How Big an Issue Is Depression in Assisted Living?

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Unfortunately, the answer to the question of how big an issue depression is in assisted living (AL) is enough to get one depressed. To aid in the treatment of depression, *Assisted Living Consult* is presenting a 3-part series on depression among seniors in AL. This first of 3 articles will focus on the magnitude of the problem of depression in AL with an examination of its prevalence. We will discuss the many available diagnostic tools, determining which tools are best to use.

The second article, titled "Comorbid Conditions: Compounding the Problem of Depression in Assisted Living," deals with the relationship of depression and comorbid conditions such as chronic obstructive pulmonary disease (COPD). Depression all too often comes hand in hand with other chronic conditions. This presents difficulties not only in making the diagnosis of depression, but also in managing depression. The importance of managing depression in the face of comorbid conditions is critical since depressed patients often fail in self-management of these other illnesses. As a result, AL residents are likely to be forced from their residences to a higher level of care. The second article will also address the treatment options for depression, focusing on those treat-

ment options 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 and the relationship of those measures to depression will be included.

To understand the magnitude of the problem of depression in AL, we need to look first at the prevalence of this disease. However, it is not only the prevalence of depression, but also the magnitude of the disease that makes it such a significant issue. The simple fact is that currently nearly 1 million older Americans reside in AL facilities.[1] The number of residents in AL has grown about 4% since 2004.[1] This growing community provides the perfect opportunity to develop programs dedicated to managing depression among seniors.

Prevalence

Depression is common in later life. In 2005 and 2006, 81.9% of adults older than 50 received treatment in the prior year for depression, compared with 70.3% of those aged 35 to 49, 64% of those aged 26 to 34, and 46.9% of those aged 18 to 25.[2]

Unfortunately, many people view depression as a natural part of aging—it is not! If left untreated, depression may cause physical, cognitive, and social impairment. Recovery from medical illnesses and surgery may be delayed. Untreated depression also increases healthcare utilization. What's more, many older adults with depression commit suicide: Among men, ages 75 and older, the rate of suicide is 37.4 per 100,000 population.[3]

Advanced age carries with it unique risks and concerns. Elderly people face many changes in life, from moving away from a home of many years, to losing friends or spouses, to deteriorating health. Studies of depression in AL have found that 20% to 24% of AL residents have symptoms of depression (women more so than men),[4,5] which translates to 20 to 24 residents in a typical 100-bed facility. Depression is often related to greater levels of functional disability, poorer self-rated health, a lower sense of mastery, less religiosity, and less positive attitudes towards aging.[4,5] In one study, among those with dementia, 25% had comorbid depression.[4] Other studies have reported depression rates of 24.5% to 54.4% among people with dementia.[6]

Researchers have found that depression among AL residents is not only common, but also undertreated.[4,7] This may contribute to morbidity and interfere with the ability of residents to age in place.

So why is depression such an issue in AL? The profiles of a person with depression and an AL resident share several common characteristics, among them[4,8]:

- Functional impairment
- Poor health
- Female gender
- Perceived lack of social support

These 4 characteristics that are common in people with depression are also common among AL residents. For example, AL residents are predominantly female (more than 75%).[9] Seniors who have moved into AL facilities have done so because health and functional impairments have limited their ability to live independently. The move to an AL facility often triggers among residents a perceived lack of social support from those who previously were their neighbors, friends, and family within the community. Further, if residents feel they have been forced to move into an AL facility or if they worry about being able to afford their ongoing care needs, depression is more likely. Widowhood (more likely to be experienced by female residents) also increases the risk for depression.

An important characteristic of good mental health among AL residents may be a resident's belief that the AL facility is "home." According to a study using data from the Florida Medicaid Assisted Living Study,[10] helping residents adjust to their new "home" and providing or encouraging the social support they need are 2 areas in which AL staff can help the most in preventing or alleviating depression among elders.

