Geriatric Mental Health
Disaster and Emergency
Preparedness
John A. Toner, EdD, PhD, is associate professor of Medical Psychology, director of Residency/Fellowship Programs, and co-director of the Statewide Geriatric Psychiatry Residency/Fellowship Program at the Columbia University Stroud Center and Department of Psychiatry. He is a senior research scientist at the New York State Psychiatric Institute and holds interdepartmental and interuniversity appointments in the Mailman School of Public Health, where he has been a recipient of the Calderone Prize for Faculty Research, and the State University of New York, Upstate Medical University, where he is a director of the Center for Aging Research, Education, and Services. He is the director of the Columbia–New York Geriatric Education Center of the Consortium of New York Geriatric Education Centers and the Rural Geriatric Mental Health Initiative (POISE). Trained in gerontology and geriatric neuropsychology, Dr. Toner has devoted over 20 years to educating and recruiting medical doctors and other health care professionals to work in medically underserved areas. He is an editorial board member and fellow of numerous scientific journals and professional societies.

Therese M. Mierswa, MSW, is a Fordham University Andrus Scholar Geriatric Social Worker currently serving as the coordinator for assisted living in the Maryknoll Fathers and Brothers Retirement Community in Ossining, New York. Prior to this position, she was the program coordinator for the Columbia University Statewide Geriatric Psychiatry Residency Program. Ms. Mierswa has a Certificate of Training from the AMA and National Disaster Life Support Foundation in Basic Disaster Life Support, a certificate in Geriatric Mental Health and Emergency Preparedness from the Consortium of New York Geriatric Centers (CNYGEC), and CMI Education Institute credits in crisis debriefing for survivors of trauma and violence.

Judith L. Howe, PhD, is associate professor in the Brookdale Department of Geriatrics and Palliative Medicine, Mount Sinai School of Medicine; associate director/education and evaluation, Geriatric Research, Education, and Clinical Center (GRECC) at the James J. Peters VA Medical Center; and director, Consortium of New York Geriatric Education Centers. She is a board member of the Association for Gerontology in Higher Education (AGHE) and president of the National Association of Geriatric Education Centers. Dr. Howe is the Editor designate of the Gerontology and Geriatric Education Journal. Dr. Howe is a fellow of the New York Academy of Medicine, AGHE, and the Gerontological Society of America.
Dedicated to Flo Aaroe,
who personifies what it means to
take the high road,
and to the countless number of
invisible and silent survivor-victims of disasters;
to Rev. James J. Dineen, SJ,
who brought spiritual support
to victims' families and workers at Ground Zero;
and to Flo's son,
Bruce E. Simmons,
What though the radiance which was once so bright
    Be now for ever taken from my sight,
Though nothing can bring back the hour
Of splendour in the grass, of glory in the flower;
    We will grieve not, rather find
Strength in what remains behind;
    In the primal sympathy
Which having been must ever be;
In the soothing thoughts that spring
    Out of human suffering;
In the faith that looks through death,
In years that bring the philosophic mind
—William Wordsworth
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Contributors

Othmane Alami, MD
Acting Medical Director
Mental Health PSL Community Outreach Team
Minneapolis, Minnesota
Adjunct Clinical Assistant Professor
University of Minnesota at Minneapolis

Lynda Atack, RN, PhD
Professor
Baccalaureate Nursing Program
School of Community and Health Sciences
Centennial College
Toronto, Canada

Annette M. Atanous, MSSW
Education Specialist
U.S. Department of Veterans Affairs
James J. Peters VA Medical Center
Geriatric Research, Education, and Clinical Center (GRECC)
Bronx, New York

D. Peter Birkett, MD
Director
Statewide Geriatric Psychiatry Residency/Fellowship Program
Associate Research Scientist
Columbia University Stroud Center
New York, New York

Trish Dryden, RMT, MEd
Director
Applied Research and Innovation
Centennial College
Toronto, Canada

Michael B. Friedman, LMSW
Director
Center for Policy, Advocacy, and Education
Geriatric Mental Health Alliance of New York
New York, New York
Terry Fulmer, PhD, RN, FAAN
Erline Perkins McGriff Professor
Dean
New York University College of Nursing
New York, New York

William Grant, EdD
Executive Director
Center for Emergency Preparedness
SUNY Upstate Medical University
Syracuse, New York

Neil Hall, MD, MBA
Attending Physician
Associate Research Scientist
Columbia University Stroud Center
New York, New York

Judith L. Howe, PhD
Associate Professor
Brookdale Department of Geriatrics and Palliative Medicine
Mount Sinai School of Medicine
New York, New York
Associate Director/Education and Evaluation
VISN 3 Geriatrics Research, Education, and Clinical Center Program (GRECC)
at James J. Peters VA Medical Center
Bronx, New York
Director
Consortium of New York Geriatric Education Centers
Director
VA Interprofessional Palliative Care Fellowship Program

Joanne Izzo, MDiv, LCSW-R
Social Worker
Posttraumatic Stress Disorder Outpatient
Department of Veterans Affairs
Brooklyn Campus, New York Harbor Healthcare Medical Center
Brooklyn, New York

Beth A. Kallmyer, LCSW
Director
Client Services
Alzheimer’s Association
Chicago, Illinois

Jed A. Levine, MA
Executive Vice President
Director of Programs and Services
New York City Chapter of the Alzheimer’s Association
New York, New York
Richard Mandelbaum, RH, AHG
Registered Herbalist
Forestburgh, New York

Lucia McBee, LCSW, MPH, CYI
Social Work Supervisor
Jewish Home Lifecare
Adjunct Lecturer
Columbia University School of Social Work
New York, New York

Evelyn S. Meyer, MA, LMSW
Artist and Freelance Author
Los Angeles, California

Therese M. Mierswa, MSW
Coordinator
Assisted Living
Maryknoll Fathers and Brothers
Ossining, New York

Mark R. Nathanson, MD
Director
Psychiatric Emergency Services
Elmhurst Hospital and Medical Center
Elmhurst, New York
Assistant Clinical Professor
Columbia University Department of Psychiatry
Attending Physician
New York Presbyterian Hospital
New York, New York

Nora O'Brien-Suric, MA
Senior Program Officer
The John A. Hartford Foundation
New York, New York

Ian Portelli, PhD, MMS, CRA
Director
Emergency Medicine Research
New York University School of Medicine
Department of Emergency Medicine
NYU Center for Catastrophe, Preparedness, and Response
New York, New York

Jenny Riddell, MA
Lecturer and Psychotherapist
Department of Interdisciplinary Studies in Professional Practice
School of Community and Health Sciences
City University, London, UK
Douglas M. Sanders, PhD
Deputy Clinical Director and Licensed Clinical Psychologist
Rockland Psychiatric Center (Middletown Campus)
Cognitive Remediation Program
Middletown, New York

Andrea Sherman, PhD
President
Transitional Keys
Master Trainer
National Center for Creative Aging
Washington, DC

Philippa Sully, MSc, RN
Visiting Lecturer in Reflective Practice
Department of Interdisciplinary Studies in Professional Practice
School of Community and Health Sciences
City University, London, UK

Concetta M. Tomaino, DA, MT-BC, LCAT
Executive Director/Co-Founder
Institute for Music and Neurologic Function
Senior Vice President
Music Therapy Services
Beth Abraham Family of Health Services
Bronx, New York

John A. Toner, EdD, PhD
Director
Geriatric Residency and Fellowship Programs
Co-Director
Columbia University Statewide Geriatric Psychiatry Residency/
    Fellowship Program
Director
Columbia–New York Geriatric Education Center of the Consortium of New York
    Geriatric Education Centers (CNYGEC)
Associate Clinical Professor and Senior Research Scientist
Columbia University Stroud Center in the Faculty of Medicine and New York State
    Psychiatric Institute
New York, New York

