

Cambridge University Press

978-0-521-88419-8 - The WHO World Mental Health Surveys: Global Perspectives on the Epidemiology of Mental Disorders

Edited by Ronald C. Kessler and T. Bedirhan Ustun

Frontmatter

[More information](#)

THE WHO WORLD MENTAL HEALTH SURVEY: GLOBAL PERSPECTIVES ON THE EPIDEMIOLOGY OF MENTAL DISORDERS

The effect of mental illness on a global level is profound, with an impact on communities worldwide from a social, cultural, and economic perspective. Although most psychiatry and psychology texts provide some statistical analyses of mental health disorders and their treatment, the epidemiology of mental illness is still poorly understood. This book reports results from the World Health Organization (WHO) World Mental Health (WMH) Survey Initiative, the largest coordinated series of cross-national psychiatric epidemiological surveys ever undertaken. Results from discrete surveys of seventeen different countries on four continents are reported here for comparison and cross-referencing. Many of the countries included in the WMH surveys had never before collected data on the prevalence or correlates of mental disorders in their country, and others had information on mental disorders only from small regional studies prior to the WMH survey. These surveys provide valuable information for physicians and health policy planners and provide greater clarity on the global impact of mental illness and its undertreatment.

Dr. Ronald C. Kessler is a professor in the Department of Health Care Policy at Harvard Medical School.

Dr. T. Bedirhan Üstün works in the Classification, Assessment, Surveys, and Terminology Division of the Department of Health Financing and Stewardship at the World Health Organization, Geneva, Switzerland.

Cambridge University Press

978-0-521-88419-8 - The WHO World Mental Health Surveys: Global Perspectives on the Epidemiology of Mental Disorders

Edited by Ronald C. Kessler and T. Bedirhan Ustun

Frontmatter

[More information](#)

The WHO World Mental Health Survey: Global Perspectives on the Epidemiology of Mental Disorders

Edited by

Ronald C. Kessler

Harvard Medical School

T. Bedirhan Üstün

World Health Organization

*Published in collaboration with the World Health Organization,
Geneva, Switzerland*



CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press

978-0-521-88419-8 - The WHO World Mental Health Surveys: Global Perspectives on the Epidemiology of Mental Disorders

Edited by Ronald C. Kessler and T. Bedirhan Ustun

Frontmatter

[More information](#)

CAMBRIDGE UNIVERSITY PRESS

Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo, Delhi

Cambridge University Press

32 Avenue of the Americas, New York, NY 10013-2473, USA

www.cambridge.org

Information on this title: www.cambridge.org/9780521884198

© World Health Organization 2008

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2008

Printed in the United States of America

A catalog record for this publication is available from the British Library.

Library of Congress Cataloging in Publication Data

The WHO World Mental Health Survey: global perspectives on the epidemiology of mental disorders / edited by Ronald C. Kessler, T. Bedirhan Üstün.

p. ; cm.

Includes bibliographical references and index.

ISBN 978-0-521-88419-8 (hardback)

1. World Mental Health Survey Initiative. 2. Mental health – Statistics. 3. Mental health surveys. 4. Psychiatric epidemiology. I. Kessler, Ronald C. II. Üstün, T. B.

III. World Health Organization.

[DNLM: 1. Mental Disorders – epidemiology. 2. Health Surveys. WM 140 W927 2008]

RA790.5.W15 2008

362.2'0422–dc22 2008007732

ISBN 978-0-521-88419-8 hardback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party Internet Web sites referred to in this publication and does not guarantee that any content on such Web sites is, or will remain, accurate or appropriate.

Every effort has been made in preparing this publication to provide accurate and up-to-date information that is in accord with accepted standards and practice at the time of publication. Nevertheless, the authors, editors, and publisher can make no warranties that the information contained herein is totally free from error, not least because clinical standards are constantly changing through research and regulation. The authors, editors, and publisher therefore disclaim all liability for direct or consequential damages resulting from the use of material contained in this publication. Readers are strongly advised to pay careful attention to information provided by the manufacturer of any drugs or equipment that they plan to use.

Cambridge University Press

978-0-521-88419-8 - The WHO World Mental Health Surveys: Global Perspectives on the Epidemiology of Mental Disorders

Edited by Ronald C. Kessler and T. Bedirhan Üstün

Frontmatter

[More information](#)

Contents

Acknowledgments page ??

Contributors ??

PART I. METHODS

1 Introduction 3

Ronald C. Kessler and T. Bedirhan Üstün

2 Sample Designs and Sampling Procedures 14

Steven G. Heeringa, J. Elisabeth Wells, Frost Hubbard, Zeina N.

Mneimneh, Wai-Tat Chiu, Nancy A. Sampson, and Patricia A. Berglund

3 Implementation of the World Mental Health Surveys 33

Beth-Ellen Pennell, Zeina N. Mneimneh, Ashley Bowers, Stephanie

Chardoul, J. Elisabeth Wells, Maria Carmen Viana, Karl Dinkelmann,

Nancy Gebler, Silvia Florescu, Yanling He, Yueqin Huang, Toma Tomov,

and Gemma Vilagut Saiz

4 The World Health Organization Composite International Diagnostic Interview 58

Ronald C. Kessler and T. Bedirhan Üstün

5 Translation Procedures and Translation Assessment in the World Mental Health Survey Initiative 91

Janet Harkness, Beth-Ellen Pennell, Ana Villar, Nancy Gebler,

Sergio Aguilar-Gaxiola, and Ipek Bilgen

6 Concordance of the Composite International Diagnostic Interview Version 3.0 (CIDI 3.0) with Standardized Clinical Assessments in the WHO World Mental Health Surveys 114

