

Treating Depressed Older Adults in Primary Care: Narrowing the Gap between Efficacy and Effectiveness

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IN 1992, THE NATIONAL INSTITUTES OF HEALTH sponsored a Consensus Development Panel on Depression in Late Life, which concluded that most older adults live in the community and see a primary care provider at least once per year but do not receive treatment for depression when it is indicated (National Institutes of Health 1992). Even when primary care providers do recognize and diagnose depression, they rarely provide treatments that are in accordance with the evidence-based guidelines developed by the Agency for Health Care Policy and Research (1993). In this review, we will explore the gap between what is known about the *efficacy* of treatments for late-life depression under research conditions and the *effectiveness* of treatments as they occur in the “real world” of primary care. We will examine barriers to effective care and suggest ways in which the care for older primary care patients with depression can become more effective. To identify relevant literature on the treatment of depression in late life, we searched MEDLINE and PsychINFO from 1966 to 1997 and identified additional articles by reviewing references and consulting with a number of experts in the field of late-life depression.

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Late-Life Depression in General Medical Settings

Prevalence of Depression

Nearly 5 million of the 31 million Americans over age 65 suffer from clinically significant depressive syndromes (Lebowitz 1996). Prevalence estimates vary from 1.6 percent to 26.9 percent, depending on the definition used, the population studied, and the methodology used to identify cases (Gurland, Cross, and Katz 1996). The prevalence of major depression increases as one moves from community settings (1 to 3 percent) to primary care (6 to 9 percent) to institutional settings like nursing homes (12 to 30 percent).

The Epidemiologic Catchment Area Study (ECA) found the prevalence of major depression, as defined in the third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III), among those over 65 to be 1.4 percent in women and 0.4 percent in men, a rate only one-fourth of that existing among those aged 18 to 44. This age difference is less apparent in primary care settings, where the prevalence of major depression among older adults has been estimated to range from 6.5 percent to 9 percent (Oxman, Barrett, Barrett, et al. 1990; Lyness, Caine, King, et al. 1997). Particularly high rates of major depression (11.5 percent) were found in a multiethnic sample of elderly, inner-city adults who met poverty criteria (Arean, Robinson, and Hicks 1997b).

Depressive symptoms that do not meet DSM-IV criteria for major depression are now being recognized as common and important among the elderly. Dysthymia is a chronic depressive syndrome that persists for at least two years, and minor depression is most commonly defined as persistent dysphoria or anhedonia plus one to three depressive symptoms that are present nearly every day for at least two weeks. Minor depression is a heterogeneous group of syndromes that may either represent a prodromal or residual form of major depression or dysthymia or constitute a response to an identifiable stressor.

The ECA found that 2 percent of older adults in the community have dysthymia, 4 percent have adjustment disorder with depressed mood, and an additional 15 percent have subsyndromal depressive symptoms (Koenig and Blazer 1996). In primary care settings, prevalence rates of subthreshold depressive syndromes for all adults range from 17 to 25 percent. Oxman et al. (1990) found higher rates of subthreshold depression among elderly medical outpatients; 47 to 52 percent met re-

search diagnostic criteria (RDC) for minor depression. In a sample of multiethnic, poor, older medical patients, 16 percent met criteria for dysthymia (Arean, Robinson, and Hicks 1997b).

Risk Factors for Depression in Older Adults

Risk factors for developing depression after age 65 are similar to those in younger individuals and include being female, unmarried, poor, socially isolated, and having a history of depression at a younger age (Ranga, George, Peiper, et al. 1998). Additional risk factors that are particularly important in older adults include loss and grief, caretaking responsibilities, and medical illness in the patient or a spouse (Jorm 1998; Ormel, Kempen, Penninx, et al. 1997; Roberts, Kaplan, Shema, et al. 1997).

Each year, 800,000 Americans lose their spouse, leaving 11 million widows and 2 million widowers, a total of 7 percent of the population. The death of a spouse is associated with declining mental and physical health, increased mortality due to suicide and other causes, and reduced income. Major depression, substance abuse, anxiety disorders, and post-traumatic stress disorder are common in the first year (Jacobs 1993), and widows or widowers who meet criteria for major depression at two months are at markedly increased risk of having major depression at one year (Zisook and Schuchter 1996).

There is generally a positive relation between social support and morale in old age, and social isolation is a risk factor for poor mental and physical health (Seeman, Kaplan, Knudsen, et al. 1987). The risk of depression is particularly great for those older adults who are taking care of a significant other with serious medical or cognitive impairments (Russo, Vitaliano, Brewer, et al. 1995; Schwarz and Bixen 1997).

