AGING AND MENTAL HEALTH

SECOND EDITION



DANIEL L. SEGAL SARA HONN QUALLS MICHAEL A. SMYER

Table of Contents

<u>Cover</u>

Table of Contents

<u>Half title page</u>

<u>Title page</u>

Copyright page

Dedication

Preface

Part I: Introduction

1 Mental Health and Aging

What is Normal Aging?

What is Abnormal or Unusual Aging?

Mental Health and Mental Disorder

Linking the Physical and Mental in Later

Life: Comorbidity

Individual Differences and Assessment of

Risk

The Context of Clinicians and Clients: Now

What Do We Do?

Summary and Conclusions

2 Basic Gerontology for Working with Older Adults

<u>Developmental Issues in Mental Health and</u> <u>Aging</u>

Working with Older Adults: The Contextual, Cohort-Based, Maturity, Specific-Challenge Model

Summary and Conclusions

Part II: Models of Mental Health in Later Life

3 Psychodynamic Model

Introduction to the Model

Adult Development: The Context for Aging

Development in the Second Half of Life

Mental Health in Later Life

Development of Psychopathology

Assessment

Treatment

Summary and Conclusions

4 Cognitive-Behavioral Model

Introduction to the Model
Cognitive Aspects of the Model
Behavioral Aspects of the Model
Mental Health from the CognitiveBehavioral Model

Mental Health in Older Adults

Assessment

Treatment

Additional Comments about the Cognitive-

Behavioral Model

Summary and Conclusions

5 Stress and Coping Model

Introduction to the Model

Stress and Coping: Normal and Abnormal

<u>Adaptation</u>

Assessment Strategies

General Treatment Strategies and the

Emergence of Health Psychology

Treatment Strategies

Summary and Conclusions

<u> 6 Family Systems Model</u>

Introduction to the Model: Aging Families

Family Dynamics: A Systems Model

Mental Health Within a Systems Model

Assessment

Intervention

Summary and Conclusions

<u>Part II Summary and Commentary</u>

<u>Applying Models to Individual Life</u> Circumstances

Part III: Introduction to Mental Disorders

7 Cognitive Impairment

Is CI Normal for Older Adults?

Delirium: A Common, Reversible Cause of CI

Dementia: The Most Devastating Cause of

<u>CI</u>

Mild Cognitive Impairment (MCI)

Depression and Cognitive Impairment

Summary of Four Types of Cognitive

Impairment

Assessment

Interventions

<u>Planning</u>

Environmental Interventions

Behavior Management

Interventions to Enhance Cognitive

<u>Functioning</u>

Summary and Conclusions

8 Depression

<u>Definition of Depression</u>

Prevalence of Depression in Older Adults

Theories of Etiology

Other Risk Factors for Depression

Vascular Depression and its Link to

Dementia

Assessment

Interventions
Prevention of Depression
Suicide
Summary and Conclusions

<u>9 Severe Mental Disorders in Older</u> <u>Adults</u>

Overview of Schizophrenia throughout the Life Span

<u>Differences in the Onset, Course, and</u> Outcome of Schizophrenia

<u>Factors Complicating Course and Outcomes</u> <u>of Schizophrenia</u>

The Aging Person with Schizophrenia: Early-Onset Schizophrenia (EOS)

The Aging Person with Schizophrenia: Late-Onset Schizophrenia (LOS)

Future Challenges

Summary and Conclusions

10 Anxiety, Sexual, and Sleep Disorders

Anxiety

<u>Types of Anxiety Disorders</u>
<u>Sexual Disorders and Difficulties</u>
<u>Sleep Disorders and Difficulties</u>
<u>Summary and Conclusions</u>

11 Substance Abuse, Personality Disorders, and Marital/Family Conflict

Substance Abuse

Personality Disorders

Marital Conflicts

<u>Family Problems</u>

Summary and Conclusions

12 Settings and Contexts of Mental Health Services

Housing

Social Services

Health Care

Legal Contexts

The Roles of Mental Health Providers across

Settings

Summary and Conclusions

Epilogue

References

Index

Segal—Aging and Mental Health, 2e

Aging and Mental Health Second Edition

Daniel L. Segal, Sara Honn Qualls, and Michael A. Smyer



This second edition first published 2011 © 2011 Daniel L. Segal, Sara Honn Qualls, and Michael A. Smyer

Edition history: Blackwell Publishers (1e, 1999)

Blackwell Publishing was acquired by John Wiley & Sons in February 2007. Blackwell's publishing program has been merged with Wiley's global Scientific, Technical, and Medical business to form Wiley-Blackwell.

