Epidemiology of Women’s Health

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Dedication

Dedicated to the memory of my parents, and to my sister, Connie.
# Contents

## Acknowledgments  viii

## Foreword  ix

Sandro Galea, MD, DrPH

## Contributing Authors  xi

## Section I.  Introduction to Epidemiology of Women’s Health  1

### CHAPTER 1  An Overview of Women’s Health: From the Past to the Future  3

Ruby T. Senie, PhD

### CHAPTER 2  Epidemiologic Research Methods  17

Ruby T. Senie, PhD

## Section II.  Personal and Community-Based Health Promotion and Morbidity Prevention  33

### CHAPTER 3  Intentional and Unintentional Injury Mortality and Morbidity  35

Joyce C. Pressley, PhD, MPH

Patrick Dawson, BA, MPH

### CHAPTER 4  Health Promotion, Disease Prevention  49

Ruby T. Senie, PhD

### CHAPTER 5  Preventive Nutrition: Public Health Implications  67

Laura Stadler, MS, RD

Wahida Karmally, DrPH, RD, CDE, CLS, FNLA

### CHAPTER 6  Oral and Dental Health  81

Dara Rosenberg, DDS, MS, MPH, FACD

### CHAPTER 7  Epidemiology of Women’s Use of Complementary and Alternative Medicine  91

Heather Greenlee, ND, PhD

Judith S. Jacobson, DrPH, MBA

Fredi Kronenberg, PhD

## Section III.  Sexual Health Across the Life Span  101

### CHAPTER 8  Puberty  103

Tamarra James-Todd, PhD, MPH

### CHAPTER 9  Sexuality and Sexual and Reproductive Health  111

Leslie M. Kantor, MPH

Gina Gambone, MPH

### CHAPTER 10  Epidemiology of Reproductive Health  125

Ruby T. Senie, PhD

### CHAPTER 11  Menopause  153

Ruby T. Senie, PhD

## Section IV.  Sexually Transmitted Infections  167

### CHAPTER 12  Sexually Transmitted Infections  169

Stephen S. Morse, PhD

### CHAPTER 13  The Epidemiology of HIV/AIDS among American Women  181

Martha M. McKinney, PhD

Katherine M. Marconi, PhD, MS

Lois J. Eldred, PA-C, MPH, DrPH

### CHAPTER 14  Prevention of HIV/AIDS in Women  195

Zena Stein, MA, MB, BCH, Dr Med Sc (Hon) Witwatersrand, Dr Sc (Hon) Columbia University

Mervyn Susser, MB, BC, Dr Med Sc (Hon) Witwatersrand, FRCP (Edinburgh), FRCP (London)

## Section V.  Chronic Psychological and Psychosocial Conditions  207

### CHAPTER 15  Eating Disorders  209

Julia Sheehy, PhD

### CHAPTER 16  Depression in Women  217

Daniel J. Pilowsky, MD, MPH

Katherine M. Keyes, PhD
CHAPTER 17 Bipolar Disorder
Elizabeth Saenger, PhD

CHAPTER 18 Posttraumatic Stress Disorder in Women
Eun Jung Suh, PhD
Clara Li, MA

CHAPTER 19 Substance Use Disorders
Susan E. Foster, MSW
Linda Richter, PhD

CHAPTER 20 Intimate Partner Violence and Women’s Health in the USA
Leslie L. Davidson, MD, MSc
Cynthia Golombok, MPH

SECTION VI. Endocrine and Autoimmune Conditions

CHAPTER 21 Asthma
Judith S. Jacobson, DrPH, MBA

CHAPTER 22 Multiple Sclerosis
William A. Sheremata, MD

CHAPTER 23 Systemic Lupus Erythematosus
Archanaa Vasudevan, MD
Ellen M. Ginsler, MD, MPH

CHAPTER 24 Diabetes Across the Stages of a Woman’s Life
Julie C. Will, PhD, MPH
Gloria L. A. Beckles, MD, MSc
Michelle D. Owens-Gary, PhD

