

Current Status of Psychotherapy for Mental Disorders in the Elderly

Amber Gum, PhD* and Patricia A. Areán, PhD

Address

*Department of Psychiatry, University of California at San Francisco, 401 Parnassus Avenue, Box CPT, San Francisco, CA 94143, USA.
E-mail: ambergum@lppi.ucsf.edu

Current Psychiatry Reports 2004, 6:32–38

Current Science Inc. ISSN 1523-3812

Copyright © 2004 by Current Science Inc.

Research on psychotherapy for older adults with psychiatric disorders has demonstrated its effectiveness, although the majority of research has been conducted on major depression. Recent advances in extending this research to additional diagnostic categories and treatment settings are reviewed. Psychotherapy appears promising in the treatment of minor depression, dysthymia, anxiety disorders, depression with comorbid personality disorders, depression with comorbid cognitive impairment, and as an adjunctive treatment in psychotic disorders. Psychotherapy also has been successfully transported to the primary care setting, and shows potential in long-term care and in-home settings. Many of these studies are preliminary, however; additional research is needed with larger, more diverse samples across a variety of psychiatric diagnoses and treatment settings.

Introduction

Research on psychotherapy with older adults with psychiatric disorders has increased substantially in recent years, largely demonstrating that it is an effective treatment modality for this population. The purpose of the present article is to review recent advances in psychotherapy research with older adults, which include 1) increased attention to a wider range of disorders and comorbidities, and 2) expansion to primary care and other settings and improving access to services. Before discussing these advances, a brief historical review of psychotherapy research with older adults will be provided. The article will conclude with a summary and recommendations for future research.

Background: Focus on Major Depression

The majority of research on psychotherapy for older adults has focused on major depression. In 1991, a National Institutes of Health consensus panel on treatment of late-life depression [1] stated that not enough research existed to

support any conclusions regarding the efficacy or effectiveness of psychotherapy, and reported that older adults may be less accepting of psychotherapy than younger cohorts. Since that time, numerous uncontrolled and controlled studies have been conducted, leading more recent reviewers to conclude that a variety of types of psychotherapy are efficacious and effective for late life depression [2••,3–6] and that older adults generally find psychotherapy acceptable [7], with 50% even preferring it over medication [8••]. In a 1997 update, the National Institutes of Health consensus panel recognized that “psychosocial treatments deserve greater emphasis, and it is clear...that late-life depression can be treated successfully with psychotherapy” [9]. A small number of studies indicate that gains are maintained, on average, although these studies have relatively short follow-up periods [2••].

Several types of psychotherapy have been efficacious with depressed older adults. Behavioral (BT), cognitive-behavioral (CBT), and problem-solving (PST) are treatments based on learning theory of personality and focus on teaching patients new skills to cope with depression and psychosocial problems [10,11]. Brief dynamic therapy (BDT), interpersonal (IPT), and supportive therapy (ST) focus primarily on resolution of interpersonal problems and processes through exploration of affect [12]. Finally, reminiscence, developed specifically for older adults, is based on Erikson’s theory of human psychosocial development and focuses primarily on integrating a patient’s history into how they understand their lives at this point [13].

Of these therapies, CBT and IPT have the most empiric support and are considered evidence-based practice [2••,3–6]. Several randomized studies have found CBT more effective than usual care or control conditions [2••]. In a recent meta-analysis, Pincus and Sörensen [14•] reported good effect sizes for CBT (0.64 for self-rated depression, 1.18 for clinician-rated depression, and 0.78 for well being). Studies of IPT tended to examine it in combination with medication or placebo pills, and generally found it more effective than placebo pill or medications alone [2••].

