DCP3 Series Acknowledgments

Disease Control Priorities, third edition (DCP3) compiles the global health knowledge of institutions and experts from around the world, a task that required the efforts of over 500 individuals, including volume editors, chapter authors, peer reviewers, advisory committee members, and research and staff assistants. For each of these contributions, we convey our acknowledgment and appreciation. First and foremost, we would like to thank our 33 volume editors who provided the intellectual vision for their volumes based on years of professional work in their respective fields, and then dedicated long hours to reviewing each chapter, providing leadership and guidance to authors, and framing and writing the summary chapters. We also thank our chapter authors who collectively volunteered their time and expertise to writing over 160 comprehensive, evidence-based chapters.

We owe immense gratitude to the institutional sponsor of this effort: The Bill & Melinda Gates Foundation. The Foundation provided sole financial support of the Disease Control Priorities Network. Many thanks to Program Officers Kathy Cahill, Philip Setel, Carol Medlin, and (currently) Damian Walker for their thoughtful interactions, guidance, and encouragement over the life of the project. We also wish to thank Jaime Sepúlveda for his longstanding support, including chairing the Advisory Committee for the second edition and, more recently, demonstrating his vision for DCP3 while he was a special advisor to the Gates Foundation. We are also grateful to the University of Washington's Department of Global Health and successive chairs King Holmes and Judy Wasserheit for providing a home base for the DCP3 Secretariat, which included intellectual collaboration, logistical coordination, and administrative support.

We thank the many contractors and consultants who provided support to specific volumes in the form of economic analytical work, volume coordination, chapter drafting, and meeting organization: the Center for Disease Dynamics, Economics & Policy; Centre for Chronic Disease Control; Centre for Global Health Research; Emory University; Evidence to Policy Initiative; Public Health Foundation of India; QURE Healthcare; University of California, San Francisco; University of Waterloo; University of Queensland; and the World Health Organization.

We are tremendously grateful for the wisdom and guidance provided by our advisory committee to the editors. Steered by Chair Anne Mills, the advisory committee assures quality and intellectual rigor of the highest order for *DCP3*.

The National Academy of Medicine, in collaboration with the InterAcademy Medical Panel, coordinated the peer-review process for all *DCP3* chapters. Patrick Kelley, Gillian Buckley, Megan Ginivan, and Rachel Pittluck managed this effort and provided critical and substantive input.

The World Bank External and Corporate Relations Publishing and Knowledge division provided exceptional guidance and support throughout the demanding production and design process. We would particularly like to thank Carlos Rossel, the publisher; Mary Fisk, Nancy Lammers, Rumit Pancholi, and Deborah Naylor for their diligence and expertise. Additionally, we thank Jose de Buerba, Mario Trubiano, Yulia Ivanova, and Chiamaka Osuagwu of the World Bank for providing professional counsel on communications and marketing strategies.

Several U.S. and international institutions contributed to the organization and execution of meetings that supported the preparation and dissemination of *DCP3*. We would like to express our appreciation to the following institutions:

- University of Bergen, consultation on equity (June 2011)
- University of California, San Francisco, surgery volume consultations (April 2012, October 2013, February 2014)
- Institute of Medicine, first meeting of the Advisory Committee to the Editors (March 2013)
- Harvard Global Health Institute, consultation on policy measures to reduce incidence of noncommunicable diseases (July 2013)
- Institute of Medicine, systems strengthening meeting (September 2013)
- Center for Disease Dynamics, Economics & Policy (Quality and Uptake meeting, September 2013;

reproductive and maternal health volume consultation, November 2013)

- National Cancer Institute, cancer consultation (November 2013)
- Union for International Cancer Control, cancer consultation (November 2013, December 2014)

Carol Levin provided outstanding governance for cost and cost-effectiveness analysis. Stéphane Verguet added invaluable guidance in applying and improving the extended cost-effectiveness analysis method. Shane Murphy, Zachary Olson, Elizabeth Brouwer, Kristen Danforth, and David Watkins provided exceptional research assistance and analytic assistance. Brianne Adderley ably managed the budget and project processes. The efforts of these individuals were absolutely critical to producing this series, and we are thankful for their commitment.

Series and Volume Editors

VOLUME EDITORS

Vikram Patel

Vikram Patel is Professor of International Mental Health and Wellcome Trust Principal Research Fellow at the London School of Hygiene & Tropical Medicine (LSHTM). He is a psychiatrist whose work focuses on the epidemiology and treatment of mental disorders in low-resource settings. He was the Founding Director of the Centre for Global Mental Health at the LSHTM and is the Co-Director of the Centre for Control of Chronic Conditions at the Public Health Foundation of India. In 2011, Dr. Patel served on the Government of India's Mental Health Policy group, which produced India's first national mental health policy in 2014.

Dan Chisholm

Dan Chisholm is a Health Systems Adviser in the Department of Mental Health and Substance Abuse at the World Health Organization. His main areas of work include development and monitoring of global mental health plans and activities, technical assistance to Member States on mental health system strengthening, and analysis of the costs and cost-effectiveness of strategies for reducing the global burden of mental disorders and other noncommunicable diseases.

Tarun Dua

Tarun Dua is a Medical Officer working in the Evidence, Research and Action on Mental and Brain Disorders unit in the Department of Mental Health and Substance Abuse at the World Health Organization. Dr. Dua serves as the focal point for neurological disorders in the organization.

Ramanan Laxminarayan

Ramanan Laxminarayan is Vice President for Research and Policy at the Public Health Foundation of India, and he directs the Center for Disease Dynamics, Economics & Policy in Washington, DC, and New Delhi. His research deals with the integration of epidemiological models of infectious diseases and drug resistance into the economic analysis of public health problems. He was one of the key architects of the Affordable Medicines Facility–malaria, a novel financing mechanism to improve access and delay resistance to antimalarial drugs. In 2012, he created the Immunization Technical Support Unit in India, which has been credited with improving immunization coverage in the country. He teaches at Princeton University.

María Elena Medina-Mora

María Elena Medina-Mora is the General Director for the National Institute of Psychiatry Ramón de la Fuente Muñiz in Mexico. She is a member of the National System of Researchers. Dr. Medina-Mora is a full researcher of the National Institutes of Health and has a teaching appointment in the National Autonomous University of Mexico and as Adjunct Professor in the Harvard T. H. Chan School of Public Health. She is also member of the World Health Organization's Expert Committee on Addictions.

SERIES EDITORS

Dean T. Jamison

Dean T. Jamison is a Senior Fellow in Global Health Sciences at the University of California, San Francisco, and an Emeritus Professor of Global Health at the University of Washington. He previously held academic appointments at Harvard University and the University of California, Los Angeles; he was an economist on the staff of the World Bank, where he was lead author of the World Bank's *World Development Report 1993: Investing in Health.* He was lead editor of *DCP2*. He holds a PhD in economics from Harvard University and is an elected member of the Institute of Medicine of the National Academy of Sciences. He recently served as Co-Chair and Study Director of *The Lancet's* Commission on Investing in Health.

Rachel Nugent

Rachel Nugent is a Research Associate Professor in the Department of Global Health at the University of Washington. She was formerly Deputy Director of Global Health at the Center for Global Development, Director of Health and Economics at the Population Reference Bureau, Program Director of Health and Economics Programs at the Fogarty International Center of the National Institutes of Health, and senior economist at the Food and Agriculture Organization of the United Nations. From 1991–97, she was Associate Professor and Department Chair in Economics at Pacific Lutheran University. She has advised the World Health Organization, the U.S. government, and nonprofit organizations on the economics and policy environment of noncommunicable diseases.

Hellen Gelband

Hellen Gelband is Associate Director for Policy at the Center for Disease Dynamics, Economics & Policy (CDDEP). Her work spans infectious disease, particularly malaria and antibiotic resistance, and noncommunicable disease policy, mainly in low- and middle-income countries. Before joining CDDEP, then Resources for the Future, she conducted policy studies at the (former) Congressional Office of Technology Assessment, the Institute of Medicine of the National Academies, and a number of international organizations.

Susan Horton

Susan Horton is Professor at the University of Waterloo and holds the Centre for International Governance Innovation (CIGI) Chair in Global Health Economics in the Balsillie School of International Affairs there. She has consulted for the World Bank, the Asian Development Bank, several United Nations agencies, and the International Development Research Centre, among others, in work carried out in over 20 low- and middle-income countries. She led the work on nutrition for the Copenhagen Consensus in 2008, when micronutrients were ranked as the top development priority. She has served as Associate Provost of Graduate Studies at the University of Waterloo, Vice-President Academic at Wilfrid Laurier University in Waterloo, and interim dean at the University of Toronto Scarborough.

Prabhat Jha

Prabhat Jha is the Founding Director of the Centre for Global Health Research at St. Michael's Hospital and holds Endowed and Canada Research Chairs in Global Health in the Dalla Lana School of Public Health at the University of Toronto. He is Lead Investigator of the Million Death Study in India, which quantifies the causes of death and key risk factors in over two million homes over a 14-year period. He is also Scientific Director of the Statistical Alliance for Vital Events, which aims to expand reliable measurement of causes of death worldwide. His research includes the epidemiology and economics of tobacco control worldwide.

Ramanan Laxminarayan

See the list of Volume Editors.

Charles N. Mock

Charles N. Mock, MD, PhD, FACS, has training as both a trauma surgeon and an epidemiologist. He worked as a surgeon in Ghana for four years, including at a rural hospital (Berekum) and at the Kwame Nkrumah University of Science and Technology (Kumasi). In 2005-07, he served as Director of the University of Washington's Harborview Injury Prevention and Research Center. In 2007-10, he worked at the World Health Organization (WHO) headquarters in Geneva, where he was responsible for developing the WHO's trauma care activities. In 2010, he returned to his position as Professor of Surgery (with joint appointments as Professor of Epidemiology and Professor of Global Health) at the University of Washington. His main interests include the spectrum of injury control, especially as it pertains to low- and middle-income countries: surveillance, injury prevention, prehospital care, and hospital-based trauma care. He is President (2013-15) of the International Association for Trauma Surgery and Intensive Care.

