A Doctor's View

Depression in Long-Term Care Residents

By JULES ROSEN, MD

During my 30 years of experience as a geriatric psychiatrist, treating depression among residents of long-term care facilities has been a challenge. Approximately 20 percent of all nursing home residents have major depression (about 350,000 people in the U.S.), and an additional 30 percent have significant depressive symptoms. That means in any long-term care facility, every other resident is likely to have some form of depression — and many also have dementia to some degree, though for those with severe dementia, depression can be difficult to distinguish from other causes of behavioral disturbances.

Depression in these vulnerable seniors has a profound negative impact on both their quality of life and physical health. Family members, unable to relieve the despair, suffer along with the resident; and nursing home staff and administrators struggle to meet the needs of these residents who find little comfort or pleasure.

To address this problem, almost 50 percent of nursing home residents, including those with dementia, receive antidepressant medications — even though the science doesn't show reliably positive results. What's more, nursing home residents taking antidepressants experience a greater risk of falls and other negative side effects, although the newer generation of antidepressants does not have the life-threatening cardiac effects of the older medications.

So, as with anything we do in medicine, a careful risk/benefit analysis is critical to treating symptoms of depression in seniors. It also is important to consider an array of possible therapies. For example, we have seen promising results with a nonpharmacological treatment of depression among nursing home residents who were cognitively capable of participating in a self-determined program of recreational activities.

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UNDERSTANDING NURSING HOME DEPRESSION

There are many different pathways leading to depression, including genetic vulnerability and medical or neurologic illness. Among nursing home residents, social losses and environmental stressors frequently combine with genetic, medical and neurologic factors to result in depression symptoms.

Psychiatrists use the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) to diagnose the "illness" of depression. The DSM diagnoses are based primarily on constellations of symptoms, rather than presumed causes, to identify an illness. For example, if two people report symptoms of sadness, loss of pleasure, low energy, feeling sick, poor sleep and appetite, and they express a death wish — in the absence of a specific medical condition causing these symptoms, they both are likely to be diagnosed with major depression.

It doesn't matter that for one person, the illness came out of the blue, whereas for the other person there was a precipitating factor — he was laid off from his job unexpectedly. The diagnosis is the same: major depres-

sion. However, should the treatment be the same? Would antidepressants work equally well in both situations, or would a new job be the treatment of choice for the second person?

Similarly, nursing home depressions are not all the same. Nursing home residents commonly have medical conditions associated with depression, such as dementia, diabetes, heart disease and stroke. Some may bring with them a history of recurrent depression, which puts them at high risk for recurrence. All experience profound social changes: They are no longer in their own home, eating their own food and conducting personal business and social activities according to their own schedules. Having staff members present at the most personal of times, and perhaps sharing a room with a stranger, are additional stressors. Residents with comorbid dementia are less able to understand and adjust to these environmental changes, adding to the feelings of loss and depression.

PHARMACOLOGY OF NURSING HOME DEPRESSION

About 50 percent of nursing home residents — about 900,000 elderly people — are on an antidepressant medication. Many are on more than one antidepressant, and some receive brand-name drugs. If a generic antidepressant medication conservatively costs about $50 per month or $600 per year, we are spending, in rough numbers, about half a billion dollars per year. The actual costs are considerably higher due to the use of polypharmacy and brand-name drugs. Medicare covers the lion's share of this expense.

There have been four randomized, controlled trials of antidepressant medications to treat nursing home depression. None shows a benefit of the active drug beyond a placebo response rate. Furthermore, large, double-blind, randomized studies of newer generation antidepressants and a meta-analysis of seven antidepressant trials fail to demonstrate benefit of active medication compared to placebo for seniors with dementia and comorbid depression.[1,2]

Without scientific data supporting their use, why do psychiatrists (including me) continue to prescribe antidepressants to residents in nursing homes with and without dementia? The answer is simple: These medicines help many of our patients, though not all.

To use an analogy, let's look at penicillin for the treatment of sore throat. Most sore throats are viral. Unless it is caused by a strep infection, a typical sore throat will not respond to penicillin. In fact, a randomized trial of antibiotics to treat all sore throats likely would yield results no better than a placebo.

However, if the patient happens to have a strep infection, penicillin could prevent a life-threatening complication — rheumatic fever. So, in the absence of a lab test that establishes the origin of the illness, all sore throats would be treated with antibiotics because the risk of untreated strep is so high.

Unfortunately, there is no lab test to inform us if a depression is likely to respond to medication or not. But we make a good-faith effort with an antidepressant rather than miss an opportunity to ease a long-term care resident's symptoms. For those wondering about the use of psychotherapy, it can be very effective for seniors with mild to moderate depression. However, this modality of treatment is not readily available in most nursing homes.

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Therefore, in the absence of nonpharmacological options, depressed residents of long-term care facilities, with or without dementia, receive antidepressant medication treatment.[3] Some will respond, and some will not.

