients by private patients, and to some difficulty in finding nursing home beds for Medicaid patients.

- The paperwork associated with both private and public medical insurance requires a full time clerk in a busy physician's office. The work would be much simiplied if a uniform claim form were used by each insurance company and by the federal government. Some physicians have elected not to provide help for their patients in completing insurance forms, maintaining that it is not part of their job to enable patients to finance their health care. If this practice became widespread, elderly people in particular would have to find other sources of help in obtaining reimbursement.

Drugs

In 1974, people over 65, who at that time comprised 11 percent of the population of the United States, spent $2.3 billion on drugs, more than 20 percent of the national total.[8] The cost of drugs is not covered by Medicare, and is a major burden for many older people some of whom send out of state to firms which supply drugs cheaply by mail. This may delay the onset of treatment, expose them to possibly unreliable drugs, and eliminate personal attention and patient education by community pharmacists.

- Elderly people need more drugs than the young. They are also more likely to have serious side-effects and toxic reactions from drugs. Many older people frequently use over-the-counter drugs, (pain-killers, laxatives and vitamins are the most common), and these may react with prescribed drugs they are taking. Patients who go to several different physicians may have drugs prescribed which should not be taken together. Some physicians prescribe repeated refills by telephone without seeing the patient, so that drugs and doses may no longer be appropriate. In addition, some pharmacists may refill out-of-date prescriptions.

- Housebound elderly patients who live in areas where pharmacists do not have a delivery service find it difficult or impossible to obtain refills of needed prescriptions.

MEANS CURRENTLY EMPLOYED TO SOLVE PRIMARY CARE PROBLEMS OF THE ELDERLY IN IOWA

More Physicians

Since the establishment of the Department of Family Practice at The University of Iowa in 1972, and the affiliated network of training programs, the number of family physicians in Iowa has increased. More than half of the graduates from these training programs are now moving into the small towns. In 1980, 33 (65 percent) of the 51 graduates who entered practice, selected Iowa sites.[2] Fifty-six percent of the graduates since 1976 have chosen to practice in Iowa. Family physicians trained elsewhere also choose to practice in Iowa.[9] The number graduating each year at Iowa is increasing; it was 47 in June, 1979, and 51 in 1980. Interest in primary care residency training is also increasing among students at The University of Iowa College of Medicine, reaching 56 percent of the graduating class in 1980. Of these, 29 are entering Family Practice training programs.

More Physician Extenders

Physician extenders are well-accepted by elderly people,[10,11] and are gaining increasing acceptance among doctors, particularly among younger physicians. Sixty-eight percent of the 144 graduates of The University of Iowa Physicians Assistants program are employed by private physicians in office settings, and 77 percent of these are in family practice settings. Those working in satellite offices make health services more accessible to old people with transportation problems, and also free up some of the family physicians' time.

Public health nurses and nurse practitioners run the State's well-elderly clinics. These provide health education, health screening, easy accessibility, and follow-up at low costs, all services much appreciated by older people. Public health and private agency visiting nurses provide home health care, assisted by home health aides.

More Home Care Services

Home health is a vital part of primary care for elderly persons. Department of Social Services District Offices have ranked the home health aide service as the area in which expansion would be most beneficial to the elderly.[4]

Accessibility

Accessibility of health care services is improved by senior transport systems, usually buses which pick up patients at home and take them to their doctor's office. Special investigations, such as barium x-ray studies, often have to be performed at a distant hospital, and improved transportation and escort services for this would be helpful.

Physicians' Problems

Increasing attention is being paid in medical schools to the inclusion of aspects of geriatric medicine into the medical curriculum. In Ohio and Nebraska, medical schools are required to include geriatric medicine in their curricula for all students. Questions on geriatric medicine will be included in national examinations, probably within the next year. Continuing medical education conferences for practicing physicians now regularly contain lectures on elderly patients, or are devoted entirely to geriatrics. In Family Practice training programs, physicians are taught communication skills with patients.

Physicians' lack of time is a problem that is not yet solved. Well-elderly clinics, physician extenders, and cooperation with public health and visiting nurses for follow-up are helpful, but more needs to be done.

Drugs

Clinical pharmacists are being trained in increasing numbers, and they serve a valuable function in patient and physician education. Workshops given by College of Pharmacy and College of Medicine faculty have been held throughout the state, improving health professionsals' knowledge of therapeutics. Time limits for prescription refills have already been established.

RECOMMENDATIONS

- Increase education in geriatric medicine for all health professionals, particularly medical students and practicing physicians. The goal should be to have a mandatory geriatrics component in the medical curriculum in Iowa.

- Emphasize the value of specially trained physician extenders, such as geriatric visiting nurses, who could work with a family physician and provide health education, follow-up, and outreach for the elderly patients in the practice.[11]

- Encourage increased emphasis on the mental problems of elderly at Community Mental Health Centers and improved cooperation between Centers and primary care physicians.

- Establish geriatric assessment teams of trained professionals to assist physicians to assess the health and social needs of elderly people and to identify the level of care (home, sheltered housing, or institution) which they require.

- Improve primary care by facilitating independent living and delaying institutionalization with expanded home care services. More day care and day hospital programs are needed. These services are not now generally available in Iowa, but constitute an accepted, important constituent of established programs for older people in other countries and parts of the United States.

- Expand consumer education programs on health and available services.

- Explore the possibilities of expanding Medicare and Medicaid coverage.

- Provide improved pharmacy services (home delivery, enforcement of restricted refills, drug register for each patient, patient education).

- Improve health in nursing homes by improving availability of physical therapy, occupational therapy, and speech therapy.

- Increase availability of podiatry services, both in location and reimbursement. This will also relieve physicians' time, and lower medical costs.

- Mandate a uniform health insurance claim method.

Future Directions for Primary Health Care

1. Provide a federal program of special inducements for primary care physicians with large numbers of elderly patients on Medicare. In one European country, physicians receive a higher capitation fee for their patients over 65, and still higher fees for patients over 75, in recognition of the multiple time-consuming medical problems of the old.

2. Establish a state outreach system of preventive medicine for the frail elderly who are not receiving medical care. One way would be the establishment of an age/sex register and an automatic home visit and evaluation of every person when they reach 75 or 80 years of age.

3. Identify high-risk elderly. Trained health visitors could be made available for identifying the needs of all elderly people who are known to be at high-risk of illness and death. It would include those who live alone, have been recently discharged from the hospital, recently bereaved, or have a history of mental illness.