SECTION VII. Malignancies

CHAPTER 25 Lung Cancer
Yuan-Chin Amy Lee, PhD
Zuo-Feng Zhang, MD, PhD

CHAPTER 26 Breast Cancer
Ruby T. Senie, PhD

CHAPTER 27 Ovarian Cancer
Ruby T. Senie, PhD

CHAPTER 28 Endometrial Cancer
Susan R. Sturgeon, DrPH, MPH
Aimee Kroll-Desrosiers, MS

CHAPTER 29 Cervical Cancer
Ruby T. Senie, PhD

CHAPTER 30 Colorectal Cancer
Julie Rachel Kumar, MPH
Sidney J. Winawer, MD
Ann G. Zauber, PhD

SECTION VIII. Chronic Conditions

CHAPTER 31 Women and Cardiovascular Disease
Mary Kilty, MBA, MPH, MPhil
Heidi Mochtar Greenberger, PhD, MPH, RD
Moise Desvarieux, MD, PhD

CHAPTER 32 Migraine in Women
Mark W. Green, MD

CHAPTER 33 Epidemiology of Chronic Pain and Chronic Pain-Related Conditions
Thelma J. Mielenz, PT, PhD, OCS
Kimberly J. Alvarez, MPH

CHAPTER 34 Osteoarthritis and Rheumatoid Arthritis
Laura Robbins, DSW

CHAPTER 35 Osteoporosis: Epidemiology and Consequences
Jeri W. Nieves, PhD

SECTION IX. Aging

CHAPTER 36 Clinical Changes Experienced by Older Women
Ruby T. Senie, PhD

CHAPTER 37 Subjective Well-Being of Midlife and Older Women
Victoria H. Raveis, PhD

CHAPTER 38 The Impact of Falls and Fall Injuries on Older Women
Judy A. Stevens, PhD, MPH
Grant T. Baldwin, PhD, MPH
Michael F. Ballesteros, PhD
Rita K. Noonan, PhD
David A. Sleet, PhD, FAAHB

CHAPTER 39 Alzheimer’s Disease in Women
Sarah C. Janicki, MD, MPH
Section X. Impact of Research: Lessons from the Past, Challenges of the Future 523

CHAPTER 40
An Overview of Breast Screening 525
Cornelia J. Baines, MD, MSc, FACE

CHAPTER 41
The Future Role of Genetics in Women’s Health Research and Clinical Care 535
Wendy Chung, MD, PhD

Abbreviations 545
Glossary 547
Index 551
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I am indebted to the colleagues and clinicians who contributed chapters of outstanding quality to this textbook; their specialized interests provide unique perspectives on many aspects of women's health. I am also grateful to several friends, as well as some researchers whom I have never met; their willingness to read drafts of the original outline, guide decisions about topics for inclusion, and peer-review many chapters has greatly enhanced the value of the book. Special thanks to Dr. Sandro Galea for his support and that of the Department of Epidemiology at the Mailman School of Public Health.

During the book's gestation, women's health has received increased attention, often indicating the need for more gender-specific research to address the many unanswered questions raised by the authors in each chapter. Most epidemiology research relies on confidential questionnaire data collected from women and men; therefore, on behalf of all chapter authors, I express my gratitude to the vast number of people who have participated in the research referenced in this textbook and thank those who will be asked to contribute to future investigations.

The emotional support I received from my companion, Mario Fratti, my sister, Sally, and close friends, Danielle Maurice and Julie Olbert among many others, provided essential encouragement. I could not have functioned without the technical assistance provided by my sons, David and Daniel. I thank you all for your patience during this long and time-consuming project.