Overall, few advantages have been found in comparisons of different types of therapy [2••,3–6], although there have been a few exceptions. For example, two studies found PST [15] or a similar goal-focused therapy [16] to be superior to RT. Niederehe and Schneider [5] concluded that RT appeared beneficial for milder but not more severe depression. CBT and BDT showed similar efficacy in some

earlier studies [17], and no published studies have compared IPT with other forms of therapy. Matching type of therapy to patient characteristics or preferences may be important. For example, one study of caregivers (all over age 55) found that BDT was more beneficial for new caregivers and CBT was more beneficial for longer-term caregivers. The authors suggested that new caregivers may need to process affect around recent changes in caregiving responsibilities, whereas longer-term caregivers may need more structured problem solving [18].

Making general conclusions regarding comparisons of psychotherapy and antidepressant medication, or their combination, is difficult, because different studies have reported different findings. Some clinical guidelines recommend that psychotherapy is appropriate for mild-to-moderate depression, but that antidepressants are necessary for more severe depression, although there are few empiric findings that adequately address this issue [5]. The majority of studies comparing therapy with medications have involved IPT, and these studies tend to suggest that the combination of the two may be superior to each alone, acutely and to prevent relapse [2••]. The evidence comparing CBT with medications is limited; one study suggested that CBT was better than desipramine, and that the combination did not confer any additional benefit [19]. In their review, Zeiss and Breckenridge [6] concluded that antidepressants may speed recovery, but that psychotherapy may result in longer-term benefits.

Psychotherapy Research in Different Diagnoses Minor depression and dysthymia

The few studies conducted provide limited, but promising, evidence for psychotherapy in minor depression and dysthymia. One study found interpersonal counseling (a very brief form of IPT) more effective for minor depression than usual care [20]. Another study found variable results across sites in a randomized controlled trial of PST modified for primary care patients with dysthymia or minor depression [21], compared with an antidepressant or placebo; PST was very effective at some sites and worse than placebo at other sites. The authors speculated that quality of the therapy delivered may have contributed to the variability in findings, highlighting the importance of assuring that therapists are appropriately trained and providing quality services.

Anxiety disorders

Recently, a small number of studies examined psychotherapy for older adults with anxiety disorders, mostly focusing on generalized anxiety disorder (GAD). In a meta-analytic review, Nordhus and Pallesen [22••] reported an average effect size of 0.55 across 15 studies of various types of anxiety disorders and symptoms. The studies were quite varied, with approximately half of them including participants with anxiety symptoms rather than specific anxiety disorders.

Most studies had small sample sizes and included a variety of comparison groups (eg, pre- to post-treatment, wait-list, and ST).

Two randomized controlled studies of CBT for GAD have been published recently. For these studies, CBT was presented in a group format and included education about anxiety, relaxation skills, cognitive restructuring techniques, and graded worry exposure. Participants had weekly out-of-session assignments. Wetherell *et al.* [23] compared group CBT with a support group that involved discussion of worry-provoking topics and a wait-list control group. CBT and the discussion group were superior to wait-list in reducing GAD severity and worry. CBT also improved depressive symptoms, role functioning, and energy to a greater degree than the control group. Therefore, although there were few significant differences between CBT and the discussion group and each seemed beneficial, CBT appears to benefit a wider range of outcomes. Only 5% of the control group spontaneously remitted across the treatment period.

Stanley *et al.* [24] compared a similar group CBT intervention with a minimal contact control group (who received brief phone calls weekly to assess symptoms) and achieved similar results for CBT. Significantly more CBT participants improved on measures of anxiety, worry, depression, and quality of life compared with the control group, and these treatment gains were largely maintained a year later. Only 8% of the control group remitted, similar to the previous study, indicating the importance of active treatment for this population.

A sizeable portion of participants in each study had a comorbid depressive disorder; 20% in one study had a depressive disorder [23] and 28% in the second study had major depression [24]. In these studies, CBT decreased depressive symptoms; therefore, this intervention appears beneficial for individuals with anxiety and a coexisting depressive disorder.