Josep Maria Haro, Saena Arbabzadeh-Bouchez, Traolach S. Brugha,

Giovanni de Girolamo, Margaret E. Guyer, Robert Jin, Jean-Pierre

Lépine, Fausto Mazzi, Blanca Reneses, Gemma Vilagut Saiz,

Nancy A. Sampson, and Ronald C. Kessler

PART II. COUNTRY-SPECIFIC CHAPTERS

WHO: Regional Office for the Americas (AMRO) 131

7 Mental Disorders in Colombia: Results from the World Mental Health Survey 131

José Posada-Villa, Marcela Rodríguez, Patricia Duque, Alexandra

Garzón, Sergio Aguilar-Gaxiola, and Joshua Breslau

Cambridge University Press

978-0-521-88419-8 - The WHO World Mental Health Surveys: Global Perspectives on the Epidemiology of Mental Disorders

Edited by Ronald C. Kessler and T. Bedirhan Ustun

Frontmatter

[More information](#)

vi

Contents

- 8 The Mexican National Comorbidity Survey (M-NCS):
Overview and Results 144
Maria Elena Medina-Mora, Guilherme Borges, Carmen Lara, Corina Benjet, Clara Fleiz, G. Estela Rojas, Joaquín Zambrano, Jorge Villatoro, Jerónimo Blanco, Sergio Aguilar-Gaxiola, and Ronald C. Kessler
- 9 The National Comorbidity Survey Replication (NCS-R):
Cornerstone in Improving Mental Health and Mental
Health Care in the United States 165
Ronald C. Kessler, Patricia A. Berglund, Wai-Tat Chiu, Olga Demler, Meyer Glantz, Michael C. Lane, Robert Jin, Kathleen Ries Merikangas, Matthew Nock, Mark Olfson, Harold A. Pincus, Ellen E. Walters, Philip S. Wang, and Kenneth B. Wells
- WHO: Regional Office for Africa (AFRO) 211
- 10 Mental Disorders among Adult Nigerians: Risks,
Prevalence, and Treatment 211
Oye Gureje, Olusola Adeyemi, Nonyenim Enyidah, Michael Ekpo, Owoidoho Udofia, Richard Uwakwe, and Abba Wakil
- 11 The South African Stress and Health Study (SASH): A
Foundation for Improving Mental Health Care in South Africa 238
Allen A. Herman, David Williams, Dan J. Stein, Soraya Seedat, Steven G. Heeringa, and Hashim Moomal
- WHO: Regional Office for the Eastern Mediterranean (EMRO) 265
- 12 Mental Disorders and War in Lebanon 265
Elie G. Karam, Zeina N. Mneimneh, Aimee N. Karam, John A. Fayyad, Soumana C. Nasser, Hani Dimassi, and Mariana M. Salamoun
- WHO: Regional Office for Europe (EURO) 279
- 13 Mental Health in Belgium: Current Situation and Future
Perspectives 279
Ronny Bruffaerts, Anke Bonnewyn, and Koen Demyttenaere
- 14 The Prevalence of Mental Disorders and Service Use in
France: Results from a National Survey 2001–2002 305
Saena Arbabzadeh-Bouchez, Isabelle Gasquet, Vivianne Kovess-Masfety, Laurence Negre-Pages, Jean-Pierre Lépine
- 15 Prevalence and Treatment of Mental Disorders in
Germany: Results from the European Study of the
Epidemiology of Mental Disorders (ESEMEd) Survey 331
Jordi Alonso and Ronald C. Kessler
- 16 The Prevalence of Mental Disorders and Service Use in
Israel: Results from the National Health Survey, 2003–2004 346
Daphna Levinson, Yaacov Lerner, Nelly Zilber, Itzhak Levav, and Jacob Polakiewicz
- 17 The Prevalence of Mental Disorders and Service Use in
Italy: Results from the National Health Survey 2001–2003 364
Giovanni de Girolamo, Pierluigi Morosini, Antonella Gigantesco, Sara Delmonte, and Ronald C. Kessler

Cambridge University Press

978-0-521-88419-8 - The WHO World Mental Health Surveys: Global Perspectives on the Epidemiology of Mental Disorders

Edited by Ronald C. Kessler and T. Bedirhan Ustun

Frontmatter

[More information](#)**Contents****vii**

- 18 Mental Disorders and Service Use in the Netherlands: Results from the European Study of the Epidemiology of Mental Disorders (ESEMED) 388
Ron de Graaf, Johan Ormel, Margreet ten Have, Huibert Burger, and Martine Buist-Bouwman
- 19 The Epidemiology of Mental Disorders in the General Population of Spain 406
Josep Maria Haro, Jordi Alonso, Alejandra Pinto-Meza, Gemma Vilagut Saiz, Ana Fernández, Miquel Codony, Montserrat Martínez, Antonia Domingo, Juan Vicente Torres, Josué Almansa, Susana Ochoa, and Jaume Autonell
- 20 The State of Mental Health and Alcoholism in Ukraine 431
Evelyn J. Bromet, Semyon F. Gluzman, Nathan L. Tintle, Volodymyr I. Paniotto, Charles P. M. Webb, Victoria Zakhozha, Johan M. Havenaar, Zinoviy Gutkovich, Stanislav Kostyuchenko, and Joseph E. Schwartz
- WHO: Regional Office for the Western Pacific (WPRO) 447**
- 21 Mental Disorders and Service Use in China 447
Yueqin Huang, Zhaorui Liu, Mingyuan Zhang, Yucun Shen, Cheuk Him Adley Tsang, Yanling He, and Sing Lee
- 22 Twelve-month Prevalence, Severity, and Treatment of Common Mental Disorders in Communities in Japan: The World Mental Health Japan 2002–2004 Survey 474
Norito Kawakami, Tadashi Takeshima, Yutaka Ono, Hidenori Uda, Yoshibumi Nakane, Yosikazu Nakamura, Hisateru Tachimori, Noboru Iwata, Hideyuki Nakane, Makoto Watanabe, Yoichi Naganuma, Toshiaki A. Furukawa, Yukihiro Hata, Masayo Kobayashi, Yuko Miyake, and Takehiko Kikkawa
- 23 *Te Rau Hinengaro*: The New Zealand Mental Health Survey 486
Mark A. Oakley-Browne, J. Elisabeth Wells, and Kate M. Scott
- PART III. CROSS-NATIONAL COMPARISONS**
- 24 Lifetime Prevalence and Age of Onset Distributions of Mental Disorders in the World Mental Health Survey Initiative 511
Ronald C. Kessler, Sergio Aguilar-Gaxiola, Jordi Alonso, Matthias C. Angermeyer, James C. Anthony, Patricia A. Berglund, Somnath Chatterji, Giovanni de Girolamo, Ron de Graaf, Koen Demyttenaere, Isabelle Gasquet, Semyon F. Gluzman, Michael J. Gruber, Oye Gureje, Josep Maria Haro, Steven G. Heeringa, Aimee N. Karam, Norito Kawakami, Sing Lee, Daphna Levinson, Maria Elena Medina-Mora, Mark A. Oakley-Browne, Beth-Ellen Pennell, Maria Petukhova, José Posada-Villa, Ayelet Ruscio, Dan J. Stein, Cheuk Him Adley Tsang, and T. Bedirhan Üstün
- 25 Delay and Failure in Treatment Seeking after First Onset of Mental Disorders in the World Mental Health Survey Initiative 522
Philip S. Wang, Sergio Aguilar-Gaxiola, Jordi Alonso, Matthias C. Angermeyer, Guilherme Borges, Ronny Bruffaerts, Somnath Chatterji,