Nina Tumosa, PhD
Professor
Saint Louis University
Health Education Officer
VISN 15 GRECC
Co-Director
Gateway Geriatric Education Center of Missouri and Illinois
St. Louis, Missouri
Andrea Villanti, MPH, CHES
Senior Education Coordinator
Department of Epidemiology
Johns Hopkins Bloomberg School of Public Health
Baltimore, Maryland

Malcolm T. Wandrag, MSc
Lecturer
Civil Emergency Management
City University
London, UK

Kimberly A. Williams, LCSW
Director
The Geriatric Mental Health Alliance of New York
The Center for Policy, Advocacy, and Education
Mental Health Association of New York City
New York, New York
With the increase in the number and complexity of disaster events, there is one factor that remains constant in determining the effectiveness of disaster mental health response and recovery—that is, preparedness. Evidence shows that disaster mental health programs for older persons are most effective when there is an existing plan for the rapid mobilization, response, and service implementation of mental health providers. However, this is rarely the case. Older victims of disasters are often neglected and left alone in their despair, as was the case in the aftermaths of September 11, 2001, and Hurricane Katrina. Ageism, a term I first coined in 1969, refers to the denial on a societal level of the special needs of a large segment of the population. This is particularly true regarding the emotional/mental health needs of older persons during times of crises, such as disasters.

After the September 11 World Trade Center attacks, many older persons and people with disabilities living near the disaster area were left stranded in their homes without assistance. In response, the International Longevity Center-USA, of which I am president and chief executive officer, contacted local and citywide organizations that serve older people to find out how they had dealt with the emergency and to discover what resources were available to aid these vulnerable sectors of the city in the event of a future emergency. We were frankly shocked to find an overwhelming lack of plans and systems to care for vulnerable populations such as the elderly and impaired. In particular, we noted the critical shortage of mental health practitioners experienced in working with older clients and a lack of general knowledge about how mental health problems are manifested in older persons. With better awareness of the symptoms, practitioners can intervene more quickly and appropriately to sustain the best possible quality of life for the older person during and subsequent to a disaster or emergency.
This volume provides the first-ever comprehensive overview of the essential information everyone working with older persons should know about the mental health effects of disasters on the elderly. It emphasizes the essential role that choice and choosing play in maintaining quality of life for older persons affected by disasters and emergencies. It also gives key evidence-based and interdisciplinary approaches for identifying and classifying mental health disorders, such as PTSD, depression, and substance abuse, to which older persons are particularly vulnerable. This is a must-read book for clinicians, service providers, policy makers, program planners, and teachers in the fields of mental health, aging, and emergency preparedness.

Robert N. Butler, MD
The rage you feel does more damage to the vessel in which it is stored than to the object on which it is poured. Give it up girl.

—Anonymous

Here is the copy of the verse you wanted, John. I found this on the sidewalk as I was going into my lawyer’s office! Good advice—wherever you are! Stay well—my best to the kids. See you in May! Love, Flo xx.

—Flora Aaroe, March 22, 2009

On September 11, 2001, life, as most of us had come to know it in America, changed. The physically, emotionally, and socially numbing catastrophe of the tragic attacks on the World Trade Center (WTC) in New York City and the Pentagon in Washington, DC, have left a void in the American psyche. Yet as a society we have moved on. And we have done so because of our collective wisdom, which guides us in the direction of hope, rebirth, and redemption, with an ever-present awareness that our individual and societal vessels are better served by doing so.

Flo Aaroe is the 72-year-old mother of a WTC victim. Within the 12-month period leading up to September 11, her husband of many years fell victim to a lingering terminal illness and died, her son-in-law was killed in a motorcycle accident, she was forced to move from her home, and most tragic of all, her son, Bruce, was killed in the terrorist attack on Tower II of the WTC. In the emotional abyss of her life at the time, Flo saw hope where there seemed to be only hopelessness. She found peace where around her fermented rage. Out of the abyss—and primarily due to a supportive network of family and friends (and excellent mental health interventions)—Flo came to know herself as never before . . . she became whole. In 2009, Flo reflected on the past 8 years as she recounted the experiences of her first deep dive in Cancun, Mexico, and her hot air balloon safari in eastern Pennsylvania. Up, up, and away! You go, girl!
Flo is representative of the thousands of invisible and silent survivor-victims of the September 11 events and the many other man-made and natural disasters of our time. The visible survivor-victims of these disasters, such as the grieving young widows and their infant/toddlers or adolescent children, the homeless young families, and so forth, receive most of the attention from the government, the media, and society at large. But the older, invisible, and silent survivor-victims of disaster are often left alone in their despair. These are the older disaster survivors themselves, and also the parents, the grandparents, the siblings, and the friends of younger victims lost in disasters. This book is about them and their needs…and particularly about their mental health needs, which are most often neglected either because they do not seek help—the stiff upper lip mentality—or because they are bypassed by first responders and follow-up mental health providers.

The primary purpose of this book is to provide a comprehensive overview of the essential information everyone working or hoping to work in the field of aging should know about disasters, emergencies, and their effects on the mental health and well-being of older persons. Another purpose of the book is to efficiently provide the reader with evidence-based approaches for identifying and classifying mental health problems, such as posttraumatic stress disorder (PTSD), depression, and substance use, that may occur in older adults during and post disasters/emergencies. Additionally, the book provides state-of-the-art resources related to clinical, individual, and community responses to the mental health needs of older people in disasters. Specifically, in addition to providing evidence-based approaches to assessment and diagnosis of mental health problems, the book helps define the special needs and approaches to the care of at-risk groups of older persons such as veterans and holocaust survivors; older adults who are isolated, dependent, have mobility problems or communication deficits, are cognitively impaired, or have other comorbidities; elders who use Meals on Wheels, vital medications, or home care; or older persons who are in senior centers, nursing homes, or assisted living settings. This book utilizes quality of life as its unifying theme and emphasizes the work of Barry Gurland and associates at the Columbia University Stroud Center for Quality of Life in establishing the critical role that choices and choosing have in promoting good quality of life, particularly during disasters, emergencies, and other crises in older persons’ lives. The general aims of the book are to (1) increase understanding of the mental health issues in older adults; (2) provide tools that can foster resiliency and recovery at the community, group, and individual levels;
and (3) influence the development of positive responses to disasters—that is, responses that have the potential to minimize adverse mental and physical outcomes in older persons and maximize individual and group recovery in the context of quality of life.

The burgeoning older population in the United States, particularly the rapid increase in numbers of those over the age of 85, calls for resources to prepare a workforce to serve this population. The U.S. Census Bureau projection for the year 2025 is that 18.2% of the national population will be 65 years or older, and by 2050 the proportion of those over the age of 65 will more than double. Moreover, in certain disaster-prone areas of the country such as the southeastern coastal areas, older adults are significantly more heavily represented. Therefore, it is imperative to prepare those in the workforce involved in natural and/or man-made disasters and disaster preparedness with the skills and knowledge to work with this rapidly growing population, as they are likely to interface with older persons during disasters and emergencies.

Recent studies of PTSD in older persons have challenged popular stereotypes and revealed the substantial proportions of older persons who develop PTSD and the high proportion who continue to suffer chronic mental health and associated physical conditions post-disaster. Some studies provide evidence that medical and social impacts on older persons and their caregivers can be comparable or worse than for younger persons. Paradoxically, there is evidence that older adults have greater resilience to the effects of disasters than younger persons. Regardless, this book provides disaster preparedness strategies for reducing disaster-related impacts on older persons and their caregivers and building upon their natural resilience.