Contributors

Emiliano Albanese

Department of Psychiatry, University of Geneva, Geneva, Switzerland

Margaret Barry

National University of Ireland Galway, Galway, Ireland

Amanda J. Baxter

School of Public Health, University of Queensland, Brisbane, Queensland, Australia; Queensland Centre for Mental Health Research, Wacol, Queensland, Australia

Vladimir Carli

Swedish National Center for Suicide Research and Prevention, Karolinska Institutet, Stockholm, Sweden

Fiona J. Charlson

School of Public Health, University of Queensland, Herston, Queensland, Australia; Institute for Health Metrics and Evaluation, University of Washington, Seattle, Washington, United States

Pamela Y. Collins

U.S. National Institute of Mental Health, Bethesda, Maryland, United States

Abigail Colson

Center for Disease Dynamics, Economics & Policy, Washington, DC, United States; Department of Management Science, University of Strathclyde, Glasgow, Scotland

Louisa Degenhardt

National Drug and Alcohol Research Centre, University of New South Wales Australia, Sydney, New South Wales, Australia; Melbourne School of Population and Global Health, University of Melbourne, Victoria, Australia; Institute for Health Metrics and Evaluation, University of Washington, Seattle, Washington, United States

Catherine O. Egbe

University of KwaZulu-Natal, Durban, South Africa; Center for Tobacco Control Research and Education, University of California San Francisco, San Francisco, California, United States

Holly E. Erskine

School of Public Health, University of Queensland, Herston, Queensland, Australia; Institute for Health Metrics and Evaluation, University of Washington, Seattle, Washington, United States

Sara Evans-Lacko

Centre for Global Mental Health, Institute of Psychiatry, Psychology, and Neuroscience, King's College London, London, United Kingdom

Valery Feigin

National Institute for Stroke and Applied Neurosciences, Auckland University of Technology, Auckland, New Zealand

Abebaw Fekadu

Addis Ababa University, Addis Ababa, Ethiopia

Alize J. Ferrari

School of Public Health, University of Queensland, Herston, Queensland, Australia; Institute for Health Metrics and Evaluation, University of Washington, Seattle, Washington, United States

Panteleimon Giannakopoulos

Department of Psychiatry, University of Geneva, Geneva, Switzerland

Petra Gronholm

Centre for Global Mental Health, Institute of Psychiatry, Psychology, and Neuroscience, King's College London, London, United Kingdom

David Gunnell

University of Bristol, Bristol, United Kingdom

Wayne D. Hall

Centre for Youth Substance Abuse Research, University of Queensland, Brisbane, Queensland, Australia

Steven Hyman

Stanley Center for Psychiatric Research, Broad Institute of MIT and Harvard and Department of Stem Cell and Regenerative Biology, Harvard University, Cambridge, Massachusetts, United States

David Jernigan

Johns Hopkins Bloomberg School of Public Health, Johns Hopkins University, Baltimore, Maryland, United States

Nathalie Jette

University of Calgary, Calgary, Alberta, Canada

Kjell Arne Johansson

University of Bergen, Bergen, Norway

Carol Levin

Department of Global Health, University of Washington, Seattle, Washington, United States

Mattias Linde

Department of Neuroscience, Norwegian University of Science and Technology, Trondheim, Norway; Norwegian Advisory Unit on Headaches, St. Olavs Hospital, Trondheim, Norway

Crick Lund

Department of Psychiatry and Mental Health, Alan J. Flisher Centre for Public Mental Health, University of Cape Town, Cape Town, South Africa; Centre for Global Mental Health, Institute of Psychiatry, Psychology, and Neuroscience, King's College London, London, United Kingdom

John Marsden

National Addiction Centre, King's College London, London, United Kingdom

Itamar Megiddo

Center for Disease Dynamics, Economics & Policy, Washington, DC, United States; Department of Management Science, University of Strathclyde, Glasgow, Scotland

Cathrine Mihalopoulos

Deakin University, Melbourne, Victoria, Australia

Maristela Monteiro

Pan American Health Organization, Washington DC, United States

Aditi Nigam

Center for Disease Dynamics, Economics & Policy, Washington, DC, United States

Rachana Parikh

Public Health Foundation of India, New Delhi, India

Inge Petersen

University of KwaZulu-Natal, Durban, South Africa

Michael R. Phillips

Shanghai Mental Health Center, Shanghai Jiao Tong University School of Medicine, Shanghai, China; Departments of Psychiatry and Global Health, Emory University, Atlanta, Georgia, United States

Martin J. Prince

Institute of Psychiatry, Psychology, and Neuroscience, King's College London, London, United Kingdom

Atif Rahman

University of Liverpool, Liverpool, United Kingdom

Neha Raykar

Public Health Foundation of India, New Delhi, India

Tania Real

National Institute of Psychiatry Ramón de la Fuente Muñiz, Mexico City, Mexico

Jürgen Rehm

Centre for Addiction and Mental Health, Toronto, Ontario, Canada

Jacqueline Roberts

Autism Centre of Excellence, Griffith University, Brisbane, Queensland, Australia

Robin Room

Centre for Alcohol Policy Research, La Trobe University, Melbourne, Victoria, Australia; Centre for Social Research on Alcohol and Drugs, Stockholm University, Stockholm, Sweden

Diego Sánchez-Moreno

Ministry of Health, Mexico City, Mexico

James G. Scott

University of Queensland Centre for Clinical Research, Brisbane, Queensland, Australia; Metro North Mental Health, Royal Brisbane and Women's Hospital, Brisbane, Queensland, Australia

Maya Semrau

Centre for Global Mental Health, Institute of Psychiatry, Psychology, and Neuroscience, King's College London, London, United Kingdom

Rahul Shidhaye

Public Health Foundation of India, New Delhi, India; CAPHRI School for Public Health and Primary Care, Maastricht University, Maastricht, the Netherlands

Morton M. Silverman

Suicide Prevention Resource Center, Education Development Center, Waltham, Massachusetts, United States, The University of Colorado Denver School of Medicine, Aurora, Colorado, United States; The Jed Foundation, New York, New York, United States

Timothy J. Steiner

Norwegian University of Science and Technology, Trondheim, Norway; Imperial College London, London, United Kingdom

Emily Stockings

National Drug and Alcohol Research Centre, University of New South Wales, Sydney, Australia

Kirsten Bjerkreim Strand

University of Bergen, Bergen, Norway

John Strang

National Addiction Centre, King's College London, London, United Kingdom

Kiran T. Thakur

Columbia University College of Physicians and Surgeons, New York, New York, United States

Graham Thornicroft

Centre for Global Mental Health, Institute of Psychiatry, Psychology, and Neuroscience, King's College London, United Kingdom

Stéphane Verguet

Department of Global Health and Population, Harvard T. H. Chan School of Public Health, Boston, Massachusetts, United States

Lakshmi Vijayakumar

SNEHA, Voluntary Health Services, Chennai, India; Centre for Youth Mental Health, University of Melbourne, Melbourne, Victoria, Australia

Theo Vos

Institute for Health Metrics and Evaluation, University of Washington, Seattle, Washington, United States

Harvey A. Whiteford

School of Public Health, University of Queensland, Herston, Queensland, Australia; Queensland Centre for Mental Health Research, Wacol, Queensland, Australia; Institute for Health Metrics and Evaluation, University of Washington, Seattle, Washington, United States

Advisory Committee to the Editors

Anne Mills, Chair

Professor, London School of Hygiene & Tropical Medicine, London, United Kingdom

Olusoji Adeyi

Director, Health, Nutrition, and Population Global Practice, World Bank, Washington, DC, United States

Kesetebirhan Admasu Minister of Health, Addis Ababa, Ethiopia

George Alleyne

Director Emeritus, Pan American Health Organization, Washington, DC, United States

Ala Alwan

Director, World Health Organization, Regional Office for the Eastern Mediterranean, Cairo, Arab Republic of Egypt

Rifat Atun

Professor, Global Health Systems, Harvard University, Boston, Massachusetts, United States

Zulfiqar Bhutta

Chair, Division of Women and Child Health, Aga Khan University Hospital, Karachi, Pakistan

Agnes Binagwaho Minister of Health, Kigali, Rwanda

Mark Blecher

Senior Health Advisor, South Africa Treasury Department, Cape Town, South Africa

Patricia Garcia

Dean, School of Public Health, Universidad Peruana Cayetano Heredia, Lima, Peru

Roger Glass

Director, Fogarty International Center, National Institutes of Health, Bethesda, Maryland, United States

Amanda Glassman

Director, Global Health Policy, Center for Global Development, Washington, DC, United States

Glenda Gray

Executive Director, Perinatal HIV Research Unit, Chris Hani Baragwanath Hospital, Johannesburg, South Africa

Demissie Habte

Chair of Board of Trustees, International Clinical Epidemiological Network, Addis Ababa, Ethiopia

Richard Horton

Editor, The Lancet, London, United Kingdom

Edward Kirumira

Dean, Faculty of Social Sciences, Makerere University, Kampala, Uganda

Peter Lachmann

Professor, University of Cambridge, Cambridge, United Kingdom

Lai Meng Looi Professor, University of Malaya, Kuala Lumpur, Malaysia

Adel Mahmoud Senior Molecular Biologist, Princeton University, Princeton, New Jersey, United States

Anthony Measham World Bank, Washington, DC, United States (retired)

Carol Medlin

Senior Health and Nutrition Specialist, Health, Nutrition, and Population Global Practice, World Bank, Washington, DC, United States

Alvaro Moncayo

Researcher, Universidad de los Andes, Bogotá, Colombia

Jaime Montoya

Executive Director, Philippine Council for Health Research and Development, Taguig City, the Philippines

Ole Norheim

Professor, University of Bergen, Bergen, Norway

Folashade Omokhodion

Professor, University College Hospital, Ibadan, Nigeria

Toby Ord

President, Giving What We Can, Oxford, United Kingdom

K. Srinath Reddy

President, Public Health Foundation of India, New Delhi, India

Sevkat Ruacan

Dean, Koç University School of Medicine, Istanbul, Turkey

Jaime Sepúlveda

Executive Director, Global Health Sciences, University of California, San Francisco, San Francisco, California, United States

Richard Skolnik

Lecturer, Health Policy Department, Yale School of Public Health, New Haven, Connecticut, United States

Stephen Tollman

Professor, University of the Witwatersrand, Johannesburg, South Africa

Jürgen Unutzer

Professor, Department of Psychiatry, University of Washington, Seattle, Washington, United States

Damian Walker

Senior Program Officer, Bill & Melinda Gates Foundation, Seattle, Washington, United States

Ngaire Woods

Director, Global Economic Governance Programme, Oxford University, Oxford, United Kingdom

Nopadol Wora-Urai

Professor, Department of Surgery, Phramongkutklao Hospital, Bangkok, Thailand

Kun Zhao

Researcher, China National Health Development Research Center, Beijing, China

Reviewers

Sergio Aguilar-Gaxiola

University of California, Davis, School of Medicine, Sacramento, California, United States

Pierre K. Alexandre

Management Department, College of Business, Florida Atlantic University, Boca Raton, Florida, United States

Peter Anderson Newcastle University, Institute for Health and Society, Newcastle, United Kingdom

Margaret Barry National University of Ireland Galway, School of Health Sciences, Galway, Ireland

Angelina Brotherhood

Centre for Public Health, Liverpool John Moores University, Liverpool, United Kingdom

Anja Busse United Nations Office on Drugs and Crime, Vienna, Austria

Dixon Chibanda Department of Community Medicine, University of Zimbabwe, Harare, Zimbabwe

Mary De Silva

Centre for Global Mental Health, London School of Hygiene & Tropical Medicine, London, United Kingdom

Tedla W. Giorgis

Office of the Minister, Ministry of Health, Addis Ababa, Ethiopia

Alexander Grinshpoon Israel Institute of Technology, Haifa, Israel

Yasemin Gürsoy-Özdemir Department of Neurology, Koç University School of Medicine, Istanbul, Turkey

Murad M. Khan Aga Khan University, Karachi, Pakistan

Rena Kurs

Sha'ar Menashe Mental Health Center, Sha'ar Menashe, Israel

David Leon

London School of Hygiene & Tropical Medicine, London, United Kingdom

Ron Manderscheid

National Association of County Behavioral Health and Developmental Disability Directors, Washington, DC, United States

Pallab K. Maulik

George Institute for Global Health, India, New Delhi, India

David McDaid

London School of Economics and Political Science, London, United Kingdom

Nicole M. Monteiro

Center for Healing and Development, Washington, DC, United States

Chiadi U. Onyike

The Johns Hopkins Hospital, Baltimore, Maryland, United States

Gregory Simon

Group Health Research Institute, Seattle, Washington, United States

Jürgen Unützer

Department of Psychiatry and Behavioral Sciences, University of Washington, Seattle, Washington, United States

Steven D. Vannoy

University of Massachusetts, Boston, Boston, Massachusetts, United States

Chiu-Wan Ng

Faculty of Medicine, University Malaya, Kuala Lumpur, Malaysia

Index

Boxes, figures, notes, and tables are indicated by b, f, n, and t respectively.