Registered Office

John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, United Kingdom

Editorial Offices

350 Main Street, Malden, MA 02148-5020, USA 9600 Garsington Road, Oxford, OX4 2DQ, UK The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, UK

For details of our global editorial offices, for customer services, and for information about how to apply for permission to reuse the copyright material in this book please see our website at www.wiley.com/wiley-blackwell.

The right of Daniel L. Segal, Sara Honn Qualls, and Michael A. Smyer to be identified as the authors of this work has been asserted in accordance with the UK Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, except as permitted by the UK Copyright, Designs and Patents Act 1988, without the prior permission of the publisher.

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

Designations used by companies to distinguish their products are often claimed as trademarks. All brand names and product names used in this book are trade names, service marks, trademarks or registered trademarks of their respective owners. The publisher is not associated with any product or vendor mentioned in this book. This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. It is sold on the understanding that the publisher is not engaged in rendering professional services. If professional advice or other expert assistance is required, the services of a competent professional should be sought.

Library of Congress Cataloging-in-Publication Data Segal, Daniel L.

Aging and mental health. – 2nd ed. Daniel L. Segal, Sara Honn Qualls, and Michael A. Smyer.

p. cm. - (Understanding aging)

Smyer's name appears first on the earlier edition. Includes bibliographical references and index.

ISBN 978-1-4051-3075-2 (pbk.: alk. paper) ISBN 978-1-4443-9086-5 (ebk) 1. Older people – Mental health.

2. Geriatric psychiatry. I. Qualls, Sara Honn. II. Smyer, Michael A. III. Title.

RC451.4.A5S66 2011 618.97'689-dc22 2010021917

A catalogue record for this book is available from the British Library.

Printed in Malaysia [001] [2011]

Daniel L. Segal: To Cindy and Shaynie Sara H. Qualls: To Mark, Morgan, Lea, and Marcus Michael A. Smyer: To Piper, Brendan, and Kyle

Preface

What is important in knowledge is not quantity, but quality. It is important to know what knowledge is significant, what is less so, and what is trivial.

(Leo Tolstoy)

In this book we have tried to take Tolstoy's maxim to heart, sorting out the significant from the trivial in the domain of aging and mental health. As we did so, we had two audiences in mind: today's clinicians and the clinicians of the future. The first group includes clinicians who are already in practice settings but who want to know more about the intricacies of working with older adults. The second group encompasses students in the professions that work with older adults (e.g., psychology, social work, nursing, psychiatry).

Both groups must face the issues of aging summarized by Michel Philibert, a French philosopher: "Of aging, what can we know? With aging, what must we do?" (Philibert, 1979, p. 384). These are also issues that older adults and their family members must face. In a way, they are variations on the questions that often arise in clinical settings. Consider the following example:

Betty was worried about Alex. His memory seemed to be failing him more often. He'd get to the store and forget half of the things she'd sent him there for. He seemed more tired than usual, with less energy for his hobbies at the end of the day or on weekends. He didn't want to go out with friends to the movies or to dinner. Alex didn't notice anything different in his behavior. Betty called to ask your advice: "Should I get him tested at the local Alzheimer's Center?"

How would you answer Betty? What would you need to know? Which portion of her story is significant in forming your answer? Which less so?

In answering these questions, you are implicitly answering Philibert's queries as well. You are implicitly making a differential diagnosis of Alex's situation: Is this a part of normal aging? Is this a pathological pattern? Is it a combination of the two? (Of aging, what can we know?)