Ruby T. Senie
It is an honor to write a few words of introduction to this volume about the epidemiology of women's health. This book is a magisterial effort by Dr. Ruby Senie to bring together in one volume a vast body of literature about the morbidity and mortality that characterizes women's health at the beginning of the 21st century. The information gathered here is, of course, all available elsewhere, but is both made accessible and brought into sharp relief by its assembly in the same book.

This book starts with very helpful grounding chapters in the core concepts of epidemiology. This proves a valuable addition going forward, making the subsequent chapters accessible both to readers who are familiar and those who may be unfamiliar with epidemiologic terms. It then moves on to sections that cover health promotion, sexual health, sexually transmitted diseases, endocrine and autoimmune conditions, malignancies, chronic conditions, and aging. The book ends with two most interesting chapters about potential research directions in the field.

Many themes emerge from a reading of these chapters that are relevant not only to women's health but also to our understanding of the causes of morbidity and mortality more broadly. At the risk of minimizing the impact of other concepts covered in the book, I highlight here five themes that I thought emerged clearly from the book and that are at the conceptual core of the science summarized in this book.

First, it is clear from these chapters that events and exposures across the life course beginning in utero affect health conditions as women grow through adolescence into adulthood and senior ages. This argues very strongly for a life-course perspective on the production of health more broadly and for women's health in particular.

Second, foundational social factors inexorably shape the health of women, particularly those who live in poor urban communities and in rural settings. Of contemporary concern, the rapid democratization of health information is, in many ways, contributing to a widening in the health gap between women with and those without access to financial resources as the former fall farther and farther behind in access to health information and its attendant positive consequences.

Third, we have seen tremendous success in prevention, in delaying the onset of chronic disease both through health behavior modification (e.g., routine exercise, adequate nutrition, and avoidance of cigarette smoking) through minimizing adverse exposures. This has led to the now well-documented compression in morbidity in later life making an effort to focus on healthy aging and on finding dignified approaches to treatment in the later stages of life ever more important.

Fourth, even with success in prevention, emerging threats to women's health suggest that complacency in the area ill serves us. The epidemic of obesity especially among youth and young adults may, over the coming decades, undermine some of the progress that has lowered chronic disease rates. How to interrupt this growing problem has become the focus of much research as the proportion of the population classified as overweight and obese continues to go up, potentially increasing rates of hypertension, heart disease, and some cancers.

Fifth, the opportunities for innovative epidemiologic approaches to improve women's health in coming decades appear vast. The book includes chapters that highlight how research is addressing specific risks faced by women and their relatives whose genetic analyses indicate heightened susceptibility to psychological and physical conditions. It is not implausible that targeted health behavior changes and treatment options may contribute to optimizing prevention in the near future. Perhaps more exciting though, newer technologies and cells-to-society approaches to understanding the etiology of women's health stand to inspire new and as yet unknown approaches to population prevention that in the coming decades may very well have a deep and lasting impact on improving the health of women worldwide.

By pulling these chapters together in this book, Dr. Senie has succeeded, to my mind, on three very different fronts. First, this book serves to provide the reader who is unfamiliar with the topic a firm grounding in the science of women's health. Second, even in an age of widely available but fragmented information, the cataloging of knowledge in one place remains an indispensable service. The expert reader will find much use in the chapters as reference and I suspect that many will return to specific chapters many times over, finding much here that can usefully ground future writing in the area. Third, in painting a comprehensive picture, this book serves to jog the mind, to illustrate for us what we know and what we do not know in the field, sowing seeds of future inquiry.
Ultimately the task here is vast: mapping the epidemiology of the principal causes of morbidity and mortality faced by slightly more than half of the world’s population. Within that vastness is the challenge for the field: posing questions that are focused, useful, and up to the challenge. Although many useful questions do indeed arise on a daily basis from a careful reading of the latest publications in the field, by connecting the scientific dots, our direct line to ever more specific inquiry runs the risk of losing sight of the big picture. Dr. Senie’s book remedies that, giving us a big picture that stands to remind us of the even bigger questions and, it is hoped, nudges our science forward.

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