A

ACE (Assessing Cost-Effectiveness) prevention framework, 188 acupuncture, 91, 101 addiction. See illicit drug dependence ADHD. See attention-deficit hyperactivity disorder adolescents ADHD and, 146 alcoholic consumption, heavy episodic drinking by, 128 CBT for depression in, 222 health loss in, 36 interventions for drug use, early intervention for at-risk youth, 114 mental health policies and plans, 148 onset, 8, 194 Resourceful Adolescent Programme-Adolescent version (RAP-A) program, 229-30, 230t suicides of, 171 adult mental disorders, 67-86 burden of disease, 67-68 extended-stay facilities to treat, 203 interventions for, 73-78 case detection and diagnosis, 77 collaborative and stepped care, 77 community outreach, 77-78, 79 community platform interventions, 73-74 cost-effectiveness of, 78 early intervention services, 77 family, 74, 79 health care platform interventions, 74-78 information and communication packages, 78 mental health awareness campaigns, 73 mental health legislation, 73

occupational therapy, 76, 79 packages of care, 76-77 pharmacologic and psychological treatment, 74–76, 75–76*t*, 79 population platform interventions, 73 schools, 73-74 workplace, 73 mood and anxiety disorders, 68-72 anxiety disorders, 70-71. See also anxiety disorders bipolar disorder, 71–72. See also bipolar disorder depressive disorder, 69-70. See also depression psychotic disorders, 72-73 recommendations for, 78-79 risk factors, 68 schizophrenia, 72-73. See also schizophrenia suicide and, 169 training gatekeepers to identify people with, 223 YLDs and, 67-68, 68f advertising bans on alcoholic beverages, 139 AEDs (anti-epileptic drugs), 88, 90, 91, 240 affordability. See cost-effectiveness and affordability of interventions Africa. See also specific countries and regions alcohol consumption in, 129 epilepsy in, 90 illicit drug trade in, 111 migraines in, 100 suicide prevention organizations in, 176 suicide rates in, 164, 169, 170 age as factor. See also adolescents; elderly persons for anxiety disorders, 70-71 for cause-specific deaths from MNS disorders, 53, 54t

childhood disorders resulting in adult disorders, 146, 194 for dementia, 8 of suicide and self-harm, 164, 165t, 166-67f, 166f Alcoholics Anonymous, 137 alcohol use disorders, 127-43 age of death attributable to, 53, 54t binge drinking, 49, 128 burden of disease, 32-34t, 128-30 challenges for LMICs, 138-39 classification of beverages, 127 consequences, 129 co-occurring disorders and, 49-50 cost-effectiveness of interventions for, 19, 20f, 137-38, 139-40, 221-22, 226, 227t DALYs and, 129 deaths associated with, 7t, 44, 129 fetal alcohol syndrome disorders (FASD), 128, 135, 139 GBD findings of excess mortality for estimated number of cause-specific and excess deaths, 46t, 49 gender differences, 45, 46f gender differences, 128-29 globalization of alcohol beverages industry, 128 indigenous communities and community platform interventions, 135, 136t prohibition, 131, 131t industry role, 127-28 interventions for, 130-37 advertising bans, 139 availability control and licensing of sellers, 138 blood alcohol concentration (BAC) testing of drivers, 134 breath testing of drivers, 134 community platform interventions, 130-31, 135, 136t control of unrecorded market, 133, 138-39 cross-border shopping, 133 delivery platforms, 14t demand reduction strategies, 229, 229f driving countermeasures, 134-35, 139 education campaigns, 139 family-based interventions, 135, 139 health care platform interventions, 135-37 individual-based, 130 law enforcement measures to reduce driving while impaired, 132t mass media campaigns, 135 medical and social detoxification, follow-up, and referral, 136, 137t, 139 population platform interventions, 130, 131–35, 131*t* pregnant women and, 135, 139

pricing and market regulation, 138 primary health care, 13–14t, 15 prohibition and partial bans, 131, 132t quasi-experimental studies, 130 reducing availability of alcohol, 131 school-based, 19, 139 screening and brief interventions, 135–36, 136t, 139, 140 self-help and support groups, 136–37 sobriety checkpoints, 134 specialist health care delivery, 15 suspension of driver's license, 135 taxation, 131t, 132-33, 138, 221, 229 warning labels, 135, 139 liver cirrhosis and, 50 patterns of, 128 prohibition and partial bans, 131, 132t public health considerations, 128 quasi-experimental studies, 130 recommendations for LMICs, 139 societal response, 130 suicide and, 50, 129, 169, 175 unintentional injuries and violence, 50, 129 YLLs and, 43–45, 45f, 53, 55, 55t Alzheimer's disease. See also dementia burden of disease, 32-34t, 94 DALYs and, 95 deaths associated with, 7t, 37, 53, 54t goal to identify cure by 2025, 99 pharmacological interventions, 96, 98 amphetamine dependence. See also illicit drug dependence amphetamine-type stimulants, 109 burden of disease, 32-34t consumption trends, 111 deaths associated with, 7t, 110 age of death, 54t estimated number of cause-specific and excess deaths for, 46t, 50f prevalence in Southeast Asia and Australasia, 37 rates of dependence, 110 YLLs and, 43 Anderson, P., 19 anorexia nervosa, 3. See also eating disorders antidepressants. See depression anti-epileptic drugs (AEDs), 88, 90, 91, 240 antipsychotics for dementia patients, 53, 96-97 for schizophrenia, 48 anxiety disorders, 70-71 age of onset, 70-71 burden of disease, 32-34t, 36, 70-71 childhood, 145 clinical features and course, 70

DALYs associated with, 36 deaths associated with, 7t epidemiological surveys on, 38 epidemiology, 70-71 estimated number of cause-specific and excess deaths for, 46t, 49 gender differences, 68 generalized anxiety disorder, 70 interventions for, 9t. See also adult mental disorders limited access to, 12 pharmacologic and psychological treatment, 74–76, 75t primary health care, 13-14t, 15 self-care, 15 obsessive-compulsive disorder (OCD), 70 panic disorder, 70 simple phobias, 70 social anxiety disorder, 70 YLDs and, 68, 68f Asia. See also specific countries and regions amphetamine dependence in, 37 drug users, detention and treatment of, 58 illicit substance use in, 111 Asperger's syndrome, 36. See also autistic spectrum disorders aspirin, 100-101 Assessing Cost-Effectiveness (ACE) prevention framework, 188 Atkins diet, 91 Atlas on Substance Use (WHO), 137 attention-deficit hyperactivity disorder (ADHD) age of occurrence, 146 bipolar disorder and, 49 burden of disease, 32-34t, 36 cost-effectiveness of pharmacological interventions, 155 defined, 145 estimated number of cause-specific and excess deaths for, 46t, 49 interventions for, 9t, 12 medications, 154 school-based, 192 Australia collaborative stepped care approach in, 210 drug dependence in court-mandated treatment, 113 economic costs, 111 interventions, cost of, 118, 119 indigenous communities and alcohol consumption in, 131 mental health first aid course in, 188 methadone maintenance and buprenorphine maintenance in, 226 parenting interventions in, 155, 223

planning and consultation with primary health care staff in, 210 Positive Parenting Program (Triple P), 223 autistic spectrum disorders age of cause-specific and excess deaths attributed to, 47*f* burden of disease, 32–34*t*, 36 co-occurring disorders with, 48–49 deaths associated with, 7*t* estimated number of cause-specific and excess deaths for, 46*t*, 47*f*, 48–49 interventions for, 9*t*

B

Babor, T. F., 135 Baker-Henningham, H., 150 Balanced Care Model, 207 Beijing Suicide Research and Prevention Center, 176 best practice interventions, 4b, 12, 15, 22, 56, 183, 184*t*, 188 binge drinking, 49, 128 bipolar disorder, 2 ADHD and, 49 adult bipolar disorder, 71-72 age of cause-specific and excess deaths attributed to, 47f burden of disease, 32t, 34t, 71-72 clinical features and course, 71 cost-effectiveness of interventions for, 19, 227t community-based vs. hospital-based services, 228 deaths associated with, 7t epidemiology, 71-72 estimated number of cause-specific and excess deaths for, 46t, 47f, 48 gender differences, 68 interventions for. See also adult mental disorders pharmacologic and psychological treatment, 74–76, 75t specialist health care delivery, 15 YLDs and, 68, 68f birth trauma, 185 blood alcohol concentration (BAC) testing of drivers, 134 Boussinesq, M., 52 Brazil childhood mental and developmental disorders in CBT for children with anxiety disorders, 154 community-based interventions, 149 collaborative stepped care approach in, 210 cost-effectiveness of drug therapy for schizophrenia and depression in, 225 primary care interventions in, 208 training of primary care workers, 210 specialists training primary health care staff in, 210

suicide in, 169, 170, 171, 172 Program for Promotion of Life and Suicide Prevention, 176 teacher training program to identify and assess mental health problems in, 191b breath testing of drivers, 134 brief psychological intervention for alcohol use disorders, 135-36, 136t, 139, 140 for drug dependence, 115, 116t, 117 for suicide, 177 Building Back Better (WHO), 204 bullying, 150, 156, 189 buprenorphine maintenance, 57, 117, 118, 119, 226 burden of MNS disorders, 4-5b, 5-8, 22, 29-40. See also mortality rates adult mental disorders, 67-68 alcohol use disorders, 32–34t, 128–30 childhood mental and developmental disorders, 146 depression, 69-70 Global Burden of Disease Study 2010 (GBD 2010), 29-30. See also Global Burden of Disease Study 2010 illicit drug dependence, 32, 32-34t, 34, 111, 118 implications of study findings, 36-37 limitations of study and directions for future research, 37-38 methodology of study, 30-31 neurological disorders, 87 overview, 29-30 Burundi, integration of mental health care into primary care program, 17b