Emerging evidence from disasters such as the 2001 World Trade Center disaster, the 2004 Sumatra tsunami and earthquake, and 2005’s Hurricane Katrina suggests that the affected communities, disaster responders, and health care professionals can greatly benefit from systematic disaster preparedness such as that provided by this book.

This book lays the foundation upon which clinicians, policy makers, program planners, teachers, and researchers can build. The primary target audience of this book is case managers and other specialists in services to older persons, such as social workers, nurses, psychologists, nurse practitioners, psychiatrists, primary care physicians, clergy, and elder care attorneys. It will also be a resource to older people themselves and their family caregivers as well as other formal and informal care providers such as friends and neighbors. Finally, the book will be a useful resource
to public welfare agencies, educational institutions, health care facilities, community outreach providers such as Meals on Wheels programs, transportation services for older persons, visiting nurse associations, and other mental health associations.

The eighteen chapters that comprise the book are organized into the following five sections: Introduction, Community Response to the Needs of Older Persons in Disasters, Clinical Response to the Needs of Older Persons During Disasters, Identifying and Classifying Mental and Related Health Problems, and Special Populations. The first three chapters form the Introduction. Chapter 1 sets the stage for our discussion of disaster and emergency preparedness and provides an overview of the essentials of disaster-related mental health in older persons. Chapter 1 also describes the strictly circumscribed criteria for evidence as adopted from, among others, the Cochrane Review for Effective Practice and begins the discussion of evidence-based care practices in the context of quality of life and the choice and choosing model. Quality of life, and more specifically the choice and choosing model of quality of life, serves as a unifying theme for the book. This theme links the five parts of the book into a cohesive whole. Chapter 2 demonstrates the overlapping mental and physical health issues related to older persons and disasters and provides useful tips to clinicians and nonclinicians alike about how mental health particularly affects physical health and vice versa in this age group. Chapter 3 provides an overview of the national Geriatric Emergency Preparedness and Response (GEPR) network and captures the progress that has been made to focus national attention on older people, the heretofore invisible and silent survivor-victims.

Chapter 4 is the lead chapter in the Community Response section. The authors point out that nearly half of all U.S. states do not have official plans that specifically address disaster preparedness for older persons. Furthermore, it is clear from the authors’ research that there are no consistent national or state emergency preparedness plans that detail how to provide services to older persons during disasters. Chapters 5 and 6 provide descriptions of two cross-national models of geriatric mental health disaster preparedness programs. The first is a Canadian model that draws on evidence-based literature and the results of key informant interviews conducted by the authors to describe governmental, community-based, and academic geriatric mental health disaster initiatives under way in Canada. Chapter 6 describes a national and cross-national mental health services model originating in England with broad applicability internationally. The chapter focuses on the use of facilitated reflective practice
as key to the preparation for and delivery of interdisciplinary services to older persons in disasters. Chapters 7, 8, and 9 complete the section by providing public health guidelines for developing community mental health disaster preparedness plans. Each chapter presents examples of self-help programs that have been used successfully to promote optimal health, promote quality of life, assess the likelihood of recurrence of disease, and manage disease (an explanation of these programs is contained in chapter 7). These tools, as outlined in chapter 8, are designed to help individuals better control fear levels, minimize disruption in their quality of life, increase personal safety, provide peace of mind, deliver culturally and ethnically appropriate information, and improve coping with post-traumatic stress. Chapter 9 concludes that first responders cannot meet the overwhelming demands subsequent to catastrophic events, so it is incumbent on community leaders to develop disaster preparedness plans that involve volunteers, including older persons themselves.

The three subsequent chapters comprise the Clinical Response section and focus on state-of-the-art evidence-based clinical practices relevant to treating the mental health needs of older persons during disasters. Chapter 10 examines psychosocial and pharmacological interventions for older persons during disasters with a special focus on the major domains of mental health symptoms experienced by older persons in disasters and the identification of mediating and buffering factors that promote resilience and quality of life. The authors also specify interventions that integrate and are sensitive to both common symptoms as well as idiosyncratic responses to disaster. Chapter 11 provides an overview of the important role of case management in assisting older persons with mental disorders or troubling emotional reactions in the aftermath of a disaster. The authors point out, however, that while there has been considerable research about the effectiveness of case management with older adults, the literature related to the effectiveness of case management with older persons experiencing mental, emotional, or substance abuse issues in the aftermath of a disaster is extremely limited. Chapter 12 reviews a number of complementary and alternative medicine (CAM) interventions, which are designed to enhance the ability of older persons and their caregivers to respond to the mental and physical stressors of disaster. The chapter describes the general reasons that CAM might be effective for older persons and describes in detail several specific treatments, applications, and recommendations that promote quality of life.

Three additional chapters expand upon the scope of the Clinical Response section and comprise the section titled Identifying and Classifying
Mental and Related Health Problems. Chapter 13 examines the interdisciplinary treatment team as a resource for identifying and classifying mental health and related problems in older persons during disasters and describes evidence-based interdisciplinary teamwork methods that have been incorporated into a model interdisciplinary team training program and applied to geriatric mental health disaster preparedness. This chapter also describes strategies for team training in geriatric mental health and disaster preparedness and applications of the choice and choosing model of quality of life to interdisciplinary teamwork. Chapter 14 uses a case study approach to emphasize the risk factors for psychological distress in older persons including the nature and severity of the disaster, the vulnerability of the older patient/client before and during the disaster, threat to life, previous history of psychological disturbances, past treatment efficacy, and current access to mental health services. The authors provide an in-depth review of evidence-based geriatric assessment for the recognition and differential diagnosis of mental health problems, including the systematic assessment of quality of life. The concluding chapter in this section probes the normal versus pathological aspects of bereavement and grief. The author introduces strategies for determining if the symptoms of grief—agitation and weeping, disbelief, hallucinations, panic attacks, phobias, anger, and depression—are normal or part of a mental health disease process such as PTSD, for example.

The final section of the book, Special Populations, is devoted to three chapters that address the special needs of specific subgroups of older persons who are particularly vulnerable to developing new mental health symptoms and/or experiencing exacerbation of existing mental health problems. These three groups are the following: veterans (chapter 16), older persons suffering from Alzheimer’s disease and related disorders (chapter 17), and older persons who are mistreated and/or abused during disasters and emergencies (chapter 18).

*John A. Toner, EdD, PhD*
In connection with this book project, the editors have incurred several substantial debts of gratitude. Dr. Hugh Barr gave generously of his time and constructive thinking and was instrumental in facilitating the recruitment of our cross-national collaborators.

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Introduction
Older persons represent the fastest growing segment of the American population. The U.S. Census Bureau projects that 18.2% of the U.S. population will be over the age of 65 by 2025, and by 2050 the population of older persons will more than double (Himes, 2007). This dramatic growth in the population of older persons in the United States is even more pronounced in certain disaster-prone regions such as Florida and the Gulf coast. Yet relatively little is known about the mental health impacts of disasters on older persons (Busuttil, 2004; Yehuda & Hyman, 2005) and even less about effective interventions for older persons who have been exposed to disasters (Owens, Baker, Kasckow, Ciesla, & Mohamed, 2005). Large-scale epidemiological studies of disaster-related mental health have been conducted with samples of older persons but these have focused on PTSD in older persons (van Zelst, de Beurs, Beekman, Deeg, & van Dyck, 2003). These studies have found high prevalence rates of PTSD in cohorts of older people, who often develop PTSD in the acute phase following a disaster (Neal, Hill, Hughes, Middleton, & Busuttil, 1995; Rauch, Morales, Zubritsky, Knott, & Oslin, 2006). Many older persons who initially develop acute symptoms of PTSD eventually suffer chronicity of symptoms (Elklit & O’Connor, 2005; Livingston, Livingston, & Fell, 2008). Some studies have shown that impacts on older persons can be comparable (Chung, Dennis, Easthope, Farmer, & Werrett, 2005; Kohn, Levav, Garcia, Machuca, & Tamashiro, 2005).
Geriatric Mental Health Disaster and Emergency Preparedness

or worse (Adams & Boscarino, 2006) than for younger subjects, depending on the circumstances and other corollary risk factors.