Depression and Medical Illness

The majority of persons over age 65 suffer from one or more chronic medical conditions that significantly impair their health or ability to function and increase their risk of depression. Degenerative arthritis affects 50 percent; hypertension, 40 percent; hearing loss, 30 percent; urinary incontinence, up to 30 percent; heart disease, 30 percent; diabetes mellitus, 15 percent; and significant visual impairment, up to 15

percent. Luber (1996) found that depressed outpatients had significantly more medical diagnoses than controls without depression. The rates of comorbid medical disorders and depression are especially high in certain neurologic disorders, such as stroke or Parkinson's disease. When these chronic medical conditions begin to impair an older patient's ability to function, they become associated with an increased risk of depression (Ormel et al. 1997).

Various changes on structural brain imaging have been associated with depression: enlargement of lateral ventricles; cortical atrophy; more frequent periventricular hyperintensities (primarily enlargement of perivascular spaces); more frequent deep white-matter lesions; more frequent basal ganglia lesions; and smaller caudate and putamen (Krishnan and Gadde 1996). These findings are consistent with a proposed new subtype of late-life and late-onset depression, "vascular depression" (Krishnan and Gadde 1996; Katz 1996; Alexopoulos, Meyers, Young, et al. 1997).

Katz (1996) has also proposed an alternative hypothesis for the relation between depression and common medical conditions. Sickness behavior and nonspecific physical symptoms, like fatigue, decreased ability to concentrate, and depressed mood, which are commonly seen in both depression and some chronic medical conditions, may arise from the activation of certain cytokine systems by the medical illness.

Another possible mechanism for the relation between chronic medical conditions and depression in the elderly is the increased burden of aversive physical symptoms and disability in advancing age. Older adults may experience a "vicious cycle" of pain, depression, and disability, during which pain problems may cause deprivation of deep-stage sleep, which in turn can cause or worsen depression. Deprivation of stage 4 sleep has been linked with increased musculoskeletal complaints and depressive affect (Muldovsky and Scarisbrick 1976). Depression, on the other hand, may also cause deprivation of deep sleep, thereby amplifying pain. It appears that pain and physical disability may erode patients' affect by decreasing their confidence to perform specific behaviors. Supporting this theory is the finding that physical self-efficacy is a better predictor of depressive symptoms than objective health status (Davis-Berman 1990).

Chronicity of Depression

Older adults are at greater risk for chronicity of depression than younger persons. Studies of one to six years have shown chronicity rates of 7 to

30 percent. Rates can go as high as 40 percent if those whose depression has partially remitted are included as chronic (Alexopoulos and Chester 1992). A recent review of five community-based outcome studies of late-life depression found that at 12- to 48-months' follow-up, only 19 to 34 percent were well, 27 percent were continuously ill, and most of the remainder had died (Cole and Bellavance 1997). Schulberg, Mul-sant, Schulz, et al. (1997) found that 45 percent of older primary care patients with major depression still met criteria for major depression at a six-month follow-up. Only 14 percent were considered asymptomatic at that time. Two other studies of elderly primary care patients with significant depression (Callahan, Hendrie, Dittus, et al. 1994; Unützer, Patrick, Simon, et al. 1997) found that about 50 percent of those with clinically significant depression at baseline still had significant depressive symptoms at follow-ups that ranged from nine months to two years. Among those who do recover from major depression, 13 to 19 percent relapse or have a recurrence at one year, and, by three to six years, the recurrence rate is 38 percent (Cole and Bellavance 1997).

The Impact of Depression

Depression has been associated with significant impairments in physical, mental, and social functioning and health-related quality of life in younger and older primary care samples. Although the elderly seem to adapt to aversive symptoms of medical illness more successfully than younger patients (Simon and Von Korff 1992), the development of major depression can inhibit this adaptation and lead to amplification of physical symptoms (Katon 1996). Sullivan, LaCroix, Baum, et al. (1998) studied a cohort of patients with hemodynamically significant coronary artery disease by angiography. They found that, at one year, depressive and anxiety symptoms were more highly associated with functional impairment than were baseline anatomic measures of cardiac disease.

Depression also adds significantly to health care costs among the elderly. Callahan, Hendrie, Dittus, et al. (1994) found that depressed older adults in an inner-city primary care clinic had 38 percent more outpatient visits and 61 percent greater outpatient costs over a nine-month period than those without depression. In a four-year prospective study, depressed older adults in a large staff-model HMO had significant increases in every component of health care costs, even after adjusting for the severity of chronic medical illness (Unützer et al. 1997).

Depression has also been associated with the increased risk of suicide (Conwell, Duberstein, Cox, et al. 1996) and of mortality from causes other than suicide in older adults (Murphy, Smith, Lindsay, et al. 1988; Kouzis, Eaton, and Leaf 1995). Epidemiologic studies have uncovered an increased risk of cardiovascular mortality among depressed subjects (Bruce, Leaf, Rozal, et al. 1994), and a study of post–myocardial infarction patients has found increased mortality among patients with depression (Frasure-Smith, Lesperance, and Talajic 1993). Rovner, Perman, Brant, et al. (1991) reported increased mortality in a sample of elderly nursing-home residents with depression.