С

Canada cost of Alzheimer's disease treatment in, 98 fetal alcohol syndrome (FAS) warning labels in, 135 TEAMcare Canada, 213 cancer, 41, 48, 49, 56 cannabis dependence. See also illicit drug dependence burden of disease, 32–34t cannabis products, 109 deaths associated with, 7t, 110 estimated number of cause-specific and excess deaths for, 46t medications for, 118 rates of dependence, 110 schizophrenia and, 53, 55t cardiovascular disease, 48, 51, 52, 56, 213 Carroll, A. E., 150 case studies. See also Ethiopia; India scaling up interventions for MNS disorders, 16–17*b*, 24 catastrophic financial effects, 2b

Cause of Death Ensemble Modeling (CODEm), 42 CBT. See cognitive behavioral therapy Central/Eastern Europe and Central Asia alcohol-related deaths in, 44, 55 cost-effectiveness of interventions in, 221, 227t suicide of women in, 171 YLL rates in, 44, 45–46f, 55 child abuse, 68, 146, 148, 152 Child and Adolescent Mental Health Policies and Plans (WHO), 148 childhood mental and developmental disorders, 145-61. See also attention-deficit hyperactivity disorder (ADHD); autistic spectrum disorders anxiety disorders, 145, 146 bullying, 150, 156, 189 burden of disease, 146 consequences of, 146-47 cost-effectiveness of interventions, 155-56 epidemiology, 146 gender differences in, 5, 33, 146, 147t interventions for, 9–10t, 12, 149–55, 149b, 156t child and adolescent mental health policies and plans, 148 child protection legislation, 148-49 cognitive behavioral therapy (CBT), 153-55, 156 community platform interventions, 149-51 delivery platforms, 13t early child development, 149-50 early intervention strategies, importance of, 36 health care platform interventions, 151-54 maternal mental health interventions. 152-53, 212 medications for ADHD, 154 medications for conduct disorder, 154 multisystem therapy, 155 parenting skills training, 152, 213-14 population platform interventions, 148-49 problem-solving skills therapy (PSST), 155 psychosocial treatments for conduct disorder, 154-55 school-based interventions, 150. See also education and schools screening and community rehabilitation for developmental disorders, 151-52, 156 specialist health care, 154-55 Ten Questions screen, 151, 151b voluntary sector programs, 150 nature of, 146 risk factors for, 146-48, 148t trends, 148 types of, 145 Chile CBT depression program in, 222

National Depression Detection and Treatment Program, 16–17b, 213 postpartum depression interventions in, 153, 207-8 school-based interventions in, 192 suicide rates in, 169 China alcohol consumption in, 129 taxation, 133 violence associated with, 129 Central Government Support for the Local Management and Treatment of Severe Mental Illnesses Project, 16b depression, treatment of, 70 drowning as premature cause of death in, 52 headache interventions in, 102, 208, 228b suicide in, 164, 168, 170, 172, 175, 177 survey of mental disorders in, 38 Chisholm, D., 19, 232 CHOosing Interventions that are Cost-Effective (CHOICE) project (WHO), 220, 226, 228, 228b, 232 chronic or relapsing course, 1 cocaine dependence. See also illicit drug dependence age of death attributable to, 54t burden of disease, 32-34t consumption trends, 111 deaths associated with, 7t estimated number of cause-specific and excess deaths for, 46t, 50f pharmacotherapies effectiveness for, 58 for psychostimulant dependence, 118 prevalence in North American and Latin America, 37 rates of dependence, 110 YLLs and, 43 Cochrane Collaboration review, 207 CODEm (Cause of Death Ensemble Modeling), 42 cognitive behavioral therapy (CBT) for adult mental disorders, 76 for childhood mental and developmental disorders, 153-55, 156 for depression, 225 in adolescents, 222 for illicit drug dependence, 117 maternal and child health programs, 212 school-based, 192 workplace, 188, 189 cognitive rehabilitation for dementia, 97, 213 collaborative care models, 56, 77, 79, 207 collaborative stepped care, 15, 77, 207-9, 213 Colombia, cost-effectiveness analysis of antidepressants in, 225

communicable compared to noncommunicable diseases in global burden of disease, 30, 36, 41 community-based care for childhood mental and developmental disorders, 151-52, 156 compared to hospital level of care, 228 for illicit drug dependence, 114–15, 116t residential facilities, 15-16, 203 community outreach teams, 16, 56, 77-78, 79 community platform interventions, 13-14t, 15, 187-92, 194 adult mental health, 73-74 alcohol use disorders, 130-31, 135, 136t childhood mental and developmental disorders, 149-51 gender equity and economic empowerment interventions, 193 identification and case detection, 193 illicit drug dependence, 113–14, 115t neighborhood groups, 192–93, 194 parenting. See parenting interventions in schools. See education and schools suicide and, 175–76 treatment, care, and rehabilitation, 193 workplace. See workplace comparative risk assessments (CRAs), 6, 37, 42, 55t, 59 counterfactual burden and, 44, 53-56 competency-based education, 209-10, 209t conduct disorders burden of disease, 32-34t, 36 childhood, 145 deaths associated with, 7t defined, 145 estimated number of cause-specific and excess deaths for, 46t, 49 interventions for, 9t contingency management approach to drug dependence, 117 continuous quality improvement, 214 Convention on the Rights of Persons with Disabilities, 215 co-occurring disorders, 1, 8, 12, 47 alcohol use disorders and, 49 autistic spectrum disorders and, 48-49 bipolar disorders and, 48 dementia and, 52-53 epilepsy and, 52 integrating mental health into health programs for, 212–14 schizophrenia and, 48 coping strategies and well-being, 172 Corrigan, P.W., 187

cost-effectiveness and affordability of interventions, 12, 18–19, 20f, 219–36 for adult mental disorders, 78 affordability, 229-31 alcohol use, demand reduction strategies for, 229, 229f costs of scaling up, 232f school-based social and emotional learning interventions, 229-30 of alcohol-related legislation, 221-22 for alcohol use disorders, 19, 20f, 137-38, 139-40, 221-22 for childhood mental and developmental disorders, 155-56 CHOosing Interventions that are Cost-Effective (CHOICE) project (WHO), 220, 226, 228, 228*b*, 232 collaborative care models, 56 community-based parenting programs, 222-23 for dementia, 98-99 economic evaluation of treatment and prevention, 18b for epilepsy, 19, 20f, 58, 90, 93 extended cost-effectiveness analysis (ECEA), 19, 21*f*, 238 financial risk protection, 19 for headache disorders, 102 for illicit drug dependence, 118, 120 lack of evidence, 12-15, 21 limitation of conventional cost-effectiveness analysis, 220 for MNS disorders, 223–29 by country, 224*f* international studies, 226 national studies, 224-26 primary health care, 224-27 nonspecialized treatment settings, 230-31 overview, 219-20 paucity of trials, 219, 222, 230 population and community levels, 220-23 school-based social and emotional learning interventions, 222, 229-30 specialist health care delivery, 228-29 costs of mental health care, 237–38 counseling sessions, 76 court-mandated treatment for drug dependence, 112t, 113 criminal activity related to illicit drugs, 111, 119 criminal justice platforms, 112t, 113 cross-border shopping for alcohol, 133

D

DALYs. See disability-adjusted life years DARE (Drug Abuse Resistance Education) program (US), 114 DART-AD (dementia antipsychotic withdrawal trial) trial, 53 decriminalization of suicide, 175 Degenhardt, L., 31 dementia, 93-99. See also Alzheimer's disease age of death attributable to, 53, 54t premature death, 41 age of onset, 8 burden of disease, 30, 32-34t, 87, 94-95, 94f, 95 caregiver stress, 95, 97 coping strategy program, cost-effectiveness of, 225 community health workers' detection abilities, 193 co-occurring disorders and, 52-53 cost-effectiveness of interventions for, 98-99 cost of, 8 definitions of, 31, 93-94 detection and diagnosis, 96 early-onset dementia, 94 epidemiology, 94-95 GBD findings of excess mortality for estimated number of cause-specific and excess deaths, 46t, 51f, 52-53 implications, 58 interventions for, 10t, 96-98, 186 capacity of health care teams, 97-98 caregivers, 97 community-based programs, 98 health care delivery interventions, 97 integration into health care, 213 nonpharmacological interventions, 97 other interventions, 98-99 pharmacological interventions, 96-97, 98 specialist health care delivery, 15 recommendations for, 103 YLLs and, 43, 45*f* dementia antipsychotic withdrawal trial (DART-AD) trial, 53 Dementia Society of Goa, 207 demographic factors, 3b depression, 69-70. See also bipolar disorder; postpartum depression age of cause-specific and excess deaths attributed to, 47*f* alcohol use disorders and, 49-50 antidepressants, 56, 75t, 225, 226 burden of disease, 32, 32-34t, 34, 36 chronic illnesses associated with, 68 clinical features and course, 69 co-occurring disorders with, 47, 56, 69 cost-effectiveness of interventions for, 19, 20f, 227*t*, 230 antidepressants and CBT, 225, 226

DALYs associated with, 36 deaths associated with, 6, 7t epidemiological surveys on, 38 epidemiology and burden of disease, 69-70 estimated number of cause-specific and excess deaths for, 46t, 47f, 49 gender differences, 68 interventions for, 8, 9t, 12, 75t collaborative care, 207 electroconvulsive therapy (ECT), 74 European Alliance against Depression Programme, 176 limited access to, 12 primary health care, 13-14t, 15, 207-8 psychosocial interventions for adolescents, 190 self-care, 15 specialist health care delivery, 15 transcranial magnetic stimulation as treatment for, 74 serotonin-norepinephrine reuptake inhibitors (SNRIs) and, 225 suicide and, 69, 176 YLDs and, 68, 68f YLLs and, 49 detoxification alcohol use disorders, 136, 137t, 139 substance abuse, 116, 120 developed countries. See high-income countries (HICs) developing countries. See low- and middle-income countries (LMICs) developmental disorders, children with. See childhood mental and developmental disorders developmental disorders, people with, 48. See also childhood mental and developmental disorders diabetes, 41, 56, 128, 129, 184, 213 3 Dimensions of Care for Diabetes (UK), 213 Diagnostic and Statistical Manual of Mental Disorders (DSM), 31 DSM-4, 110, 208 DSM-5, 71-72, 110 disability-adjusted life years (DALYs) alcohol use disorders and, 129 caused by MNS disorders, 5, 30-35, 31f, 32t, 34t cost per DALY averted, 18, 19, 20f gender differences, 32-33, 32t, 34-33, 34f, 34t illicit drug dependence and, 36, 111 disasters and refugees, 177 Disease Control Priorities in Developing Countries, 2b DisMod-MR, 43, 47, 49, 59 disruptive behavioral disorders. See attention-deficit hyperactivity disorder (ADHD); conduct disorders domestic violence legislation, 186 Dretzke, J., 155

driving impaired and traffic accidents, 49, 129, 137 cost-effectiveness of countermeasures, 221 countermeasures for, 134–35, 139 helmet laws, 186 Drug Abuse Resistance Education (DARE) program (US), 114 drug dependence. *See* illicit drug dependence drug education, 114, 115*t* drug testing of offenders, 112*t*, 113 in workplace, 113–14, 115*t* Drummond, M. F., 220