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ACUTE HOSPITAL CARE OF THE ELDERLY

Ian M. Smith, M.D.

Summary

Illness of the elderly need not be a permanent condition. Acute hospital care can often spare the elderly unnecessary pain and the financial burden of long term chronic care. It can allow the elderly to live at home with a spouse, and not alone and ailing in a nursing home.

This paper reviews several issues related to the acute hospital care of the aged and makes the following recommendations:

- Support research on the diseases of men to increase men's longevity.
- Support the continuing development of new techniques to cure the most threatening diseases: cancer, myocardial infarction, pneumonia, septicemia, and pulmonary embolus.
- Encourage the establishment of a public education program to have the elderly vaccinated for pneumococcal pneumonia and influenza.
- Train those responsible for discharge planning to be aware of environmental hazards which might result in falls and fractures.
- Provide support to increase health screening programs to insure timely diagnosis of disease.
- Provide support for long-term follow-up of discharged patients.
- Increase the home health care resources of the state.

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ACUTE HOSPITAL CARE OF THE ELDERLY

Illness of the elderly need not be a chronic, permanently debilitating condition. Many people in nursing homes could have been rehabilitated well enough to live comfortably in their own homes if there had been a timely identification of the illness and if adequate acute care hospitalization with skilled staff could have been provided. Long term care is a tremendous drain on the finances of the state. On the other hand, the Iowan capable of being at home home with a spouse is much more financially and socially independent than the single person living in a nursing home or living alone at home, In short, investment in better acute hospital care and in research into the diseases causing acute hosptial admission are urgently needed in IOWA.

This paper will review several critical issues on the acute hospital care of the elderly which lend themselves to public policy consideration.

Male Mortality Rates

At age 60, for every 100 males there are 136 females alive, and at age 70, 176, and at age 80, 217 women for every 100 men alive. This indicates the great death rate of men in their 60's and 70's. This is the most important question in geriatrics today: Why do these men age 60 to 70 die, and where do they die? The answers to these questions are beginning to emerge.

The men are dying in the acute care hospital. British figures show that in a given year, in the 15-44 age group, 3% of the population are admitted to acute care hospitals and 0% to long term care. In contrast to this, in the age group over 75, 13% are admitted to acute care and 6% to long term care. It is in the acute care hospitals that the men are dying, and it is here that plans have to be made to prevent these deaths and to maintain the surviving men in a healthy condition. Couples are easier to maintain and they have a happier, healthier life.

Recommendation

- Support for research on the diseases of elderly men, for the appropriate treatment of these diseases, and for follow-up care is needed to extend the life of the male in our society.

Life-Threatening Diseases

In 1965, 121 persons were admitted to short-stay hospitals in the U.S.A. for every thousand population. In those over 65, the figure was 276. In 1975, for all ages, the figure was 134, and at 65 and over, 389. Males of all ages were admitted 6% more frequently in 1975 than in 1965. Females were admitted 11% more frequently. However, over 65 years of age, additional admissions in 1975 compared to 1965 were 41% for males and 34% for females. Once admitted to hospital, those 65 and older stay twelve days on the average, compared to five to nine days in the 64 and younger. These older patients tend to have medical diseases (e.g., diabetes) rather than surgical diseases (e.g., vascular bypass); 69% have a medical disease and 31% have a surgical disease, compared to 55% medical and 45% surgical in the younger age groups.

We have studied this problem at THE UNIVERSITY OF IOWA HOSPITALS by careful review of 515 autopsies in patients age 70 and over who died at the hospital.

The most common disease is cancer. The second is acute myocardial infarction. The third is pneumonia, the fourth, septicemia, and the fifth, pulmonary embolus. Cancer is equally frequent in both sexes, but acute myocardial infarction is more common in males, as is pneumonia and septicemia. Pulmonary embolus is most common in women.

Fifty percent of all cancer occur in patients 65 and older, and 80% of the the cancer deaths occur in this age group, as shown by national figures. The most common cancers are of the lung, colon, rectum, and breast. In all cancers, there has been an improvement in the cure rate of five-year survival rate between 1954 and 1975. The cure rate has only improved from 6% to 9% in lung cancer, but this is preventable by not smoking. The cure rate in acute leukemia has gone up from 1% to 3%, but the probability is that the cure rate will have markedly increased in 1980 over the 3% for 1975. With these exceptions, most cancers have substantial cure rates. Cancers being cured 33% to 50% of the time include colon and rectum, chronic leukemia; 50% to 60% of the time, Hodgkin's disease prostrate cancer; two-thirds of the time or more, breast, skin cancer and uterine cancer. Much progress is the treatment of cancer is occurring in the acute care hospital.

The whole area of arteriosclerosis, hypertension, and their side effects of myocardial infarction or heart attack, and stroke or cerebrovascular accident is undergoing remarkable change at the present time. There is a decline in stroke deaths in all age groups between 1945 and 1975, as shown by the data from the Mayo Clinic. Figures from Los Angeles show a fall of 15% to 25% in coronary artery deaths and a fall of 25% to 35% in stroke deaths. This may be due to decreased smoking, a change in the diet, or the treatment of hypertension or all three of these occurrences.

Recommendation

- There needs to be continued support of the new techniques and procedures currently available in acute care hospitals as well as support of further development of these techniques given their improving rates of success.

Infectious Disease

A recent study in Seattle showed that elderly people with pneumonia infections die 80% of the time if not treated and only 12% of the time if treated with antibiotics. With urinary tract infections, non-treatment gave a 25% fatality rate, treatment 5%, and with infections from unknown sources, the case fatality rate was 37% untreated and 6% treated. These figures indicate the eminent treatability of elderly people with infections. Our survey in Iowa showed that pneumonia and septicemia, or blood poisoning, were the number three and four causes of death after cancer and myocardial infarction. Pneumococcal pneumonia in most instances can now be prevented by a vaccine which is effective against 80% of pneumonias, and very few side effects have been described. It is available as a once every three to five years injection at a cost of $5.00.

Recommendation

- There is a need for a public education program aimed at the elderly to encourage them to be vaccinated for pneumococcal pneumonia.

Falls and Fractures

Many diseases are not life-threatening, but may disable the patient enough to cause susceptibility to life-threatening problems. Such problems include fractures. Fractures occur ten times as frequently in women as in men over the age of 40. This is related to nutritional, endocrine, and other unknown factors that need study. Acute care hospitals, such as THE UNIVERSITY OF IOWA HOSPITALS, have methods of treating these fractures rapidly and effectively so that the elderly are not confined to bed. Prolonged bed rest is dangerous in the aged. Worn-out joints can be replaced, and bed-confined patients can be made ambulant and self-sufficient.