Diagnostic Barriers

Currently there is no mandated oversight for the screening and treatment of depression or other mental disorders in AL settings. Only a few states require AL staff to be trained in information about mental health disorders such as depression. Currently, very few AL facilities screen residents for mental health problems besides dementia, and few states require that information about emotional and mental health be included in training programs for AL staff. Several key stakeholders in AL have pointed out that a greater effort should be made to detect and treat depression in this setting, both to reduce suffering and prolong the resident's ability to remain in their preferred environment.[4,5]

Beyond the lack of regulatory requirements to manage depression among AL residents, there are several other barriers that contribute to the lack of appropriate and timely diagnosis. For one, elderly patients with depression may not report depressed moods but instead may present with less specific symptoms such as insomnia, anorexia, and fatigue. Elderly persons sometimes dismiss less severe depression as an acceptable response to life stress or a normal part of aging.[11] Additionally, many elderly patients do not have major depression, but instead have "minor" depression, that is not thought to be a single syndrome, but rather a heterogeneous group of syndromes that is characterized

as dysthymia and may not occur as a full array of symptoms at all times.[11] Barriers to proper diagnosis and treatment include[11]:

- Attribution of depressive symptoms to "normal" aging or physical illness by healthcare providers and residents alike
- Masking of depression by coexisting medical problems
- Self-medication (eg, with alcohol)
- Prescription drug use
- Poverty or low socioeconomic status (which restricts healthcare access)
- Grieving
- Social isolation
- Lack of family support
- Misdiagnosis of depression as dementia, hypochondriasis, or somatization
- Costs
- Time constraints
- Stigma associated with mental illness

Clinical experience suggests that AL staff (medical directors, nurses, medication aides, therapists, and others) can proactively assess for symptoms of depression rather than rely on the resident to report mood changes. Sometimes, medication aides, nurses, or social directors who interact often with the residents may be in the best position to note a change in a resident's mood or behavior that signals depression. Proactive assessment leads to higher rates of diagnosis and better response to therapy.

Diagnostic Tools

The diagnosis of depression can start simply enough with the "2-question screen." If the patient's response to both of these questions is "no," the patient is negative for depression based on this screen. If the patient responds "yes" to either question, more detailed questioning or additional screening should follow.

Two-question Screen[12,13]

During the past month, have you often been bothered by:

1. Little interest or pleasure in doing things
   ☐ Yes ☐ No
2. Feeling down, depressed or hopeless
   ☐ Yes ☐ No

If the patient's response to both questions is "no," the screen is negative.
If the patient responded "yes" to either question, consider asking more detailed questions.

The additional questioning could include those listed in the "interview approach." By asking patients these questions, practitioners can make a much better diagnosis and determine causes.

The Interview Approach

As an alternative to the 2-question screen, the medical interview is a powerful tool for recognizing depression. Using open-ended questions, ask about emotional issues during each visit with the patient:

Depressed mood

- How's your mood been lately?

Effects of symptoms on function

- How are things at home/work?
- How have (the symptoms) affected your home or work life?

Psychological symptoms/suicidal ideation

Figure 1.
Geriatric Depression Scale—Short Form

Scoring: One point for each response that is in capital letters.

Scoring cutoff: normal (0-5), above 5 suggests depression.

Geriatric Depression Scale (short form)

Are you basically satisfied with your life?	yes	NO	_____
Have you dropped many of your activities and interests?	YES	no	_____
Do you feel that your life is empty?	YES	no	_____
Do you often get bored?	YES	no	_____
Are you in good spirits most of the time?	yes	NO	_____
Are you afraid that something bad is going to happen to you?	YES	no	_____
Do you feel happy most of the time?	yes	NO	_____
Do you often feel helpless?	YES	no	_____
Do you prefer to stay at home, rather than going out and doing new things?	YES	no	_____
Do you feel like you have more problems with memory than most?	YES	no	_____
Do you think it is wonderful to be alive now?	yes	NO	_____
Do you feel pretty worthless the way you are now?	YES	no	_____
Do you feel full of energy?	yes	NO	_____
Do you feel that your situation is hopeless?	YES	no	_____
Do you think that most people are better off than you are?	YES	no	_____

In public domain. Originally printed in Sheikh JI, Yesavage JA. Geriatric depression scale (GDS): recent evidence and development of a shorter version. In: Brink TL, ed. *Clinical Gerontology: A Guide to Assessment and Intervention.* New York: Haworth; 1996:165-73.

- How's your concentration?
- Do you ever feel like life is not worth living?
- Have you been feeling down on yourself?
- Do you have any plans to hurt yourself?
- How does the future look to you?

Anhedonia
- What have you enjoyed doing lately?

Physical symptoms
- How have you been sleeping?
- What about your appetite?
- How's your energy?