Cambridge University Press

978-0-521-88419-8 - The WHO World Mental Health Surveys: Global Perspectives on the Epidemiology of Mental Disorders

Edited by Ronald C. Kessler and T. Bedirhan Üstün

Frontmatter

[More information](#)

viii

Contents

- Wai-Tat Chiu, Giovanni de Girolamo, John A. Fayyad, Oye Gureje, Josep Maria Haro, Steven G. Heeringa, Yueqin Huang, Ronald C. Kessler, Vivianne Kovess-Masfety, Sing Lee, Daphna Levinson, Yoshibumi Nakane, Mark A. Oakley-Browne, Johan Ormel, Beth-Ellen Pennell, José Posada-Villa, and T. Bedirhan Üstün*
- 26 Prevalence and Severity of Mental Disorders in the World Mental Health Survey Initiative 534
Ronald C. Kessler, Sergio Aguilar-Gaxiola, Jordi Alonso, Matthias C. Angermeyer, James C. Anthony, Traolach S. Brugha, Somnath Chatterji, Giovanni de Girolamo, Koen Demyttenaere, Semyon F. Gluzman, Oye Gureje, Josep Maria Haro, Steven G. Heeringa, Irving Hwang, Elie G. Karam, Takehiko Kikkawa, Sing Lee, Jean-Pierre Lépine, Maria Elena Medina-Mora, Kathleen Ries Merikangas, Johan Ormel, Beth-Ellen Pennell, José Posada-Villa, T. Bedirhan Üstün, Michael R. Von Korff, Philip S. Wang, Alan M. Zaslavsky, and Mingyuan Zhang
- 27 Recent Treatment of Mental Disorders in the World Mental Health Survey Initiative 541
Philip S. Wang, Sergio Aguilar-Gaxiola, Jordi Alonso, Matthias C. Angermeyer, Guilherme Borges, Evelyn J. Bromet, Ronny Bruffaerts, Somnath Chatterji, Giovanni de Girolamo, Ron de Graaf, Oye Gureje, Josep Maria Haro, Steven G. Heeringa, Elie G. Karam, Ronald C. Kessler, Vivianne Kovess-Masfety, Michael C. Lane, Sing Lee, Daphna Levinson, Yutaka Ono, Beth-Ellen Pennell, Maria Petukhova, José Posada-Villa, Kathleen Saunders, Soraya Seedat, Yucun Shen, T. Bedirhan Üstün, and J. Elisabeth Wells
- PART IV. CONCLUSIONS**
- 28 Overview and Future Directions for the World Mental Health Survey Initiative 555
Ronald C. Kessler and T. Bedirhan Üstün
- Index* 569

Cambridge University Press

978-0-521-88419-8 - The WHO World Mental Health Surveys: Global Perspectives on the Epidemiology of Mental Disorders

Edited by Ronald C. Kessler and T. Bedirhan Ustun

Frontmatter

[More information](#)

Acknowledgments

The World Health Organization (WHO) World Mental Health (WMH) Survey Initiative had its beginnings in the late 1990s in the work of an earlier WHO research consortium (Kessler 1999). That earlier consortium was created to facilitate cross-national comparisons of the results obtained in community epidemiological surveys in which the WHO Composite International Diagnostic Interview (CIDI) (Robins et al. 1988) was used to estimate the prevalence and correlates of ICD-10 and DSM-III-R disorders. The members of that earlier consortium were frustrated by the lack of consistency in the measurement of the many nondiagnostic variables in early CIDI surveys that are of interest to researchers who carry out surveys of this type, such as measures of risk factors, social consequences, and treatment. As new researchers began contacting the consortium for advice in planning future CIDI surveys, we saw the opportunity to correct the problem of incomparability by bringing together these new researchers in order to coordinate the measurement of nondiagnostic variables in future CIDI surveys. Our hope at that time was that we might be able to coordinate such surveys from a half-dozen countries for purposes of rigorous cross-national comparison. We never anticipated that the new consortium would end up including the current complement of interviews with nearly 200,000 respondents in close to 30 countries, nor that our efforts to include nondiagnostic measures would result in the complete revision of the CIDI that has subsequently occurred (Kessler & Üstün, 2004).