Recommendations

- New developments in the orthopaedic surgical treatment of fractures in the elderly should be made known and made available state wide.

- Discharge planning from acute care hospitals to home should attend to environmental hazards which might result in falls and fractures. Discharge planning personnel and home care staff need to be trained in environmental modifications. Such modifications (usually minor) could be covered by Medicare or Medicaid.

Timely Diagnosis

Other diseases where good treatment can make the difference between self-sufficiency and disablement or death are benign prostatic hypertrophy, where the male sex gland swells and blocks the exit from the bladder; some cases of urinary and fecal incontinence; Paget's disease; and cataract. Such diseases can be treated in the acute care hospital where skilled staff are available. It is therefore very important that these patients reach such a facility.

Recommendation

- Many of these diseases could be readily identified through well elderly clinics and screening programs. Support should be provided to increase these programs.

Surgical Treatment of the Elderly.

Surgery can be used to replace worn-out parts of the body and to bypass blockages. Examples of this are the coronary artery bypass operations to provide adequate supply to the heart damaged by aging. In similar ways, diseased organs such as the uterus or the prostate can be removed and elderly people restored to health. It must be kept in mind that certain operations are intrinsically dangerous and have a high case fatality rate, between 10% and 20%. Above-the-knee amputation, removal of the colon, or grafting of the aorta are examples. However, many diseases such as cataract, gallbladder removal, below-the-knee amputation, and transurethral prostatectomy have a 5% or less fatality rate in those 70 and over.

While in the hospital, the elderly are susceptible to side effects of drugs, falls, fatigue, etc. These have to be monitored carefully, and a surveillance system for the elderly in acute care hospitals is indicated in order to avoid these problems. Such surveillance has begun at THE UNIVERSITY OF IOWA HOSPITALS.

Recommendation

- Financial support is needed to develop a year-long follow-up of discharged patients to monitor their health.

Linkage of Acute Care Hospital to Home Care System

The need for home care for the patient who has been recently hospitalized is five or more times greater than for those of the same age and social stature not hospitalized. It is therefore very necessary to do post hospital visits in order to make sure that home helps, Meals on Wheels, and other home aids are available during convalescence to maintain this rehabilitated patient in the community. We must begin to do follow-up visits.

Recommendation

- The home health care resources of the state need to be greatly expanded if appropriate discharge planning is able to be carried out by the acute care hospitals.

LEISURE, RETIREMENT AND THE ELDERLY

Benjamin K. Hunnicutt, Ph.D.
Michael L. Teague, Ed.D.

Summary

Up to very recent times retirement has been viewed as a welcome reward for a life of hard work. Today, there are growing signs that increasing numbers of older workers are not retiring out of personal preference or physical necessity, but because economic and institutional policies have pushed older citizens unwillingly out of the labor market. In short, many of the original assumptions upon which current retirement policies are based are no longer true. The result is a growing necessity to realize the balance of work and nonwork around the older and younger population.

To construct a flexible retirement policy in the State of Iowa, the authors have called for four principal state actions:

- Commission an independent study of alternatives for flexible retirement in Iowa.
- Review demonstration and research projects directed toward flexible retirement at the federal, state and private corporation level.
- Assume a leadership role in studying how Iowa citizens view the distribution of work and nonwork time.
- Prepare an extensive state policy on flexible retirement that may be used as a basis for legislative decisions.

Examples of factors to be considered in such a state policy as called for in item #4 are provided in Table 2 of the appendix.

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The Problem of Retirement and Leisure

Since the passage of the Social Security Act in the 1930's most people have accepted the value of retirement--an extended period of free time after the useful work life. Retirement is still seen as a just and proper reward for years of service or a necessary thing since people, after all, do wear out. The commonsense view of old age and the moral sensibilities of most Americans together have sanctioned retirement and pension systems. To question the value of retirement seems even indiscreet--a cavalier and youthful disregarding of the rights of the elderly. To suggest that older people work more or that their leisure time is not a form of living happily ever after, is in many ways to run against moral sensibilities, commonsense, and the shared conviction of most Americans who have supported social security in this country and value retirement as an important--although distant--personal value.

But numerous writers and researchers have done just that--found fault with retirement. The American Medical Association speaks directly to this concern:

> At a certain chronological age--most often 65--forces outside of medicine inflict a disease or disability-producing condition upon working men and women that is no less devastating than cancer, tuberculosis, or heart disease. Compulsory retirement robs those affected of the will to live full, well-rounded lives, deprives them of opportunities for compelling physical and mental activity and encourages atrophy and decay... Compulsory retirement on the basis of age will impair the health of many individuals whose job represents a major source of status, creative satisfaction, social relationships or self-respect. It will be equally disastrous for the meaningful goals or interests in life, job-related or otherwise. Job separation may well deprive such a person of his only source of identification and leave him floundering in a motivational vacuum with no frame of reference whatsoever.
>
> There is ample clinical evidence that physical and emotional problems can be precipated or exacerbated by denial or employment opportunities. Few physicians deny that a direct relationship exists between enforced idleness and poor health....

- Leisure, then, is often a burden for the elderly--a source of problems not the Mother Lode for the "golden years". Full-time free time leads to isolation since the all important work contacts are lost. It can also lead to boredom. The familar problems for the elderly, feelings of helplessness, loss of sense of purpose and meaning to life, have a lot to do with the attention which our culture has given to work and has neglected to give to non-work activities.

- Leisure is very often a burden for the elderly because they are not prepared for it, and not able to buy things to enrich it, and find public leisure services inadequate for their needs; older people also are too often forced out of work and then denied access to other jobs. The dimensions of "forced free time" during old age has been gauged: the 1975 national survey done by Louis Harris found that 31% of those people over 65 who were retired would like to work but could not for various reasons.

• Hence, older Americans face two major problems associated with their "leisure time". For many of them, it is a limitless horizon of empty time and a source of problems such as isolation. Secondly, many who want to work, at least part-time, find they cannot. The solution to these problems must be public and must take the forms of preparing and educating people for retirement and providing adequate leisure services as well as opening up more work or volunteer opportunities for older Americans.

