Comorbid Medical Conditions: Compounding the Problem of Depression in Assisted Living

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Last issue we presented the first in a series of 3 articles on depression among assisted living (AL) residents. That article, titled "How Big an Issue Is Depression in Assisted Living?" (page 30, July/August issue; www.assistedlivingconsult.com/issues/04-04/alc78-Depression-721a.pdf), discussed the prevalence of depression in AL settings and some of the tools used to diagnose it. This article presents the relationship of depression and comorbid medical conditions, such as chronic obstructive pulmonary disease (COPD), diabetes, cardiovascular disease, and others, and addresses treatment options for depression, focusing on those available through the Medicare Part D program. "Best Practices in Management of Depression in Assisted Living" is the title of our third article. It will discuss implementation of resident support groups within the AL environment, the use of physician extenders, and the development of an efficient and effective process for diagnosis and management of depression in AL residents. A discussion of quality measures will be included.

Depression and Medical Comorbidity

Comorbid medical conditions can contribute to depression, and the reverse is also true: depression can

worsen many comorbid medical conditions, as Katon has shown in a review of dozens of studies of depression in community, primary care, and inpatient settings.[1] Among the diseases cited as having a connection with depression are myocardial infarction, diabetes, cerebrovascular accident, cancer, and Parkinson's. Studies also show that patients with depression may have higher rates of adverse health behaviors and lower adherence to treatment regimens.[2,3] And, in fact, comorbid medical conditions are common in elderly individuals, particularly those who are living in AL residences. According to a study of 2014 residents of 193 assisted living (AL) facilities, comorbidities (having 1 or more chronic diseases) are common among residents of AL facilities.[4] Life events that occur with aging can also contribute to depression.

Depression increases a person's sensitivity to existing medical conditions and also affects the ability to self-care. The prognosis of chronic disorders such as cardiovascular disease and diabetes can worsen because of the resident's poor adherence to treatment recommendations.[5-7] Accurate and timely diagnosis of depression in AL residents is vital.

As one deeply involved in care of AL residents, I strongly recommend that AL residents be assessed for depression. Failure to do so is likely to result in premature transfer of the resident from the AL facility to a higher level of care, such as a skilled nursing facility. Screening for depression may seem difficult. Yet, because AL staff interact with residents daily, they notice changes in resident behavior that may be signs and symptoms of depression. Staff reports of such changes in residents can help the medical staff to diagnose depression. (See "How Big an Issue Is Depression in Assisted Living?," page 30, July/August issue of *ALC*.)

Depression and Comorbid Medical Conditions

Sometimes it is difficult to tell whether depression results from coexisting chronic medical conditions or whether depression is a comorbid occurrence. For example, depression is common in cachectic patients and can aggravate weight loss, a condition of great concern in AL residents. A retrospective chart review of weight loss over a 2-week period in 156 nursing home residents showed that 15% of those who had been in the facility for 3 to 5 months (short-stay) lost 5 or more pounds, the amount determined by researchers to be an excessive weight loss. Twenty-one percent of those who were in the facility for 6 months or longer (long-stay) had lost 5 or more pounds. Among the 30 residents who had an excessive weight loss, depression was the most common cause (60% for short-stay residents and 36% for long-stay residents).[8]

Major depression coexists in 23% to 26% of patient with Alzheimer's disease.[9,10] In one study the prevalence of major depression among those with severe Alzheimer's disease was nearly 50%.[11]

Stroke is a common diagnosis among newly admitted AL residents. Studies show that some degree of depression occurs in stroke victims: 21% had major depression, 23% had symptoms of minor depression, and 42% had signs of subclinical depression.[12,13] The use of antidepressants in these people may increase their rate of survival.[13]

Of those with moderate or severe chronic obstructive pulmonary disease (COPD), the prevalence of depression is estimated to be 40% to nearly 50%.[14-16] In fact, COPD patients with comorbid depression are at greater risk for 3-year mortality than those without depression.[16] The risk of mortality over 2 years among 10,704 Medicare beneficiaries with diabetes and comorbid depression was found to be 36% to 38% greater than among those with diabetes alone.[17]

Knowing that the rate of comorbid depression among those with chronic conditions is high may aid a clinician in making the diagnosis of depression, but it may not make the management of depression any easier. However, the importance of managing depression in those with comorbid medical conditions is critical because depressed patients often fail in self-management of their comorbid conditions.[2]

Other common coexisting medical conditions in depressed people are listed in Table 1.[18] Although these figures are for the entire population, it is likely that the numbers can be applied to AL residents and may actually be higher.