This first volume in the series of volumes that will report key WMH results presents an overview of the Initiative and descriptive data on patterns and correlates of prevalence and treatment in the first 17 countries that completed

their WMH surveys. Future volumes will investigate more targeted issues and will expand the number of countries included as the data from these countries come on line. The results in the current volume will be updated for new WMH countries as the data from these countries become available. Our web site (www.hcp.med.harvard.edu/wmh) will provide details on access to these new results. The web site also lists the many journal articles and reports prepared by WMH collaborators to present country-specific, regional, and worldwide WMH results in a wide variety of topic areas. These postings are updated on an ongoing basis to provide current information on all available WMH reports.

We want to thank many people for making the WMH Survey Initiative possible. To begin at the beginning, we thank Darrel Regier for his vision and Lee Robins for her implementation in creating the first fully structured research diagnostic interview capable of being used by trained lay interviewers to make accurate diagnoses of mental disorders in general population samples. The instrument they developed, the Diagnostic Interview Schedule (DIS) (Robins et al. 1981), was used in the landmark Epidemiologic Catchment Area (ECA) surveys in the United States. The widespread dissemination of ECA results (Robins & Regier 1991) led to a new generation of psychiatric epidemiological studies being carried out in many countries around the world (Cross-National Collaborative Group 1992; Weissman et al. 1993; Weissman et al. 1994) and these, in turn, led to the development of the CIDI.

The Institute for Social Research (ISR) at the University of Michigan helped us early in the development of WMH in supporting and hosting several collaborator meetings. Steve Heeringa and Beth-Ellen Pennell from ISR, in addition, have been key collaborators from the beginning

Cambridge University Press

978-0-521-88419-8 - The WHO World Mental Health Surveys: Global Perspectives on the Epidemiology of Mental Disorders

Edited by Ronald C. Kessler and T. Bedirhan Ustun

Frontmatter

[More information](#)

x

Acknowledgments

of WMH as Co-Directors of the WMH Data Collection Coordinating Centre. Pennell spent a year in Geneva at WHO to help jump-start the training and quality control monitoring phases of the centralized data collection process. She and Heeringa and their staff have subsequently been the driving force behind the WMH data collection effort. We cannot thank them enough for their past and continued collaboration.

Norman Sartorius, the Director of the Department of Mental Health at WHO at the time the CIDI was developed, worked with Drs. Robins and Regier to expand the DIS to include ICD-10 criteria and in this way created the first version of the CIDI. Dr. Sartorius also worked to promote use of the CIDI once it became available, leading to the creation of the first WHO CIDI Consortium and indirectly to the WMH Survey Initiative. All WMH collaborators are very grateful to him, as we are to Drs. Robins and Regier, for their vision and their foundational work. Later Directors of the Department of Mental Health at WHO, including Jorge Alberto Costa e Silva and Benedetto Saraceno, along with WHO Executive Directors Tim Evans, Julio Frenk, Chris Murray, and Yasuhiro Suzuki, also supported our work in carrying out systematic cross-national comparative studies. Their help is gratefully acknowledged.

We would also like to thank the Pan American Health Organization (PAHO) for their assistance in helping us expand the WMH Survey Initiative into the countries of their region. We are especially grateful to José Miguel Caldas de Almeida, the past Chief of the Mental Health and Specialized Programs Unit at PAHO. His support was invaluable to us in promoting WMH and encouraging a number of countries in this part of the Americas to carry out WMH surveys. We are also grateful for the support of Itzhak Levav and Claudio Miranda during their tenures at PAHO, as well as for the support of Jorge Rodriguez, the present Unit Chief of the PAHO Mental Health, Substance Abuse and Rehabilitation Unit.

Bob Rose, during his tenure as Director of the Health Program at the John D. and Catherine T. MacArthur Foundation, supported the early developmental phases of WMH work. We are

very grateful to Dr. Rose and the MacArthur Foundation for affording us the opportunity to hold international planning meetings and for supporting the work of the WMH Data Collection Coordinating Centre. We also want to thank the Pfizer Foundation, which provided additional core WMH support during the critical early phases of the Initiative. The Pfizer Foundation also funded the initial WMH surveys in China, as well as early Initiative planning meetings. They continue to support WMH in numerous ways that are essential to our success.

An important development in the early days of the WMH Survey Initiative was the simultaneous funding of surveys in six Western European countries in a public-private collaboration between the European Commission and Smith-KlineBeecham, with subsequent continued support of this project by GlaxoSmithKline. We were fortunate to have very helpful and enthusiastic project officers, Marc Ratcliffe and Bruce Wang, who helped launch this project under the leadership of Jordi Alonso, providing us with a critical mass that sustained us during the early years of WMH. We thank them for this vital support.

The U.S. National Institute of Mental Health (NIMH) has also provided us with valuable support for a number of important WMH activities, including funding for surveys in three countries (South Africa, Ukraine, USA), for centralized data analysis, for our most recent annual WMH collaborator meetings, and for meetings to translate and adapt the CIDI into Spanish. We would like to thank our project officers, Karen Bourdon, Lisa Colpe, and Mercedes Rubio for all their help in these undertakings. We also thank Juan Ramos, who during his tenure at NIMH was instrumental in helping us expand our initiative into the PAHO countries, and the late Ken Lutterman, who during his tenure at NIMH was instrumental in helping us expand the WMH into South Africa.