The Efficacy of Treatments for Late-Life Depression

A number of recent articles review the efficacy of treatments for late-life depression (Lebowitz 1996), and we will only summarize the major findings here. If properly used, antidepressant medications are efficacious for the majority of older adults with major depression (Schneider 1996). A recent review indicates that antidepressants can also be efficacious in subjects with comorbid medical illness (Gill and Hatcher 1997). Electroconvulsive therapy (ECT) has high rates of response in severe depression (80 to 90 percent) but shows high rates of relapse (30 percent in six months), especially among those with a history of medication resistance.

Among psychotherapies, cognitive behavioral therapy (CBT), interpersonal therapy (IPT), and possibly brief dynamic therapy have proved to be effective (Niederehe 1996). Arean, Perri, Nezu, et al. (1993) have developed a version of CBT, called “social problem-solving group therapy,” for older adults with major depression, which has reduced depressive symptoms significantly more than reminiscence therapy or a wait list control condition. As with younger patients, the value of combined pharmacotherapy and psychotherapy has not been clearly demonstrated over that of either treatment alone.

There are few treatment studies for minor depression or dysthymia in older adults. The results of a multicenter study of paroxetine versus placebo versus problem-solving therapy (PST) for older adults with minor depression will be reported this summer. Antidepressant trials for subthreshold depressive disorders in mixed-age samples suggest that

medications are significantly more effective than placebo in those with Hamilton Depression Scores greater than 13 but not in milder cases of depression (Paykel, Hollyman, Freeling, et al. 1988; Stewart, McGrath, Quitkin, et al. 1992). In a mixed-age sample, fluoxetine has proved superior to placebo in the treatment of dysthymia (Hellerstein, Yanowitch, Rosenthal, et al. 1993).

A meta-analysis of 17 studies of psychosocial treatments for depression in older adults found that the effect sizes for studies involving patients with major depression or with subthreshold depression were both significantly greater than zero (Scogin and McElreath 1994). A recent trial of interpersonal counseling (IPC) delivered by psychiatric nurse specialists for medically ill older adults with “subdysthymic depression” showed that IPC was feasible and acceptable to older adults (Mossey, Knott, Higgins, et al. 1996). Compared with the usual care, IPC was effective in reducing depressive symptoms at three- and six-months’ follow-up.

Effectiveness of “Usual Care” for Depressed Older Adults

The ECA study estimated that 60 percent of all persons receiving care for mental and emotional problems are treated exclusively in general medical settings, and it appears that this proportion is even greater in older adults (Regier, Myers, Kramer, et al. 1984; Waxman and Carner 1984). Studies have shown that older adults are less likely than younger patients to seek and receive specialty mental health services (Gurland, Cross, and Katz 1996; Callahan et al. 1994; Unützer et al. 1997; Shapiro, Skinner, Kessler, et al. 1984, Goldstrom, Burns, Kessler, et al. 1987). Blazer (1978) found that 1 percent of older adults in a community sample received some type of counseling or psychotherapy. Another survey of elderly community residents with significant depressive symptoms found an increased use of general medical services but not of mental health services (Ganguli, Gilby, Seaberg, et al. 1995). Only 2.1 percent in the depressed sample used specialty mental health services. A study by Arean, Robinson, and Hicks (1997a) found that older adults were as likely as younger adults to perceive a need for, and to seek out, mental health services, but they were significantly less likely to be referred by their primary care providers.

The estimates for recognition of depression in older primary care patients vary widely, from 15 to 94 percent (Callahan et al. 1994; Gurland, Cross, and Katz 1996; Caine, Lyness, and Conwell 1996; Luber 1996). Despite this large range, it is clear that significant numbers of depressed older adults are not recognized and diagnosed in primary care. A recent survey of primary care providers found that only 33 percent of providers use standard screening tests for depression (Glasser and Gravdal 1997). Fifty percent said they focused on organic diagnoses before they turned their attention to depression. Even when patients are recognized, there is little evidence that recognition alone translates into higher rates of adequate treatment, referral to mental health practitioners, or improved clinical outcomes (Katon 1995).

Little is known about the adequacy of acute-phase treatment for depressed older adults in primary care. Callahan and colleagues (1994) found that only one in seven elderly outpatients who had significant depressive symptoms received treatment with antidepressant medications. Only half of the patients who were referred for a mental health consultation made at least one visit. In a sample of depressed older adults in inner London, only 14 percent were prescribed antidepressants by their primary care providers, and 24 percent were prescribed hypnotics (Blanchard, Waterreus, and Mann 1994). Luber (1996) found that only one-third of the elderly outpatients who were diagnosed as depressed by their primary care providers received antidepressant prescriptions. Lyness, Caine, King, et al. (1997) found little difference in rates of antidepressant prescriptions between older primary care patients with major depression or subsyndromal depressions, indicating that primary care providers do not easily make distinctions between the different types of depression.