Personality disorders and treatment-resistant depression

As with younger adults, older adults with personality disorders tend to not respond as well to psychotherapy as those without comorbid personality disorders. Dialectical-behavior therapy (DBT) is a form of CBT that has been adapted for use with older adults with comorbid depression and personality disorder [25]. DBT was originally developed for individuals with borderline personality disorder [26], and is an intensive treatment that may last a year or more involving individual and group therapy and availability for telephone “coaching” during crises. Skills taught in DBT entail mindfulness, interpersonal effectiveness, emotion regulation, and distress tolerance. For older adults, the primary modifications relate to the targets of treatment, mainly extreme, inflexible use of unhelpful coping styles that seem to make them vulnerable to depression (eg, actively attempting to change all problems vs problem avoidance, withdrawing from others, and denying distress versus excessive help-seeking) [25].

In a small pilot study ($n=34$), older adults with depression (mostly chronic depression, not necessarily meeting criteria for personality disorder) were randomized to receive antidepressant medication alone or antidepressant medication plus DBT (28-week skills training group with weekly 30-minute telephone coaching sessions, followed by reduced frequency of telephone contacts for the next 6 months). Results indicated that those who received medications plus DBT had significantly fewer depressive symptoms (self-rated and interviewer-rated) and lower relapse rates, and were more likely to improve on measures of coping styles [27]. This intensive type of therapy appears acceptable to older adults and may affect longstanding coping patterns, making it promising with personality disorders.

Psychotic disorders

Behavioral approaches may be an effective adjunct to medication treatment for older adults with longstanding psychotic disorders. A small randomized study ($n=40$) compared standard medication treatment with medication treatment plus 24-week behavioral skills training groups in middle-aged and older individuals (age range 42 to 69) with chronic psychotic disorders (average length of 21 years with the disorder). The skills training involved common problems for individuals with psychotic disorders including social skills, communication, and daily activities, such as transportation. Those who participated in the BT groups did not improve on psychopathology, but improved significantly on everyday living skills, compared with those who only received medications immediately after the intervention and 3 months later [28].

Cognitive impairment

Although depressive symptoms are prevalent in older adults with cognitive impairment or dementia [29], these individuals generally are excluded from psychotherapy research. A few small studies examined this issue, however. Alexopoulos *et al.* [30] recently reported on a pilot study ($n=25$) comparing PST with ST in older adults with executive dysfunction; these patients tend to have a poorer response to antidepressant medications [31–33]. Participants who received PST tended to improve more on depressive symptoms than those receiving ST; PST was hypothesized to address the specific behavioral and cognitive deficits associated with executive dysfunction by helping individuals initiate problem-solving behavior and avoid persisting on problems or ineffective solutions.

Preliminary findings presented at recent professional proceedings suggest that psychotherapy may be feasible for individuals with mild dementia, particularly if caregivers are involved, and that participants and caregivers find psychotherapy helpful [34,35]. From the design of these studies, however, evaluation of the efficacy or effectiveness of the psychotherapy for depressive symptoms or quality of life is difficult. For individuals with more severe dementia, BT to train the caregiver to increase the patient's pleasant events or to train the caregiver in

problem-solving skills appear effective at reducing depressive symptoms for patient and caregiver [36].

Medically ill

The majority of psychotherapy studies with medically ill samples have not focused explicitly on older adults or specific psychiatric diagnoses, and usually focus on individuals with a specific medical diagnosis, such as cancer or arthritis. Although beyond the scope of this paper, studies generally support the effectiveness of psychotherapy in decreasing depressive and anxiety symptoms, enhancing coping skills, and even affecting physical outcomes (*eg*, pain, disability) across a variety of medical conditions (*see* Smith *et al.* [37] for recent reviews across a variety of medical diagnoses).