The discussion of depression and its related comorbid medical conditions, in my opinion, is one of the chicken and the egg, but no matter which came first, the treatment of depression can improve the treatment of the comorbid medical condition. Therefore, staff in AL facilities need to be especially alert in monitoring residents with comorbid medical conditions for depression.

Table 1.
Most Prevalent Coexisting Medical Conditions in Entire Depression Population[18]

Coexisting Medical Condition	Percentage of Patients Observed (%)
Hyperlipidemia	27.5
Hypertension	26.3
Fatigue	19.2
Low back pain	13.8

2005 Depression Benchmarks, Table 1d. Demographics 600,000 patients; Managed Care Measures, LLC

Treatment Options

The APA guidelines[19] call for the treatment of depression to start with an evaluation, initiation of therapy, and then assessment of the

adequacy of the response after 4 to 8 weeks. This assessment can determine the extent of the patient's or resident's response to the initial treatment (ie, whether there is an initial response failure, a partial response, or a full response to treatment). Modifications to treatment may be needed, at which point reassessment is needed after an additional 4 to 8 weeks.

Individual antidepressants are associated with a response rate of 50% to 60%, but more than 80% of patients respond to at least 1 of those medications.[20] Six different pharmacologic classes of medications can be used to treat depression (Table 2).[21] The primary targets of most major antidepressant drug classes are the neurotransmitters serotonin, norepinephrine, and dopamine. The oldest agents are the tricyclic antidepressants (TCAs) and monamine oxidase inhibitors (MAOIs).

In March 2006, researchers Gartlehner and colleagues at the Oregon Health and Science University (OHSU) published a comparative effectiveness review entitled *Drug Class Review on Second Generation Antidepressants*.[22] The OHSU review identifies some differences among some drugs with respect to efficacy, adverse events, speed of onset, and some aspects of health-related quality of life in the treatment of major depressive disorder. The OHSU report avoids using findings regarding specific drugs to make generalizations about a class.

Similar findings were published by the Agency for Healthcare Research and Quality (AHRQ).[23] Both groups determined that there are no clinically or statistically significant differences among the various agents in efficacy and effectiveness for treating acute major depression or maintaining its remission.[22,23]

The OSHU report stated that mixed results or findings from a single trial "…make the body of evidence inconclusive if any of the second generation antidepressants has a higher efficacy in comorbid patients with high anxiety, recurrent depression, or somatization."[22] However, there were some statistically significant differences in the rates of adverse effects, such as nausea, sexual dysfunction, diarrhea, and weight gain, among some agents.[22] In these trials, there were no differences in efficacy and effectiveness among participants in age groups (those who were older than 65 versus those younger than 65), and no differences in efficacy and effectiveness among people with comorbidities.[22]

Given these data, the best approach to treating depression in AL residents with comorbidities is to:

1. Select the most appropriate medication.
2. Monitor the drug's effectiveness.
3. Ensure resident adherence to the regimen and appropriate dose.
4. If a failure is noted, make an appropriate change to a different agent.

Table 2.
Classes of Antidepressants and Their Mechanisms of Action[21]

Class	Mechanism of Action
Tricyclic antidepressants (TCAs)	Nonselectively inhibit neuronal reuptake of serotonin and/or norepinephrine
Monoamine oxidase inhibitors (MAOIs)	Inhibit breakdown of norepinephrine, serotonin, and dopamine
Selective serotonin reuptake inhibitors (SSRIs)	Selectively inhibit serotonin reuptake
Serotonin antagonist reuptake inhibitors	Primarily block serotonin-2 receptors; inhibit neuronal reuptake of serotonin and norepinephrine
Alpha$_2$ antagonist	Blocks alpha$_2$ receptors, thereby disinhibiting serotonin and norepinephrine release
Serotonin–norepinephrine reuptake inhibitors (SNRIs)	Inhibit neuronal reuptake of serotonin and norepinephrine

Beyond conventional pharmaceutical interventions, there exists a role for electroconvulsive therapy (ECT) and cognitive behavioral therapy. Patients with less severe or less persistent symptoms may be appropriate candidates for psychosocial and spiritual interventions. The key for effective use of these therapies in an AL facility is to ensure resident privacy because of the social stigma associated with these mental illnesses.