Pioneering work has begun to expand the field of study of the consequences of disasters on the mental health of older persons. Predictors of acute (Mecocci, et al., 2000; Yazgan, Dedeoglu, & Yazgan, 2006) and chronic (Goenjian, et al., 1994; Goenjian, et al., 2008; Marshall, et al., 2006) PTSD in older persons are being identified and related to or distinguished from predictors in younger age groups (Chung, et al., 2005; Livingston, Livingston, Brooks, & McKinley, 1992). Groups of older persons at high risk for developing symptoms of PTSD are being characterized (Chung, 2007; Elklit & O’Connor, 2005). This growing number of findings may lead to more rational and effective interventions (Marshall, et al.; Yazgan, et al.). Some studies have found that older subjects have greater resilience than younger subjects, both after disasters (Phifer, 1990; Seplaki, Goldman, Weinstein, & Lin, 2006) and in recovery (Kato, Asukai, Miyake, Minakawa, & Nishiyama, 2007). Published reports have suggested interventions that may facilitate successful coping on the part of older persons during and after disasters and have provided information that expands our understanding of the biological pathways for stress reactions (Goenjian, et al., 2008). Additional studies have focused on methods of recruiting and sustaining the involvement of older persons in community resilience efforts (Acierno, Ruggiero, Kilpatrick, Resnick, & Galea, 2004; Norris & Murrell, 1988). Factors that are protective for older persons may account for the relative resilience of some in the face of disaster (Bramsen, VanDer Ploeg, & Boers, 2006; Lin, et al., 2002; Norris & Murrell). Several studies have focused on other impacts, in addition to PTSD, on the mental health of older persons (Neupert, Almeida, Mroczek, & Spiro, 2006; Spiro, Hankin, Mansell, & Kazis, 2006; Yazgan, et al.). These studies have noted special subgroups of older persons that are of additional concern, particularly those who are isolated, dependent, have mobility problems or communication deficits, are cognitively impaired, or have other comorbidities; use Meals on Wheels, vital medications, or home care; or are in senior centers, nursing homes, or assisted living settings.

OVERVIEW OF DISASTER AND EMERGENCY PREPAREDNESS

The purpose of this chapter is to provide an overview of the mental health consequences of disasters and emergencies, including acts of terrorism and natural disasters. The chapter also provides a review of evidence-based care
practices and criteria for determining the extent to which care practices are evidence based. With this in mind, evidence-based care practices should be evaluated in the context of the extent to which they promote good and/or improved quality of life. Barry Gurland and his associates at the Columbia University Stroud Center for Studies of Quality of Life in Health and Aging have completed groundbreaking work in this area. Several recent papers have critically reviewed and proposed criteria for judging current quality of life models and measures (Gurland & Gurland, 2008a). They have also described a new model of quality of life in older persons based on the processes of facilitating choices and choosing that are matched to these criteria (Gurland & Gurland, 2008b) and examined the potential of the choices and choosing model for advancing the scientific base for the field of study related to promoting quality of life in health care generally (Gurland, Gurland, Mitty, & Toner, 2009) and mental health specifically (Gurland & Katz, 2006). Recognizing the importance of quality of life, and more specifically the choices and choosing model of quality of life, we feel that the foundation has been established for developing and adapting evidence-based care practices related to the mental health consequences of disasters and emergencies, using the choices and choosing model to promote quality of life in older persons in the aftermath of disasters and emergencies.

Older persons, particularly those who are frail, face extraordinary physical and mental health challenges in the days and months that follow a disaster. In addition, a system of emergency preparedness is generally not in place for those caring and responsible for older persons—both in the informal and formal sectors of care. For instance, following the attacks on the World Trade Center and also Hurricane Katrina, older persons and people with disabilities living in the hardest-hit areas were trapped for days before being rescued (O’Brien, 2003).

Several studies have informed our conceptualization of the mental health consequences of various types of disasters. Some have focused on direct victims and rescue workers. Others have focused on the mental health consequences of terrorist-based disasters on individuals, communities, and entire populations within and beyond disaster zones (Vlahov, 2002, p. 295). Disasters and emergencies are concurrently psychological and physiological regardless of whether the disaster is physical, biological, or chemical. Although most public health efforts have concentrated on individual treatment and prevention, the social and political imperative exists to develop evidence-based interventions and effective educational programs and resources for health care professionals and paraprofessionals. The goal is to promote the healing of individuals and communities by
incorporating community-based public information and training and uti-
\[\text{...} \]
Mental health and social service providers in a variety of settings have
reported a growing sense of anxiety among their older clients in the after-
math of recent disasters and particularly in response to the wars in Iraq
and Afghanistan (Yehuda & Hyman, 2005). These concerns are even more
marked for certain older cohorts such as holocaust survivors and veterans
for whom television reports and talk of war may reawaken anxieties in those
already coping with PTSD. Gullette (2006) found subsequent to the Hur-
rricane Katrina disaster in New Orleans that those who were most vulner-
able to the effects of the disaster were older, poor, female, African American,
and disabled.

Definition of Terms

Disaster

According to the American Red Cross, a disaster is defined as an event
that involves 10 or more deaths and involves 100 or more persons. Disas-
ters involve an appeal for assistance (International Federation of Red Cross
and Red Crescent Societies, 1999). The Federal Emergency Management
Agency (FEMA) expands this definition in terms of the severity of the event
that warrants governmental response and defines a disaster as “an occur-
rence of severity and magnitude that normally results in deaths, injuries,
and property damage and that cannot be managed through the routine pro-
cedures and resources of government. It requires immediate, coordinated,
and effective response by multiple government and private sector organiza-
tions to meet human needs and speed recovery” (Center for Mental Health
Services, 1999, p. 6).

Emergency

FEMA defines an emergency in the terms used in the Robert T. Stafford
Disaster Relief and Emergency Assistance Act of 1988. An emergency re-
fers to “any occasion or instance for which, in the determination of the Presi-
dent, Federal assistance is needed to supplement State and local efforts
and capabilities to save lives and to protect property and public health and
safety, or to lessen or avert the threat of a catastrophe in any part of the
United States” (Robert T. Stafford Disaster Relief and Emergency Assis-
tance Act, 1988). Emergencies are sudden occurrences and may be due to
epidemics, technological catastrophes, or strife from natural or man-made causes, including terrorism. Emergencies are distinguished from disasters in that, although emergencies and disasters both require a rapid reallocation of resources, emergencies can be handled by allocating existing agency resources. Disasters require additional resources from other outside agencies.

**Preparedness**

Veenema (2007, p. 612) defines preparedness as the following: “All measures and policies taken before an event occurs that allow for prevention, mitigation, and readiness. Preparedness includes designing warning systems, planning for evacuation and relocation, storing food and water, building temporary shelter, devising management strategies, and holding disaster drills.” For the purpose of this book, preparedness also includes all mental health measures, such as assessment and screening, to determine risks for the onset of mental health problems.