Centralized WMH analyses have also been supported by a number of other funders whose assistance we would like to acknowledge here. In addition to NIMH (R01 MH070884, R13-MH066849, R01-MH069864), the John D. and Catherine T. MacArthur Foundation, and the

Cambridge University Press

978-0-521-88419-8 - The WHO World Mental Health Surveys: Global Perspectives on the Epidemiology of Mental Disorders

Edited by Ronald C. Kessler and T. Bedirhan Ustun

Frontmatter

[More information](#)**Acknowledgments****xi**

Pfizer Foundation, these include AstraZeneca International, Bristol-Myers Squibb, Eli Lilly and Company Foundation, the Fogarty International Center (FIRCA R03-TW006481), GlaxoSmith-Kline, the U.S. National Institute of Drug Abuse (NIDA; R01 DA016558), Ortho-McNeil Pharmaceuticals, and the Pan American Health Organization.

Finally, we want to thank our support staff for their tireless work in helping us assemble this first WMH series volume. We are especially grateful to Alison Hoffnagle for her efforts in coordinating the preparation and processing of all the chapters in this volume. We also thank Julie Berenzweig, Eric Bourke, Jerry Garcia, Keri Godin, Emily Phares, Nancy Sampson, Todd Strauss, Laurel Valchuis, Elaine Veracruz, and Lisa Wittenberg for all their hard work on this volume to bring it to completion.

The author alone is responsible for the views expressed in this publication, and they do not necessarily represent the decisions, policy, or views of the World Health Organization.

REFERENCES

- Cross-National Collaborative Group. (1992). The changing rate of major depression. Cross-national comparisons. *Journal of the American Medical Association*, 268, 3098–105.
- Kessler, R. C. (1999). The World Health Organization International Consortium in Psychiatric Epidemiology (ICPE): Initial work and future directions – The NAPE lecture 1998. *Acta Psychiatrica Scandinavica*, 99, 2–9.
- Kessler, R. C. & Üstün, T. B. (2004). The World Mental Health (WMH) Survey Initiative Version of the World Health Organization (WHO) Composite International Diagnostic Interview (CIDI). *The International Journal of Methods in Psychiatric Research*, 13, 93–121.
- Robins, L. N., Helzer, J. E., Croughan, J. L. & Ratcliff, K. S. (1981). National Institute of Mental Health Diagnostic Interview Schedule: Its history, characteristics and validity. *Archives of General Psychiatry*, 38, 381–9.
- Robins, L. N. & Regier, D. A., eds. (1991). *Psychiatric Disorders in America: The Epidemiologic Catchment Area Study*. New York: Free Press.
- Robins, L. N., Wing, J., Wittchen, H. U., Helzer, J. E., Babor, T. F., Burke, J., Farmer, A., Jablenski, A., Pickens, R., Regier, D. A., Sartorius, N. & Towle, L. H. (1988). The Composite International Diagnostic Interview. An epidemiologic instrument suitable for use in conjunction with different diagnostic systems and in different cultures. *Archives of General Psychiatry*, 45, 1069–77.
- Weissman, M. M., Bland, R. C., Canino, G. J., Greenwald, S., Hwu, H. G., Lee, C. K., Newman, S. C., Oakley-Browne, M. A., Rubio-Stipec, M. & Wickramaratne, P. J. (1994). The cross national epidemiology of obsessive compulsive disorder. The Cross National Collaborative Group. *Journal of Clinical Psychiatry*, 55 Suppl. 5–10.
- Weissman, M. M., Bland, R., Joyce, P. R., Newman, S., Wells, J. E. & Wittchen, H. U. (1993). Sex differences in rates of depression: Cross-national perspectives. *Journal of Affective Disorders*, 29, 77–84.

Cambridge University Press

978-0-521-88419-8 - The WHO World Mental Health Surveys: Global Perspectives on the Epidemiology of Mental Disorders

Edited by Ronald C. Kessler and T. Bedirhan Ustun

Frontmatter

[More information](#)

Contributors

Olusola Adeyemi, MBBS, FWACP

Federal Psychiatric Hospital, Kaduna, Nigeria

Sergio Aguilar-Gaxiola, MD, PhD

Center for Reducing Health Disparities,
University of California, Davis School of
Medicine, Sacramento, CA, USA

Josué Almansa, BSc

Institut Municipal d'Investigació Mèdica
(IMIM-Hospital del Mar), Barcelona,
Spain

Jordi Alonso, MD, PhD

Institut Municipal d'Investigació Mèdica
(IMIM-Hospital del Mar), Barcelona, Spain;
CIBER en Epidemiología y Salud Pública
(CIBERESP), Barcelona, Spain

Matthias C. Angermeyer, MD

Center for Public Mental Health, Gösing am
Wagram, Austria

James C. Anthony, MSc, PhD

Department of Epidemiology, School of
Medicine, Michigan State University, East
Lansing, MI, USA

Saena Arbabzadeh-Bouchez, MD

Hôpital Fernand Widal, Paris, France

Jaume Autonell, MD

Sant Joan de Déu-SSM. Fundació Sant Joan de
Déu, Barcelona, Spain

Corina Benjet, PhD

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

Patricia A. Berglund, MBA

Institute for Social Research, University of
Michigan, Ann Arbor, MI, USA

Ipek Bilgen, MA

University of Nebraska–Lincoln, USA

Jerónimo Blanco, BS

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

Anke Bonnewyn, MA

Department of Neurosciences and Psychiatry,
University Hospital Gasthuisberg, Leuven,
Belgium

Guilherme Borges, ScD

Department of Epidemiology, National Institute
of Psychiatry, Mexico City, Mexico

Ashley Bowers, MS

Institute for Social Research, University of
Michigan, Ann Arbor, MI, USA

Joshua Breslau, PhD

Center for Reducing Health Disparities,
University of California–Davis School of
Medicine, Sacramento, CA, USA

Evelyn J. Bromet, PhD

State University of New York, Stony Brook, NY,
USA

Ronny Bruffaerts, PhD

Department of Neurosciences and Psychiatry,
University Hospital Gasthuisberg, Leuven,
Belgium

