Z. Yi, E. M. Crimmins, Y. Carrière and J.-M. Robine, Longer Life and Healthy Aging

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Jim Oeppen

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This book is one of the results of a very productive initiative by the IUSSP on “Longevity and Health”. After a thematic introduction by the editors, the chapters are divided into four parts, each with its own summary. They are: Disability and Healthy Life Expectancy; Individual Healthy Aging; The Family and Healthy Aging; and Community Effects on Healthy Aging.

Parts II–IV have a natural hierarchical scale. Part I has a less clear structure, ranging from Jagger’s review of themes to a methodological chapter on the shortcomings of multi-state life-tables. The section is completed by country-specific studies of Taiwan and the US and by two disease-focused chapters: one on diabetes, and the other on more general trends in morbidity and mortality but with an emphasis on cardiovascular diseases.

Healthy aging for individuals is the theme of Part II. The subject is still at the stage where major returns may come from improving the measurement instruments. Crimmins et al. propose an index of physiological frailty by age. They find that the index at first increases with age, but then levels off in very old age. Their interpretation that this is the result of selective mortality matches the observation that there is a mortality plateau for the oldest-old. The two chapters on gender differences in China and the UK allow us to appreciate the commonality of women’s experiences as the numerically dominant group at older ages across these two cultures. Other chapters address dementia, the insights that can be gained from focusing on centenarians, and the life-long impact of social status.

Corder et al. examine the impact of apolipoprotein E (APOE) polymorphisms on the risk for, and survival following, vascular accidents such as heart disease and stroke. Subjects are divided into two groups: aged 75–84 and 85+. They find that mortality selection affects genotype distribution among the second group. The authors use time since examination as the fundamental time scale for the survival

J. Oeppen (✉)
Max Planck Institute for Demographic Research, Konrad-Zusestr. 1, 18057 Rostock, Germany
e-mail: oeppen@demogr.mpg.de

process, but most demographers would presumably consider that it should be age instead, especially for the older group, and would consider using hazard methods appropriate for left-truncation. The role of APOE in the competing mortality risks at these and earlier ages is not explored.

The third section concerns “The Family and Healthy Aging”. This is a pleasure as the analysis of “joint lives”, which formed one of the fundamental interests of the founders of actuarial science, retains its importance in aging and genetic studies, whereas it has become neglected in survival analysis. No matter how much we improve life expectancy and healthy aging, there will always be those who care and grieve. The issues of care and transfers were touched on in part I by Jagger in her review of the major themes, but readers will appreciate the juxtaposition of analyses of the roles of children as potential caregivers in the Netherlands and China. The section is completed by a study of longevity among Chinese consanguines. This is a difficult statistical topic and the authors recognize that the data and the descriptive nature of the methods should be improved.

In Part IV we move upward to the next scale in the hierarchy: Community Effects on Healthy Aging. The future economic impact of aging makes the headlines, often at the expense of the importance of informal care. This section strikes a better balance between these issues, but three of the chapters are from the Canadian viewpoint and even the Australian example does not stop the reader from wanting an Asian perspective.

Nevertheless, one of the strengths of this volume is its geographical coverage. The chapters on elderly populations of European origin are complemented by five on China and Taiwan. Although there is no analysis of other Asian data, the exploration of the impact of changes in survival and family patterns on aging in this region helps to understand what will come after the “demographic dividend”.

The broad range of topics should be expected by a reader with an interest in healthy aging. Descriptive analysis informs the major themes of eight of the chapters and, in general, the analytic models of the others should not be beyond the scope of demographers. The most challenging chapter in terms of methodology examines the within-cell homogeneity assumption of multi-state life tables. Contextual background will be tested by the chapter on the role of apolipoprotein E in vascular response, but the analysis remains within the familiar dimensions of age and survival.

Although there are a few typographical errors in table headings, the text follows the laudable IUSSP traditions of high production values, and the inclusion of a subject index in an edited volume.

As one would expect from a seminar volume, this is not a general introduction to healthy aging. It can be recommended to specialists in this area and as a volume to be taken down from the library shelves for particular insights. For non-specialists, it is encouraging to see that a demographic perspective can contribute so much to this important field.