Studies of compliance with antidepressant medications in mixed-age samples have shown that less than 50 percent of primary care patients with major depression receive antidepressant trials that meet AHCPR dosage/duration standards (Agency for Health Care Policy and Research 1993; Simon, Von Korff, Wagner, et al. 1993). There is some evidence that physicians tend to reduce the intensity of antidepressant treatment before their patients experience full recovery (Myers 1996; Hawley, Quick, Harding, et al. 1997). About 40 percent of patients stop taking newly prescribed medications within four to six weeks, and less than 40 percent of patients in primary care stay on antidepressants for 180 days

or longer (Simon et al. 1993; Katon, Robinson, Von Korff, et al. 1996). This proportion may be even higher in older adults because of increased sensitivity to side effects (Kamath, Finkel, and Moran 1996). Data from a large HMO indicate that older adults are less likely than younger patients to complete a 30- or 90-day course of antidepressant medications at a therapeutic dose (Unützer, Katon, Russo, et al. 1999).

The Gap between Efficacy and Effectiveness

Despite the availability of efficacious treatments for late-life depression, few older adults receive these treatments in primary care. Even when providers use treatments that have performed well in randomized controlled trials, they do not find them nearly as effective when they are used in “real world” patients.

A number of reasons have been cited for this gap between *efficacy* (the result of treatments under tightly controlled experimental conditions) and *effectiveness* (the result of treatments under more typical practice conditions) (Simon, Wagner, and Von Korff 1995; Lebowitz and Rudorfer 1998; Wells 1999b). Often, patients in actual practice have comorbid psychiatric, medical, or social problems that may lower treatment responsiveness. They face barriers like the cost of medications or the time required to attend psychotherapy sessions. They are seen much less often than patients in clinical trials, and their side effects are not monitored as closely. All these factors can lead to more treatment dropouts, medication changes, and lower treatment adherence and effectiveness.

Patient Barriers

Findings from the Established Populations for Epidemiologic Study of the Elderly (EPESE) and other studies suggest that being poor or old significantly decreases one’s likelihood of treatment for depression (Brown, Salive, Guralnik, et al. 1995). Older adults may lack the knowledge or information needed to obtain good care for depression, or they may hold attitudes that prevent them from obtaining care. They may be more sensitive to the stigma associated with depression (Thompson, Mitchell, and House 1989), or they may fear addiction and interference with other

medical treatments (Goldman 1997). Furthermore, older adults and their physicians may misattribute symptoms of major depression to “normal” aging, physical illness (Gallo, Anthony, and Muthen 1994; Rabins 1996), or grief.

Although depression is more common in women (Linzer, Spitzer, Kroenke, et al. 1996), men appear to experience special barriers to the successful recognition and treatment of depression. Potts, Burnam, and Wells (1991) found that primary care providers were better able to detect depression in women than in men. This may be in part because women are more likely to report affective symptoms and crying spells (Allen-Burge, Storandt, Kinscherf, et al. 1994). In a large community study, Brown and colleagues (1995) found that depressed women were about twice as likely to be treated with antidepressants as men.

In addition to these barriers, some unique risk factors for depression in late life can create obstacles to the effective treatment of depression. The presence of *grief and bereavement* in depressed older adults, for example, may persuade patients and primary care providers that the depression is “normal,” may lead to therapeutic nihilism, and may prevent depressed patients from getting effective treatments for depression. Depressed *caregivers* of demented or medically ill spouses may find that the full-time obligation of taking care of an impaired spouse prevents them from using mental health services. *Chronic medical illness* is the single most important factor that distinguishes older from younger patients. It increases the risk of depression and the risk that depression will not be diagnosed even when it is present. Medical comorbidity, concurrent medications, polypharmacy, and changes in drug metabolism in older adults also increase the likelihood that patients will experience side effects from antidepressant medications and other psychotropic drugs, leading to lower treatment adherence and increased treatment dropout. Schneider (1996) suggests, for example, that the finding of lower dropout rates for selective serotonin reuptake inhibitors (SSRIs) than for tricyclic antidepressants (TCAs) in antidepressant drug trials may provide an index of treatment effectiveness under “real world” conditions, although there are not enough data from studies with older adults to test this hypothesis.

Sensory impairment, such as decreased vision and hearing, can also contribute to decreased treatment adherence. *Cognitive impairment* is associated with a higher prevalence of depression and may be a barrier to effective medication or psychotherapy treatments. Patients may forget

to take their medications regularly, and they may not be able to make use of traditional psychotherapy. Cognitive impairment also makes it difficult for clinicians to take reliable histories of depression (Wiener, Alexopoulos, Kakuma, et al. 1997). In addition, both sensory and cognitive impairments may add to the difficulty of traveling to the site of outpatient care. In addition, Blazer has described the role of “*existential*” *challenges* in late life depression. Older adults who find no meaning in their existence may be less likely to ask for and use treatments for depression (Blazer 1993).