Traolach S. Brugha, PhD, MRCPsych

Department of Health Sciences, University of
Leicester, United Kingdom

Martine Buist-Bouwman, PhD

Netherlands Institute of Mental Health and
Addiction, Utrecht, Netherlands; U. Medical
Center Gronigen, University of Gronigen,
Netherlands

Huibert Burger, MD, PhD

University Medical Center Groningen,
University of Groningen,
Netherlands

Cambridge University Press

978-0-521-88419-8 - The WHO World Mental Health Surveys: Global Perspectives on the Epidemiology of Mental Disorders

Edited by Ronald C. Kessler and T. Bedirhan Ustun

Frontmatter

[More information](#)

xiv

Contributors

Stephanie Chardoul, BA

Institute for Social Research, University of Michigan, Ann Arbor, MI, USA

Somnath Chatterji, MD

Global Programme on Evidence for Health Policy, World Health Organization, Geneva, Switzerland

Wai-Tat Chiu, MA

Department of Health Care Policy, Harvard Medical School, Boston, MA, USA

Miquel Codony, MD, MPH

Institut Municipal d'Investigació Mèdica (IMIM-Hospital del Mar), Barcelona, Spain

Giovanni de Girolamo, MD

Health Care Research Agency, Emilia-Romagna Region, Bologna, Italy

Ron de Graaf, PhD

Netherlands Institute of Mental Health and Addiction, Utrecht, Netherlands

Sara Delmonte, MD

Psychiatric University Clinic, University of Modena and Reggio Emilia, Modena, Italy

Olga Demler, MA, MS

Department of Biostatistics, Boston University, Boston, MA, USA

Koen Demyttenaere, MD, PhD

Department of Neurosciences and Psychiatry, University Hospital Gasthuisberg, Leuven, Belgium

Hani Dimassi, PhD

Institute for Development Research Advocacy and Applied Care (IDRAAC), Beirut, Lebanon; School of Pharmacy, Lebanese American University, Byblos, Lebanon

Karl Dinkelmann, BA

Institute for Social Research, University of Michigan, Ann Arbor, MI, USA

Antonia Domingo, MD, PhD

Institut Municipal d'Investigació Mèdica (IMIM-Hospital del Mar), Barcelona, Spain

Patricia Duque, TS

Colegio Mayor de Cundinamarca University, Bogota, Colombia

Michael Ekpo, MBBS, FWACP

Federal Psychiatric Hospital, Calabar, Nigeria

Nonyenim Enyidah, MBBS, FWACP

Psychiatric Hospital, Port Harcourt, Nigeria

John A. Fayyad, MD

Institute for Development, Research, Advocacy and Applied Care (IDRAAC), the Department of Psychiatry and Clinical Psychology at the Balamand University Faculty of Medicine and St George Hospital University Medical Center, Beirut, Lebanon

Ana Fernández, BA

Sant Joan de Déu-SSM, Fundació Sant Joan de Déu, Barcelona, Spain

Clara Fleiz, BA

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

Silvia Florescu, PhD

National School of Public Health and Health Services Management, Bucharest, Romania

Toshiaki A. Furukawa, MD

Department of Psychiatry and Cognitive–Behavioral Medicine, Nagoya City University Graduate School of Medical Sciences, Japan

Alexandra Garzón, TS

Colegio Mayor de Cundinamarca University, Bogota, Colombia

Isabelle Gasquet, MD, PhD

INSERM U669, Hôpital Cochin, Paris, France

Nancy Gebler, MA

Institute for Social Research, University of Michigan, Ann Arbor, MI, USA

Antonella Gigantesco, PsyD

National Centre for Epidemiology, Health Promotion and Surveillance, National Institute of Health, Rome, Italy

Cambridge University Press

978-0-521-88419-8 - The WHO World Mental Health Surveys: Global Perspectives on the Epidemiology of Mental Disorders

Edited by Ronald C. Kessler and T. Bedirhan Ustun

Frontmatter

[More information](#)**Contributors****xv****Meyer Glantz, PhD**National Institute on Drug Abuse, Bethesda,
MD, USA**Semyon F. Gluzman, MD**

Ukrainian Psychiatric Association, Kiev, Ukraine

Michael J. Gruber, MSHarvard Medical School, Department of Health
Care Policy, Boston, MA, USA**Oye Gureje, DSc, FRCPsych**Department of Psychiatry, University College
Hospital, Ibadan, Nigeria**Zinoviĭ Gutkovich, MD**St. Luke's–Roosevelt Hospital Center, New York,
NY, USA**Margaret E. Guyer, PhD**Massachusetts Mental Health Center, Boston,
MA, USA**Janet Harkness, PhD**University of Nebraska–Lincoln, USA; ZUMA,
Mannheim, Germany**Josep Maria Haro, MD, PhD**Sant Joan de Déu–SSM, Fundació Sant Joan de
Déu, Barcelona, Spain**Yukihiro Hata, MD**Department of Psychiatry, Field of Social and
Behavioral Medicine, Kagoshima University
Graduate School of Medical and Dental
Sciences, Japan**Johan M. Havenaar, MD, PhD**

