

THIRD EDITION

INTRODUCTION TO  
**GLOBAL  
HEALTH**

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# Preface

The first and second editions of *Introduction to Global Health* were written during the Millennium Development Goals (MDG) era of global health. The MDGs spelled out an ambitious plan for significantly reducing global poverty between 2000 and 2015. They were wildly successful. The number of people living on less than \$1 per day dropped substantially during the first 15 years of the 21st century. As a growing number of global health partnerships set agendas for change and financed action plans, significant progress was made toward alleviating hunger, preventing maternal and child mortality, and controlling HIV/AIDS and malaria.

The next generation of global goals—the Sustainable Development Goals (SDGs)—were launched at the end of 2015. They spell out 17 goals for enhancing human flourishing by 2030, including targets related to poverty reduction, hunger, health, education, gender equality, clean water and sanitation, affordable and clean energy, decent work, infrastructure and technology development, human rights, sustainable urbanization, responsible production and consumption, climate and environment, peace, and governance. The SDGs seek to promote prosperity while upholding human rights, protecting the planet, and fostering peace and security. All of the goals are interdependent, and all are inextricably tied to health. Improvements in any of the 17 areas will yield benefits for population health, and improvements in public health will enable other SDGs to be achieved.

Most of the MDGs were targeted at improving quality of life among the world's poorest people. The SDGs retain those aims but add a lengthy list of objectives that apply to countries

across the income spectrum. For example, the SDGs include targets for preventing new hepatitis B virus infections; reducing the number of adults who die from cardiovascular diseases, cancers, and other noncommunicable diseases before their 70th birthdays; reducing the suicide mortality rate; increasing access to treatment for substance use disorders; and reducing deaths from road traffic injuries and violence. These conditions affect people in every country, and all countries have the opportunity under the SDGs to track their progress toward improving health metrics related to these concerns.

This third edition of *Introduction to Global Health* is a book for the SDG era. The socioeconomic and environmental determinants of health are presented in the context of the SDGs. The shifting landscape for financing and implementing global health initiatives is described in expanded chapters on payers and players. Chapters on infectious diseases, reproductive health, and nutrition are complemented by new chapters on noncommunicable diseases, mental health, and injuries. The similarities and differences in the conditions that cause illness and death in featured countries representing diverse world regions and income levels are illustrated with estimates from the Global Burden of Disease (GBD) project, which now produces annually updated profiles of health status in every country. (Disclosure: the author is a GBD collaborator.) The global health agenda has expanded to cover all of the world's people, and this book provides a positive, forward-looking perspective on the numerous actions that are helping promote the health, well-being, and security of people across the lifespan and across the globe.

# New to This Edition

The third edition of *Introduction to Global Health* has been significantly expanded to include more comprehensive coverage of the full spectrum of topics that now constitute part of the global health agenda.

Chapter 1 presents a new model for identifying global health issues—one that incorporates populations, action, cooperation, equity, and security—and it introduces the key concepts of prevention science, health transitions theory, globalization, and global health security.

Chapter 2 introduces the new Sustainable Development Goals (SDGs) that will guide international development efforts through 2030 and describes the most commonly used global health metrics.

Chapters 3 and 4 use the SDGs as a framework for exploring the social and environmental determinants of health. Chapter 3 describes the connections between health and economics, education, gender, employment, culture, migration, and governance. Chapter 4 examines the links between health and water, sanitation, energy, air quality, occupational and industrial health, urbanization, sustainability, and climate change.

Chapter 5 uses the SDGs and the Universal Declaration of Human Rights to highlight some of the major ethical issues in global health, including questions about the right to have access to healthcare services and medicines, humanitarian responsibilities after natural disasters and during times of conflict, and the rights of people in prison, people with disabilities, and other special populations.

Chapter 6 is a new chapter that describes the health system models used in various countries and explains the funding mechanisms used to pay for global health activities. Chapter 7 features the diversity of entities involved in implementing and evaluating global health interventions, including governmental and intergovernmental agencies, nonprofit organizations, and for-profit corporations.

Chapters 8 through 17 present the health conditions that account for the greatest burden of disease globally. Each chapter begins with a section that explains why the featured topic is considered to be a global health issue, and each chapter emphasizes the interventions that can reduce the impact of adverse health conditions on individuals and populations. Health metrics from the Global Burden of Disease (GBD) collaboration are used to illustrate the populations affected by each condition.

Chapter 8 describes the global threats posed by HIV/AIDS, tuberculosis, and antimicrobial resistance. Chapter 9 discusses the heavy toll that child mortality from diarrheal diseases and pneumonia takes on low-income countries and describes the tools that are available to contain outbreaks of influenza and other vaccine-preventable infections. Chapter 10 describes the burden from malaria and neglected tropical diseases in low-income countries and the global threats associated with emerging infectious diseases. Chapter 11 highlights a diversity of reproductive and sexual health issues, including family planning, infertility, pregnancy, maternal mortality, neonatal health, men's health, and sexual minority



health. Chapter 12 describes the nutrition transition and the challenges associated with undernutrition, overnutrition, and food safety.

A series of new chapters describe the opportunities for global health initiatives to address the noncommunicable diseases (NCDs), mental health disorders, and injuries that are among the leading causes of death worldwide. Chapter 13 focuses on cancer, Chapter 14 focuses on cardiovascular disease, and Chapter 15 focuses on chronic respiratory diseases and diabetes. The principles of behavior change, tobacco control, and other methods for prevention and management of NCDs are highlighted. Chapter 16 describes the diversity of mental health conditions that contribute to global disease burden and emphasizes the need for greater access to mental health services. Chapter 17 discusses injury prevention and control methods.

Two chapters synthesize the core messages of the book through the lens of health promotion across the lifespan. Chapter 18 presents the major improvements in neonatal, infant, child, and adolescent health that were

achieved under the MDGs and the opportunities for continued progress under the SDGs. Chapter 19 describes the emerging challenges associated with aging populations and the opportunities for promoting healthy adulthood and aging.

Chapter 20 is a new chapter that describes the links between diverse educational and career pathways and global health, and emphasizes the opportunities for everyone to be involved in making communities and the world a healthier place for current and future generations.

More than 350 figures and tables highlight key material, and nearly all of these are new for the third edition. All of the statistics in the book have been updated. Data from eight of the world's largest countries, which collectively are home to half of the world's people, are used to illustrate the patterns of health status in high-income, middle-income, and low-income countries: Brazil, China, Ethiopia, Germany, India, Iran, Nigeria, and the United States. A new glossary provides definitions for more than 780 key terms in global health.

# About the Author

**Kathryn H. Jacobsen**, MPH, PhD, is professor of epidemiology and global health at George Mason University. She is the author of more than 150 scientific articles as well as *Introduction to Health Research Methods: A Practical Guide*, also published by Jones & Bartlett Learning.

She is also a contributor to the Global Burden of Disease project and frequently provides commentary for print and television media.