A study cited previously [20] involved medically ill elders who had recently been hospitalized and found that these patients responded better to interpersonal counseling than usual care for minor depression. Some intervention studies do not exclude on the basis of psychiatric symptoms or diagnosis, but focus on enhancing coping for any individuals with chronic illness, and often use multicomponent interventions. For example, Rybarczyk *et al.* [38•] randomized 243 older adults with a variety of chronic medical conditions to usual care or a multicomponent group intervention (eight 2-hour group sessions) involving education and exercises on the following: 1) mind-body link, 2) relaxation training, 3) cognitive restructuring, 4) problem solving, 5) communication and assertiveness training, and 6) techniques to improve sleep, nutrition, and exercise. Intervention participants improved significantly more than control participants on sleep, pain, anxiety, depression, and control beliefs. One year later, the intervention group still had better sleep, control beliefs, and health behaviors, but depression and anxiety improvements were not maintained. This type of integrative intervention is very appealing with older adults, given the frequency of medical comorbidity and mood symptoms. Future research should consider augmentation strategies to better maintain improvements in mood symptoms, particularly for those with more severe mood disturbance.

A few additional studies have examined the usefulness of psychotherapy for older adults with medical illness in various medical settings. These studies will be discussed subsequently by treatment setting.

Extending Service Delivery to Medical Settings

Primary care settings

Older adults generally prefer to receive mental health services in the same setting where they receive their general medical care and often seek mental health care from their primary care providers [39]. Therefore, researchers have begun to examine the expansion of services, including psychotherapy, into the primary care setting. This research has largely focused on depression. In a recent review of studies in primary care for depression (not restricted to older adults), it was concluded that psychotherapy (CBT, IPT,

and PST) was effective for major depression, with less evidence for minor depression or dysthymia [40].

Primary care studies generally focus on effectiveness of comprehensive treatment packages for depression that include psychotherapy in comparison with usual care, as opposed to trials in which psychotherapy conditions are randomized. These studies have the advantage of generalizability to “real world” clinical settings, but provide less information about the efficacy of psychotherapy alone. Still, these studies suggest that the extension of psychotherapy for older primary care patients is feasible and promising [39].

The IMPACT (Improving Mood-Promoting Access to Collaborative Treatment) study [8••] is one model of integrating mental health services, including psychotherapy, into primary care. IMPACT was a multisite (18 primary care clinics across five states), randomized controlled trial comparing usual care with a collaborative care model for treatment of depression in 1801 older primary care patients. In the collaborative care model, participants worked closely with a depression clinical specialist (nurse or psychologist), who provided a comprehensive depression treatment program (education, discuss treatment options, manage treatment, monitor depressive symptoms, provide psychotherapy if desired by the participant, and serve as liaison to rest of primary care team). Compared with usual care, patients receiving collaborative care were more likely to receive treatment for depression (including being more likely to receive psychotherapy), show reduction or remission of depressive symptoms, report greater satisfaction with their depression care, and report better overall functioning.

The IMPACT study demonstrated that brief psychotherapy, in combination with other medical care, is feasible and effective for depressed older adults in primary care settings, many of whom have comorbid medical conditions (average of 3.2 medical conditions in IMPACT). The type of therapy offered in IMPACT was problem-solving therapy-primary care (PST-PC), which involves teaching systematic steps for solving problems across six 30-minute sessions. Psychologists and nurses, some of whom had no mental health background, were able to learn and apply the therapy appropriately after a 1-day workshop and close supervision of at least three training cases. This study also demonstrated that the addition of a depression clinical specialist can increase the availability and participation in psychotherapy; 51% of participants preferred psychotherapy to medications, but only 8% had received any specialty mental health services (including but not limited to psychotherapy) in the 3 months preceding the study.

The PROSPECT (Prevention of Suicide in Primary Care Elderly: Collaborative Trial) study [41] is another multisite randomized trial comparing comprehensive treatment of depression in older primary care patients with usual care, with a focus on assessing suicidal ideation and reducing suicide risk. Similar to IMPACT, this study uses a health specialist who provides a variety of services, including assessment, liaison with primary care physician, medication management, monitoring symptoms and side effects, and closely

monitoring suicidal patients. Health specialists also provide IPT to patients who choose it, who cannot tolerate medications, or who have psychosocial stressors that indicate augmenting medication with therapy. Although primary outcomes of this study have not been published, after 1 year of the study, Schulberg *et al.* [42] reported that health specialists (social workers, psychologists, and nurses) had been able to learn and successfully apply IPT with their patients. Therefore, this study provides further evidence that efficacious brief psychotherapies can be transported to the primary care setting and can be delivered by a variety of health professionals with appropriate training and supervision. As suggested by the study of minor depression and dysthymia in primary care described previously [21], however, quality assurance is very important in extending psychotherapy to primary care or other settings in which professionals delivering psychotherapy may have little mental health background.

