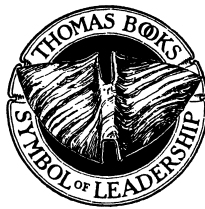


AGING AND PUBLIC HEALTH

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Technology and Demography:
Parallel Evolutions

GARI LESNOFF-CARAVAGLIA, Ph.D., Editor



CHARLES C THOMAS • PUBLISHER, LTD.
Springfield • Illinois • U.S.A.

Published and Distributed Throughout the World by

CHARLES C THOMAS • PUBLISHER, LTD.
2600 South First Street
Springfield, Illinois 62704

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ISBN 0-398-07214-0 (hard)
ISBN 0-398-07215-9 (paper)

Library of Congress Catalog Card Number: 2001027977

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Printed in the United States of America
SR-R-3

Library of Congress Cataloging-in-Publication Data

Aging and public health : technology and demography-parallel evolutions / edited by Gari
Lesnoff-Caravaglia.
p. cm.

Includes bibliographical references and index.

ISBN 0-398-07214-0 – ISBN 0-398-07215-9 (pbk.)

1. Aged—Health and hygiene—United States. 2. Aged—United States—Social conditions.
3. Aged—Services for. 4. Aging—Psychological aspects. I. Lesnoff-Caravaglia, Gari.

RA564.8 .A397126 2001
362.1'9897'00973—dc21

2001027977

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PREFACE

The presence of an increasing older population occasions the need to reevaluate the meaning of life, death, and the lived experience. Aging does not occur in isolation but is a process that reflects societal attitudes and their practical outcomes. Since such practical responses are principally the purview of public health, this provides the inevitable link between the fields of aging and public health.

As the population continues to age, traditional concerns must expand from physical and biological concerns to incorporate social and behavioral perspectives. Professionals in the fields of aging and public health need to assess the nature of the increased panoply of services that must, perforce, be developed to match the requisites of such a population in a humane and cost-effective manner. Such considerations must take into account not only individual and generational differences, but the diversity resulting from particular groups and subgroups within the aging population. Such heterogeneity represents such factors as geography, disease, disability, and ethnicity.

Provision for persons ranging in ages from 70 to 125 is the challenge that confronts the aging world. Assistance through social and health programming must develop from an underlying understanding of the older population as consisting of individuals with long personal histories, whose needs continue to evolve in the face of the changing circumstances of their lives. Individuals age at differing rates, and their aging may be accommodated, made burdensome, or hastened depending upon the felt obligations and capabilities of a society to assume such responsibilities on their behalf. How one ages, when one ages, and why one ages are reflections of the societal milieu in which the process occurs.

The wide span of biological, psychosocial, environmental, and social influences that impinge on the aging process have particular relevance for a public health perspective on health and social issues in late adult life. In this book, there is systematically developed a significant link between such concerns and a perspective that unites these two fields. Their joint concerns are presented within the context of an examination of the contemporary situation, current needs, and future trends.

The book is further divided into seven sections, each dealing with a particular focus. The sections are preceded by an introductory chapter that provides a broad view of the demographic, mortality, and morbidity trends in an aging world. The manner in which lifestyle and the quality of life are interrelated is given particular attention. The effect of behavioral, social, and environmental risk factors on the morbidity and mortality of older populations lays the groundwork for the chapters that follow.

Section II addresses the biological aspects of aging and public health. Chapter 2 focuses on the life span and life expectancy, normal aging, premature aging, diseases in old age, and sensory loss. It covers the biological and disease aspects of aging and outlines the relationship between normal aging and premature aging brought on by heredity, disease, and environment. Health-risk factors, such as behavioral, social, psychological, and socioenvironmental, are highlighted. The relationship between technological advances and their influences upon lifestyle, life expectancy, and health care are also addressed. Chapter 3 discusses nutrition and older adults by examining food and nutrition recommendations, the physiological and psychological influences on nutritional status, and the socioeconomic and environmental influences on diet. Nutrition is also examined in light of the diversity among older groups and its effects upon health status and the prevalence of disability and disease.

Section III examines the psychosocial aspects of aging and public health. Chapter 4 covers the psychosocial parameters of aging and includes societal attitudes toward aging, the heterogeneity of the aging experience, and behavior and lifestyle as determinants of health. Chapter 5 deals specifically with mental health issues and the aging population covering such factors as gender and sex differences, death and bereavement, and suicide and life-threatening behavior.

Special population groups and public health concerns are the focus in Section IV. Chapter 6 describes the invisible elderly, persons who often fall outside the purview of health providers. Included in these special population groups are victims of family violence and self-neglect, as well as the single-room occupants or persons who withdraw from the mainstream of life and become passive observers of the world. Chapter 7 covers the problems presented by an increasing older prison population. The prison environment as a setting for aging is described, as well as special issues, such as the occurrence of suicide. The special needs and interest of the rural elderly provide the focus for Chapter 8. The access to services for an increasingly diverse, older population presents an additional challenge as does the greater geographic distribution of the older population across urban, suburban, and rural environments.

The prevention that occurs before the onset of disease can be instituted by controlling those environmental and behavioral factors associated with disease conditions. Serious physical injuries can also be controlled by specific prevention strategies. The environment as a significant factor that provides the background for aging is developed in Section V with Chapter 9 focusing on the environment itself, including air quality, communicable-disease control, infections, toxic agents, and food safety. The significant effects of air and water pollution on the older population are clearly delineated. The safety of the older adult population in the community is the theme of Chapter 10. Prevention strategies related to injuries resulting from a variety of sources, such as falls, automobile use, fire, and domestic mishaps, are described.