You may also be linking your answer to an implicit action plan. Betty certainly is: Diagnose the problem and then decide what kind of treatment is most appropriate. (With aging, what must we do?)

To fully answer Betty's question requires much more information about aging in general, about patterns of mental health and mental disorder in particular, about Alex's distinctive history and pattern of functioning, and about the contexts in which she and Alex live and receive services. This book is designed to provide you with frameworks for considering each element.

Part I is an overview of basic gerontology, the study of the aging process. This background information forms a context for answering the simple question often posed by clients and their relatives: Should I be worried about this pattern of behavior (e.g., Alex's apparent memory problems)? To answer this deceptively simple question requires that we sort out the influences of physical illness, basic processes of aging, and the intersection of historical and social trends as they affect older adults' functioning. In Part I we outline the basic parameters of mental health in later life, providing the foundation upon which later chapters build.

In Part II we consider basic models of mental disorders. Each model provides a set of assumptions about mental health and the development of mental health problems, their assessment, and their treatment. These assumptions direct the clinician's attention to specific aspects of older adults and their functioning. For example, assume for the moment that Alex's memory problems are not organically caused. The behavioral perspective might highlight the

context of the older adult's behavior. Several important models of mental health and mental disorder are outlined in the chapters of Part II. In each chapter we focus on an important question for older adults and those who work with them: How is this approach relevant to older adults and the problems they encounter in later life?

The third and final part focuses attention on the most commonly occurring mental health problems and disorders in later life: cognitive impairment, depression, serious mental disorders (e.g., schizophrenia), anxiety, substance use, personality disorders, and other common disorders. In each chapter we outline the prevalence of the disorders, the most appropriate assessment approaches for older adults, and the most effective treatment strategies for older adults. We were fortunate to be able to call upon Stephen I. Bartels for his expertise in the diagnosis and treatment of chronic mental disorders (Chapter 9). Part III concludes with a capstone chapter on the contexts and settings of geriatric mental health practice. One physical setting is particularly important in geriatric mental health care: nursing homes. Although they were not designed for it, they are a major treatment setting for mentally ill older adults. Of course, other contexts (e.g., health care settings, social service settings, legal issues) affect how, where, and why mentally ill older adults are diagnosed and treated. We discuss these contexts in this final chapter.

Colleagues and friends in several settings have helped us write this book: colleagues in the Department of Psychology, the CU Aging Center, and the Gerontology Center of the University of Colorado at Colorado Springs, and the faculty, students, and staff in the Center on Aging & Work at Boston College and in the Provost's office at Bucknell University. Early in the development of the first edition we benefited from the guidance and advice of Jim Birren and two anonymous reviewers. The process of revision was

supported by input and advice from our academic and community services colleagues as well as a new set of anonymous reviewers. We eagerly acknowledge our debt to each, while also admitting that any remaining flaws are ours. We also express our deepest appreciation to our friend and editor at Wiley-Blackwell, Constance Adler, whose patience and diligence ensured that this second edition came to fruition. Finally, we remain grateful to our family members for their ongoing love, encouragement, and support.

Our goal throughout this book is to provide information and a set of frameworks that will be useful in working with older adults and their families. In the end, we hope that you will conclude that there is much to hope for in aging, and much that we can do about mental health and mental disorders later in life.

Part I: Introduction 1 Mental Health and Aging

An Introduction

Consider the following case description:

Grace, director of a Senior Center in your area, calls you about Mr. Tinker. Although Mr. Tinker used to come to the center three or four times a week, he hasn't come at all since the death of his friend, Ed, four months ago. Grace had called Mr. Tinker at home to say how much he'd been missed. When she asked if he wasn't coming because he was still upset over Ed's death, he denied it. Instead, Mr. Tinker said that he wanted to return to the center, but he was in terrible pain. In fact, he was in so much pain that he really couldn't talk on the phone and he hung up. Grace was worried that Mr. Tinker might not be getting the medical attention that he really needed. She asked you to make a home visit, which you agreed to do. You call Mr. Tinker and set up an appointment.