Long-term care settings

Although disproportionate numbers of residents in long-term care settings suffer from depression and anxiety [9], very few empiric studies have been conducted, and existing studies tend to have small sample sizes and poor control conditions. Older studies suggested that PST and reminiscence may benefit depressed nursing home patients [2••]. A more recent study reported that validation therapy, which fosters communication among patients with dementia in a structured manner, improved staff-rated aggression and depression compared with a less-structured social contact group or usual care [43]. A separate study, which included no control groups, suggested that BT may decrease the need for psychotropic medications for behavioral problems [44].

Home and telemedicine

Because many medically ill and disabled elderly patients have difficulty with transportation and may be homebound, psychosocial interventions that can be conducted in the home or via communication technology can be very valuable. Such interventions also would benefit rural elders, for whom mental health resources are even more limited. Very little research has been conducted to evaluate the effectiveness or feasibility of such interventions, however. Small studies suggest that cognitive bibliotherapy (*ie*, reading assignments and exercises) in conjunction with occasional face-to-face meetings and phone contact to teach CBT coping strategies may benefit older adults with disability [45], and that these improvements may be maintained for some patients up to 2 years [46].

Conclusions

A significant body of research now supports the effectiveness of psychotherapy for older adults with psychiatric disorders. Support exists for several approaches, particularly CBT and IPT, with relatively healthy older

adults suffering from major depression. Over the past few years, researchers have begun to examine the generalizability of these findings to older adults with other psychiatric diagnoses, comorbidities, and to different treatment settings. Although preliminary, some forms of psychotherapy appear promising for minor depression, dysthymia, anxiety, personality disorders, and mild cognitive impairment (specifically, executive dysfunction). Integrated psychoeducational interventions appear helpful for older adults with medical illness. This increased diversity in research provides important guidance to psychotherapists who work with the elderly, as older adults comprise a diverse group with varied issues and needs.

In addition to advances in treating different types of psychiatric problems, researchers are making important gains in increasing the availability of psychotherapy. Brief psychotherapy appears transportable to medical settings, with most of the research focused on the primary care setting, in an effort to integrate mental health services with other medical and social services. Even non-mental health professionals, such as nurses, are able to learn to administer brief, structured psychotherapy. Appropriate training and supervision is essential to ensure that quality psychotherapy is delivered. The delivery of psychotherapy in other medical settings also appears feasible and beneficial based on a small number of studies; delivery of in-home services (in-person or via telephone or other media) shows potential.

Despite these achievements, a great deal of additional research is needed. The research on diagnoses other than major depression is just beginning; findings from small studies require replication with larger samples. Minor depression and dysthymia often have been studied together; these likely are separate disorders that should be studied separately. As a more chronic disorder, dysthymia may require longer-term intervention. Additional research on suicidal ideation also is important in depression research, because older adults have the highest rates of suicide [47]. The small amount of anxiety research has been conducted with GAD and should be extended to other anxiety disorders. Furthermore, the comorbidity of depressive and anxiety symptoms is very common and deserves increased attention. Research with cognitively impaired elders should be extended beyond executive dysfunction, because memory impairment and dementia also are common and debilitating conditions. Finally, psychosocial interventions may be very helpful with bipolar and psychotic disorders, although almost no research has been conducted with these populations.