Free University of Amsterdam, Netherlands

Yanling He, MD

Shanghai Mental Health Center, P. R. China

Steven G. Heeringa, PhDInstitute for Social Research, University of
Michigan, Ann Arbor, MI, USA**Allen A. Herman, MD, PhD**Medical University of Southern Africa, Pretoria,
South Africa**Yueqin Huang, MD, MPH, PhD**Institute of Mental Health, Peking University,
Beijing, P. R. China**Frost Hubbard, MA**Institute for Social Research, University of
Michigan, Ann Arbor, MI, USA**Irving Hwang, MA**Harvard Medical School, Department of Health
Care Policy, Boston, MA, USA**Noboru Iwata, PhD**Department of Clinical Psychology, Hiroshima
International University, Japan**Robert Jin, MA**Harvard Medical School, Department of Health
Care Policy, Boston, MA, USA**Aimee N. Karam, MD**Institute for Development, Research, Advocacy
and Applied Care (IDRAAC), the
Department of Psychiatry and Clinical
Psychology at the Balamand University
Faculty of Medicine and St George Hospital
University Medical Center, Beirut, Lebanon**Elie G. Karam, MD**Institute for Development, Research, Advocacy
and Applied Care (IDRAAC), the
Department of Psychiatry and Clinical
Psychology at the Balamand University
Faculty of Medicine and St George Hospital
University Medical Center, Beirut, Lebanon**Norito Kawakami, MD**Department of Mental Health, Tokyo University
Graduate School of Medicine, Tokyo, Japan**Ronald C. Kessler, PhD**Department of Health Care Policy, Harvard
Medical School, Boston, MA, USA**Takehiko Kikkawa, MD**Department of Human Well-Being, Chubu
Gakuin University, Gifu, Japan**Masayo Kobayashi, MD**Department of Public Health, Jichi Medical
School, Minamikawachi, Japan**Stanislav Kostyuchenko, MD**Ukrainian Psychiatric Association, Kiev,
Ukraine**Vivianne Kovess-Masfety, MD, PhD**MGEN Foundation for Public Health, Paris,
France

Cambridge University Press

978-0-521-88419-8 - The WHO World Mental Health Surveys: Global Perspectives on the Epidemiology of Mental Disorders

Edited by Ronald C. Kessler and T. Bedirhan Ustun

Frontmatter

[More information](#)**xvi****Contributors****Michael C. Lane, MS**

Department of Health Care Policy, Harvard Medical School, Boston, MA, USA

Carmen Lara, MD

Autonomous University of Puebla, Puebla, Mexico; Ramón de la Fuente National Institute of Psychiatry, Mexico City, Mexico

Sing Lee, MB, BS

Department of Psychiatry, University of Hong Kong, P. R. China

Jean-Pierre L epine, MD

H opital Lariboisi ere Fernand Widal, Assistance Publique H opitaux de Paris, France

Yaacov Lerner, MD

Falk Institute for Mental Health Studies, Jerusalem, Israel

Itzhak Levav, MD

French Research Center of Jerusalem, Israel

Daphna Levinson, PhD

Department of Research and Planning, Mental Health Services, Ministry of Health, Jerusalem, Israel

Zhaorui Liu, MD, MPH

Institute of Mental Health, Peking University, Beijing, P. R. China

Montserrat Mart inez, BSc

Institut Municipal d'Investigaci o M edica (IMIM-Hospital del Mar), Barcelona, Spain

Fausto Mazzi, MD

Universita degli Studi dio Modena e Regio, Emilia, Italy

Maria Elena Medina-Mora, PhD

Ram on de la Fuente National Institute of Psychiatry, Mexico City, Mexico

Kathleen Ries Merikangas, PhD

Division of Service and Intervention Research, National Institute of Mental Health, Bethesda, MD, USA

Yuko Miyake, PhD

National Institute of Mental Health, National Center of Neurology and Psychiatry, Tokyo, Japan

Zeina N. Mneimneh, MPH

Institute for Development, Research, Advocacy and Applied Care (IDRAAC), Lebanon, Beirut; University of Michigan, Institute for Social Research, Ann Arbor, MI, USA

Hashim Moomal, MD

University of the Witwatersrand, Johannesburg, South Africa

Pierluigi Morosini, MD

National Centre for Epidemiology, Health Promotion and Surveillance, National Institute of Health, Rome, Italy

Yoichi Naganuma, PSW, MSc

National Institute of Mental Health, National Center of Neurology and Psychiatry, Tokyo, Japan

Yosikazu Nakamura, MD, MPH, FFPH

Department of Public Health, Jichi Medical School, Minamikawachi, Japan

Hideyuki Nakane, MD

Division of Neuropsychiatry, Department of Translational Medical Sciences, Nagasaki University Graduate School of Biomedical Sciences, Japan

Yoshibumi Nakane, MD

Division of Human Sociology, Nagasaki International University Graduate School, Japan

Soumana C. Nasser, PharmD

Institute for Development Research Advocacy and Applied Care (IDRAAC), Beirut, Lebanon; School of Pharmacy, Lebanese American University, Byblos, Lebanon

Laurence Negre-Pages, PhD

Toulouse University Hospital, Pharmacology Unit, Toulouse, France; and LN Pharma, Toulouse, France

Matthew Nock, PhD

Department of Psychology, Harvard University, Cambridge, MA, USA

Mark A. Oakley-Browne, PhD

Department of Rural and Indigenous Health, School of Rural Health, Faculty of Medicine, Nursing and Health Sciences, Monash University, Victoria, Australia

Cambridge University Press

978-0-521-88419-8 - The WHO World Mental Health Surveys: Global Perspectives on the Epidemiology of Mental Disorders

Edited by Ronald C. Kessler and T. Bedirhan Ustun

Frontmatter

[More information](#)**Contributors****xvii****Susana Ochoa, PhD**

Sant Joan de Déu-SSM, Fundació Sant Joan de Déu, Barcelona, Spain

Mark Olfson, MD, MPH

Department of Psychiatry, Columbia University, New York, NY, USA

Yutaka Ono, MD

Health Center, Keio University, Yokohama, Japan

Johan Ormel, PhD

Netherlands Institute of Mental Health and Addiction, Utrecht, Netherlands

Volodymyr I. Paniotto, PhD

Kiev International Institute of Sociology and National University of Kyiv-Mohyla Academy, Kiev, Ukraine