• Essentially, the problem in Iowa, as well as in the United States at large, is a set of incentives which operate more or less in one direction and that is to encourage people to "get out" of the labor force when they get older--to get out as quickly as current retirement policies allow. We must all realize that current retirement policies are not frozen in stone; they were devised and implemented in response to prior social and economic conditions, at which time the average length of life was considerably shorter than at present and when financial burden of supporting a retired population was far less than it is today and will be tomorrow. We are all aware that social and economic circumstances are now changing rapidly in our country and these changes are taking place under altered demographic conditions. It is quite likely that our retirement policies will be altered as these general socioeconomic changes proceed. In Iowa, we have the opportunity and responsibility to shape change in directions that conform with our economic and social objectives. Whether we do so will depend upon a convergence of economic and social thought and a willingness to experiment with new approaches for the utilization and organization of time, which will enhance flexible retirement options; e.g., temporary retirement, trial retirement, part-time employment, job sharing.

Current Measures Addressing the Problem

• In approaching the specific problems of workers as they age, two major goals have emerged: (1) the provisions of adequate financial benefits for the support of older persons who have retired from regular employment, and (2) the development of greater flexibility of choice for aging workers as to when to partially or fully retire from regular employment. These two goals are not in conflict and should be pursued simultaneously by prompting a transitional (gradual) retirement process, providing temporary retirement whereby one may return to work, and that regular full-time work beyond the usual retirement age be made a real option for older workers.

• Table 1 provides a partial overview of significant federal legislation endorsing these goals.

• Despite a general lack of major public reforms endorsing flexible retirement, there are several federal and state laws which can serve as models to the State of Iowa, e.g., Federal Employees Flexible and Compressed Work Schedules Act of 1978, Public Law 95-390 (H.R. 7814); Federal Employees Part-Time Career Employment Act of 1978, Public Law 95-437 (H.R. 10126); Comprehensive Employment and Training Act Amendments of 1978; and the Fair Labor Standards Amendments of 1979 (H. R. 1784). Iowa might also look to such states

as California which is presently considering the voluntary reduction of worktime in state agencies and departments, job-sharing, and pro-rated fringe benefits and partial pension systems. Of special interest should be a state-of-the-art paper on alternative work schedules and older workers, presently being prepared by the National Council of Alternative Work Patterns and the Legislative Research and Development Services Division of the America Association of Retired Persons.

Recommendations

It is time that to recognize the complexity of flexible retirement policies by working with individual organizations, both public and private, to see if they can persuade them to adopt a variety of measures to demonstrate that it is possible to employ more older people.

- Table 2 provides a sample of several policy areas and actions for gainful employment and education promoting flexible retirement. It should be noted that the provisions in Table 2 are not exhaustive but meant to provide policy direction.

We must in fact seek to identify a variety of approaches suitable for government, business organizations and individual citizens in attaining greater retirement flexibility. Therefore, we are urging the State of Iowa to endorse four principal actions:

- Commission this year an independent study of alternatives for flexible retirement in the State of Iowa.

- Review current demonstration and research projects directed toward flexible retirement at the federal, state and private corporation levels.

- Assume a leadership role in supporting and conducting the research needed to better understand how individuals currently view the distribution of their time between employment and the various uses of free time, how these views change over time, what new options might be preferred and utilized, and how individuals could best be prepared to adjust to upcoming changes in time allocation.

- Based on the above work, prepare an extensive state policy paper on flexible retirement which focuses on legislative and organizational incentives and disincentives for the adoption of alternative work scheduled for Iowa's older adults.

We recommend that Iowa State legislators give serious consideration to the issue of flexible retirement. By taking the principal action steps contained in this paper, legislators will not only be assisting Iowa's elderly citizens, but will be enhancing the productivity of our economy, reducing financial burdens of social payments, and enhancing the lives of the minority group we will all eventually join.

Table 1

Legislative Action Endorsing Employment
of Older Persons

Legislation	Objective
Age discrimination in Employment Act of 1967	Remove age discrimination up to age 65 for most occupations; has now been amended to age 70.
Community Employment and Training Act (C.E.T.A.) funded through Titles I, II, III, & VI	Identify older workers as a significant target group for employment.
Senior Community Service Employment Program/Title IX of the Older Americans' Act	Subsidize part-time employment for older workers.
Emergency Jobs Programs Extension Act	Under Title VI of C.E.T.A., direct alternative work patterns for older workers and parents with young children.
Wagner-Peyser Act of 1933	Within broad framework, this act provides state counseling, training, referral services for middle-aged and older workers.
Senior Environmental Employment Project	AOA funds a demonstration project to a state environmental protection agency in each of the ten federal regions for providing job development and retirement opportunities to older persons in an environmental protection area.
Lifelong Learning Act	Ensure opportunities for all older persons to acquire skills and information necessary to maintain independence and community participation.

Table 2

Policy Areas Endorsing Gainful Employment
and Education for Older Persons*

- Gainful Employment. Provide the opportunity for older persons to continue to contribute to society through gainful employment as long as they desire and are capable of doing so.

  1. Provide incentives which encourage public and private employers to lessen the impact of impending retirement.

     a. Part-time retirement
     b. Gradual reduction in work hours prior to retirement
     c. Trial retirement
     d. Life-cyclic planning techniques that encourage educational and work sabbaticals

  2. Provide incentives for public and private employers to include training programs of supervisors and managers which address the needs of older persons.

  3. Provide other options or opportunities for individuals facing retirement (early or otherwise) due to health problems.

     a. Restructuring jobs
     b. Job sharing
     c. Vocational rehabilitation should be considered a viable option
     d. Ensure that federally and state sponsored adult training programs provide for the training needs of impaired elderly who wish second careers or other training

  4. Create more employment opportunities through government support.

     a. Improve the rate of participation of older persons in existing manpower programs; e.g., C.E.T.A., Emergency Employment Programs
     b. Include consideration of older persons in any new job programs; e.g., welfare reform, multi-service centers
     c. Include consideration of older persons as workers in all programs funded by the federal government; e.g., Senior Community Service Employment Program, Senior Environmental Employment Project
     d. Review current or proposed employment programs to ensure that employment opportunities are provided for older persons living in rural areas
     e. Provide incentives for state and local governments to consider public service jobs for older persons.

*Table 2 has been principally adapted from Arthur S. Fleming, Commissioner on Aging, Administration on Aging, Department of Health, Education and Welfare, statement before the Congressional Hearings on Alternatives to Retirement.