Integrated psychoeducational interventions that target physical and psychological symptoms, as described by Rybarczyk *et al.* [38•], are particularly promising for older adults with comorbid physical illness. These interventions may affect a wider variety of outcomes (eg, pain or disabil-

ity) than purely psychologic interventions, and may prevent the development of psychiatric disorders in this high-risk group. Future research will need to examine this type of intervention with older adults, who may require augmentation with more intensive psychotherapy, with more severe physical and psychiatric illness.

Attention to ethnic and racial diversity in psychotherapy research also is very important. The majority of studies to date have included primarily Caucasian individuals, with sample sizes too small to examine any ethnic differences in therapeutic effectiveness. Therefore, future studies need to include more minorities, because many minority elders are willing to engage in psychotherapy (Areán, Unpublished data). This will require special efforts to recruit minorities into psychotherapy studies, including involving representative elders in designing recruitment methods [48].

Future research also should consider the use of preventive interventions, particularly for high-risk elderly patients, such as homebound or institutionalized individuals. Such interventions will need to follow participants over longer periods and include a range of outcome measures other than symptoms (eg, quality of life or social function) to demonstrate effects.

Once efficacious interventions are developed across diagnostic categories and comorbidities, examining ways to integrate these interventions into medical and other settings, similar to the depression research in primary care, is important. Long-term care settings are particularly important, because they have disproportionate numbers of elders with depression and anxiety. Only with continued work to expand service delivery will many older adults actually experience the benefits of any developments in therapeutic techniques.

References and Recommended Reading

Papers of particular interest, published recently, have been highlighted as:

- Of importance
 - Of major importance
1. NIH Consensus Panel on Diagnosis and Treatment of Depression in Late Life: **Diagnosis and treatment of depression in late life.** *JAMA* 1992, **268**:1018–1024.
 2. •• Areán PA, Cook BL: **Psychotherapy and combined psychotherapy/pharmacotherapy for late life depression.** *Biol Psychiatry* 2002, **52**:293–303.
- Comprehensive review of empiric studies of psychotherapy and combined treatment for late-life depression.
3. Karel MJ, Hinrichsen G: **Treatment of depression in late life: psychotherapeutic interventions.** *Clin Psychol Rev* 2000, **20**:707–729.
 4. Gatz M, Fiske A, Fox LS, *et al.*: **Empirically validated psychological treatments for older adults.** *J Ment Health Aging* 1998, **4**:9–46.
 5. Niederehe G, Schneider LS: **Treatments for depression and anxiety in the aged.** In *A Guide to Treatments that Work*. Edited by Nathan PE, Gorman JM. New York: Oxford University Press; 1998:270–287.
 6. Zeiss AM, Breckenridge JS: **Treatment of late life depression: a response to the NIH consensus conference.** *Behav Ther* 1997, **28**:3–21.