As you prepare to visit Mr. Tinker, what are the basic questions you might ask about him and his situation? Which factors do you think are important to explore with Mr. Tinker? How would you assess Mr. Tinker's functioning?

Your answer to these simple inquiries reflects your implicit model of mental health and aging. In this book, especially in Part II, we will illustrate several different conceptual models of mental disorders and aging. In doing so, we will emphasize the links between starting assumptions and subsequent strategies for assessment and intervention. You will come to see that your philosophical assumptions about mental health, mental disorder, and aging shape the

interpretive process of working with older adults and their families.

Mr. Tinker's current functioning raises a basic question: Is his behavior just a part of normal aging or does it represent a problem that requires professional attention? Our answer represents implicit and explicit assumptions regarding the continuum of functioning that runs from outstanding functioning through usual aging to pathological patterns of behavior.

What is Normal Aging?

The starting point for mental health and aging must be a general understanding of *gerontology*, the study of normal aging, and *geriatrics*, the study of the medical aspects of old age and the prevention and treatment of the diseases of aging. In Mr. Tinker's case, we want to know if his reaction is a part of a normal grieving process or an indication of a disease process (e.g., a mood disorder, such as major depressive disorder). To answer this requires a starting definition of normal aging.

A conceptual definition

Discussions of this issue focus attention on three different patterns of aging: normal or usual aging; optimal or successful aging; and pathological aging (e.g., Rowe & Kahn, 1998). Baltes and Baltes (1990a) provide definitions of normal and optimal aging:

Normal aging refers to aging without biological or mental pathology. It thus concerns the aging process that is dominant within a society for persons who are not suffering from a manifest illness. Optimal aging refers to a kind of utopia, namely, aging under development-enhancing and age-friendly environmental conditions.

Finally, sick or pathological aging characterizes an aging process determined by medical etiology and syndromes of illness. A classical example is dementia of the Alzheimer type.

(pp. 7-8)

A statistical definition

Distinguishing between normal aging and optimal aging requires us to sort out statistical fact from theoretically desirable conditions. For example, the Baltes and Baltes definition suggests that normal aging does not include "manifest illness." However, in the United States today, chronic disease is typical of the experience of aging: More than 80 percent of those 65 years old and older have at least one chronic medical disease, and 50 percent have at least two chronic medical diseases (Centers for Disease Control and Prevention and The Merck Company Foundation, 2007).

For example, half of those over age 65 report having arthritis (Hootman, Bolen, Helmick, & Langmaid, 2006). By 2030, 54 percent of adults with arthritis are expected to be over age 65 (Hootman & Helmick, 2006). Moreover, among the oldest old groups (75+ or 85+) there are substantially higher rates. Thus, from a statistical perspective, arthritis is certainly modal, and may be considered a part of normal aging. We will return to this in Chapter 2.

A functional definition

Another approach to defining normal aging arises from defining "manifest illness." By focusing not on presence or absence of a chronic disease, such as arthritis, but on the *impact* of that disease, we may get another depiction of "normal aging." Here, again, though, the definition of terms can affect our conclusion regarding normal aging.

Consider the prevalence of disability among older adults. Functional disability could be considered one indicator of manifest illness among older adults. So far, so good. However, how shall we define functional disability? The answer may determine our conclusion about what is or is not normal for later life. Again, Mr. Tinker's situation may help us clarify the issues:

When you get to Mr. Tinker's house, you find an apathetic, listless, very thin man of 81. He seems to be fairly isolated socially, having few friends and even fewer family members in the area. (He never married and he has no living siblings.) Although he seems physically able to cook, he says that he hasn't been eating (or sleeping) regularly for quite a while – and he doesn't care if he never does again.

Is Mr. Tinker functionally disabled? If so, is this normal for someone of his age? According to the US Census Bureau, most persons aged 75 years old and older have a disability: 56 percent of those 75–79 years old had any type of disability with 38 percent having a "severe disability" (Brault, 2008). In contrast, Manton, Gu, and Lamb (2006) reported that 78 percent of the 75–84 age group was "non-disabled." How could such differing pictures of older adults emerge?