In addition to these 2 sets of questions, there are many other instruments available to measure depression. One of the most widely used is the Geriatric Depression Scale (GDS). First created by Yesavage and colleagues,[8] the GDS (Figure 1) is used in 2 forms. The GDS Long Form is a brief, 30-item questionnaire in which participants are asked to respond by answering "yes" or "no" in reference to how they felt over the past week. A Short Form GDS consists of 15 questions—the questions from the Long Form that had the highest correlation with depressive symptoms in validation studies. Ten of the questions, when answered positively, and 5 when answered negatively, indicate depression. Normal scores are 0 to 4, depending on age, education, and other complaints. A score of 5 to 8 indicates mild depression; 9 to 11 indicates moderate depression; and 12 to 15 indicates severe depression. The Short Form, which takes 5 to 7 minutes to complete, is more easily used by people who are physically ill and mildly to moderately demented (because of short attention spans or easy fatigability).[8] The original GDS is in the public domain and can be used by clinicians without restrictions. Both the short- and long-term versions are available at www.stanford.edu/~yesavage/GDS.html.

Figure 2.
Cornell Scale for Depression in Dementia[15]

Scoring is based on symptoms/signs occurring during the week prior to testing: a = unable to evaluate; 0 = absent; 1 = mild or intermittent; 2 = severe. Higher scores indicate a need for further evaluation. Nineteen questions are asked, related to mood, behavioral disturbances, physical signs, cyclic functions, and ideational disturbances. The categories are listed here.

Mood-related signs
- Anxiety (anxious expression, ruminations, worrying)
- Sadness (sad expression, sad voice, tearfulness)
- Lack of reactivity to pleasant events
- Irritability (easily annoyed, short tempered)

Behavioral disturbances
- Agitation (restlessness, handwringing, hairpulling)
- Retardation (slow movements, slow speech, slow reactions)
- Multiple physical complaints
- Loss of interest, less involved in usual activities

Physical signs
- Appetite loss
- Weight loss
- Lack of energy (fatigues easily, unable to sustain activities)

Cyclic functions
- Diurnal variation on mood
- Difficulty falling asleep
- Multiple awakenings during sleep
- Early morning awakening

Ideational disturbances
- Suicide (feels life is not worth living, has suicidal wishes, or makes suicidal attempt)
- Poor self-esteem (self-blame, self-deprecation, feelings of failure)
- Pessimism (anticipation of the worst)
- Mood-congruent delusions (delusions of poverty, illness, or loss)

The Cornell Scale for Depression in Dementia[14] (Figure 2) is a 19-item assessment based on patient and caretaker information. The scale includes questions about mood, behavior, physical signs, and idea disturbances. Each item is scored on a 3-point scale, yielding a possible total score of 38. Higher scores indicate greater severity of depression. A score of 8 or more indicates clinically significant depression.[8]

The *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR)*[16] gives 9 criteria for depression. The presence of at least 5 of these criteria, occurring nearly every day during the same 2-week period, or a score of more than 10 on the Beck Depression Inventory[17] (Figure 3) or 10 or more on the GDS supports the diagnosis of depression in elderly patients.[18]

While all of these can be used for screening of AL residents for depression, the medical diagnosis under the *DSM-IV-TR* requires the presence of at least 5 of the following symptoms most of the day, nearly every day, for at least 2 weeks. At least 1 of the first 2 bolded symptoms must be present.[16]

1. **Depressed mood**
2. **Markedly diminished interest in usual activities**
3. Significant increase or loss in appetite or weight

4. Insomnia or hypersomnia
5. Psychomotor agitation or retardation
6. Fatigue or loss of energy
7. Feelings of worthlessness or guilt
8. Difficulty with thinking, concentrating, or making decisions
9. Recurrent thoughts of death or suicide

An example of how to screen and assess residents for depression is provided by the Texas Department of Aging and Disability Services (DADS) Quality Matters Web QMWeb). This state's quality measure for depression in skilled nursing home (SNF) residents requires that all residents receive proper screening, assessment, and treatment for depression.[19] Although the quality measure in this case is written for SNF residents, it would work effectively for AL residents as well. The recommendations are to[19]:

- Pick a validated screening tool (GDS, Cornell, Beck, etc.) as the *primary depression screening tool* in your facility. Realize, however, that there is no single depression scale that will work for all residents (Figure 4). Therefore, be prepared to use instruments other than your primary screening tool in some circumstances.
- Assess newly admitted AL residents within the first month.
  - Review the new resident's medical chart for depression that may be related to medical conditions, including[20]:
    - Weight loss
    - Sleep disturbances
    - Low energy
    - Diabetes
    - Pituitary, adrenal, or thyroid disorders
    - Certain malignancies
    - Some infections
    - Some neurologic disorders
    - Collagen disorders
    - Cardiovascular disease
    - Vitamin/mineral deficiency or excess states
- Routinely screen all residents for depression (at the time of MDS assessments, for example) using your facility's screening tool. Notify the attending physician if the screening tool indicates possible depression according to *DSM-IV-TR* criteria.
  - If a resident has some symptoms, but not 5 or more, the resident is at risk for major depression or has minor depression. Look for other conditions that might be associated with symptoms of depression (eg, anxiety, somatization, personality disorders, grief, adjustment reactions, or mood disorders associated with medications).
- Frequently assess residents who show signs of mood disturbances, those who have recently experienced a traumatic loss or significant change in condition, and those who show a negative affect such as anxiety or anger (particularly nonverbal residents).
- Do not rely solely on the results of formal *depression screening instruments*, but also consider interviews with other caregivers and family, observation, and medical records in your assessment and determination of need for further evaluation.
- Always assess residents for suicide.
- Notify the physician if a resident shows new signs of depression or if there are significant changes in depression screening scores.

Figure 3.
Beck Depression Inventory[17]

This 21-question survey is completed by patients and scored on a 0 to 3 scale (0 = minimal; 3 = severe depression). The questions relate to:

- Sadness
- Hopelessness
- Past failure
- Anhedonia
- Guilt
- Punishment
- Self-dislike
- Self-blame
- Suicidal thoughts
- Crying
- Agitation
- Loss of interest in activities
- Indecisiveness
- Worthlessness
- Loss of energy
- Insomnia
- Irritability
- Decreased appetite
- Diminished concentration
- Fatigue
- Lack of interest in sex

Score <15: Mild Depression; Score 15-30: Moderate Depression; Score >30: Severe Depression

These assessments can be done by nursing staff. AL facilities should train all AL staff to be alert for changes in resident mood. For example, medication aides, who interact with residents 1 or more times a day, are likely to notice changes in residents' mood. Activity directors may also notice changes in residents' participation. It's important to include all AL staff in training programs to recognize these changes in residents.

Conclusion

By starting with a simple 2-question screen and completing more detailed diagnostic evaluations, clinicians can make an accurate diagnosis of depression and start the AL resident on an appropriate treatment plan. Diagnosis and treatment of depression in AL residents is important to each individual's quality of life, functioning, health, and well-being since physical health is closely connected to mental health.[21,22] But it is not just the individual's health that is affected by depression. Community life is also affected. Furthermore, identification and treatment of depression in older adults lowers the risk of admission to SNFs.[22]

The next article in this series will focus on the relationship of comorbid conditions to depression and

Figure 4.
Comparison of Depression Scales

The follow table provides information on depression scales that have been used with elderly people. Information include number of items in each version of the scale, format of the items, reliability (Cronbach alpha), and sensitivity and specificity.

Depression Scale	Number of Items	Format	Cronbach's Alphas[a]	Sensitivity and specificity[b,c]
Beck Depression Inventory (BDI)	20	yes/no	0.85	89% and —
Beck Depression Inventory (BDI)	20	3-point severity scale	—	—
Cornell Scale for Depression in Dementia (CSDD)	19	3-point severity scale	0.71 - 0.84	—
Geriatric Depression Scale	15	yes/no	0.89	88% and 62%
Geriatric Depression Scale	30	yes/no	0.83	89% and 68%
Hamilton Depression Rating Scale (Ham-D)	24	4-point severity scale	0.88	—

a. Cronbach's alpha values represent internal consistency of the scale. Acceptable Cronbach's alpha scores =0.7.
b. Sensitivity is the proportion of true cases of depression. It varies with cut-off scores. Acceptable range was not specified.
c. Specificity is the proportion of true cases with no depression. It varies with cut-off scores. Acceptable range was not specified.

Sources: Adapted from Bell MA and Goss AJ. Recognition, assessment, and treatment of depression in geriatric nursing home residents. *Clinical Excellence for Nurse Practitioners.* 2001;5(1):26-36. Texas Department of Aging and Disability Services. Evaluation and Management of Depression in LTC: A Literature Review. May 2003.

the difficulties of diagnosing and treating depression in this setting. Treatment options for depression, especially those available through the Medicare Part D program, will be addressed. ALC

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