7. Areán PA, Alvidrez J, Barrera A, et al.: **Would older medical patients use psychological services?** *Gerontologist* 2002, 42:392–398.
 8. •• Ünützer J, Katon W, Callahan CM, et al.: **Collaborative care management of late-life depression in the primary care setting: a randomized controlled trial.** *JAMA* 2002, 288:2836–2845.
- The IMPACT study demonstrated the effectiveness of an integrated model of brief structured psychotherapy and medication management in primary care. Psychotherapy was successfully taught to nurses without mental health backgrounds.
9. NIH Consensus Panel on Diagnosis and Treatment of Depression in Late Life: **Diagnosis and treatment of depression in late life: consensus statement update.** *JAMA* 1997, 278:1186–1190.
 10. Nezu AM, Nezu CM, Perri MG: *Problem-solving Therapy for Depression.* New York: Wiley-Interscience; 1988.
 11. Beck AT, Rush AJ, Shaw BF, Emery G: *Cognitive Therapy of Depression.* New York: Guilford; 1979.
 12. Klerman GL, Weissman MM, Rounsaville BJ, Chevron E: *Interpersonal Psychotherapy of Depression.* New York: Basic Books; 1984.
 13. Lewis MI, Butler RN: **Life-review therapy: putting memories to work in individual and group psychotherapy.** *Geriatrics* 1974, 29:165–173.
 14. • Pinquart M, Sörensen S: **How effective are psychotherapeutic and other psychosocial interventions with older adults? A meta-analysis.** *J Ment Health Aging* 2001, 7:207–243.
- Comprehensive meta-analytic review of 122 psychotherapy studies. Concludes psychotherapy is effective and explores moderators of effect size differences across studies.
15. Areán PA, Perri MG, Nezu AM, et al.: **Comparative effectiveness of social problem-solving therapy and reminiscence therapy as treatments for depression in older adults.** *J Consult Clin Psychol* 1993, 61:1003–1010.
 16. Klausner EJ, Clarkin JF, Spielman L, et al.: **Late-life depression and functional disability: the role of goal-focused group psychotherapy.** *Int J Geriatr Psychiatry* 1998, 13:707–716.
 17. Thompson LW, Gallagher D, Breckenridge JS: **Comparative effectiveness of psychotherapies for depressed elders.** *J Consult Clin Psychol* 1987, 55:385–390.
 18. Gallagher-Thompson D, Steffan A: **Comparative effects of cognitive-behavioral and brief psychodynamic psychotherapies for depressed family caregivers.** *J Consult Clin Psychol* 1994, 62:543–549.
 19. Thompson LW, Coon DW, Gallagher-Thompson D, et al.: **Comparison of desipramine and cognitive/behavioral therapy in the treatment of elderly outpatients with mild-to-moderate depression.** *Am J Geriatr Psychiatry* 2001, 9:225–240.
 20. Mossey JM, Knott KA, Higgins M, Talerico K: **Effectiveness of a psychosocial intervention, interpersonal counseling, for sub-dysthymic depression in medically ill elderly.** *J Gerontol A Biol Sci Med Sci* 1996, 51:M172–M178.
 21. Williams JW, Jr., Barrett J, Oxman T, et al.: **Treatment of dysthymia and minor depression in primary care: a randomized controlled trial in older adults.** *JAMA* 2000, 284:1519–1526.
 22. •• Nordhus IH, Pallesen S: **Psychological treatment of late-life anxiety: an empirical review.** *J Consult Clin Psychol.* 2003, 71:643–651.
- Meta-analytic review of empiric studies of psychotherapy for late-life anxiety disorders. Concludes psychotherapy is effective; average effect size was 0.55.
23. Wetherell JL, Gatz M, Craske MG: **Treatment of generalized anxiety disorder in older adults.** *J Consult Clin Psychol.* 2003, 71:31–40.
 24. Stanley MA, Beck JG, Novy DM, et al.: **Cognitive-behavioral treatment of late-life generalized anxiety disorder.** *J Consult Clin Psychol* 2003, 71:309–319.
 25. Lynch TR: **Treatment of elderly depression with personality disorder comorbidity using dialectical behavior therapy.** *Cogn Behav Pract.* 2000, 7:468–477.
 26. Linehan MM: *Cognitive Behavioral Treatment for Borderline Personality Disorder.* New York: Guilford Press; 1993.
 27. Lynch TR, Morse JQ, Mendelson T, Robins CJ: **Dialectical behavior therapy for depressed older adults: a randomized pilot study.** *Am J Geriatr Psychiatry* 2003, 11:33–45.