Provider Barriers

Primary care providers often lack the necessary awareness, skills, or confidence to correctly diagnose and treat older adults with depression (Shah and Harris 1997). They may misdiagnose depression as dementia (Rabins 1996) or attribute all the depressive symptoms to old age, situational stressors, or chronic medical illness, and this can lead to therapeutic nihilism. Cole, Christensen, Raju, et al. (1997) note that patients and providers may both mistakenly believe in the “fallacy of good reasons”: because the patient is old and medically ill, it is no surprise that he or she is depressed, and there is little point in trying to change this. They may also be uncomfortable with “emotional language,” leading them to collude with the patient in a sense of hopelessness and adopt a course of therapeutic nihilism.

Older adults often present with multiple chronic medical conditions in addition to their depressive symptoms, and the primary care provider, who is increasingly subject to time constraints, has to attend to multiple competing priorities during a brief office visit. Providers may avoid asking about depression because they fear opening “Pandora’s Box” of emotions and uncovering psychosocial stressors that they are ill prepared to handle in a 10- to 15-minute office visit. They may perceive no real treatment choices for what they consider fundamentally to be psychosocial problems. Primary care physicians have reported that they view increased time with each patient as the single item that would be most helpful in improving the care of depressed older adults in their practice (Glasser and Gravdal 1997). They have also mentioned other items that would be useful: increased reimbursement for counseling; greater emphasis in medical training on the link between physical and mental health; more support staff in the office; and better relationships

with colleagues who could provide referrals. A recent survey found that primary care providers were four times more likely to report difficulties in obtaining outpatient mental health care for their patients than for other specialty medical services (Center for Studying Health Systems Change 1997). This problem may be particularly severe for older adults because only a small number of practicing psychiatrists are formally trained or have significant experience in treating older adults.

Clinic and Policy Barriers

Marcus, Fortney, Olfson, et al. (1997) have shown that there are clear limits to the geographic distance patients are willing to travel to receive mental health services for depression. This factor may be particularly problematic for older adults, who have limited mobility and must rely more heavily on public transportation. It may be a particular problem in rural areas, where concerns about privacy and confidentiality can become additional barriers to seeking care for depression (Chalifoux, Neese, Buckwalter, et al. 1996; Thompson, Unützer, Katon, et al. 1999).

In many health plans, mental health care is now “carved out” or provided off site, and it may be difficult for older patients to negotiate multiple systems of care successfully, as each has its own access barriers and funding streams (National Institutes of Health, 1992). Such carve-out arrangements can also limit the collaboration between primary care and specialty mental health providers, a particular problem in the treatment of older adults who have multiple, comorbid medical problems.

A recent analysis of mental health claims under Medicare Part B found that Medicare beneficiaries are enjoying better access to mental health services now than a decade ago (Rosenbach and Ammering 1997). It also found, however, that in 1992 mental health spending accounted for only 2 percent of all professional services under Medicare Part B. Medicare continues to require a 50 percent copayment for most outpatient mental health services, compared with 20 percent for general medical services and a 190-day lifetime limit on inpatient mental health treatment (Paveza and Cohen 1996). These policies may shift the costs of mental health treatment to primary care, where the lack of recognition and effective treatment of depression have been well documented. They may also discourage patients and providers from using specialty mental health services.

*Barriers for Poor and Ethnic
Minority Populations*

The barriers we have described are often particularly difficult for low-income and minority patients, who tend to have more health problems and to be more disabled. Poor and ethnic minority populations are underrepresented in mental health care settings (Hough, Karno, Burnam, et al. 1987; Meinhart and Vega 1987; Snowden and Cheung 1990). African Americans, Hispanics, and Asians are all less likely to consult a mental health specialist than are Whites (Gallo, Marino, Ford, et al. 1995). Latinos, in particular, demonstrate a clear pattern of underutilization of mental health services (Sue, Fujino, Hu, et al. 1991); immigrants and less acculturated groups have extremely low rates of service use (Wells, Golding, Burnam, et al. 1987). Three hypothesized factors for lowered mental health utilization among Latinos have *not* proved to be true: Latinos actually hold more positive, rather than more negative, views of mental health care than do Whites (Karno and Edgerton 1969; Acosta and Sheehan 1976); they do not use traditional healers as alternatives to mental health care to any large extent (Keefe, Padilla, and Carlos 1978); and they do not choose health care providers over mental health care providers when seeking treatment for mental disorders (Takeuchi, Leaf, and Kuo 1988).

In the EPESE, Brown and coworkers (1995) found that elderly African Americans were less likely to be prescribed antidepressant medications than their White counterparts. Such differences may reflect ethnic differences in attitudes toward treatment (Cooper-Patrick, Powe, Jenckes, et al. 1997) and in recognition of depression or symptom expression (Brown, Schulberg, and Madonia 1996).