5. Encourage the private sector to provide employment opportunities for older persons.

   a. Provide incentives for private employers to hire older persons; e.g., tax credits, training subsidies, direct employment subsidies
   b. Encourage labor unions to support a policy of expanded employment opportunities for older workers
   c. Provide incentives for inclusion of older workers in area development programs
   d. Provide incentives for affirmative action programs aimed toward older persons
   e. Provide incentives for private employers to examine organizational structure and function to identify more opportunities for retaining or hiring older persons; e.g., designing or redesigning job responsibilities, job sharing
   f. Provide incentives for the establishing of local job centers to bring together older persons and potential employers

6. Develop and offer older persons job opportunities that coincide with their required skills.

   a. Give priority to demonstration programs which provide an opportunity to demonstrate creative uses of older persons' skills and the value of employing older persons
   b. Encourage and develop the use of part-time work and job sharing techniques which meet the needs of older workers for more flexible work scheduling, and to encourage continued employment while "phasing-in" to retirement
   c. Disincentives in public and private pension plans should be eliminated
   d. Encourage paid and unpaid positions which maintain occupational status through consultant work; e.g., ACTION, Green Thumb, R.S.V.P., Emeritus Organizations, SCORE, VISTA, Service Corporation of Retired Executives

- Educational Opportunities

   a. Ensure inclusion of older persons in existing or new programs aimed at vocational rehabilitation including sheltered workshops

   b. Expanding opportunities for older persons to work and/or to serve as volunteers in educational activities at all levels

   c. Ensuring opportunities for older persons to acquire skills and information needed for decision-making and for coping with daily and special tasks in order for them to maintain their independence and their continuing participation in family and community affairs; e.g., Elderhostel. In 1977, 24 of 50 states provided tuition-free education in state-supported colleges and universities.

Table 2 (cont'd)

d. Helping to "reach the unreached" by locating older persons in need of information, education and related services and to help them obtain needed information and service, giving special attention to minority cultural groups and/or socially isolated older persons

e. Expanding and improving education delivery system including home-based and community-based programs and use of media, giving special attention to older persons who are physically handicapped and/or in hospitals, nursing homes

f. Endorse and promote model projects which assist participants in planning for second careers based on leisure time interests and hobbies, which the individual can convert to income producing activities after retirement

g. Endorse and promote pre-retirement programs not just directed toward maintaining one's living during retirement years but identifying opportunities for second careers and identifying the steps one needs to take in order to become involved in a second career. This endorsement should not only be dependent upon the private and public employer, but should include both the secondary and post-secondary educational levels

WORK AND RETIREMENT

Lorraine T. Dorfman, Ph.D.

Summary

The growth of the older population, their reasonably good health and expressed desire to continue meaningful activity, suggest that we take a fresh look at work and retirement and explore new options and choices for the elderly. The purpose of the paper is to examine a number of ways to broaden current policies regarding work and retirement, and to suggest policy directions.

The following policies are recommended statewide and nationally:

- Emphasize in employment and retirement policies a wide range of choices.
- Make flexible the age of retirement.
- Increase opportunities for part-time employment.
- Increase opportunities for job retraining and preparation for second careers.
- Use increased numbers of older persons in community service and volunteer jobs.
- Encourage the availability of preretirement education and planning.

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WORK AND RETIREMENT

A number of national trends suggest that we take a fresh look at work and retirement. These trends include continuing growth of the older population, reasonably good health enjoyed by many older people, a steady trend toward early retirement, and the expressed desire of older people to continue activity that they find meaningful. In the state of Iowa, which has the third largest percentage of older people in the United States, exploration of broadened options and choices for older citizens is particularly important. At issue are both the quality of life for the Iowa aging and their continued participation and contribution to the life of state.

The purpose of this paper is to examine a number of ways to broaden current policies regarding work and retirement, and to suggest directions for policy based on knowledge to date. The following topics will be discussed: mandatory retirement, continued employment, flexible retirement, job retraining and second careers, volunteerism, and preretirement education. Assessment of the economic tradeoffs required to implement these options is beyond the scope of this paper and will not be discussed.

The Issues

Mandatory Retirement vs. Continued Employment

As of January 1, 1979, federal retirement policy prohibited mandatory retirement before age 70 for almost all workers. The near future may see the abolition of age-based mandatory retirement altogether.

- Proponents of mandatory retirement claim that: 1) it provides equal treatment for all based on the criterion of age; 2) it facilitates the orderly flow of new workers into the labor force; and 3) it provides a pool of skilled persons for needed volunteer activities.

- Those who challenge the concept of mandatory retirement note increasing life expectancy, better health and health care, inflation, the desire of people to retain their standard of living, increasing awareness of the deleterious effects of enforced idleness, the need for enough workers to support the very old, and evidence that older workers perform well on the job (Rhine, 1978; Rosenblum, 1977; Special Committee on Aging, U.S. Senate, 1979).

- With respect to preference for employment beyond age 65, the National Council on Aging survey (Harris and Associates, 1975) found that nearly one-third of retirees (31%) said that they would like to continue work if they had the opportunity to do so.

- It is difficult to estimate with any degree of certainty the number of older workers who will take advantage of the recent extension in the age of mandatory retirement: on one hand, the effects of an inflationary economy may contribute to an increase in the number of older workers; on the other hand, the long-term national trend has been and continues to be toward earlier retirement.

The Iowa picture shows some increase in the percentage of people age 65 and over in the work force between 1970 and 1979 (Rosenow, 1978). By 1981, it is estimated that a total of 21% of elderly persons will be in the labor force (Morris, 1980).

- It seems reasonable to conclude that the worklife of a greater proportion of Iowans could be extended without negative consequences to the state, given the relatively stable population a generally low unemployment rate, and projections for moderate gains in employment (Rosenow, 1978). In fact, continued employment of older workers may result in positive consequences to the state by lessening the burden of dependency as the low birth rate becomes felt in the labor force, and by continued utilization of the skills and accumulated knowledge of older workers.

Part-Time Employment

There are a number of possibilities to consider here.

- First, adopting a more flexible approach to retirement would permit a gradual reduction of employment over a number of years. Such phased-in retirement might include one or more of the following strategies: 1) working fewer hours per week; 2) working fewer weeks per year; 3) job sharing. Second, many older people, for reasons of health, additional income or leisure, prefer to continue part-time work for an indeterminant period. Recent data show that permanent part-time employees are the fastest growing segment of the work force (Special Committee on Aging, U.S. Senate, 1979), and that along with the young, the old constitutes the greatest proportion of part-time workers.