The answer lies in the definition of disability. The Census Bureau focuses on difficulty with functional activity for its specific definition of disability. The range of functional activities is somewhat broader than traditional definitions: lifting and carrying a weight as heavy as 10 pounds; walking three city blocks; seeing the words and letters in ordinary newsprint; hearing what is said in normal conversation with another person; having one's speech understood; and climbing a flight of stairs. In contrast, Manton et al. (2006) focused on activities of daily living (ADL; e.g., eating, getting in or out of bed, getting around indoors, bathing, dressing, using a toilet) and instrumental activities of daily

living (IADL, e.g., light housework; doing the laundry; meal preparation; grocery shopping).

Not surprisingly, these different definitions of disability produce different depictions of functioning and normal aging. The metric we use in assessing functional ability is important for two reasons: the specific activities may be important in and of themselves; and the ability to complete activities (such as ADL and IADL activities) acts as a proxy for underlying physical, cognitive, and social skills (Kemp & Mitchell, 1992). Thus, depending upon the range of functioning we wish to assess, we may conclude that Mr. Tinker is either disabled or not and that such a pattern of functioning is either normal or unusual aging!

What is Abnormal or Unusual Aging?

Thus far, we have considered merely one side of the dilemma: What is normal aging? We have also limited ourselves to *physical* and *functional* definitions, steering clear of similar issues focusing on *mental* health problems or disorders.

You notice that Mr. Tinker doesn't mention being in any terrible pain – that is until you mention his friend Ed. When you do, Mr. Tinker grabs his side and says how much it hurts to talk. You suggest that he lie down and rest for a minute, which he does.

From the couch, Mr. Tinker begins to talk about Ed. It turns out that the two men were not just "friends" as Grace had implied. They were like brothers (if not closer) and had been since they were boys. "I'm good for two things," Mr. Tinker said, "no good and good for nothing. But Ed was my buddy anyway. Don't know why he bothered with me. I never made much of my life. But I do know that it won't be hunting season without him. Just can't do it alone and nobody in their right mind would want to hunt with an old fool like me."

Again, Mr. Tinker challenges us. Is he mentally ill? The answer depends upon resolving other issues: How will we define mental health among older adults? Conversely, how will we define mental disorder among older adults? In Part III of this book, we will discuss assessment and treatment approaches for many specific mental disorders. Here, however, we start at the beginning: definitions of mental health and mental disorder.

Mental Health and Mental Disorder

The Centers for Disease Control and Prevention and the National Association of Chronic Disease Directors (2008) summarized the importance of mental health in later life:

The World Health Organization defines health as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" [WHO, 1948] ... Because mental health is essential to overall health and well-being, it must be recognized and treated in all Americans, including older adults, with the same urgency as physical health ... In fact, the mental health of older Americans has been identified as a priority by the Healthy People of 2010 objectives [US Dept. of HHS,

2000

], the 2005 White House Conference on Aging [US Dept. of HHS,

2006

], and the 1999 Surgeon General's report on mental health [US Dept. of HHS,

1999

Mental health among older adults is a multifaceted concept that reflects a range of clinical and research activity, rather than a unified theoretical entity (Qualls & Layton, 2010; Qualls & Smyer, 1995). Definitions of mental health in later life combine several complex elements: statistical normality; the link between individual functioning and group norms; the extent to which specific disorders can be effectively treated or controlled; and ideals of positive functioning (Butler, Lewis, & Sunderland, 1998).

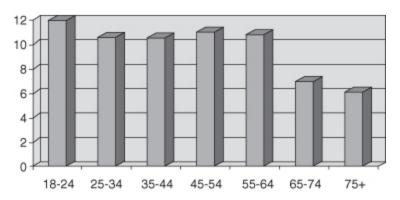
In contrast, there is greater agreement on definitions of mental disorder among older adults. For both clinical and research purposes. operational definitions of mental usually follow the American disorder **Psvchiatric** Association's guidelines in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR: American Psychiatric Association, 2000). Thus, mental disorder in older adults is operationally defined by patterns of disorders as outlined in the DSM-IV-TR, which is the prominent classification system for much of the developed world (Segal, 2010). Several hundred mental disorders are defined in the manual, which lists the specific diagnostic criteria for each disorder.