Individuals of low socioeconomic status who belong to an ethnic minority encounter more instrumental barriers to mental health care, such as lack of insurance, time, and transportation, and heavier child and elder care responsibilities, than do White and higher-income individuals (Takeuchi, Leaf, and Kuo 1988). In a positive demonstration of the impact of overcoming instrumental barriers to care for minorities, Norquist (1991) found that a Mexican-American sample covered by Medi-Cal insurance used more services than did those without insurance. Similarly, providing services in Spanish is essential for monolingual Spanish speakers to gain access to services. However, these instrumental factors, taken together, do not account for all the differ-

ences in service use. Clearly, cultural factors play a part. For example, recruitment of an elderly Latina into treatment may require the support of a male member of her family, like her husband or son, which can be an added factor in limiting her availability for treatment. Furthermore, the cultural competence of the staff may influence use of care. For example, speaking informally to an older Latino male may cause him to feel disrespected and thus discourage him from entering treatment. Similarly, a lack of warmth or not showing enough *simpatica* may send a negative message to a Latino about what to expect from the care that is being offered. African Americans may find it difficult to be vulnerable to White practitioners. Additionally, the fear of being forcibly hospitalized may be more real to elderly African Americans than to their White counterparts. Paying attention to these instrumental barriers and handling interventions in a culturally sensitivity manner can increase the number of individuals who gain access to mental health care.

Improving Primary Care for Older Adults with Depression

In recent years, systematic approaches to improving the care of depressed patients have been developed and tested in primary care settings. These models have been summarized by Katon, Von Korff, Lin, et al. (1997) as “population-based disease management for depression,” and they are complex intervention packages with multiple components that will be described below.

Case Finding and Construction of an “Epidemiologic Map”

Rabins (1996) suggests that rather than treating a report of depression or sadness as the “sine qua non” of depression, we train clinicians to look carefully for all symptoms of the depressive syndrome, including anorexia, sleep disturbance, complaints of low energy, unexplained pain, or other somatic complaints. Patients with such complaints should be further screened for depression, and a number of brief screening instruments can be used for this purpose (Mulrow, Williams, Gerety, et al. 1995).

Two screening instruments that have been widely used in older adults are the Center for Epidemiologic Studies Depression scale (Radloff 1977) and the Geriatric Depression Scale (GDS) (Yesavage, Brink, Lum, et al. 1983; Lyness, Noel, Cox, et al. 1997). Shortened ten- and four-item versions of the GDS have been shown to have acceptable psychometric properties in older primary care patients (D'Ath, Katona, Mullan, et al. 1994; van Marwijk, Wallace, de-Bock, et al. 1995). In fact, there is some evidence that a single question (i.e., "Do you often feel sad or depressed?") may be as effective a screen for depression as longer screening instruments (Mahoney, Drinka, Able, et al. 1994; Chochinov, Wilson, Enns, et al. 1997). Screening for depression in a well elderly population has also been performed successfully over the telephone (Dorfman, Lubben, Mayer-Oakes, et al. 1995; Burke, Roccaforte, Wengel, et al. 1995).

Over the past 20 years, a series of studies has been conducted to improve the recognition of depression by screening primary care patients for depressive symptoms (Johnstone and Goldberg 1976; Moore, Silimper, and Bobula 1978; Zung, Magill, Moore et al. 1983; Linn and Yager 1984; Hoeper, Kessler, Nyez, et al. 1984; Shapiro, German, and Skinner 1987; Magruder-Habib, Zung, Feussner, et al. 1989; Magruder-Habib, Zung, and Feussner 1990; Ormel, Koeter, van den Brink, et al. 1991; Coyne, Fechner-Bates, and Schwenk 1994; Dorwick and Buchan 1995; Greenfield, Meszler-Reizes, Magruder, et al. 1997; Riefler, Kessler, Bernhard, et al. 1996; Coyne, Klinkman, Gallo, et al. 1998). Katon and Gonzales (1994) reviewed the evidence on randomized controlled trials of screening interventions published until 1993. They concluded that although most of these trials demonstrated that screening and feedback to primary care providers improved detection rates and some studies improved the rates of depression-specific treatments, robust differences in symptom outcomes were not shown. Klinkman and Okkes (1998), in a review of more recent trials, came to a similar conclusion. Callahan and colleagues (1994) screened primary care patients aged 60 and older for depression in an inner-city, primary care clinic, notified primary care providers that their patients might meet criteria for major depression, and provided them with patient-specific treatment recommendations. This intervention increased the diagnosis of depression in primary care from 8 percent to 26 percent and enhanced the likelihood of patients remaining on antidepressants at six months from 10 percent to 33 percent, but it did not lead to a difference in depressive symptoms or

functioning between the intervention and the control groups. It appears that depression screening, even if followed by treatment suggestions, may not be sufficient to improve depressive outcomes (Katon 1995).