Ε

early child development, 149-50, 192-93 early intervention drug dependence of at-risk youth, 114 for psychosis treatment, 77 East Asia and Pacific alcohol consumption in cost-effectiveness of interventions, 137, 221 driver testing and arrest, 135 taxation, 133, 137 cost-effectiveness of interventions in, 227t, 239 suicide prevention organizations in, 176 suicide rates in, 164 traditional medicine in, 202 YLLs in, 44, 45-46f Eastern Europe. See Central/Eastern Europe and Central Asia Eastern Mediterranean Region suicide in, 170 WHO proposed regional framework in, 23-24b eating disorders, 3, 32–34t ECEA. See extended cost-effectiveness analysis economic effects of illicit drug dependence, 111 of mental, neurological, and substance use (MNS) disorders, 8 economic evaluation of treatment and prevention, 18b. See also cost-effectiveness and affordability of interventions ECT (electroconvulsive therapy), 74 education and schools alcohol education campaigns, 139 early childhood enrichment programs, 192-93 epilepsy education, 58 illicit drug dependence drug education, 114, 115t skills training, 114, 115t mental health awareness, 73-74 overdose prevention education, 114-15 peer-led education, 202 preschool educational programs, 192-93

school-based interventions, 189-92, 194 alcohol use, 19, 139 childhood mental and developmental disorders, 150 emergency response, 190, 191b HealthWise program (South Africa), 190, 190b identification and case detection, 190-91 illicit drug dependence, 114, 115t information and awareness, 189 Mental Health First Aid for High School Teachers, 191 social and emotional learning interventions, 189-90, 222, 229-30 suicide and self-harm, 176 teacher training program, 191b treatment, care, and rehabilitation, 192 for vulnerable children, 190 whole-of-school approaches, 150 Egypt childhood mental and developmental disorders, community-based interventions in, 149 suicide in, 170 Eickmann, S. H., 149 elderly persons. See also Alzheimer's disease Home Care Program for (Goa), 207 neurological disorders in, 36 suicide rates of, 164 electroconvulsive therapy (ECT), 74 emergency response drug-related interventions, 115 humanitarian aid, 16 mental health care, 204 school-based interventions, 190, 191b environmental events, 3b epilepsy, 88-93 alcohol use disorders and, 49 anti-epileptic drugs (AEDs), 88, 90, 91, 240 autistic spectrum disorders and, 48 birth trauma and, 185 burden of disease, 30, 32-34t, 87, 88-89 co-occurring disorders and, 52 cost-effectiveness of interventions for, 19, 20f, 58, 90, 93, 227t extended cost-effectiveness analysis, 241t DALY ranking of, 90 deaths associated with, 7t, 41 age of death, 53, 54t definition of, 31, 88 epidemiology, 88-89 GBD findings of excess mortality for estimated number of cause-specific and excess deaths, 46t, 51-52, 51f implications, 58

gender differences in, 5, 33 interventions for, 8, 10t, 89–93 alternative therapies, 91 anti-stigma interventions, 89-90 helmet laws, 186 legislation, 90 management of infectious etiologies, 91 optimizing health care delivery, 91-92 pharmacological interventions, 58, 90-91 population platform interventions, 89 primary health care, 13-14t, 15 self-management, 90, 203 surgical management, 91, 93 treatment gap, 58, 92*f*, 93*b* mental illness and, 52 recommendations for, 103 status epilepticus, 88 suicide and, 52 YLDs and, 90 YLLs and, 43–45, 45f Ethiopia alcohol use, demand reduction strategies for, 229 cost-effectiveness of interventions in, 18b depression interventions in, 248t productivity impact of scaled-up treatment, 246 - 47extended cost-effectiveness analysis of publicly financed mental and neurological health care package in, 245-46, 247t comparison with India, 249t parenting skills training in, 152 school-based social and emotional learning intervention in, 230 European Alliance against Depression Programme, 176 European Headache Federation, 208 evidence-based interventions for health care delivery, 204, 205t extended cost-effectiveness analysis (ECEA), 19, 21f, 238 application to MNS disorders, 238, 239 comparison of India and Ethiopia, 249t Ethiopia analyses, 245–48 Indian analyses, 240-45 principles and practice, 238

F

faith-based organizations, 202 family impacts and involvement, 1 alcoholics, family-based interventions for, 135, 139 family history of suicide, 170 illicit drug dependence, 110 in treatment, 74, 79 farmers, suicides of, 171 Farrington, D. P., 150 fetal alcohol syndrome disorders (FASD), 128, 135, 139 financial risk protection (FRP), 19, 203, 238, 239b Finland Alzheimer's disease, pharmacological interventions for, 98 epilepsy-related deaths in, 52 illicit drug use in, 111 workplace treatment, care, and rehabilitation in, 189 fluoxetine, 226 folic acid deficiency, 94 food fortification, 185 forensic psychiatry, 203 fragile X syndrome, 48-49 France APPRAND program, 188 fetal alcohol syndrome (FAS) warning labels in, 135 FRP (financial risk protection), 19, 203, 238, 239b Fuhr, D., 19

G

gatekeeper training, 176, 223 GBD. See Global Burden of Disease Study 2010 (GBD 2010) gender differences in burden of MNS disorders, 5, 32–34, 32*t*, 34*f*, 34*t*, 68 alcoholic consumption, 128-29 childhood mental and developmental disorders, 5, 33, 146, 147*t* illicit drug dependence, 5, 45, 46f suicide and, 164, 165*t*, 166–67*f* YLLs and, 45, 46f generic drugs. See medications genotyping, 68 Global Burden of Disease Study 2010 (GBD 2010), 3, 29-30. See also burden of MNS disorders comparative risk assessments. See comparative risk assessments (CRAs) excess mortality from MNS disorders, 41-65 assessment as risk factors for other health outcomes, 44. See also co-occurring disorders cause-specific death estimates, 42, 44-53. See also specific MNS disorders implications, 56-58 methodology of study, 42-44. See also years of life lost (YLLs) transition from communicable to noncommunicable diseases, 30, 36, 41 Global Burden of Disease Study 2013 (GBD 2013), 38 Global Campaign against Headache, 101 Global Campaign against Headache for Europe, 102,208

Global Health Estimates of disease burden, 5 globalization of alcohol beverages industry, 128 Gmel, G., 133 Good Behavior Game (US), 114 good practice interventions, 12, 15, 183, 184*t*, 188, 193, 214 Grading of Recommendations Assessment, Development and Evaluation (GRADE) guidelines, 8, 130–31 Gunnell, D., 17*b*

Н

Handwerk, M., 155 Happell, B., 56 HCV (hepatitis C), 51, 57, 111, 119 headache disorders, 99-102. See also migraine burden of disease, 100 cost-effectiveness of interventions for, 102 epidemiology, 100 interventions for, 100-101, 188 alternative therapies, 101 optimizing health care delivery, 102, 208 pharmacological interventions, 100-101 public education programs, 101-2 self-management, 100 training health care providers, 102 medication-overuse headache, 99-100 recommendations for, 103 tension-type headache, 99 Headache Management Trial, 208 health care platform interventions, 4b, 13-14t, 15-16, 201 - 18for alcohol use disorders, 135-37. See also alcohol use disorders for childhood mental and developmental disorders, 151-54. See also childhood mental and developmental disorders collaborative stepped care. See collaborative stepped care for depression, 70 elements of, 201-4 emergency mental health care, 204. See also emergency response evidence-based, 204 hospital level of care, 13-14t, 15, 203 for illicit drug dependence, 114-18, 116t. See also illicit drug dependence integrating mental health into existing health programs, 212-14 for mood and psychotic disorders, 74-78 primary level. See primary health care level PRogramme for Improving Mental health carE (PRIME), 209, 231

for psychiatric services, 203 quality of care, 15, 214-15 relationships among difference delivery channels, 204 self-care and informal health care, 202–3. See also self-care specialists. See also specialist health care delivery training primary health care staff by, 210 for suicide, 177–78 system-strengthening strategies for, 204-9 task-sharing approach, 209–12, 210b Healthnet Transcultural Psychosocial Organization (TPO), 17b HealthWise program (South Africa), 190, 190b hepatitis B, 51, 111 hepatitis C (HCV), 51, 57, 111, 119 heroin. See illicit drug dependence; opioid dependence high-income countries (HICs). See also specific countries alcoholic consumption in, 128, 138 burden of MNS disorders in, 5, 29 cost-effectiveness of interventions in, 19 drug dependence treatments and interventions, 118 dementia care costs in, 95f epilepsy-related deaths in, 51 intervention delivery platforms in, 12 screening children for developmental disorders, 151-52 specialist services, 2 Hip Hop Stroke (awareness program for children), 189 HIV/AIDS alcohol use and, 184 anti-epileptic drugs for people with, 91 burden of disease, 57 cost-effective prevention strategy, 226 dementia and, 94 illicit drug use and, 51, 58, 110-11, 115, 119 integrating mental health into existing programs for, 212 mental health needs of persons with, 213-14 methadone maintenance and, 117, 118 suicide and, 169 HIV antiretroviral therapy, 57 home care programs, 207 Honduras, epilepsy treatment in, 89, 186 hospital level of care, 13-14t, 15, 203 cost-effectiveness of, 228-29 humanitarian aid and emergency response, 16, 204 human rights violations, 58, 67, 214, 215

