



Epidemiology of Women's Health

Edited by

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Dedication

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





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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

FOREWORD

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. The chapters, diverse and authored by a broad range of experts in the field, all well capture the state of the science in each particular area and contribute to a whole that is very much greater than the sum of the parts.

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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