In a population-based approach to reducing the impact of depression, screening may be focused on the identification of high-risk groups, such as patients with certain medical disorders or persons with prior histories of depression, in order to allocate interventions to those who are most likely to benefit from them. Katon and colleagues (1997) have described this process of identifying high-risk groups in a population as “epidemiologic mapping.”

Patient Education and Activation

Efforts to improve the management of chronic conditions like diabetes, hypertension, or depression have shown the importance of helping patients become knowledgeable and active collaborators in their own care (Von Korff, Gruman, Schaefer, et al. 1998). Educational efforts for older adults should draw on our understanding of the unique developmental challenges in old age. When addressing depressed older adults, these efforts should also extend to patients’ family members and caregivers. Two studies have demonstrated the effectiveness of education for the elderly: they describe a psychoeducational workshop for elderly patients with recurrent major depression and their families (Sherrill, Frank, Geary, et al. 1997) and a behaviorally oriented self-help group under the direction of a layperson (Thompson, Gallagher, Nies, et al. 1983).

Provider Education and Support

Guidelines and educational materials have been developed over the past few years to help clinicians provide more cost-effective care for depressed patients in primary care (Agency for Health Care Policy and Research 1993). Although these guidelines do not focus on the treatment of older adults, they do provide the basis for an organized and rational approach to the diagnosis and treatment of depression in primary care and can be adapted to the special needs of older adults. They should form the centerpiece of any systematic effort to improve the care of older adults with depression.

Rutz, von Knorring, and Walinder (1992) reported on a depression education program for general practitioners in Gotland, Sweden, in

1983 and 1984. The program was associated with lower rates of prescriptions for major tranquilizers and benzodiazepines, decreased suicide rates, less sick leave, and fewer inpatient admissions for depression. Unfortunately, these parameters returned to baseline within three years of the discontinuation of the intervention.

Although the education of providers may be an important element in the effective treatment of older adults with depression, it is not sufficient to produce long-standing changes in the care of patients. Such education has to be coupled with practice-based provider support mechanisms: effective reminder systems; physician extenders; or mental health professionals who have been enlisted to support primary care clinicians in their ongoing care of depressed patients (Katon et al. 1997).

Assessment and Treatment Matching

Acute-phase treatments in primary care may involve antidepressant medications or psychosocial interventions, such as interpersonal therapy, cognitive behavioral therapy, and adaptations of these treatments for older adults (Arean, Perri, Nezu, et al. 1993; Mossey, Knott, Higgins, et al. 1996). A comprehensive assessment of functioning, comorbid physical disorders, and medications is important to help providers and patients select the most effective treatments. Clinicians should inquire about their patients' prior experiences and attitudes toward treatments like antidepressants or psychotherapy, discuss barriers to treatment adherence, and figure out ways to minimize treatment dropouts. Whenever possible, family members or caregivers should be involved in this process. Primary care providers may not have the necessary time and expertise to perform comprehensive assessments, but they can assign a geriatric nurse specialist in primary care to take over this task, leaving the patient and the physician with more time to focus on treatment.

Tracking Treatment Outcomes

Because as many as 50 percent of patients will not respond to the initial choice of treatment or will have to change medications at least once, diagnosing depression and initiating acute-phase treatment alone is insufficient. It is extremely important to follow patients actively until a remission of depressive symptoms has occurred. Such follow-up can be

aided by the use of a depression rating scale, which can be administered by primary care providers or a physician extender during clinic visits or over the telephone. In the early stages of treatment, follow-ups should focus on treatment adherence and the management of side effects, whereas later follow-up contacts should focus on restoring optimal functioning and on treatment adherence to prevent relapses. Mandatory outcomes tracking at eight to ten weeks after a diagnosis of depression in primary care might be a performance indicator that could be used by Medicare and other insurers to improve quality of care for depressed older adults. The AHCPR guidelines suggest that patients who are not significantly improved at eight to ten weeks require changes in treatment or a consultation with a mental health specialist.

Depressed patients with three or more depressive episodes or comorbid major depression and dysthymia should receive long-term maintenance treatment with antidepressants in order to prevent unnecessary relapses of depression (Agency for Health Care Policy and Research 1993). As in younger patients, these risk factors have been associated with relapse in older adults (Reynolds, Frank, Perel, et al. 1995). A recent trial of maintenance treatments with nortriptyline and/or interpersonal psychotherapy in older adults with major depression showed that treatments, either alone or in combination, were associated with lower recurrence rates than placebo (Reynolds, Frank, Perel, et al. 1999).

Integration of Mental Health and Primary Care Services

Providing mental health services for older adults in primary care has many advantages. Older adults may be less willing to incur extra travel to seek specialty mental health care, and the increased medical comorbidity in older adults makes close communication between mental health providers and their primary care colleagues essential.

