UC San Diego

UC San Diego Previously Published Works

Title

Effective aging. Meeting the challenge of growing older.

Permalink

<https://escholarship.org/uc/item/9qn26219>

Journal

Journal of the American Geriatrics Society, 38(7)

ISSN

0002-8614

Authors

Curb, JD
Guralnik, JM
LaCroix, AZ
et al.

Publication Date

1990-07-01

DOI

10.1111/j.1532-5415.1990.tb01478.x

Peer reviewed

Effective Aging

Meeting the Challenge of Growing Older

J. David Curb, MD,*† Jack M. Guralnik, MD, PhD,* Andrea Z. LaCroix, PhD,*‡
Samuel P. Korper, PhD,* Dorly Deeg, MS,§ Toni Miles, MD, PhD,|| and Lon White, MD*

In this century we have seen the dream of significant increases in life expectancy move closer to reality, with remarkable declines in mortality occurring for all age groups. However, as human life expectancy increases, it has become evident that remaining vigorous and free of disability, and, perhaps most critically, maintaining an acceptable quality of life is as important, perhaps more important, than the absolute number of years achieved.

Aging "well," which has in the past been termed "productive,"¹ "healthy,"² or, most recently, "successful"³ aging, has been receiving increasing attention from the public, policymakers, and scientists. However, in the great majority of cases, the challenge of growing older involves more than the avoidance of disease or physiologic change. It frequently requires effectively compensating for physiologic changes and diseases.

CONCEPTUAL ALTERNATIVES

Clinicians and scientists have long sought to develop terminology that would improve the general understanding of the process associated with aging well. For example, the term "productive aging,"¹ is drawn from the field of economics and implies the production of a marketable product or service, a factor that may or may not be necessary to maintain high quality of life. Healthy aging, as used by Benfante et al.,² implies an absence of disease. Rowe and Kahn would add the absence of physiologic decline to that definition.³ However, among older persons whom each of us has known who are maintaining a high level of physical and/or

social function, many have one or more chronic diseases and evidence of age-related physiologic changes.

Despite physiologic declines (which are often related to disease), less than ideal levels of risk factors, and clinically diagnosed disease, a great deal of adaptation and rehabilitation can occur, permitting the maintenance of relatively high levels of functioning in a large segment of the older population. The concept of compensatory or "effective" aging also has much in common with some of the precepts of rehabilitative medicine. In a recent text, *Rehabilitation in the Aging*, Williams states, "The aim of rehabilitation, 'to restore an individual to his/her former functional and environmental status, or alternatively to retain or maximize remaining function,' should be at the heart of care of all aging persons in order to help them continue to live as full a life as possible."⁴

A host of nonphysiologic factors can influence the ability to age effectively and influence the lifestyle choices that promote that state. Beyond the burden of disease and disability, these factors include economic well-being, social support resources, availability and access to health services, and psychologic well-being. Although the presence and severity of disease must be considered, most clinicians can recall experiences in which two seemingly similar individuals with similar clinical problems who for reasons that were not apparent experienced very different long-term outcomes in the areas of function and well-being. Understanding the reasons for such differences in the ability to compensate effectively for physiologic events and trends can help us to discover better ways to preserve independence and quality of life among older people in our society. Among those who age effectively, declines as minor as loss of high-frequency hearing or as major as a heart attack or hip fracture need not translate, as they often do, into permanent disability and significant decline in quality of life.

An understanding of the aging process itself also supports the practical value of this concept. Most authorities support a multiple factor model of an aging process.⁵ It is thus thought of as a constellation of parallel and only loosely connected mechanisms with different pri-

From the *National Institute on Aging, Epidemiology, Demography, and Biometry Program, Bethesda, Maryland; †Kuakini Medical Center and Division of Geriatrics, John A. Burns School of Medicine, University of Hawaii, Honolulu, Hawaii; the ‡Center for Health Studies, Group Health Cooperative of Puget Sound and Department of Epidemiology, University of Washington, Seattle, Washington; the §Netherlands Institute for Gerontology, Rotterdam, Netherlands; and the ||Department of Epidemiology, School of Public Health, University of Illinois, Chicago, Illinois.

Address correspondence and reprint requests to Jack M. Guralnik, MD, PhD, EDB Program, National Institute on Aging, Federal Building, Room 618, 7550 Wisconsin Avenue, Bethesda, MD 20892.

mary effects at the tissue or organ level. Few scientists believe that we will find a pacemaker or master controller of the individual's rate of aging. This suggests that no unitary method to block or prevent the ill effects of aging is likely to be found. Thus, for the foreseeable future, most older individuals will be burdened by some age-associated problems. It is critical that we work to find new and better ways to maintain well-being, despite the inevitability of some obstacles to this for most people.

CONCLUSION

It is probable that only a small percentage of the overall population aged 65 and older have no disability and no chronic conditions, thus making them potential candidates for successful aging as defined by Rowe and Kahn. This percentage would likely be much lower if this group were evaluated intensively to exclude all those with subclinical disease, physiologic loss in a single organ function, and risk factor elevations above ideal levels. Among those 80 and older, whose survival itself provides some evidence of success, a much smaller percentage would be candidates for successful aging.

It would be a grave mistake for the society or the scientific community to exclusively adopt the successful aging approach as a guide to developing future research agendas, or more broadly directing public health policy. Yet it is also critical that we continue to increase our

knowledge of those special factors that promote "success."

For clinicians, reliance solely on the concept of successful aging to determine a philosophy toward the practice of geriatric medicine would impose unfortunate limitations on physicians and patients. The concept proposed here encompasses both successful agers and the vast middle ground of older people for whom maintenance of functional abilities in the face of physiologic losses and disease is a reasonable and practical objective. Among those who slip below a reasonable threshold, tested interventions aimed at restoration to acceptable levels of well-being are needed. It is important that scientists and clinicians adopt a unified concept of aging that allows for prevention, treatment, and compensation or rehabilitation with the ultimate goal of developing health-care practice and policies that will maximize the quality of life for the largest number of older people.

REFERENCES

1. Butler RN, Gleason HP (eds): *Productive Aging: Enhancing Vitality in Later Life*. New York, Springer, 1985
2. Benfante R, Reed D, Brody J: Biological and social predictors of health in an aging cohort. *J Chron Dis* 38:385, 1985
3. Rowe JW, Kahn RL: Human aging: usual and successful. *Science* 237:143, 1989
4. Williams TF (ed): *Rehabilitation in the Aging*. New York, Raven Press, 1986
5. Warner HR, Butler RN, Sprott RL, Schneider EL (eds): *Modern Biological Theories of Aging*. New York, Raven Press, 1987