Ι

ibuprofen, 100 ICD-10. *See* International Classification of Diseases illicit drug dependence, 109-25. See also amphetamine dependence; cannabis dependence; cocaine dependence; opioid dependence age of death attributable to, 54t burden of disease, 32, 32-34t, 34, 111, 118 consequences, 110–11 consumption trends, 111 cost-effectiveness of interventions, 118, 120 criminal activity, 111, 119 DALYs associated with, 36, 111 definition of, 31, 109-10, 120n1 delivery platforms for, 14t economic costs of, 111 externalizing disorders, 114, 120n4 family factors, 110 GBD findings of excess mortality for estimated number of cause-specific and excess deaths, 49, 50f, 51 implications of, 57-58 gender differences in, 5, 45, 46f global trends, 111 implications for low- and middle-income countries, 118 - 19individual factors, 110 injecting drug risks, 51, 53, 55*t*, 57, 226 internalizing disorders, 114, 120n4 interventions and policies, 11t, 111-18 access to treatment, 114 brief psychological intervention, 115, 116t, 117 cognitive behavioral therapy (CBT), 117 community-based care, 114–15, 116t community platform interventions, 113-14, 115t contingency management approach, 117 control of supply, 112 court-mandated treatment, 112t, 113 criminal justice platforms, 113 delivery platforms for, 14t detoxification and withdrawal, 116, 120 drug education, 114, 115t drug testing of offenders, 112t, 113 early intervention with at-risk youth, 114 health care platform interventions, 114-18, 116t imprisonment, 112*t*, 113, 120 law enforcement, 112, 112t, 119-20 legislation, 186 medication for cannabis dependence, 118 medication for heroin and opioid dependence, 116t. 117 naloxone and other emergency responses, 115 overdose prevention education, 114-15 population platform interventions, 112–13, 112t prescription monitoring programs, 112-13, 112t primary health care, 13-14t, 15, 115, 116t

psychosocial interventions, 117 public awareness campaigns, 112t, 113 residential rehabilitation, 117 school-based prevention programs, 114, 115t self-help and mutual aid groups, 114, 115t skills training in schools, 114, 115t specialist health care delivery, 15, 116–17, 116t supervised injecting facilities, 57, 115 therapeutic community (TC) model, 117 workplace drug testing, 113–14, 115t medical vs. moral models of addiction, 12, 119 mortality rates, 110-11 narcotic antagonists, 119, 120, 120n6. See also buprenorphine maintenance; naltrexone maintenance natural history of dependence, 110 novel psychoactive substances, 109, 120n2 peer group factors, 110 pharmacotherapies, effectiveness of, 57-58 polydrug use, 114, 120*n*5 precursor chemicals, 112, 112t, 120n3 recommendations, 119-20 research needs, 119, 120 risk factors, 110 social and contextual factors, 110 suicide and, 51, 55*t*, 110, 175 YLLs and, 45*f*, 53, 110 gender differences and, 45, 46f imprisonment for drug offenses, 112t, 113, 120 India alcohol consumption in, 129 demand reduction strategies for, 229 taxation on, 133 unrecorded production and consumption, 221 collaborative care for mental illnesses in, 77 community-based rehabilitation in, 78 cost-effectiveness of interventions in, 18b depression, 230, 243-44, 244t extended analysis for schizophrenia, 19, 21f Dementia Society of Goa, 207 District Mental Health Programme, 208 education and schools in examination stress, 175 teacher training for youth health promotion program, 222 teacher training to improve epilepsy knowledge, 191 epilepsy interventions in, 240, 241t extended cost-effectiveness analysis (ECEA), 240-45 comparison with Ethiopia, 249t headache interventions in, 228b MANAS (MANashanti Sudhar Shodh, or project to promote mental health), 78, 207, 224-25

maternal and infant health programs in, 153 National Sample Survey Organization, 238 pesticide ban in, 185 school-based social and emotional learning intervention in, 230 suicide in, 168, 170, 178 religious and spiritual beliefs, 172 safe storage of pesticides, 176 universal health coverage, 240, 245f indigenous communities and alcohol consumption community platform interventions, 135, 136t prohibition, 131, 131t individual factors alcohol use disorders, 130 illicit drug dependence, 110 infants immunization programs for, 185 maternal and infant health programs, 153 psychosocial interventions for, 149, 150 salt iodization programs for, 185 informal health care. See self-care information and communication packages, 78 injecting drug risks, 51, 53, 55*t*, 57, 226 Institute for Health Metrics and Evaluation at University of Washington, 38 Institute of Medicine's Forum on Neuroscience and Nervous System Disorders, 209 intellectual disability burden of disease, 32-34t childhood, 145 defined, 145 effective interventions for, 10t Inter-Agency Standing Committee's Guidelines on Mental Health and Psychosocial Support in Emergency Settings, 204 International Classification of Diseases (ICD-10), 5, 31, 35, 37, 42, 46, 49, 72, 109, 168 International Convention on the Rights of Persons with Disabilities, 186 International Labour Organization, 188 International League against Epilepsy, 88 interventions for MNS disorders, 8-12 for adult mental disorders, 73-78. See also adult mental disorders for alcohol use disorders, 130-37. See also alcohol use disorders case studies, 16–17b for childhood mental and developmental disorders, 149-55. See also childhood mental and developmental disorders collaborative care models, 56 community-based. See community platform

interventions

costs. See cost-effectiveness and affordability of interventions delivery platforms of, 12-17, 13-14t for dementia, 96-98 effective essential interventions, 8-12, 9-11t health care. See health care platform interventions for illicit drug dependence, 11t, 111–18. See also illicit drug dependence limited access to, 12 population-based. See population platform interventions quality of care, 15, 214-15 iodine deficiency, 185 Iran, suicide in, 176, 177 Israel community-based interventions for childhood mental and developmental disorders, 149 Heart Disease study, 52

J

Jamaica childhood emotional and behavioral problems in, 150 psychosocial interventions for malnourished infants in, 149, 150

K

Kamgno, J., 52 Kenya epilepsy-related deaths in, 52, 88 epilepsy treatment in, 89 training of primary care workers in, 210 ketogenic diet, 91 key messages, 4*b* Kilian, R., 155 knowledge gaps, effect on scaling up, 21–22 Korea, Republic of dementia detection program in, 98 suicide in, 175

L

Lachenmeier, D., 133–34 Latin America and the Caribbean alcohol consumption in, 129 cost-effectiveness of interventions, 137, 221 partial bans on, 132 self-help and support groups, 136, 137 taxation on, 132–33 cost-effectiveness of interventions in, 221, 226, 227*t* substance use disorders in, 44 suicide in religious and spiritual beliefs, 172 risk factors, 169 survivors of suicide loss, 172

traditional medicine in, 202 YLLs in, 44, 45-46f law enforcement alcohol use disorders and, 132t illicit drug dependence and, 112, 112t, 119–20 legislation on alcoholic beverages, 221-22 child protection legislation, 148-49 on epilepsy, 90 illicit drugs legislation, 186 mental health legislation, 73 restricting access to lethal means of suicide, 17b, 176, 185, 194, 222 licensing of alcoholic beverages sellers, 138 life expectancy gap in people with mental disorders, 41, 42, 57. See also years of life lost (YLLs) lifestyle risk factors, 47, 56-57, 58, 101 Lim, S. S., 44, 129 List of Essential Medicines (WHO), 57 liver cirrhosis, 50, 184 low- and middle-income countries (LMICs). See also specific countries alcohol consumption in, 128 challenges for, 138-39 cost-effective interventions, 221 mortality rates associated with, 130 recommendations for, 139 burden of MNS disorders in, 29 cause-of-death data from, 58 childhood mental and developmental disorders, community-based interventions in, 149 dementia care costs in, 95f epilepsy-related deaths in, 51 epilepsy treatment gap in, 58, 92f illegal substance dependence in assessment issues, 118 burden of disease, 118 cost-effectiveness of interventions, 118 health care infrastructure and capacity, 119 implications, 118-19 medical vs. moral models of addiction, 119 opioid substitution treatment (OST), 57, 119 potential new treatments, 119 research needs, 119 intervention delivery platforms in, 12, 29 MNS disorders in, 5 mood and anxiety disorders in, 69 neurological disorders in, 87 suicide surveillance in, 168 survey of mental disorders in, 38 transition from communicable to noncommunicable diseases in, 41 vital registration systems, lack of, 163 lung cancer, 42

Μ

major depressive disorder. See depression Malaysia, suicide in, 175, 177 MANAS (MANashanti Sudhar Shodh, mental health project in India), 78, 207, 224-25 mania, 69, 71. See also bipolar disorder mass media campaigns. See public awareness campaigns maternal depression. See postpartum depression maternal mental health interventions, 152-53, 212 Mauritius preschool program in, 150 school-based prevention program for adolescent depression in, 222, 229 school-based social and emotional learning intervention in, 230 Maximizing Independence at Home project, 97 media reporting of suicide and self-harm, 175 medical marijuana, 91 medical vs. moral models of addiction, 12, 119 medications access of people with mental disorders to, 48 for ADHD, 154 antipsychotics for dementia patients, 53, 96-97 for conduct disorder, 154 cost-effectiveness of, 226 for epilepsy. See anti-epileptic drugs (AEDs) low-cost generics, 22, 226 morbidity and mortality rates related to treatment with, 47 pharmacotherapies for dementia, 96-97, 98 for epilepsy, 90-91 for headache disorders, 100–101 for heroin and opioid dependence, 116t, 117 for mood and psychotic disorders, 74, 75-76t, 79 for substance use disorders, 48, 57-58, 118 prescription monitoring programs, 112-13, 112t psychotropic medications effects of, 48, 56 primary care staff prescribing, 212 Megiddo, I., 240 memantine, 96, 98 men. See gender differences mental, neurological, and substance use (MNS) disorders, 1, 2. See also neurological disorders; specific types of disorders adults. See adult mental disorders alcohol abuse. See alcohol use disorders children. See childhood mental and developmental disorders disability-adjusted life years (DALYs) due to, 5. See also disability-adjusted life years economic output lost due to, 8

mortality rates associated with, 6. See also mortality rates need for action to address, 22-23 significance for global health, 5-8 substance abuse. See illicit drug dependence years lived with disability (YLDs) and, 5, 6f. See also years lived with disability years of life lost (YLLs) and, 5, 6, 6f. See also years of life lost mental disorders. See adult mental disorders; childhood mental and developmental disorders; mental, neurological, and substance use (MNS) disorders; *specific disorders (e.g., anxiety, depression)* mental health awareness campaigns, 73, 186-87. See also public awareness campaigns mental health first aid training, 188, 191, 193, 223 Mental Health Gap Action Programme (mhGAP). See World Health Organization (WHO) mental health legislation, 73. See also legislation mental health workers health centers or home visitation programs using, 193 human resource competencies for MNS disorders in, 210 low availability of, 12 pre-service and in-service training of primary care workers, 210 methadone maintenance, 57, 111, 113, 117, 118, 226 Mexico alcoholic beverages in cost-effectiveness of interventions, 138 demand reduction strategies for, 229 unrecorded production of, 133 illicit substance use in, 111 school-based social and emotional learning intervention in, 230 mhGAP. See World Health Organization microfinance, 193 Middle East and North Africa cost-effectiveness of interventions in, 227t illicit drug dependence in, 44 suicide of women in, 171 midwives, role of, 212 migraine. See also headache disorders burden of disease, 32-34t, 87 cost-effectiveness of interventions for, 228b DALYs associated with, 36 deaths associated with, 7t definition of, 99 estimated number of cause-specific and excess deaths for, 46t interventions for, 10t, 188 primary health care, 13–14t, 15 self-care, 15