- A major issue in adopting more flexible work patterns is resistance of employers to alteration of traditional work patterns. There is some evidence, however, that difficulties in implementing more flexible policies among management personnel may have been overemphasized, and that there is indeed willingness to adopt individualized methods of assessing performance of older workers (Harris and Associates, 1975).

Job Retraining and Second Careers

The possible elimination of mandatory retirement in the near future highlights the need for job retraining to combat job skill obsolescence. Although there are some older workers who may be reluctant to undergo job retraining, the National Council on Aging survey (Harris and Associates, 1975) found that even among those persons already retired, 15% expressed an interest in learning new job skills or in participating in a job training program to prepare for a different job. What is more, among individuals of preretirement age (55-64), more than one-third (37%) said that they would be interested in learning new skills or in job training. We can conclude, then, that there is considerable demand for job training among middle-aged persons.

Volunteerism

About 4,800 retired Iowans donated their time and services in 1979 through the Retired Senior Volunteer Program (Iowa City Press Citizen, 1980). Such volunteers can make significant and unique contributions to their communities, different from those made by paid workers. Moreover, in a society that is seeking

to create new and satisfying social roles for the elderly, volunteerism serves to create a "status bearing, functional role for the elderly" (Salmon, 1979).

- Older volunteers express interest in providing services in a wide variety of settings, notably in health, mental health, social and psychological support services, and in family, youth and children-oriented services (Harris and Associates, 1975). The talents of volunteers are presently being utilized in such organizations as Project Serve, Foster Grandparents and VISTA. Older persons also serve as volunteers in SCORE (Service Corps of Retired Executives) and Operation Green Thumb (involving beautification of public areas by retired farmers).

- At present, however, the potential of older volunteers is much underutilized although 22% of retirees engage in volunteer activities, another 10% would like to volunteer their services, and it is estimated that if communities took advantage of the interest in volunteerism, the volunteer force could be increased by 50% (Harris and Associates, 1975).

Preretirement Education

Accurate knowledge and information about retirement are needed in order to make the choices discussed above. Employers in modern society are becoming increasingly involved in the task of providing workers with this information. Preretirement education is taking place in a wide range of business, industrial and educational settings. This education may take the form of informal informational sessions, short courses, discussion groups, or individual counseling. Ideally, preretirement preparation occurs well in advance of retirement; in practice, it is most often offered in the five-year period preceding retirement, or at best, begining at age 55. The goals of preretirement education include not only disseminating information about economic, legal, social and psychological aspects of retirement, but more fundamentally, fostering personal planning and positive thinking about retirement (Anderson, 1969).

It seems reasonable to expect that any reduction in the "future shock" that accompanies important transitions in the life cycle, including retirement, may have potential mental health benefits. In addition, many organizations feel that preretirement education in their package of employee benefits contributes to better employee relations and projects an image of an organization that is personally concerned with its workers (O'Meara, 1977).

Recommendations

This review has suggested a number of directions for policy that are applicable statewide and nationally. Major recommendations are as follows:

- employment and retirement policy should emphasize a wider range of choices for older persons
- age of retirement should be more flexible
- opportunities for paid employment should be increased
- opportunities for part-time employment should be increased
- opportunities for job retraining and preparation for second careers should be increased

- greater efforts should be made to utilize older persons in community service and volunteer jobs

- preretirement education and planning should be available to all persons, preferably well in advance of their planned retirement date.

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PROBLEM DRINKING AMONG THE IOWA ELDERLY

Harold Mulford, Ph.D.

Summary

About four percent of elderly Iowans (aged 61 years and over) may be classified as "problem drinkers," or incipient problem drinkers; over 90% of them are men. At any given time, only a minority of them have drinking-related problems. They rarely fit the stereotype of the debilitated skid row derelict. They have fewer, less severe and different problems than younger problem drinkers. They are more likely to suffer from self neglect, accidents, injuries from falling, confusion and family quarrels, but less likely to have problems related to job, the law, or physical violence. They consume smaller quantities of alcohol and are less likely to need detoxification or medical treatment for alcohol withdrawal. However, they may have certain medical problems that need to be distinguished from those related to the normal aging process.

Many who began drinking late as a reaction to retirement, loss of spouse, and feelings of loneliness are more responsive to help. Others with a long history of heavy drinking tend to be more resistant to help. Elderly problem drinkers are generally motivated and can most effectively be assisted by an empathic, community alcoholism counselor who understands the special problems of both the problem drinker and the older adult. A simple, informal, common sense approach that helps them use existing community resources and services to solve their own problems is recommended. Institutionalization should be a last resort.

To best treat the older problem drinker, the following recommendation is made:

- In the absence of a treatment proven to be effective or other universal solution, each community should be permitted, even encouraged, to work out its own program for helping the elderly with drinking problems. This would be preferable to a uniform program mandated by Federal or State agencies.

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Drinking and the Iowa Aged

Compared with younger Iowans, the proportions of the elderly (age 61 years and older) who are: a) drinkers, b) heavy drinkers, and c) problem drinkers are all quite low. Still, the elderly are not immune. Their problems and needs are different, but they are just as responsive, and perhaps more so to proffered assistance in dealing with drinking related problems.

A recently completed (1979) survey conducted by the Division of Alcohol Studies, Department of Psychiatry, University of Iowa, interviewed 1,451 Iowans, age 21 years and older; reveals the elderly help account for the increased number of drinkers and the near doubling of the per capita alcohol sales since we conducted similar State surveys in 1958 and 1961. Only about half (52%) of elderly Iowans are drinkers today compared to 83% of younger adults; still, this is a considerable increase over the 35% of the elderly who were drinkers in 1961. While the vast majority (96%) of elderly drinkers are light and moderate consumers the rate of heavy drinking has increased from 1% to 4% since 1961.(By heavy drinking is meant 3 or more drinks more than once a week). Most elderly heavy drinkers are men; the rate being 1% for women and 7% for men. They come in equal proportions from the cities and farms, with heavy drinking being lowest among the elderly in towns (2,500 pop. or less). Heavy drinking in the elderly is also associated with educational level being lowest for those with no more than an eighth grade education.

- Using a broad definition of problem drinker/potential problem drinker to include those who reported extreme deviant drinking (morning drinking, blackouts, etc.), or drinking for psychological relief, or uncontrolled drinking, or drinking related problems, the "problem drinker" rate for the elderly is only 4%, or less than one-half that of younger Iowa adults (9.4%). More that 90% of these elderly problem drinkers are men. However, only about one-fourth (less than 1%), of these elderly problem/potential problem drinkers reported they were currently actually experiencing drinking related trouble in any of the major life areas; health, finances, family, job or trouble with the law. Three times as many younger Iowans reported such troubles (2.4%).