**Response**

Response is “the phase in a disaster when relief, recovery and rehabilitation occur; also includes the delivery of services, the management of activities and programs designed to address the immediate and short-term effects of an emergency or disaster” (Veenema, 2007, p. 613).

**Types and Characteristics of Disasters**

According to DeWolfe (2000), there are four major types of disasters: natural disasters such as fires, floods, earthquakes, hurricanes, and tornados; technological disasters such as blackouts and computer/electronic malfunctions; health disasters such as epidemics; and social disasters such as riots and genocides.

Disasters are unpredictable, varied events with mental health implications for older persons and the communities in which they live. The severity of mental health impacts on older people is determined by the characteristics of the disaster itself. DeWolfe emphasizes that the following characteristics of disasters determine impacts: natural versus human causation, degree of personal impact, size and scope of the disaster, visible impact/low point, and the probability of recurrence.
Natural Versus Human Causation

Recent studies have provided conflicting results regarding the mental health impacts of natural versus human-caused disasters; however, there are distinct psychological effects associated with each. Human-caused disasters, such as terrorist attacks, airline crashes, and so forth, result in the survivors’ struggle to reconcile the loss of life with the reality of violence and human error and the belief that the loss was unnecessary and preventable. On the other hand, natural disasters are most often seen as acts of God, which are beyond human control and without evil intent. In the disaster following Hurricane Katrina, natural and human-caused factors collided to yield a natural disaster that was made worse through human error and neglect (Gullette, 2006).

Degree of Personal Impact

Studies have demonstrated that the more personal the survivors’ exposure to the disaster, the more severe the post-disaster effects (Vlahov, 2002). Such factors as witnessing the death of a victim, the death of a family member, or the destruction of one’s home are high-impact factors, which result in more anxiety, depression, PTSD, somatic symptoms, and addictions.

Size and Scope of the Disaster

As with the degree of personal impact, a relationship exists between the size and scope of the devastation and the mental health impacts. The devastating loss of an entire community removes everything that is familiar to the survivor. Most survivors become disoriented at the most basic levels (Adams & Boscarino, 2006; Chung, et al., 2005; Kohn, et al., 2005). This disorientation can be life-threatening in older persons, particularly those who are isolated, have communication deficits, or are otherwise members of special subgroups of vulnerable older persons (Neupert, et al., 2006; Spiro, et al., 2006; Yazgan, et al., 2006).

Visible Impact/Low Point

Most disasters have a corresponding recovery period that begins at a clearly defined end/low point. In natural disasters, the end point of a devastating flood, earthquake, or hurricane signals the recovery and rebuilding process.
Although this recovery and rebuilding process may be delayed in the case of earthquake aftershocks and the secondary effects of floods, eventually the disaster ends and the healing begins. Human-caused disasters are altogether different. Technological events—for example, nuclear accidents—may not exhibit high visible impact or an observable end/low point, yet the prolonged threat of health consequences can result in chronic stress and anxiety due to the continuous threat (Rahu, 2003; Sumner, 2007).

**Probability of Recurrence**

Mental health consequences of disasters are exacerbated when there is a perceived immediate or long-term risk of recurrence.

**EVIDENCE-BASED CARE (EBC) PRACTICES**

**Introduction and Definition of EBC**

Testing medical interventions for efficacy has existed since the time of Avicenna’s The Canon of Medicine in the 11th century. However, it was only in the 20th century that this effort evolved to affect almost all fields of health care and policy. In 1972, professor Archie Cochrane, a Scottish epidemiologist, published a book entitled *Effectiveness and Efficiency: Random Reflections on Health Services* (Cochrane, 1972). His book, which was reprinted in 1999, as well as his subsequent advocacy, led to increasing acceptance of the concepts behind EBC practices. EBC is the application of tested and proven guidelines to the care of patients in clinical settings in order to ensure the best prediction of medical treatment outcomes. EBC uses systemic methods to support the application of evidence from valid clinical research to clinical practice, thus reducing variability of care. It is designed to optimize the effectiveness of care by linking research and practice with clinical education and the decision-making process (Gambrill, 1999). While many aspects of care depend on individual factors that are only partially subject to scientific methods, EBC can help clarify those parts of clinical practice that are, in principle, subject to scientific methods and apply these methods. Health care professionals, allied health care providers, and health care institutions can use EBC as a tool to help them measure their performance and identify areas for further study and improvement (Torpy, 2009).
Criteria for Determining Whether a Care Practice Is Evidence Based

While past clinical guidelines were based mostly on the clinical wisdom of experts, EBC uses a hierarchy of evidence to guide clinical decision making and to classify the level of evidence that supports an intervention free from the various biases that beset clinical research. EBC uses techniques such as meta-analysis of the scientific literature, risk-benefit analysis, and randomized controlled trials (RCTs). EBC seeks internally valid evidence that is externally valid for clinical practice. Since no individual study can include full clinical reality, meta-analyses of various diagnostic and therapeutic studies including various relevant subgroups, such as older patients or those with comorbidity, are indispensable. To support individual decision making, these meta-analyses should evaluate effect modification between subgroups rather than seeking overall effect measures adjusted for subgroup differences. A rigorous meta-analysis of multiple studies has the advantage of using quantitative methods to provide a single best estimate of the effect of an intervention (Guyatt & Rennie, 2002). The systematic review of published research studies is a major method for evaluating particular treatments. The Cochrane Collaboration is one of the most well-known and well-respected examples of systematic reviews. A 2007 analysis of 1,016 systematic reviews from all 50 Cochrane Collaboration Review Groups found that 44% of the reviews concluded the intervention was likely to be beneficial, 7% concluded the intervention was likely to be harmful, and 49% concluded the evidence did not support either benefit or harm. Of these reviews, 96% recommended further research (El Dib, Atallah, & Andriolo, 2007). In contrast, patient testimonials, case reports, and even expert opinion have little value as proof because of the placebo effect, the biases inherent in the observation and reporting of cases, difficulties in ascertaining who is an expert, and more.

Reviewing the strength of evidence for a clinical practice requires evaluating the quality, including minimizing of bias; quantity, including magnitude of effect and sample size; and consistency, such as similar findings reported using similar and different experimental designs. All these elements help to characterize the level of confidence that can be assigned to a body of knowledge (West, et al., 2002). Systems to stratify evidence by quality have been developed, including one by the U.S. Preventive Services Task Force for ranking evidence about the effectiveness of treatments or screening (Barton, 2007):
Level I: Evidence obtained from at least one properly designed randomized controlled trial

Level II-1: Evidence obtained from well-designed controlled trials without randomization

Level II-2: Evidence obtained from well-designed cohort or case-control analytic studies, preferably from more than one center or research group

Level II-3: Evidence obtained from multiple time series with or without the intervention; dramatic results in uncontrolled trials might also be regarded as this type of evidence

Level III: Opinions of respected authorities based on clinical experience, descriptive studies, or reports of expert committees

Gray offered a different hierarchical classification of evidence for the effectiveness of research studies (Gray, 1997):

1. A meta-analysis or systematic review of well-designed randomized controlled trials
2. A single, properly designed randomized controlled trial
3. Studies without randomization
4. Other quasi-experimental studies from more than one center or research group
5. Expert reports and authorities’ recommendations based on descriptive studies or clinic evidence

Problems With and the Need for Evidence-Based Geriatric Psychiatry

The field of mental health, especially geriatric psychiatry, seems to be lagging behind in using evidence-based strategies. Conventional drug trials typically exclude people over 65 years of age, and even when they do include older persons, they commonly select individuals who are healthy or have few physical disabilities to minimize reports of adverse events and withdrawal from pharmaceutical trials (Banerjee & Dickinson, 1997). Psychotherapies and psychosocial interventions are a special challenge since they are difficult to deliver in a uniform way. This contrasts with pharmacological trials in which the intervention and control condition are clearly identified and measured. Older patients tend to take multiple medications, have multiple comorbidities, be more sensitive to drug-drug interaction, and have issues that could impair their adherence to treatment. They are
also more sensitive to medication side effects, and they respond to psychotherapy according to their level of cognitive impairment (Banerjee & Dickinson). To make matters worse, there is a lack of empirical evidence that can guide the clinician because a majority of clinical trials for psychotropic medications are based on young individuals. This unfortunate combination has made older persons with mental disorders at a higher risk for poorer quality care (Bartels, et al., 2002). While in geriatric psychiatry the empirical research base is limited, the principles of evidence-based decision making can still be applied and hopefully will lead to a significant improvement in quality of care.