Mihalopoulos, C., 155, 223 Millennium Development Goals, 214 Mini-Mental State Examination, 96 MNS. See mental, neurological, and substance use (MNS) disorders monitoring and evaluation of interventions, 22 monitoring and reporting systems dementia, 213 suicide and self-harm, 177 mood disorders, 68-70, 75t. See also anxiety disorders; depression moral vs. medical model of addiction, 12, 119 morphine maintenance, 117 mortality rates. See also Global Burden of Disease Study 2010 (GBD 2010); years of life lost (YLLs) for alcohol use disorders, 7t, 44, 129 cause-of-death data, difficulty in capturing, 58-59 illicit drug dependence, 110-11 MNS disorders associated with, 6-7, 7t, 22, 41 models used in estimating, 43, 43f suicide mortality rates, 164, 165t multiple sclerosis, 3, 29, 32-34t, 87 multisystem therapy, 155 music therapy, 74 mutual aid groups. See support groups

N

naloxone and other emergency responses, 115 naltrexone maintenance, 57, 117, 119 narcotics. See illicit drug dependence National Institute for Health and Care Excellence (NICE), 99 natural history models, 43, 45-46, 48, 49, 59 needle programs, 57 neighborhood factors, 3b neighborhood groups, 192-93, 194. See also self-help programs; support groups neurocysticercosis, 89b, 91, 186 neurological disorders, 87-108. See also epilepsy; headache disorders burden of disease, 30, 32-34t, 87 community health workers' detection abilities, 193 cost-effectiveness of interventions for, 226 in elderly persons, 36 GBD findings of excess mortality for estimated number of cause-specific and excess deaths, 46t, 51, 51f implications, 58 gender differences in, 45, 46f interventions for, 10t delivery platforms, 14t school-based interventions, 189, 192

YLDs and, 87 YLLs and gender differences and, 45, 46f regional differences and, 55 New Zealand fetal alcohol syndrome (FAS) warning labels in, 135 indigenous communities, alcohol consumption by, 135 Nigeria alcohol use, demand reduction strategies for, 229 community-based awareness in, 73 depression in, 69, 70, 208, 225 epilepsy in, 230 schizophrenia in, 225, 230 suicide in, 169 noncommunicable diseases compared to communicable diseases in global burden of disease, 30, 36, 41 integrating mental health into primary care for, 213 nonspecialist human resource cadres, 15, 22 Norwegian dementia mortality study, 52 novel psychoactive substances, 109, 120n2

0

obesity, 49, 56-57, 100 obsessive-compulsive disorder (OCD), 70 occupational therapy, 76, 79 Open the Doors program, 187 opioid dependence. See also illicit drug dependence burden of disease, 32-34t consumption trends, 111 DALYs associated with, 36 deaths associated with, 7t, 37, 41 age of death, 54t GBD findings of excess mortality for estimated number of cause-specific and excess deaths, 46t, 50f, 51 implications, 57-58 illicit opioids, 109 naltrexone maintenance, 117 opioid substitution treatment (OST), 57, 113, 114, 118, 119, 120. See also methadone maintenance prevalence in Australasia and Western Europe, 37 rates of dependence, 110 substance use disorders and, 51 supervised injectable heroin maintenance, 57, 117 YLLs and, 37, 43 overdose prevention education, 114–15 oxycodone, 111. See also opioid dependence

P

Pakistan depressive disorder related to suicide in, 169

mental health awareness among school children in, 74 preventive maternal and child health care in, 153 rural secondary schools in, 189 suicide in, 175 depressive disorder related to, 169 women, 171 Thinking Healthy Programme, 212 Palestine, school-based intervention in, 191b panic disorder, 70, 75t parenting interventions, 193 community-based program for, cost-effectiveness of, 222–23 skills training, 152, 213-14 Parkinson's disease burden of disease, 30, 32-34t, 87 gender differences in, 5, 33 peer-led interventions education, 202 illicit drug dependence, 110 self-help groups and peer support, 203 Perinatal Mental Health Project (South Africa), 212 pesticides regulation to restrict access to, 17b, 176, 185 safe storage of, 176 self-poisoning, 175, 177 Phanthunane, P., T. Vos, 225 pharmacologic treatment. See medications phobias, 70 Pion, S. D. S., 52 Plan Do Study Act, 214 Platania-Phung, C., 56 pneumonia, 53, 56 political will, effect on scaling up, 21 polydrug use, 114, 120*n*5 Pompili, P., 52 population platform interventions, 13-14t, 15, 183-87, 193-94 for adult mental health, 73 for alcohol use disorders, 130, 131–35, 131t for childhood mental and developmental disorders, 148 - 49for epilepsy, 89 for illicit drug dependence, 112–13, 112t information and awareness campaigns, 186-87 key findings, 183 legislation and regulations, 184-85. See also legislation protecting persons with MNS disorders, 186 restricting access to means of suicide, 185 for suicide, 174-75 postpartum depression, 75t, 77, 152-53, 212 women's support groups for, 153

post-traumatic stress disorder (PTSD), 49, 68, 70, 75t, 77, 192 poverty. See also financial risk protection (FRP) microfinance schemes and, 193, 221 schizophrenia and, 48 suicide and, 169, 170, 175 Powell, C., 149 precursor chemicals, 112, 112t, 120n3 pregnancy alcohol use in, 135, 139 vulnerability for MNS disorders, 185 premature mortality, 5. See also years of life lost (YLLs) Preventing Suicide: A Global Imperative (WHO), 177 prevention of MNS disorders, 4b, 8-12, 9-11t. See also interventions for MNS disorders adult mental disorders, 76-77 cost-effectiveness of. See cost-effectiveness and affordability of interventions primary health care level, 13-14t, 15, 203 for alcohol use disorders, 13-14t, 15 competency-based education, 209-10, 209t cost-effectiveness of, 224-27 international studies, 226 national studies, 224-26 evidence-based, 205t for illicit drug dependence, 13-14t, 15, 115 planning and consultation, 210 pre-service and in-service training of workers, 210 psychotropic medications, prescription authority for, 212 Prince, M., 44 problem-solving skills therapy (PSST), 155 PRogramme for Improving Mental health carE (PRIME), 209, 231 psychiatric services, 203. See also specialist health care delivery psychosis, 2 extended cost-effectiveness analysis for, 19 interventions for, 8 medications for, 226 primary health care for, 13-14t, 15 specialist health care delivery for, 15 psychosocial interventions for conduct disorder, 154-55 for illicit drug dependence, 117 for malnourished infants, 149 psychosocial life crises and suicide, 169-70 psychotherapy for mood and psychotic disorders, 74, 75–76t psychotropic medications, effects of, 48, 56 PTSD. See post-traumatic stress disorder

public awareness campaigns, 186–87, 194
alcohol consumption, 135
headaches, 101, 102
illicit drug dependence, 112*t*, 113
mental health, 73
Public Health Action for the Prevention of Suicide (WHO), 177
public health considerations
alcohol use disorders, 128
health platform related, 208
integrating mental health into existing programs, 212–14
maternal mental health, 153
suicide, 173

Q

quality-adjusted life years (QALYs), 155, 225 quality of care, 15, 214–15. *See also* health care platform interventions

R

RAP-A program, 230, 230t refugees, suicides of, 171-72, 177 rehabilitation cognitive rehabilitation for dementia, 97 illicit drug dependence, 117 mental disorders, 78 Rehm, J., 133-34, 137, 221 relaxation techniques, 74 religious beliefs and suicide, 172 religious healers, 202 research and development initiatives, 22 for illicit drug dependence, 119, 120 residential facilities, 15-16, 203 for illicit drug dependence interventions, 117 Resourceful Adolescent Programme-Adolescent version (RAP-A) program, 229–30, 230t respiratory diseases, 41, 56 risk factors for childhood mental and developmental disorders, 146-48, 148t for illicit drug dependence, 110 for suicide, 37, 168-71, 173f, 178 risperidone, 226 Russian Federation, headache interventions in, 102, 208, 228b

S

Saxena, S., 232 scaling up, 4–5*b* affordability and. *See* cost-effectiveness and affordability of interventions case studies of interventions for MNS disorders, 16–17*b*

extended cost-effectiveness analysis for, 19, 21f health system barriers and opportunities for, 21-22 knowledge gaps as factors, 21-22 political will as factor, 21 proposed regional framework in WHO Eastern Mediterranean Region, 23–24b strategies for strengthening health system, 22 schizophrenia, 72–73 age of cause-specific and excess deaths attributed to, 47f burden of disease, 32-34t cannabis dependence and, 53, 55t clinical features and course, 72 co-occurring disorders with, 48 cost-effectiveness of interventions for, 19, 20–21f, 225, 227t, 230 community-based vs. hospital-based services, 228 extended cost-effectiveness analysis, 242t DALYs associated with, 36 deaths associated with, 7t age of death, 54*t* environmental factors associated with, 68 epidemiology and burden of disease, 72-73 estimated number of cause-specific and excess deaths for, 46–48, 46t, 47f extended cost-effectiveness analysis for, 19, 21f, 241 - 45gender differences in, 5, 33, 68 genotyping of individuals with, 68 interventions for. See also adult mental disorders enhanced financial and service coverage, 241-43 pharmacologic and psychological treatment, 76t side effects of antipsychotic medications for, 48 suicide and self-harm and, 48 YLDs and, 68, 68f YLLs and, 43, 45f, 48 schools. See education and schools Scott, D., 56 screenings for alcohol use disorders, 135-36, 136t, 139 for childhood mental and developmental disorders, 151-52, 156 for comorbid health issues, 56-57 for dementia, 98 for illicit drug dependence, 115, 117 for mental health disorders, 77 SDG (sustainable development goal), 2b self-care, 13-14t, 15, 202-3 for epilepsy, 90 evidence-based, 205t for headache disorders, 100 for mood and psychotic disorders, 74

self-harm. See suicide and self-harm self-help programs, 57, 202-3 for alcohol use disorders, 136-37 for illicit drug dependence, 114, 115t self-immolation. See suicide and self-harm serotonin-norepinephrine reuptake inhibitors (SNRIs), 225 Service Organization Pyramid for an Optimal Mix of Services for Mental Health (WHO), 202, 202f sexual minorities, suicide of, 172 shame and fear, 67 SHR (sustained headache relief), 100 simple phobias, 70 Single Convention on Narcotic Drugs, 120n1 Six Sigma, 214 Skeen, S., 194 smoking, 47-48, 49, 52, 56-57 Sneha (suicide prevention organization), 175 sobriety checkpoints, 134 social anxiety disorder, 70 social causation pathway, 3b social change, 3b social determinants, 1, 3b for illicit drug dependence, 110 social drift pathway, 3b societal response to alcohol use disorders, 130 socioeconomic status, 3b. See also poverty drinking and, 129 schizophrenia and, 48 SOLVE training package, 188 Sornpaisarn, B., 133 South Africa alcohol consumption of pregnant women in, 135 collaborative stepped care approach in, 210 epilepsy treatment in, 89 HealthWise program in, 190, 190b HIV/AIDS treatment integrated with mental health in, 214 parenting skills training in, 152 Perinatal Mental Health Project, 212 Primary Care 101 (PC101), 214 primary care practitioners in, 208 workplace interventions in, 189 South Asia alcohol consumption in cost-effectiveness of interventions, 137, 221 taxation, 133, 137 cost-effectiveness of interventions in, 226, 227t, 231,239 suicide prevention organizations in, 176 suicide rates in, 164 traditional medicine in, 202