Data from the Centers for Disease Control's Behavioral Risk Factors Surveillance System (BRFSS) revealed that in 2007, 6.9 percent of adults aged 65–74 reported frequent mental distress as defined by having 14 or more mentally unhealthy days. The percentage was slightly lower (6.1 percent) for the 75 or older group (CDC, 2007). Older age groups had the lowest prevalence of frequent mental distress compared to all younger age groups (see Figure 1.1).

<u>Figure 1.1</u> Frequent mental distress by age group in 2007 (% of respondents).

Source: Adapted from CDC (2007).

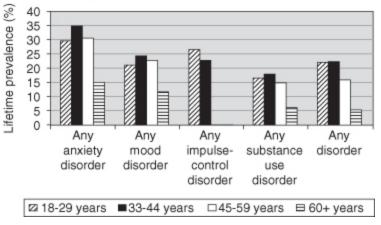
Frequent Mental Distress by Age Group in 2007 (% of respondents)



A similar pattern emerges when the focus is on diagnosed mental disorders. Kessler, Berglund, Demler, Jin, and Walters (2005) reported data from the National Comorbidity Study, which included interviews with a nationally representative sample of over 9,000 people. Again, older adults had lower levels of diagnosable anxiety disorders, mood disorders, impulse-control disorders, and substance use disorders compared to younger adult groups (see Figure 1.2).

<u>Figure 1.2</u> Lifetime prevalence of DSM-IV/World Mental Health Survey disorders by age group from the National Comorbidity Survey Replication sample.

Source: Adapted from Kessler et al. (2005).



Depression is clearly not a part of normal aging. In 80 percent of cases, depression is a treatable condition (Centers for Disease Control and Prevention and the National Association of Chronic Disease Directors, 2008).

geriatric depression reflects the difficulty of "normal aging" from discerning pathological Depression in later life appears in several guises. When using the Beck Depression Inventory, older adults have low rates of moderate depression and anxiety (6.1 percent comparison to adults (Goldberg, in young Breckenridge, & Sheikh, 2003). Only 5.0 percent of adults age 65 or older currently have depression and 10.5 percent have had a lifetime diagnosis of depression (Centers for Disease Control and Prevention and the National Association Directors. 2008). of Chronic Disease However. the prevalence of depressive symptoms among older adults is much higher. (See Chapter 8 for a full discussion of the epidemiology of depression.)

Again, the challenge is distinguishing between normal and pathological aging: Are Mr. Tinker's sleep and appetite disturbances a sign of depression, a part of the normal aging process, or a combination of the two?

Another challenge is that rates of mental disorders vary by setting. For example, older adults in institutional settings present a very different picture: In a sample of older medical inpatients, 46 percent had mild depressive symptoms and 27 percent had severe depressive symptoms (Linka, Bartkó, Agárdi, & Kemény, 2000). Similarly, a recent study analyzed data from Minimum Data Set assessments and found that 27 percent of newly admitted nursing home residents were diagnosed with schizophrenia, bipolar disorder, depression, or anxiety disorder (Grabowski, Aschbrenner, Feng, & Mor, 2009). Grabowski and his colleagues (2009) summarized the impact of these patterns: "Nursing homes have become the de facto mental health care institution as a result of the dramatic downsizing and closure of state psychiatric by the deinstitutionalization hospitals. spurred on movement" (p. 689).