Medicare's Coverage of Pharmacotherapy for Depression

The Centers for Medicare & Medicaid (CMS) has provided guidance to Medicare Part D prescription drug plans (PDPs) that requires these plans to cover most medications in 5 classes, several of which include drugs to treat mental health conditions. This guidance states that PDPs must have "all or substantially all" products covered in the classes of immunosuppressants, antidepres-

sants, antipsychotics, anticonvulsants, and antiretrovirals.[24]

In addition, CMS states that Medicare Part D PDPs may not implement prior authorization or step-therapy requirements that are intended to steer beneficiaries to preferred alternatives within these protected classes for enrollees who are currently taking a drug in these classes. Unfortunately, this protected access is limited to those beneficiaries who are already taking the medication prescribed under a previous payer. New prescriptions—even those within a protected class—could be subject to restrictive utilization practices by PDPs.[25]

Clinician and patient advocacy groups who lobbied CMS for assurances of access are partially responsible for CMS's decision to protect these drug classes. The clinical rationale is based on the fact that these classes of drugs do not typically follow class effects. Restrictive formularies that limit access within a class of drugs to a particular drug may be responsible for greater adverse reactions that, in the long run, cost more in health outcomes and overall expenditures.[22,26]

It is worth noting that CMS has determined that PDPs do not need to include medications that are isomers. Specifically, CMS, in what appears to be an effort to encourage the use of generic medications, created guidance stating that escitalopram (Lexapro) and citalopram (Celexa) are therapeutically equivalent. This decision allows PDPs to cover only citalopram at the exclusion of escitalopram.[27]

The Basis of Successful Treatment

While a therapeutic response to treatment is defined by a partial improvement in depressive symptoms, remission is characterized by recovery from depressive symptoms and return to normal baseline functioning.[28] Four subgroups of seniors have been identified who differ in their rate and ability to sustain recovery. These groups show[29]:

1. Rapid sustained improvement
2. Delayed but sustained improvement
3. Partial or mixed response
4. No response

Response to treatment was poorer for those who had[29]:

- Higher levels of acute and chronic stressors
- Poorer social supports
- Onset of a first depressive episode at a younger age (endogenous depression)
- Higher current anxiety
- Older current age
- Poorer subjective and objective sleep

Not surprisingly, patients with comorbid major depressive disorder who are treatment resistant use a disproportionately larger share of healthcare resources and have significantly more claims compared with patients with comorbid major depressive disorder who respond to treatment.[30]

Adverse effects often cause patients to stop treatment for depression. A meta-analysis of 10 parallel-group, double-blinded, placebo-controlled trials of second-generation antidepressants in elderly patients with late-life major depression showed that antidepressant efficacy varies and that discontinuation of treatment for adverse effects was higher among those taking antidepressants than among those receiving placebo. Discontinuation rates because of adverse events among those receiving antidepressants were 8% to 27%; rates among those receiving placebo were 1% to 11%.[31] This study demonstrates the vulnerability of these patients and their need for careful assessment and reassessment during treatment.

Relapse is common among those who do not adhere to antidepressant treatment regimens. In a study of 4052 Medicaid patients treated with antidepressants, approximately 25% relapsed. Relapse was related to comorbidities, race, and failure to continue therapy.[32] Nonadherence to medication regimens is an important issue in AL facilities. In nursing homes, nurses directly administer medications to residents, but in AL facilities, medication administration varies considerably. Some AL facilities allow residents to self-administer, while others use unit-based dispensing devices that rely on active participation by the resident. The potential for nonadherence, especially to medications for depression, is high.

There is strong evidence for pharmacologic treatment of depression for 6 to 9 months after remission. Duration of treatment is tailored to the individual patient's risk for relapse.[33] Yet, in one study, up to 28% of older patients reported nonadherence to medication.[34] Premature discontinuation of treatment is associated with higher rates of depression relapse and major depressive episodes.[35]

Treatment guidelines provide clinicians with standards for diagnosis and ongoing treatment of depression, focusing particularly on medication regimens and the importance of maintaining appropriate therapy over time.

The Healthplan Employer Data and Information Set (HEDIS), while not applicable to most AL residents, nonetheless demonstrates the importance of adequate treatment duration and follow-up. The HEDIS measures for depression include the following[36]:

- Optimum practitioner contact, which is reflected by the percentage of eligible member patients who received at least 3 follow-up office visits with a primary care physician or mental health provider during the 12-week acute treatment phase after depression was diagnosed and antidepressant medication was prescribed
- Effective acute phase treatment, calculated as the percentage of

member patients who received antidepressant medication and had at least 3 follow-up visits during the 12-week acute phase after the initial diagnosis
- Effective continuation phase treatment, reflected by the percentage of member patients who remained on antidepressant medication for 6 months

These measures can be used as a guide for the development of an AL facility-wide depression management program. The basis of best practices in the management of AL residents is, in fact, the topic of our third article in this series. It will discuss implementation of resident support groups within the AL environment, the use of physician extenders, and the development of an efficient and effective process for diagnosis and management of depression in AL residents. ALC

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