specialist health care delivery, 15, 74-76, 203 for alcohol use disorders, 15 for childhood mental and developmental disorders, 154-55 cost-effectiveness of, 228-29 evidence-based, 205t for extended-stay facilities, 203 for illicit drug dependence, 15, 116-17, 116t Sri Lanka children with developmental delays in, 151 suicide in, 170, 171, 175, 177-78 prevention through pesticide regulation, 17b, 185, 185b safe storage of pesticides, 176 START (STrAtegies for RelaTives) study, 99 Statistical Process Control, 214 stigma and discrimination, 1, 5b, 22, 67 anti-stigma interventions, 89-90, 187 limiting access to interventions, 12 limiting access to screenings, 56 quality of care and, 214 self-care and, 203 suicide and, 175, 176 Strang, J., 8 stroke, 41, 56 Sub-Saharan Africa alcohol consumption in, 129 cost-effectiveness of interventions, 137, 221 mortality associated with, 129 taxation, 133, 137 childhood mental disabilities, lack of data on, 146 cost-effectiveness of interventions in, 221, 226, 227t, 231, 239 epilepsy in, 44, 45, 52, 89, 91 human resource competencies for MNS disorders in, 210 illicit drug dependence in, 44 cost-effectiveness of interventions, 118 microfinance in, 193 traditional medicine in, 202 YLL rates in, 44, 45–46f, 55 gender differences and, 45, 46f substance use disorders. See illicit drug dependence suicide and self-harm, 42, 163-81 of adolescents, 171 age pattern of, 164, 165*t*, 166–67*f* alcohol consumption and, 50, 129, 169, 175 as cause of death, 41, 164 changes in rates (2000-12), 164, 165t coping strategies and well-being, 172 cost-effectiveness of prevention efforts, 178 decriminalization of, 175 definition of, 163

depression and, 69, 176 drug misuse and, 175 early traumatic events associated with, 170-71 economic issues and, 175 effective interventions for, 11t epidemiology, 163 epilepsy and, 52 exposure to models, 170 family history of suicide, 170 of farmers, 171 gender differences, 164, 165t, 166-67f, 171 interventions for, 11t, 174–78 brief intervention and contact, 177 community platform interventions, 175-76 delivery platforms, 14t disasters and refugees, 177 examination stress, 175 gatekeeper training, 176 health care platform interventions, 177-78 medical management of poisoning with pesticides, 177 monitoring and reporting systems, 177 national suicide prevention strategies, 177-78 nongovernmental organization services, 175-76 population platform interventions, 174-75, 194 restricting access to lethal means, 17b, 174–75, 176, 185, 194, 222 safe storage of pesticides, 176 school-based interventions, 176 stigma and discrimination, 175 media reporting of, 175 mental disorders and alcohol misuse associated with, 169 methods, availability of, 168, 170 pesticide self-poisoning, 175, 177 Sri Lanka suicide prevention through pesticide regulation, 17*b*, 185*b* physical disorders and, 169 prevention in LMICs, 172-74 prior suicide attempts, 170 protective factors, 172 psychosocial life crises and, 169-70 as public health issue, 173 of refugees and internally displaced persons, 171-72, 177 religious and spiritual beliefs, 172 risk factors for, 37, 168–71, 173f, 178 schizophrenia and, 48 of sexual minorities, 172 stigma of, 176 strong personal relationships and, 172 substance use disorders and, 51, 55t, 110 suicide attempt rates, 164-68

suicide mortality rates, 164, 165t surveillance in LMICs, 168 survivors of suicide loss, 172 urban vs. rural locations, 170 WHO prevention guidelines, 57, 163, 173 YLLs and, 53, 55 supervised injecting facilities, 57, 115 support groups, 192-93, 194. See also self-help programs for alcohol use disorders, 136-37 for illicit drug dependence, 114, 115t suspension of driver's license, 135 sustainable development goal (SDG), 2b sustained headache relief (SHR), 100 Sweden cost of Alzheimer's disease treatment in, 98 dementia-related deaths in, 53 epilepsy-related deaths in, 52 Szekely, A., 176

Т

Tanzania epilepsy-related deaths in, 52 epilepsy treatment in, 89 task-sharing approach, 209–12, 210b taxation of alcoholic beverages, 131t, 132-33, 138, 221, 229 Taylor, B. J., 133-34 teacher training program to identify and assess mental health problems, 191, 191b TEAMcare USA and TEAMcare Canada, 213 telemedicine, 78 Ten Questions screen, 151, 151b testing blood alcohol concentration (BAC) testing of drivers, 134 breath testing of drivers, 134 Thailand alcoholic beverages, regulation of, 128 antidepressants and CBT as cost-effective interventions for depression in, 225 therapeutic community (TC) model, 117 Thinking Healthy Programme (Pakistan), 212 3 Dimensions of Care for Diabetes (UK), 213 Total Quality Management, 214 TPO (Healthnet Transcultural Psychosocial Organization), 17b traditional healers, 202 traffic accidents. See driving impaired and traffic accidents transcranial magnetic stimulation, 74 traumatic brain injury, measures to protect against, 186

treatment gap, 214 in epilepsy, 58, 92*f* treatment of MNS disorders, 4*b*, 8–12, 9–11*t. See also* interventions for MNS disorders cost-effectiveness of. *See* cost-effectiveness and affordability of interventions Ttofi, M. M., 150 tuberculosis, 50, 129, 212, 213–14 Turkey

early childhood enrichment project in, 192 suicide in, 170, 171

U

Uganda epilepsy treatment in, 89 specialists training primary health care staff in, 210 United Kingdom Alzheimer's disease, pharmacological interventions for, 98 bipolar disorder research in, 48 cognitive rehabilitation for dementia in, 97 community-based awareness in, 73 community-based vs. hospital-based programs in, 73 coping strategy program for mental health of dementia caregivers in, 225 crisis intervention teams in, 77 epilepsy-related deaths in, 52 parenting programs in, 223 3 Dimensions of Care for Diabetes, 213 United Nations Children's Fund Multiple Indicator Cluster Survey, 151 Convention on the Rights of Persons with Disabilities, 215 United States court-mandated drug treatment in, 113 depression in, 69 Drug Abuse Resistance Education (DARE) program, 114 fetal alcohol syndrome (FAS) warning labels in, 135 Good Behavior Game for classroom behavior management with young children, 114 stroke awareness program for children in, 189 TEAMcare USA, 213 universal health coverage, 5b, 18b, 19, 237-51. See also extended cost-effectiveness analysis (ECEA) health system goals, 237 MNS coverage, 237-38 pay out-of-pocket (OOP) for treatment, 237-38 University of Washington's Institute for Health Metrics and Evaluation, 38

unrecorded market of alcohol production and sales, 133, 138–39 urinary tract infections, 53

V

vicious cycle of social determinants, 3*b* violence alcohol-attributable, 50, 129 domestic violence legislation, 186 Vreeman, R. C., 150

W

warning labels on alcoholic beverages, 135, 139 web-based psychological therapy, 15, 78 Whiteford, H. A., 31 WHO. See World Health Organization whole-of-government approach, 205 whole-of-school approach, 150 women. See also gender differences; pregnancy gender equity and economic empowerment interventions, 193 postnatal depression. See postpartum depression suicide rates of, 171 workplace interventions, 194 drug testing, 113-14, 115t epilepsy, anti-stigma interventions for, 89 identification and case detection, 188 mood and anxiety disorders intervention, 73 promotion and primary prevention, 188 World Development Report (1993), 2b World Health Organization (WHO) Assessment Instrument for Mental Health Systems (WHO-AIMS) survey, 73 Atlas on Substance Use, 137 Building Back Better, 204 Child and Adolescent Mental Health Policies and Plans, 148 CHOosing Interventions that are Cost-Effective (CHOICE) project, 220, 226, 228, 228b, 232 Comprehensive Mental Health Action Plan, 22, 24 cost-effectiveness analysis, 18 detection of mental disorders, system for, 77 Global Health Estimates, 5, 163, 166f High-Level Meeting on Non-communicable Diseases (2011), 229 Integrated Management of Adult and Adolescent Illness (IMAI), 213 List of Essential Medicines, 57 Mental Health Gap Action Programme (mhGAP), 1, 5, 8, 17*b*, 22, 74, 77, 204, 245 alcohol consumption and, 135, 136 depression and, 208

Mental Health Global Action Program, 177

Ministerial Conference on Global Action Against Dementia (2015), 99 noncommunicable disease interventions package, 213 Preventing Suicide: A Global Imperative, 177 proposed regional framework in Eastern Mediterranean Region, 23–24b Public Health Action for the Prevention of Suicide, 177 on quality improvement (QI) mechanisms, 214 QualityRights Project, 186 QualityRights Toolkit, 215 recommended method for integrating hospitalbased and community-based mental health services, 16b Service Organization Pyramid for an Optimal Mix of Services for Mental Health, 202, 202f on suicide and suicide prevention, 57, 163, 173, 177, 178 World Mental Health Action Plan (2013-2020), 177 World Mental Health (WMH) surveys, 69–70, 71, 102, 166 YLDs assigned to MNS disorders, 30 World Psychiatric Association, 187

Y

years lived with disability (YLDs), 5, 6*f*, 30–31, 35, 35*f*, 37 adult mental disorders, 67–68, 68*f* epilepsy, 90 from natural history models, 43 neurological disorders, 87

population attributable fractions (PAFs) and, 44 schizophrenia, 68, 68f years of life lost (YLLs), 5, 6, 6f, 30-31, 35, 35f, 37, 41 alcohol use disorders, 43-45, 45f, 53, 55, 55t amphetamine dependence, 43 attributions needed for more accurate representation of MNS disorders, 55 cause of death and, 42-43, 46, 53-55 cocaine dependence, 43 dementia, 43, 45f depression, 49 differences in patterns of MNS prevalence and, 44-45, 45f gender differences, 45, 46f illicit drug dependence, 45f, 53, 110 gender differences and, 45, 46f natural history models and, 45-46 neurological disorders gender differences and, 45, 46f regional differences and, 55 opioid dependence, 37, 43 population attributable fractions (PAFs) and, 44 regional differences and, 53–54, 55f schizophrenia, 43, 45f, 48 suicide and, 53, 55

Z

Zambia epilepsy treatment in, 90 headache disorders and treatment in, 100, 102, 228*b* trauma-focused CBT for children in, 154