OVERVIEW OF PSYCHOPHARMACOLOGICAL AND NONPSYCHOPHARMACOLOGICAL TREATMENTS

This section provides a brief overview of the major psychopharmacological medications and nonpsychopharmacological treatments, such as psychosocial and behavioral strategies, commonly used with older persons suffering from mental health problems. For a thorough, in-depth discussion of these treatments, please see chapter 10 and chapter 14.

Medication management in the field of geriatric mental health is a real and constant challenge. Older persons tend to take multiple medications, have multiple comorbidities, have issues that can impair their adherence to treatment, and be more sensitive to side effects. In fact, medications for mental health problems, also known as psychotropics, are among the most common medications associated with preventable adverse drug events in older persons (Gurwitz, et al., 2003). To make matters worse, there is a lack of empirical evidence to guide the health care provider because a majority of clinical trials for psychotropic medications use young individuals. These elements make the decision to start psychotropic treatment of an older patient a challenge because the clinician has to assess the risk-benefit ratio.

PSYCHOPHARMACOLOGICAL TREATMENTS

Antidepressants

Selective Serotonin Reuptake Inhibitors (SSRIs)

SSRIs are considered first-line agents for the treatment of depression based on their safety and side effects profiles rather than their efficacy. In fact,
randomized controlled trials support that SSRIs and tricyclics have the same efficacy (Anderson, 2000) and are superior to placebo (Wilson, Mottram, Sivananthan, & Nightingale, 2005). The safety profiles of SSRIs give them a clear advantage over other antidepressants. They are relatively benign in overdose (Barbey & Roose, 1998), and, unlike tricyclics, they have a relatively benign cardiovascular profile (Glassman, 1993). The most common side effects of SSRIs are gastrointestinal. Both hyponatremia and syndrome of inappropriate antidiuretic hormone (SIADH) have been associated with the use of SSRIs in older patients. The incidence of SIADH in older persons treated with SSRIs may be as high as 12% (Fabian, et al., 2004).

**Tricyclic Antidepressants (TCAs)**

The clinical utility of classical TCAs in the geriatric population is limited by their side effect and safety profiles despite their robust effectiveness. TCAs have anticholinergic side effects and lead to anticholinergic-induced urinary retention and confusion. The major safety problem with TCAs is their cardiovascular side effects (Glassman, 1993). They are lethal in overdose, and as little as three times the daily dose can result in death from heart block or arrhythmia. Given the prevalence of occult and manifest ischemic heart conditions in the older population, TCAs should be avoided. Unlike the classical TCAs, newer TCA-related antidepressants have better side effect profiles and offer the clinician and patient an acceptable alternative in situations where SSRIs are not acceptable (Mottram, Wilson, & Strobl, 2006).

**Monoamine Oxidase Inhibitors (MAOIs)**

MAOIs are rarely used in the older population because of their side effect profiles as well as the requirement for dietary and medications restriction, a serious challenge in older persons whose memory can be impaired. However, the FDA quite recently approved a transdermal patch of selegeline that may not require dietary restrictions. The risk of orthostasis, a serious risk factor for falls, limits their use.

**Benzodiazepines**

Benzodiazepines are avoided in older patients because of their numerous side effects. Benzodiazepines can cause impairment of information acquisition, impairment of consolidation and storage of memory, or both (Greenblatt, 1992). Among patients with dementia, the use of benzodiazepines can
exacerbate cognitive deficits in multiple domains. Even in patients without dementia, chronic use of benzodiazepines also may be associated with deficits in sustained attention and visuospatial impairment that are insidious and not recognized by the patient (Ashton, 1995; Ayd, 1994). Amnestic effects may be more marked in heavy alcohol drinkers (Ashton).

**Antipsychotics**

When atypical antipsychotics were introduced, there was a clear resurgence in antipsychotic prescribing for older patients (Briesacher, et al., 2005). Older patients started receiving atypicals for various conditions, but this changed when atypicals were found to increase the risk of stroke, metabolic syndrome, and death in older persons with dementia (Schneider, Dagerman, & Insel, 2005). The view that atypicals were superior to conventional antipsychotic was seriously challenged by the findings of the Clinical Antipsychotic Trials in Intervention Effectiveness (CATIE) schizophrenia study. Aside from olanzapine, the atypical antipsychotics were no more effective than the conventional antipsychotic pherphenazine (Lieberman, et al., 2005). To make matters worse, a study found that conventional antipsychotics were as likely to increase the risk of death in older patients as atypical drugs (Wang, et al., 2005). Today, antipsychotics are used with caution in the geriatric population not only because of newly recognized stroke and mortality risks but also because of well-known side effects. Antipsychotics can cause hypotension as well as orthostatic hypotension, both associated with falls, myocardial infarction, and stroke. Many antipsychotics can cause QTC prolongations that can evolve into torsades de pointes, which may result in dizziness or syncope or may progress to ventricular fibrillation and sudden death (Taylor, 2003). They can also cause stroke via different mechanisms, including thromboembolic effects, orthostasis, and cardiac dysrhythmia, among others. The FDA has issued a warning regarding the risk of stroke among older patients with dementia and psychosis or other behavioral disturbances. In two large population-based retrospective cohort studies, comparing atypicals to conventional antipsychotics showed no increase in risk of stroke with atypical agents (Gill, et al., 2005). The extrapyramidal symptoms in older persons are also of concern: while the risk of drug-induced parkinsonism increases in the older population on antipsychotics, the risk of akathisia and acute dystonia decreases with age (Wirsching, 2001). Tardive dyskinesia is also of concern: antipsychotic-induced tardive dyskinesia is five to six times more prevalent in older persons than in younger patients (Jeste, 1999).
Medications for Dementia

Cholinesterase inhibitors are the mainstay of dementia treatment. The drugs have slightly different pharmacological properties, but they all work by inhibiting the breakdown of acetylcholine—an important neurotransmitter associated with memory—by blocking the enzyme acetylcholinesterase. Compared with placebo, cholinesterase inhibitors have a beneficial effect on cognitive function and measures of global clinical state at 6 months or more, and there is also evidence that they may improve behavioral disturbances and stabilize daily functions (Birks, 2006). There is some suggestion that these drugs may also exert neuroprotective effects (Krishnan, 2003). Memantine is a low-affinity antagonist to glutamate N-methyl d-aspartate (NMDA) receptors that may prevent excitatory neurotoxicity in dementia. It was approved in 2003 by the FDA for the treatment of moderate to severe Alzheimer’s disease. Memantine has a slight beneficial, clinically detectable effect on cognitive function and functional decline measured at 6 months in patients with moderate to severe Alzheimer’s disease (McShane, Areosa Sastre, & Minakaran, 2006).