In Section VI, Chapter 11 examines the linkage between technology and the burgeoning presence of older adults. Attention is given to the potential alteration of environmental conditions, health care, and social services through technological applications. The security issues faced by an aging population are the focus of Chapter 12, including crimes perpetuated against the older population. Social problems that impinge upon the security of the elderly are also highlighted.

The market forces that have changed the structure and character of health care settings during the last decade or so have stimulated the initiation or expansion of a variety of services, including outpatient health services, services specifically for the chronically ill and aged, rehabilitation centers, and long-term-care and terminal-care services. Increased attention is being given to prevention as well as intervention with health-promotion centers established within communities and work sites. In Section VII, Chapter 13 covers the wide array of health services available to the older adult. Although the problems of an aging population are currently being addressed, the approach has been fragmented, inefficient, and uncoordinated. Many older persons still lack adequate care. The responses of public and private agencies to health services for the elderly is delineated, and attention is given to health care planning and the older population. It is patently clear there are methods to mitigate, delay, modify, or even prevent some of the disability associated with aging. The combined effects of interventions by all levels of government, private, and voluntary programs has had both positive and negative effects on the older population and health policies serving the elderly. Attention is also brought to bear on the fact that a public health approach to the study of aging requires an understanding of health and illness in later years, as well as appreciating the fact that the quality of life is an important measure of health status. Particular emphasis is given to the fact that many of the new efforts to address the health needs of an aging society will be based on political and fiscal considerations. The need for a national, public health agenda is accentuated due

to the increasing numbers of older persons, as well as to the increasing diversity among the elderly and broad range of health conditions and disabilities.

The emphasis throughout this book is on the importance of an integration of both public health and aging to foster expanded services to deal with chronic disease and disability, secondary and tertiary prevention, a community orientation, and appropriate interventions for older persons. The health of the general population is now seen as a public concern and is no longer purely a private matter. Such resulting changes in perception derive from the growth of medical sciences and technology, the growing expectations and demands of the public, the escalating costs of health care, and the need to reduce the wide spectrum of barriers to care.

This book is designed to aid professionals and students in understanding the multiple forces that impinge on the health and social status of aging populations. This book is also an invaluable tool for policy makers, researchers, and practitioners in related fields who are interested in the well-being of the elderly.

GARI LESNOFF-CARAVAGLIA, PH.D.

CONTENTS

<i>Contributors</i>	v
<i>Preface</i>	vii

I. Introduction: Altering Perspectives on Aging and Public Health

Chapter

1. The Aging World	5
<i>Laurence G. Branch</i>	

II. Biological Aspects of Aging and Public Health

2. Health and Aging	15
<i>Gari Lesnoff-Caravaglia</i>	
3. Nutrition and Older Adults	29
<i>Namvar Zohoori</i>	

III. Psychosocial Aspects of Aging and Public Health

4. Psychosocial Parameters of Aging	51
<i>Ann Rathbun</i>	
5. Mental Disorders and Mental Health Services in Late Life: Issues for Public Health and Public Policy	69
<i>Bob G. Knight and Michele L. Maines</i>	

IV. Special Population Groups and Public Health

6. The Invisible Elderly	93
<i>Gari Lesnoff-Caravaglia</i>	
7. Growing Old in Prison	112
<i>Gari Lesnoff-Caravaglia</i>	

8. The Rural Elderly124
Sara A. Quandt and Thomas A. Arcury

V. Environmental Aspects of Aging and Public Health

9. Environmental Health and Aging149
Michele Morrone
10. Safety and the Elderly165
Timothy J. Ryan

VI. Technology and Aging

11. Squaring the Circle: Demography and Technology183
Gari Lesnoff-Caravaglia
12. Security and the Elderly201
Timothy J. Ryan

VII. Health Services and the Older Adult

13. Health Services: Public Policies Affecting the
 Health of Older Adults219
Katherine E.W. Will

- Index*247

AGING AND PUBLIC HEALTH

**I. INTRODUCTION:
ALTERING PERSPECTIVES
ON AGING AND
PUBLIC HEALTH**

Chapter 1

THE AGING WORLD

LAURENCE G. BRANCH

THE WORLD WAS MARKEDLY DIFFERENT at the turn of the twenty-first century from what it was at the turn of the twentieth century. It is estimated that one-half all the people in the history of the world who have reached age sixty-five are alive today. There are myriad reasons for the advances in longevity: improvements in sanitation, an understanding of infectious diseases and germ theory, the discovery of penicillin and the subsequent development of other pharmaceuticals, technological advances in health care delivery in general and the modern hospital in particular, and, more recently, the attention on health promotion and disease prevention.

Let us consider some of the major trends and events of the twentieth century that have markedly influenced the older population as it enters the twenty-first century. An examination of the factors that have shaped society's collective history may provide an understanding of the present and permit predicting the future with greater confidence, if not with increased accuracy.

MAJOR TRENDS IN THE UNITED STATES DURING THE TWENTIETH CENTURY

1900

It was the dawn of the twentieth century. In Europe, Germany was well on its way to implementing industrialization in the work place. Manufactured goods were going to be mass produced. Otto von Bismarck, the Chancellor of Germany during the early era of industrialization, was faced with a new challenge, one never before experienced in the history of the world. Germany was operating at perceived maximum efficiency, but there were younger workers trying to get into the workforce, and there were no more jobs for them. The solution recommended by von Bismarck's economic advisors was indeed radical. The recommendation was to furlough some older workers permanently, to provide them with a lifelong pension and to