Beth-Ellen Pennell, MA

Institute for Social Research, University of Michigan, Ann Arbor, MI, USA

Maria Petukhova, PhD

Harvard Medical School, Department of Health Care Policy, Boston, MA, USA

Harold A. Pincus, MD

Department of Psychiatry, Columbia University, New York, NY, USA

Alejandra Pinto-Meza, PhD

Sant Joan de Déu-SSM, Fundació Sant Joan de Déu, Barcelona, Spain

Jacob Polakiewicz

Department of Research and Planning, Mental Health Services, Ministry of Health, Jerusalem, Israel

José Posada-Villa, MD

Medico Psiquiatra, U. Javerina, Centro Medico de la Sabana, Bogota, Colombia

Blanca Reneses, MD

Hospital Clinico San Carlos, Department of Psychiatry, Madrid, Spain

Marcela Rodríguez, MD

Colegio Mayor de Cundinamarca University, Bogota, Colombia

G. Estela Rojas, BA

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

Ayelet Ruscio, PhD

University of Pennsylvania, Philadelphia, PA, USA

Mariana M. Salamoun, BA, BS

Institute for Development, Research, Advocacy and Applied Care (IDRAAC), Beirut, Lebanon

Nancy A. Sampson, BA

Harvard Medical School, Department of Health Care Policy, Boston, MA, USA

Kathleen Saunders, JD

Group Health Cooperative Center for Health Studies, Seattle, WA, USA

Joseph E. Schwartz, PhD

State University of New York, Stony Brook, NY, USA

Kate M. Scott, PhD

Department of Psychological Medicine, Wellington School of Medicine and Health Sciences, University of Otago, Wellington, New Zealand

Soraya Seedat, MD

MRC Research Unit on Anxiety and Stress Disorders, Cape Town, South Africa

Yucun Shen, MD, PhD

Institute of Mental Health, Peking University, Beijing, P. R. China

Dan J. Stein, MD, PhD

Department of Psychiatry, University of Cape Town, South Africa

Hisateru Tachimori, PhD

National Institute of Mental Health, National Center of Neurology and Psychiatry, Tokyo, Japan

Tadashi Takeshima, MD

National Institute of Mental Health, National Center of Neurology and Psychiatry, Tokyo, Japan

Margreet ten Have, PhD

Netherlands Institute of Mental Health and Addiction, Utrecht, Netherlands

Nathan L. Tintle, PhD

Hope College, Holland, MI, USA

Cambridge University Press

978-0-521-88419-8 - The WHO World Mental Health Surveys: Global Perspectives on the Epidemiology of Mental Disorders

Edited by Ronald C. Kessler and T. Bedirhan Ustun

Frontmatter

[More information](#)**xviii****Contributors****Toma Tomov, MA, PhD**Alexandrovska Hospital, Department of
Psychiatry, Sofia, Bulgaria**Juan Vicente Torres, BSc**Sant Joan de Déu-SSM, Fundació Sant Joan de
Déu, Barcelona, Spain**Cheuk Him Adley Tsang, BSocSci**Hong Kong Mood Disorder Center, The Chinese
University of Hong Kong, Hong Kong Special
Administrative Region, P. R. China**Hidenori Uda, MD**Director General of the Health, Social Welfare,
and Environmental Department, Osumi
Regional Promotion Bureau, Kagoshima
Prefecture, Japan**Owoidoho Udofia, MBBS, FMCPsych**Department of Psychiatry, University of
Calabar, Nigeria**T. Bedirhan Üstün, MD**Department of Classifications and Terminology
(CAT), World Health Organization, Geneva,
Switzerland**Richard Uwakwe, MBBS, FMCPsych**Faculty of Medicine, College of Health Sciences,
Nnamdi Azikiwe University, Awka, Nnewi,
Nigeria**Maria Carmen Viana, MD, PhD**Escola de Medicina da Santa Casa de
Misericórdia de Vitória, Departamento de
Clínica Médica, Disciplina de Psiquiatria,
Vitoria, Brasil**Gemma Vilagut Saiz, BSc**Institut Municipal d'Investigació Mèdica
(IMIM-Hospital del Mar), Barcelona, Spain;
CIBER en Epidemiología y Salud Pública
(CIBERESP), Barcelona, Spain**Ana Villar, PhD**

University of Nebraska–Lincoln, USA

Jorge Villatoro, MARamón de la Fuente National Institute of
Psychiatry, Mexico City, Mexico**Michael R. Von Korff, ScD**Group Health Cooperative, Center for Health
Studies, Seattle, WA, USA**Abba Wakil, MBBS, FWACP**Federal Psychiatric Hospital, Maiduguri,
Nigeria**Ellen E. Walters, MS**Department of Health Care Policy, Harvard
Medical School, Boston, MA, USA**Philip S. Wang, MD, PhD**Division of Service and Intervention Research,
National Institute of Mental Health,
Bethesda, MD, USA**Makoto Watanabe, MD, PhD**Department of Public Health, Jichi Medical
School, Minamikawachi, Japan**Charles P. M. Webb, PhD**State University of New York, Stony Brook, NY,
USA**J. Elisabeth Wells, PhD**Department of Public Health and General
Practice, Christchurch School of Medicine
and Health Sciences, University of Otago,
Christchurch, New Zealand**Kenneth B. Wells, MD, MPH**University of California, Los Angeles, CA,
USA**David Williams, PhD, MPH**Harvard School of Public Health, Boston, MA,
USA**Victoria Zakhosha, MA**Kiev International Institute of Sociology and
National University of Kyiv-Mohyla
Academy, Kiev, Ukraine**Joaquín Zambrano, BS**Ramón de la Fuente National Institute of
Psychiatry, Mexico City, Mexico**Alan M. Zaslavsky, PhD**Department of Health Care Policy, Harvard
Medical School, Boston, MA, USA**Mingyuan Zhang, MD**Shanghai Mental Health Center, Shanghai,
P. R. China**Nelly Zilber, ès Sc**Falk Institute for Mental Health Studies, French
Research Center of Jerusalem, Israel