- Contrary to the idea that they suffer a progressive disease, elderly problem drinkers are generally less advanced in the alcoholic process than are younger problem drinkers. Consistent with other evidence, we found that with advancing age, drinkers tend to reduce their consumption. Many quit altogether. They tend to "mature out". Rarely do elderly problem drinkers fit the stereotype of the debilitated skid row derelict.

- There are two types of elderly problem drinkers. Some elderly problem drinkers have a long history of heavy drinking for psychological relief, i.e., to relieve anxiety, worry, stress, etc., as a way of life. They may or may not have experienced serious drinking-related trouble along the way. Others began heavy drinking only recently in reaction to retirement, the loss of spouse, feelings of loneliness, etc. The latter type is generally more responsive to help.

- Elderly problem drinkers tend to have fewer, less severe, and different types of problems than do younger problem drinkers. They may have a combination of physical, mental and social problems, but their problems are more likely to be self-neglect, accidents, injuries from falling, confusion and family quarrels, and less likely to be related to job, the law, or physical violence while drinking.

Elderly problem drinkers generally consume small quantities of alcohol because of a lower tolerance, and therefore, suffer fewer acute medical problems associated with heavy consumption. They are less likely to need detoxification or to need medical treatment for alcohol withdrawal symptoms.

One of the challenges in dealing with elderly problem drinkers is to distinguish between physical conditions that result from the normal, biopsychological problems of aging and the problems that arise as a result of heavy drinking interacting with the normal aging process. It is easy to wrongly ascribe physical problems to drinking, which, actually, are simply the effects of aging and chronic physical illness.

Help for Iowa's Elderly Problem Drinkers

While the age group 61 and over makes up more than one-quarter of the State's adult population, and 18% of the heavy drinkers, they constitute 11% of the State's problem drinkers, and only 7% of the clients appearing in Iowa's community alcoholism centers in a 1973 study. It is noteworthy that far fewer of the elderly center clients had a dual drug problem; about 6% of the elderly women clients (but less than one percent of the men) were abusing some other drug in addition to alcohol.

- Failure of the elderly problem drinkers to appear in the alcoholism centers in the expected numbers, in part, reflects the lesser severity of the problem. But it is also a function of their being less visible to the community and receiving less pressure to go for help. For example, they rarely get picked up by the police and have no trouble on the job because they have no job.

- Also, alcoholism centers generally geared more to serve younger problem drinkers, tend to slight the special circumstances and needs of the elderly. Elderly problem drinkers are especially resistant to coming forward and seeking help from the centers. They are more resentful of filling out forms that pry into their personal lives and the other irrelevant formalities often required to get help from the centers. Nonetheless, those who are reached prove no less, and perhaps more, responsive to social support types of assistance than do younger problem drinkers. They are more motivated, have probably been trying to overcome their problem for some time, and, if properly approached, welcome some help.

Recommendations

- Each community in the state should be assisted in having the services of an alcoholism counselor.

- The etiology, diagnosis and treatment of the presumed alcoholism disease is no less a mystery in the elderly than in other problem drinkers. The absence of an effective treatment for the undefined disease hardly justifies expensive, long term, inpatient treatment centers or sophisticated formal treatment regimens-especially in the face of mounting evidence that recovery rates are independent of type, duration and intensity of treatment. At the same time, it is well documented that problem drinkers do recover, and that they are never too old to "mature out" of their alcohol dependence. The natural maturing out process can be expedited by the assistance of an empathic counselor who understands both the problem drinker and the elderly - one who understands: a) the stresses and strains of aging; b) the appeal that alcohol has as a means of coping with those problems, and

c) the fact that alcohol is an insidious, deceptively simple and dangerous solution to life's problems.

Ideally, every community of the State would have an alcoholism counselor who would help the elderly problem drinkers to use existing community agencies and service professionals to meet their own individual needs. The counselor would identify the elderly problem drinkers through other community agencies, reach out to contact them, offer to help, motivate them to do something about their drinking, assist them to make maximum use of their own personal resources as well as community resources, and generally help them learn to cope with life's problems without undue reliance upon alcohol. In other words, the counselor acts as a catalyst to help the problem drinkers more effectively manage the natural, social, psychological and physiological forces influencing their drinking behavior.

An example of this approach may be found at the community alcoholism center located in Iowa City. To meet the special needs of the elderly, the Iowa City center has four volunteers and one paid counselor who specialize in working with the elderly problem drinkers. They reach out to contact them, do not demand paper work or impose other conditions for receiving help, and generally function in the informal manner described above. Although the program has not been carefully evaluated, apparently, increased numbers of elderly problem drinkers are reached at minimal cost. The success rate for this simple common sense approach can hardly be less than other more costly alcoholism treatments.

NUTRITION AND THE IOWA ELDERLY

Margaret Osborn, Ph.D.,

Summary

Over the years, researchers from The University of Iowa and and Iowa State University have studied what the people of Iowa eat. These surveys reveal that diets of some elderly Iowans are found to be inadequate. One does not need scientific data to be aware that Iowa has an "overweight" problem which is a form of poor nutrition. National nutrition surveys also reveal that many elderly are not well fed.

Factors which contribute to the nutrition of the elderly are long time food habits, loneliness, shopping problems, reduced income and poor dental health and medical problems.

To assist in solving the nutrition problems of the Iowa elderly, the following recommendations are made:

- Fund the expansion of congregate meal and home delivered meal programs in Iowa.
- Require the services of a registered dietitian for all levels of retirement and nursing homes.
- Provide transportation for the elderly to congregate meal sites, grocery stores, medical and dental centers.
- Fund a nutrition education program for the elderly. For long term education, nutrition should be a required subject in the public school of Iowa.

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Nutrition Problems of the aged

The science of nutrition is relatively new compared to many other sciences but its role as an important factor contributing to health is well recognized. The nutritional status of the aged has been studied by dietary intake, biochemical and clinical examination either singly or in combination.

- Dietary intake studies of Iowans have been conducted over the years by researchers at The University of Iowa and Iowa State University. Not many studies have specifically studied the elderly but the elderly were included as part of the sample.