A final relevant issue is not simply the rates of mental disorder in older adults, but rather the pattern of the age of onset of mental disorders (e.g., the average age at which people tend to first experience the disorder). Informative data from Kessler et al. (2005) indicated that the median age of onset was much earlier for anxiety disorders (11) years old) and impulse-control disorders (11 years old) than for substance use disorders (20 years old) and mood disorders (30 years old). For all of the mental disorders included in this large study, 50 percent of all lifetime cases start by age 14, 75 percent of all lifetime cases start by age 24, and 90 percent of all lifetime cases start by age 42. Thus, the first onset of most mental disorders is in childhood or adolescence and a much smaller percentage of disorders have an onset in later life. Among older adults with a mental disorder, it is clinically relevant to determine when the disorder began. For example, an older adult who has suffered from lifelong depression will likely have a lengthier and more complicated treatment than an older adult who experienced depression for the first time in later life. The issue of age of onset is further explored in many of the chapters on specific mental disorders in Part III of this book.

Linking the Physical and Mental in Later Life: Comorbidity

Mr. Tinker's pattern of symptoms – his lethargy, social withdrawal, and his reported physical pain – remind us of the importance of *comorbidity*: combinations of more than one mental disorder, physical illness, or combination of both. Cohen (1992) provides a context for understanding comorbidity by outlining four useful paradigms for the interaction of physical and mental well-being among older adults:

- Psychogenic (or psychologically based) stress may lead to health problems.
- Health problems may lead to psychiatric disturbances.
- Coexisting mental and physical health challenges may interact.
- Social and psychosocial resources may affect the course of physical or mental disorders.

Indeed, one's initial concern about a client or patient may be raised by either a physical or mental health problem.

First, psychogenic stress may lead to physical health problems: In Mr. Tinker's case, abdominal pain may be a reaction to his grief over Ed's death. For Mr. Tinker, this physical symptom may be a more socially acceptable way for him to express pain.

Second, the direction of causality may be reversed, however, with a physical disorder leading to psychiatric disturbance. Consider the following sentence:

The five senses tend to decline with senescence.

Remove the f's, s's, and th's. Now try to make sense of what's left:

e ive en tend to decline wi ene e.

This example mimics high frequency hearing loss among older adults (Butler et al., 1998) and gives you a sense of how easily such a hearing loss might lead to delusions and confusion among older adults.

A third possibility is that coexisting physical and mental disorders may interact. One category of mental disorders among older adults underscores this interplay: cognitive impairment, including the dementias. Cognitive impairment among older adults is a challenge for interdisciplinary diagnosis and treatment. Distinguishing among age-related cognitive change, mild cognitive impairment (MCI), and

Alzheimer's disease or other dementias can be difficult (Buracchio & Kaye, 2009; Green, 2005; Peterson, 2004). In addition, differential diagnosis and prompt treatment requires ruling out a myriad of potentially reversible causes of confusional states: drug reactions; emotional disorders; metabolic disorders; impaired vision and hearing; nutritional deficiencies; dehydration; brain tumors and traumas; infections. This requires an interdisciplinary collaboration designed to assess complex patterns of comorbidity (see Chapter 7).

Currently, resources are being invested in research on the biological bases of Alzheimer's disease and related disorders (e.g., Anderson, Litvack, & Kaye, 2005; Bertram, McQueen, Mullin, Blacker, & Tanzi, 2007; Brouwers, Sleegers, & Van Broeckhoven, 2008), the social impact of these diseases (e.g., Kim, Knight, & Longmire, 2007; Montgomery & Kosloski, 2009), and the potential for preventive interventions aimed at avoiding the personal and economic devastation that accompany dementia (e.g., CDC & Alzheimer's Association, 2007; Day, McGuire, & Anderson, 2009; Teri, Logsdon, & McCurry, 2008; Willis et al., 2006).

Again, national data reflect the individual and societal importance of this work: Estimates are that as many as 5.3 million Americans currently have Alzheimer's disease and related dementias (ADRD), with 70 percent of these patients aged 71 or older suffering from Alzheimer's disease (AD) (Alzheimer's Association, 2009a). Estimates suggest that the number of ADRD patients will increase to more than 11.8 million by the year 2040 (National Academy on an Aging Society, 2000).

Similarly, recent work (Plassman et al., 2008) indicates that, for older adults age 71 years and older, two estimates of disorders are important to assess: those with already-diagnosed Alzheimer's disease (approximately 3.4 million people) and those who have cognitive impairment without