Several innovative models have been developed to improve the care of depressed patients in primary care by integrating mental health professionals into the primary care setting (Katon et al. 1997). These models include community mental health teams, consultation–liaison models, and the actual integration of mental health professionals into primary care clinics (Katon et al 1997; Schulberg, Block, Madonia, et al. 1996; Stolee, Kessler, and LeClair 1996; Gask, Sibbald, and Creed 1997).

Katon and colleagues (Katon 1995; Katon, Robinson, Von Korff, et al. 1996; Katon, Von Korff, Lin, et al. 1997) have developed models of collaborative care, in which psychiatrists or psychologists who are backed up by psychiatrists work with providers in primary care clinics to care for patients with depression. These models have proved more effective than usual primary care in improving adherence to antidepressant medications, satisfaction with care, and depressive outcomes. They were also more cost effective than usual care in treating patients with major, but not minor, depression (Von Korff, Katon, Bush, et al. 1998).

Rubenstein, Unützer, Miranda, et al. (1996) have developed a model in which a "depression nurse specialist" (DNS) in primary care maintains a case log of all depressed patients, tracks depression outcomes, and facilitates the use of adequate depression treatments. The DNS receives regular supervision from a consulting psychiatrist and can thus provide an interface for the primary care and the specialty mental health care sectors. This model is currently being tested in 43 primary care clinics in seven managed care organizations across the country (Wells 1999a). Hunkeler, Meresman, Getzell, and colleagues (1997) at Kaiser Permanente Northern California are evaluating the effectiveness of a model in which primary care physicians are augmented by nurses and specially trained peer counselors, who address patient concerns about their physical health and the side effects of medications, track depressive symptoms, encourage adherence to medications and behavioral changes, and help patients develop a more hopeful outlook. Preliminary data from this study indicate that the intervention was more effective than care as usual in improving depression outcomes (Hunkeler et al. 1997).

Blanchard, Waterreus, and Mann (1995) conducted a randomized controlled trial of community nurse management or usual care from a general practitioner and found that older adults who had received the nursing intervention had lower depression scores at three-month follow-up. There were difficulties in implementing the recommended interventions, particularly the use of antidepressant medications and attendance at a day center.

Schulberg and colleagues (1996) conducted a large randomized clinical trial in which mixed-age, primary care patients with major depression were treated by specially trained primary care providers according to AHCPR guidelines. Only 33 percent completed the full treatment regimen, but 70 percent of the participants recovered from major depression and significantly improved their functioning at eight months

when AHCPR guidelines were adhered to, versus a record of 20 percent recovery among the patients who received usual care.

Adaptations of these intervention models for older adults might include the use of geriatric nurse specialists with additional training in depression treatment or clinical social workers who would bring valuable expertise in functional assessment and in connecting older adults to community services.

Facilitation of Specialty Mental Health Care

A small percentage of depressed patients are too severely ill to receive treatment based on the primary care models described here. The American Association for Geriatric Psychiatry recommends referrals to geriatric psychiatrists in cases of high diagnostic complexity, severe depression that places patients at significant risk from malnutrition or suicide, psychosis, unresponsiveness to first-line treatments in primary care, or a need for ECT.

Linkage with Community Services

Older adults, who are often socially isolated, may benefit from referral to a number of community services, like senior centers, day programs, or meals on wheels. A comprehensive treatment program for depressed older adults should help patients make contact with these services. This requires special expertise that is usually outside the province of primary care providers, but it can be provided by a trained nurse or clinical social worker.

A population-based disease management program should incorporate all these components in a systematic way, using a treatment-matching or stepped-care approach to allocate resources in the most rational and cost-effective way.

Conclusions

Depression in older primary care patients is common and is associated with significant suffering and disability. Those most at risk often have a history of mental disorders and substance abuse prior to their old age.

Chronic medical illness, grief, and disability appear to play a major role in the depressive syndromes that are typical of old age and may increase the risk of suicide. Although there is good evidence for the efficacy of treatments for late-life depression, many depressed older adults are not recognized in primary care. Even if they are recognized, they often do not receive effective treatment for depression. Better recognition and effective treatment of depressive symptoms, particularly in the presence of medical illness, promise to advance the health-related quality of life in older adults at a reasonable cost.

More research is needed to identify effective treatments for certain groups: the very old; ethnic minorities and poor older adults, who face special barriers to care; persons with subthreshold forms of depression; and depressed patients with significant comorbid medical illness. We need a better understanding of the barriers to cost-effective care, and we must continue to adjust our systems of care to address these barriers.

There is now sufficient experience with population-based, integrated systems of care for depression to adapt and apply these models for the treatment of depressed older adults and to test them in large randomized clinical trials. We must study how well such comprehensive disease management programs work in typical populations of older adults with typical providers and how cost-effective they are compared with care as usual.

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