 28. Patterson TL, McKibbin C, Taylor M, et al.: **Functional adaptation skills training (FAST): a pilot psychosocial intervention study in middle-aged and older patients with chronic psychotic disorders.** *Am J Geriatr Psychiatry* 2003, 11:17–23.
 29. Lyketsos CG, Lopez O, Jones B, et al.: **Prevalence of neuropsychiatric symptoms in dementia and mild cognitive impairment: results from the Cardiovascular Health Study.** *JAMA* 2002, 288:1475–1483.
 30. Alexopoulos GS, Raue P, Areán P: **Problem-solving therapy versus supportive therapy in geriatric major depression with executive dysfunction.** *Am J Geriatr Psychiatry* 2003, 11:46–52.
 31. Dunkin JJ, Leuchter AF, Cook IA, et al.: **Executive dysfunction predicts nonresponse to fluoxetine in major depression.** *J Affect Disord* 2000, 60:13–23.
 32. Alexopoulos GS, Meyers BS, Young RC, et al.: **Executive dysfunction and long-term outcomes of geriatric depression.** *Arch Gen Psychiatry* 2000, 57:285–290.
 33. Kalayam B, Alexopoulos GS: **Prefrontal dysfunction and treatment response in geriatric depression.** *Arch Gen Psychiatry* 1999, 56:713–718.
 34. Miller MD: **Adapting interpersonal psychotherapy (IPT) for depressed elders with cognitive dysfunction.** Paper presented at the Annual Meeting of the International Psychogeriatrics Association. Chicago, IL; August 17–22, 2003.
 35. Burns A: **A randomized controlled trial of psychotherapy in people with AD.** Paper presented at the Annual Meeting of the International Psychogeriatrics Association. Chicago, IL; August 17–22, 2003.
 36. Teri L, Logsdon RG, Uomoto J, McCurry SM: **Behavioral treatment of depression in dementia patients: a controlled clinical trial.** *J Gerontol B Psychol Sci Soc Sci* 1997, 52:P159–P166.
 37. Smith TW, Kendall PC, Keefe FJ: **Behavioral medicine and clinical health psychology: introduction to the special issue, a view from the decade of behavior.** *J Consult Clin Psychol* 2002, 70:459–462.
 38. • Rybarczyk B, DeMarco G, DeLaCruz M, et al.: **A classroom mind/body wellness intervention for older adults with chronic illness: comparing immediate and 1-year benefits.** *Behav Med* 2001, 27:15–27.
- Integrative psychoeducation intervention (that teaches coping skills and methods to manage physical illness, such as nutrition and exercise) benefits mood, pain, and sleep in nonpsychiatric sample. Promising model for future research with psychiatric samples with comorbid medical conditions.
39. Areán PA, Hegel MT, Reynolds CF: **Treating depression in older medical patients with psychotherapy.** *J Clin Geropsychol* 2001, 7:93–104.
 40. Schulberg HC, Raue PJ, Rollman BL: **The effectiveness of psychotherapy in treating depressive disorders in primary care practice: clinical and cost perspectives.** *Gen Hosp Psychiatry* 2002, 24:203–212.
 41. Alexopoulos GS, PROSPECT Group: **Interventions for depressed elderly primary care patients.** *Int J Geriatr Psychiatry* 2001, 16:553–559.
 42. Schulberg HC, Bryce C, Chism K, et al.: **Managing late-life depression in primary care practice: a case study of the health specialist's role.** *Int J Geriatr Psychiatry* 2001, 16:577–584.
 43. Toseland RW, Diehl M, Freeman K, et al.: **The impact of validation group therapy on nursing home residents with dementia.** *J Appl Gerontol* 1997, 16:31–50.
 44. Mansdorf JJ, Calapai P, Caselli L, et al.: **Reducing psychotropic medication usage in nursing home residents: the effects of behaviorally oriented psychotherapy.** *Behav Ther* 1999, 22:21–23.
 45. Landreville P, Bissonnette L: **Effects of cognitive bibliotherapy for depressed older adults with a disability.** *Clin Gerontol* 1997, 17:35–55.
 46. Landreville P: **Cognitive bibliotherapy for depression in older adults with a disability.** *Clin Gerontol* 1998, 19:69–75.

47. Pearson JL, Brown GK: **Suicide prevention in late life: directions for science and practice.** *Clin Psychol Rev* 2000, **20**:685–705.
48. Areán PA, Gallagher-Thompson D: **Issues and recommendations for the recruitment and retention of older ethnic minority adults into clinical research.** *J Consult Clin Psychol* 1996, **64**:875–880.