NONPHARMACOLOGIC APPROACHES

Psychotherapy

Psychotherapy can be used as both a primary and an adjunctive therapy. While it was once thought that psychotherapy was of limited use in older persons because of the potential for cognitive impairment, there is now evidence that any type of psychotherapy can be as effective for older persons as for younger populations (Thompson, Gallagher-Thompson, & Breckenridge, 1987). Age itself cannot be used as an indication or contraindication of a specific therapy. Older persons can be reluctant to undergo therapy because of negative beliefs toward psychotherapy. When dealing with an older person, the therapist is expected to be flexible and to adjust his therapy to the many life changes that older persons potentially face. When using cognitive behavioral therapy (CBT), some of the more important adaptations include emphasizing behavioral techniques, particularly earlier in therapy, and frequently repeating information using different sensory modalities (Grant & Casey, 1995). Psychodynamic therapies may require an understanding of physical illness and the implications of approaching the end of life (Shiller, 1992). Reminiscence therapy, which involves the discussion of past activities, events, and experiences with another person or
a group of people, is one of the most popular psychosocial interventions in dementia care and is highly rated by staff and participants. There is some evidence that reminiscence therapy can lead to improvement in a patient’s mood, cognition, and functional ability. It can also alleviate the strain on caregivers (Woods, Spector, Jones, Orrell, & Davies, 2005).

**Electroconvulsive Therapy (ECT)**

ECT involves the application of an electric current to the head with the aim of inducing a controlled tonic-clonic convulsion and is usually carried out at intervals of days. Some reports suggest ECT is particularly effective in late-life depression (Flint & Rifat, 1998) as well as in therapy-resistant depressive older people with extensive white matter hyperintensities (Coffey, et al., 1988). Currently there is no evidence to suggest ECT causes any kind of brain damage, although temporary cognitive impairment is frequently reported (Devanand, Dwork, Hutchinson, Bolwig, & Sackeim, 1994; Scott, 1995). ECT seems to be a safe procedure even in older persons with cardiovascular disorders (Rice, Sombrotto, Markowitz, & Leon, 1994). ECT is used more frequently to treat depressed older persons and its use is declining less rapidly than in the general population (Glen & Scott, 1999).

**TREATMENT OF SOME OF THE MOST COMMON MENTAL HEALTH CONDITIONS IN OLDER PERSONS**

**Anxiety Disorders**

Anxiety symptoms are quite common in the older population. The prevalence rate of anxiety disorders among older persons living in the community has been estimated between 10% and 15% (Beekman, et al., 1998; Kessler, et al, 2005b). However, primary anxiety disorders in later life are rare, as most patients develop anxiety symptoms secondary to a medical condition or in the context of a depressive disorder (Flint, 2005). The impact of anxiety disorders in later life can be significant: They can impair quality of life by having a negative impact on functioning and well-being and are associated with increased health care utilization (de Beurs, et al., 1999). Moreover, patients suffering from anxiety disorders have an increased risk of depression (Beekman, et al., 2000); left untreated, anxiety disorders tend to become chronic (Larkin, Copeland, & Dewney, 1992). In two large cohort studies, anxiety disorders in later life were prospectively associated with an increased mortality rate (Brenes, et al., 2007). Because of
the potential for serious complications, anxiety disorders should be treated early and aggressively. A recent review concluded that SSRIs are efficacious for late-life anxiety disorders whereas the effect of benzodiazepines and tricyclic agents was not significant, which might be explained by a lack of statistical power (Pinquart & Duberstein, 2007).

**Generalized Anxiety Disorder (GAD)**

SSRI are the first line of treatment for GAD for most older patients, regardless of whether depression is present. Benzodiazepines have a more limited role for the treatment of GAD in older patients, and when they are used, lorazepam and oxazepam are preferred (Flint, 2005). Buspirone and pregabalin can also be used (Feltner, et al., 2003). Buspirone appears to have little amnestic effect (Lawlor, et al., 1992). When symptoms of GAD occur secondary to a medical condition or medications, treatment needs to be directed toward the underlying cause. CBT is well established as an effective mode of treatment for anxiety disorders. It may be used in conjunction with certain medications, such as antidepressants, but there is some suggestion that co-treatment with benzodiazepines reduces its efficacy (Van Balkom, et al., 1996). There is also some evidence that CBT is not as effective in the treatment of GAD in older patients as it is in younger patients (Mohlman, 2004).

**Panic Disorder**

Panic disorder can be secondary to a general medical condition or medications, or it can be primary. The recommended pharmacologic treatment for panic disorder in older patients is an SSRI antidepressant. The potential for an antidepressant to induce a panic attack or anxiety symptoms imposes a low starting dose and a slow titration. A benzodiazepine may be needed as adjunctive therapy during the initial weeks of treatment (Flint & Gagnon, 2003), but the frequent association of panic disorder with alcohol dependence complicates this use. CBT can be helpful in the treatment of panic disorder.

**Posttraumatic Stress Disorder**

PTSD with onset in earlier life can become symptomatic again in late life (Murray, 2005) or can result from a different trauma in old age, such as a serious fall. Older patients with PTSD have more somatic symptoms than
do younger patients (Owens, et al., 2005). In older as in younger patients, the treatment of choice for PTSD is CBT, and the first-line pharmacologic treatment is an SSRI antidepressant (Asnis, et al., 2004)

**Depression**

Depression is a relatively common condition in the older population, with a higher prevalence in demented patients, patients in nursing homes, and patients with chronic or debilitating medical conditions. Comorbid depression adversely affects the outcome of several medical conditions and has been documented for ischemic heart disease. Depressed patients with unstable angina, postmyocardial infarction, or congestive heart failure have a higher cardiac mortality rate than do medically comparable patients who are not depressed (Musselman, Evans, & Nemeroff, 1998). Suicide is a particular concern in older persons, especially those with severe or psychotic depression, comorbid alcoholism, recent loss or bereavement, a new disability, or sedative-hypnotic abuse. Treating depression has been shown to reduce the risk of suicide in at-risk older persons (Barak, et al., 2005). The majority of older persons with depression are treated by their primary care physician (PCP), but a significant portion are treated with doses that are not optimal (Wang, et al., 2005). Medications can help but may not be enough, and psychosocial support may be needed (Roose & Schatzberg, 2005). The majority of depressed older persons will eventually respond to aggressive treatment for depression (Flint & Rifat, 1996). Older persons are at chronic risk of undertreatment because of low expectations regarding recovery and fears about aggressive pharmacotherapy and ECT (Heeren, Derksen, van Heycop Ten Ham, & van Gent, 1997). While all classes of antidepressant medications have the same efficacy, SSRIs have been considered first-line agents for the treatment of geriatric depression mainly because of their better side effect profiles. The belief that older persons do not respond well to antidepressants and require a longer duration of treatment has led to the rule that the minimum duration necessary for an adequate antidepressant trial is 12 weeks. New data analyses of 12-week antidepressant treatment trials in late-life depression focused on time to response and the early identification of nonresponders (Sackeim, Roose, & Burt, 2005). Neither the overall response or remission rates nor the time to achieve sustained remission support the belief that older persons are less responsive to antidepressants or take longer to respond. A significant number of older persons with depression have memory issues that can make strict adherence to
their antidepressant problematic, exposing them to the risk of withdrawal. In such case, using fluoxetine, an SSRI with a long half-life, can be a good choice.