In March 1957, 695 persons "60-plus" years of age living in Linn County were interviewed. Ninety-three percent ate three meals regularly a day. Although meal patterns were generally good, the quality of many diets was poor. Sixteen percent had diets furnishing less than desired amounts of protein, calcium, vitamins A and C when compared to the Recommended Dietary Allowances (RDA's). For more detailed data, see appended table. The RDA's, first established in 1943, are goals rather than minimum allowances. They have been changed over the years as our knowledge increases. The most recent 1980 revisions is the tenth.[1,2]

Fifty men and fifty women, aged 50 to 80 years who came to the College of Dentistry were interviewed in the winter of 1967. The majority had diets containing a high percent of their dietary allowances of protein, calcium and vitamin A.[3]

Diets of 70 women and 30 men ages "60-90 Plus" years participating in the congregate meal program in Van Buren County were studied in 1975. About one-fourth were eating less than 50% of the RDA's for calcium and vitamin A. None were low in ascorbic acid.

On does not need scientific data to be aware that Iowa has an "overweight" problem. Overweight is a form of poor nutrition. About 50% of the older men and women taking part in the congregate meal program in Van Buren County in 1975 would be considered 15% above desirable weight for height.[4]

The Department of Agriculture 1965 Household Consumption survey, using a 24-hour recall, revealed that older persons had poorer diets in all nutrients than younger person when compared to the RDA's. A significant association was found between inadequate nutrient intake and low income.

The HANES (Health and Nutrition Examination Survey) done in 1971-74 collected dietary and biochemical data for a group of persons 65 years of age and over. Data revealed 27.2% of males and 61.8% of females were below standard for calcium; 40.1% of the males and 66.2% of the females had iron intakes below standard; 52.7% of the males and 58.4% of the females were below standard for vitamin C.

- There are several factors which contribute to the nutrition of the elderly:

    1. A lifetime accumulation of food habits has shaped their tastes. The elderly may dislike many modern processed foods. Sebrell noted in 1966 that no one in our society who had passed

military age had frozen orange juice as a baby.[6]

2. Unnecessary or falsely represented vitamin products and so-called foods cost millions of wasted dollars. The elderly are especially susceptible to such misrepresentations.

3. Many elderly are lonely. The elderly woman who is suddenly left to eat alone after the death of a husband may change her pattern of eating because of lack of incentive to prepare an adequate diet... Shopping may be a real problem. Reduced income presents a problem of whether to buy food or spend money for other necessities.

4. Lack of teeth and poor fitting dentures reduces ability to chew many foods thus reducing the variety of foods that should be eaten for good nutrition.

5. Many medical problems have nutrition as a factor, but the problem is not treated because elderly may have no money, no one to take them to the doctor, or a fear of the doctor.

Current Measures Addressing the Aged's Nutritional Problem

- The congregate meal and home delivered food systems programs (Title VII of the Older Americans Act) are an outgrowth of the 1969 White House Conference on Food, Nutrition and Health. Iowa does participate in the program and many Iowans enjoy eating with others of their own age. Those who are home bound can have a hot meal delivered to their home. Some programs deliver only five days a week. It is much less costly to maintain an individual at home than in a public or private facility.

Many retirement and nursing homes serve excellent food to their residents but a few have poor standards. The services of a qualified dietitian help insure quality nutritional care.

- Some congregate meal sites have nutrition education programs. Some publications as the government "Food Guide for Older-Folks" are available.

- The mass media has done well informally educating the elderly public about nutrition.

Recommendations

- Continue and expand the congregate meal programs.

- Expand home delivered meal service to a seven day a week program in local communities that now deliver only five days a week. Seek out individuals living in isolated areas away from town that need this service. It costs less to keep an individual at home than in a public or private faculty and one good meal a day may mean they can live at home.

- Set up home-makers service in communities that do not have such services as an alternative so someone can go to the home of an individual to help prepare a meal daily or do shopping for groceries.

- Require the services of a registered dietitian for all levels of retirement and nursing homes.

- Expand local transportation as S.E.A.T.S. programs so the elderly can shop for food and get to congregate meals.

- Set up a statewide bus system to isolated areas of the state so the elderly can have transportation to medical and dental centers such as The University of Iowa Medical and Dental Schools. With the rising cost of gasoline the low income elderly will not have money for gasoline for private transportation.

- As an alternate solution, set up satellite centers from The University of Iowa to provide medical and dental services in communities without these services. The elderly need to be taken to the services or the services need to be taken to the elderly. An individual without teeth or ill fitting dentures may not eat properly. Send a registered dietitian along to give nutrition information.

- Nutrition education in the state of Iowa needs to be provided for the elderly and the general public.

- Expand nutrition education in congregate meal service centers.

- Inform the public about congregate meal services by radio, newspaper and television.

- Set up a program such as "dial-a-dietitian" where correct nutrition education information can be received.

- Seek out a nutritionist or dietitian to write a weekly nutrition education column to be sent to every newspaper in the state of Iowa.

- Set up a system whereby dietitians and nutritionists will do radio and television programs on nutrition education for the elderly including cookery ideas. Let the leadership come from The University of Iowa and Iowa State University but include local registered dietitians in this program.

- Require that nutrition be taught in the public schools of Iowa.

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TABLE

RECOMMENDED DIETARY ALLOWANCES, REVISED 1980
FOOD AND NUTRITION BOARD, NATIONAL ACADEMY SCIENCES,
NATIONAL RESEARCH COUNCIL
FOR MEN AND WOMEN 51 + YEARS

Energy and Nutrients	Men	Women
K calories 51-75 yrs.	2,000-2,800	1,400-2,200
76 +	1,650-2,450	1,200-2,000
Protein, gm	56	44
Vitamin, A, mcg R.E.*	1,000	800
Vitamin D, mcg**	5	5
Vitamin E, mg	10	8
Vitamin C, mg	60	60
Thiamine, mg	1.2	1.0
Riboflavin, mg	1.4	1.2
Niacin, me N.E.***	16	13
Vitamin B_6, mg	2.2	2.0
Folacin, mcg	400	400
Vitamin B_{12} mcg	3.0	3.0
Calcium, mg	800	800
Phosphorus, mg	800	800
Magnesium, mg	350	300
Iron, mg	10	10
Zinc, mg	15	15
Iodine, mcg	150	150

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* Retinol equivalents; 1 retinol equivalent - 1 mcg retinol of 6meg B-crotene 6 mcg B-crotene.

** As cholecalciferol: 10 mcg cholecalciferol = 400 IU Vitamin D.

*** N.E. (niacin equivalent = 1 mg niacin or 60 mg dietary tryptophan).

The University of Iowa

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1980 - 1981

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