**Dementia**

Cholinesterase inhibitors are the mainstay of dementia treatment. In Alzheimer disease, cholinesterase inhibitors can have some benefits, albeit modest ones: cognitive improvement, stabilization of daily function, and some delay of disease progression. There is some suggestion that these drugs may also exert neuroprotective effects (Krishnan, 2003). Memantine, an NMDA antagonist, was introduced in 2003 and was specifically labeled for the treatment of dementia at moderate to severe levels. Combining an anticholinesterase inhibitor with memantine can be beneficial; results from a randomized controlled study suggest that such combination was well tolerated and could positively affect cognition, activities of daily living, global outcome, and behavior in patients with moderate to severe dementia (Areosa Sastre, Sherriff, & McShane, 2006). Vitamin E, selegiline, secretase inhibitors, Ginkgo biloba, statin drugs, estrogen, and nonsteroidal anti-inflammatory drugs (NSAIDs) have been used for the treatment of cognitive disorders, including dementia, but the evidence to support their use is weak. There is also some evidence that psychotherapy can improve the mood, cognition, and functional ability of patients with dementia (Woods, et al., 2005).

**Agitation in Dementia**

Antipsychotics remain the treatment of choice for behavioral complications of dementia (Street, et al., 2000). Studies have shown that antipsychotics are used in 30%–50% of older institutionalized patients (Giron, et al., 2001). While no antipsychotic has been approved by the FDA for the treatment of psychosis and agitation in demented older persons, placebo-controlled studies consistently show comparable advantage for antipsychotics over placebo for symptoms of both psychosis and behavioral dyscontrol (Devanand, Sackeim, Brown, & Mayeux, 1989). Benzodiazepines should be used in low doses and restricted to short-term crisis management of agitated and anxious behaviors if antipsychotics or other medications are ineffective.
Delirium

Short-term antipsychotic administration is a standard treatment strategy in patients with delirium, particularly antipsychotic medications with low anticholinergic properties such as haloperidol (Tune, 2002). Atypical antipsychotics are useful in the management of delirium. In geriatric medical practice, it is always better to minimize the number and dosage of medications, especially those that are prone to cause delirium. When a patient develops delirium, treating the underlying cause is of extreme importance. If the patient exhibits the hypoactive form of delirium, he can be managed safely using nursing intervention, such as avoiding excessive sensory stimulation, providing orientation cues such as a calendar or clock, encouraging family presence for reassurance, and other such strategies. Using physical restraints should be limited to patients who are at serious risk of falling or pulling IV lines or urinary catheters. Patients with the agitated form of delirium may end up requiring pharmacological interventions. Antipsychotics with low anticholinergic activity, like haloperidol or risperidone, are preferred. If the delirium is caused by alcohol withdrawal, benzodiazepines can reduce withdrawal severity, the incidence of delirium, and seizures (Mayo-Smith, 1997)

Insomnia

Prevalence rates of insomnia in people aged 65 and older range between 12% and 40% (Morin, et al., 1999). Older adults primarily report difficulty in maintaining sleep, and, while not all sleep changes are pathological in later life (Bliwise, 1993; Morin & Gramling, 1989), severe sleep disturbances may lead to depression and cognitive impairments (Ford & Kamarow, 1989). Night waking produces significant stresses for carers and is a common cause for demands for institutional living arrangements (Pollak, Perlick, Linsner, Wenston, & Hsieh, 1990). The sleep deprivation of insomnia may result in excessive daytime sleepiness, fatigue, irritability, impairment of concentration, and an increased risk of involvement in a traffic accident. Insomniacs report lower quality of life scores than good sleepers (Leger, Scheuermaier, Philip, Paillard, & Guilleminault, 2001), and continued unresolved insomnia may be associated with significant psychiatric morbidity, predominantly depression (Millman, Fogel, McNamara, & Carlisle, 1989; Roth, 2001). Furthermore, sleep deprivation has been associated with a reduced tolerance to pain (Johnson, 1969) and may reduce immune function (Moldofsky, Lue, Davidson, & Gorey, 1989). Bring-
ing back a normal sleep pattern is of extreme importance. The most common treatments for sleep disorders are pharmacological, particularly for insomnia (Hohagen, et al., 1994; Kupfer & Reynolds, 1997; Morin, et al., 1999). Two consensus conferences sponsored by the National Institute of Health (National Institute of Health [NIH], 1983, 1990) concluded that short-term use of hypnotic medications might be useful for acute and situational insomnia across all age groups but that long-term use remains controversial because of the potential risk of tolerance and dependency. The same NIH studies indicate that the drug of choice for the symptomatic treatment of insomnia is a benzodiazepine receptor agonist.

EVIDENCE-BASED APPROACHES TO SPECIFIC MENTAL HEALTH ISSUES DURING DISASTERS

Bereavement

Older people may go through many losses during a disaster: loss of relatives, pets, neighbors, friends, and so forth. Psychotherapy alone or coupled with psychopharmacology may be necessary in patients going through severe bereavement. Older adults who go through a loss during a disaster are more likely to suffer severe bereavement because of the absence of perceived or actual social support, the suddenness of the loss, and the presence of multiple concurrent stressful life events (Windholz, Marmar, & Horowitz, 1985).

PTSD

Because of an exposure to a situation where their life as well as their physical integrity is threatened, older persons can develop posttraumatic stress disorder. In older as in younger patients, the treatment of choice for PTSD is CBT, and the first-line pharmacologic treatment is an SSRI antidepressant (Asnis, et al., 2004).

Delirium

In a disaster area, the risk for older persons to develop delirium increases. Delirium is characterized by an acute change in cognition and attention, although the symptoms may be subtle and usually fluctuate throughout the day. This heterogeneous syndrome requires prompt recognition
and evaluation because the underlying medical condition may be life-threatening. The risk of developing delirium can be reduced by preventing and correcting dehydration, minimizing unnecessary noise and stimuli, promoting good sleep hygiene, and repeated reorientation (Miller, 2008). The treatment of delirium centers on the identification and management of the medical condition that triggered the delirious state. Antipsychotic agents may be needed when the cause is nonspecific and other interventions do not sufficiently control symptoms such as severe agitation or psychosis. Also, a patient who develops delirium can become agitated and aggressive. Using haloperidol in agitated patients with dementia can decrease the degree of aggression (Lonergan, Luxenberg, Colford, & Birks, 2002).

Insomnia

In a disaster zone, older persons may end up in a noisy and overcrowded shelter where sleep may be difficult. As such, they may develop insomnia, which can affect their well-being in a negative way. Bringing back a normal sleep pattern is of extreme importance. The simplest approach is adherence to some basic rules of sleep hygiene: avoiding daytime napping, maintaining adequate nighttime pain relief; addressing environmental conditions; avoiding alcohol and caffeine late at night; and minimizing noise, light, and excessive heat during the sleep period. However, the chaos and disorganization caused by a disaster can make it difficult to implement these basic rules. CBT can have a mild positive impact on different aspects of insomnia in older adults (Montgomery & Dennis, 2003). Several pharmacological treatments are also available for the symptoms of insomnia, and the most commonly prescribed group of sleep-promoting drugs are benzodiazepines. Short-acting benzodiazepines such as temazepam and triazolam are favored to reduce impaired functioning the next day. Benzodiazepines with a longer half-life are avoided since they can have serious hangover effects, including drowsiness, confusion, and unsteady gait.

CONCLUSION

The importance of the mental health consequences of disasters on older persons is underlined by these early findings. However, the large gaps and uncertainties in our knowledge base present major challenges to professionals and caregivers in the face of disasters and emergencies. This book aims to address these public health and clinical challenges and fill in some
of these gaps by providing the reader with evidence-based support for best practices.

REFERENCES