CONTROL-RELEVANT DEPRESSION TREATMENT

My colleagues and I sought alternative nonpharmacological options to provide evidence-based, cost-effective treatment of depressed nursing home residents. In the late 1990s, we conducted a study in a nursing home in Western Pennsylvania to evaluate the efficacy of a novel, nonpharmacological approach. A team of occupational therapists, activity therapists, and advance practice nurses and geriatric psychiatrists reviewed the existing literature on the impact of the nursing home environment on the emotional state of


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the residents.[4] We hypothesized that depression among nursing home residents is caused, to a large degree, by social and environmental changes related to nursing home placement. We wondered if residents would benefit from an individualized psychosocial intervention that replenishes the social losses and environmental isolation.

Research has demonstrated that the loss of control over daily choices contributes to depression among nursing home residents, and restoration of some elements of control reduces depression. We also understand, intuitively, that recreation ("re-creation") is essential for all of us, at any age and in all settings. The nature of recreational activities changes as we age. A boy of 10 derives pleasure from climbing a different tree every day. An 80-year-old man, however, experiences similar pleasure from a leisurely Sunday drive, sitting in a favorite chair reading a book or watching television. Nursing-home placement interrupts these recreational opportunities. No more Sunday drives. The favorite chair is nowhere to be seen. Nursing home recreation programs typically mean group activities such as bingo and music programs. For some residents, these activities are fulfilling; for others, they just don't cut it.

We devised a therapeutic program to provide depressed nursing home residents with opportunities to engage in recreational activities similar to those they enjoyed before they entered long-term care and within the boundaries of their physical abilities and environmental limitations. We identified 32 elderly residents with depression residing in one Western Pennsylvania facility. More than half of these seniors had mild to moderate dementia, but all were capable of participating in the design of an individualized recreation program.

About half of these residents had been on antidepressant medication for at least four weeks prior to this study, without notable response. During the course of our project, the dose of medication could not be changed, and no new antidepressant medications could be introduced.

The residents participating in this study engaged with a registered activity therapist to devise a program that mirrored activities they had enjoyed at home. Each participant determined the nature, frequency and duration of the activity; and for residents with dementia, family members could assist with the process.

The research team monitored activities for the six-week study, at which point they withdrew and the activity therapist discussed strategies to maintain the program.

EXAMPLES OF ACTIVITIES

Four residents who were avid card players met twice a week to play cards. Among this foursome, two had dementia and one had an expressive aphasia.

One study participant had loved to play golf before suffering a debilitating stroke. He obtained a putting iron and "green," and once a week he set it up in a long hallway and honed his putting skills. Not only did he enjoy this activity, a bevy of elderly women would watch, placing bets on whether he could make a challenging putt.

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Another resident had not missed a Pittsburgh Steelers football game for 25 years. After being admitted to the long-term care facility, he became depressed and stopped following his favorite football team because "watching the game alone is no fun." We arranged to reserve a television lounge where his children, grandchildren and other residents could gather to watch the Steelers play each Sunday during football season.

OUTCOMES

Before the study's intervention with activities, we held a six-week observation period and noted none of the participating residents showed signs of recovering from their depression. After the intervention, more than half of the participating residents had complete resolution of depression, and several others had partial improvement. Their exposure to medications or the presence of mild to moderate dementia made no difference in terms of response.

The residents who recovered were more likely to indicate, prior to the intervention, that the envi-

ronment in the nursing home did not meet their social needs. Following successful intervention, they reported that their social needs were adequately met.

We continued to monitor these residents for six weeks following completion of the intervention component of the study. Unfortunately, all of those who had recovered were depressed again, in the absence of the structured social intervention.

CONCLUSION

This study confirms that self-determined social interventions effectively treat depression among nursing home residents. So long as the resident was capable of participating in the design of his or her recreational program, the presence of cognitive deficits had no impact on the outcome.

Relapse after the structured intervention period reflects the inability of nursing homes to aid residents in sustaining an individual recreational program. For example, the foursome who played cards during the study could no longer meet because they lived on different units and floors. The facility could not arrange transport for the gathering.

This study helps us understand that nursing home residents, like everyone else, need to anticipate and engage in pleasurable activities. Many of the participants reported that they enjoyed looking forward to the activity as much as actually doing the activity.

We learned from this study that there are three components to pleasure: anticipation, the experience and the reminiscence. For example, on Monday and Tuesday, residents reported looking forward to their card game on Wednesday. After enjoying the two-hour activity, they reported also enjoying describing the activity to their family members who visited over the weekend.

In the absence of the kind of ongoing, individualized recreation program provided in the context of this study, I urge families to designate at least one "special" visit per week to include a specific activity. Some families make Sunday afternoon a photo album session, or they arrange a Skype call with a grandchild. A planned weekly lunch date, either going out to a restaurant or bringing food in from the resident's favorite restaurant, can be a powerful antidepressant.

Depression in nursing home residents differs from depression in community-dwelling seniors due to the profound social and environmental challenges that come with living in a long-term care facility. Treating depression in the nursing home setting requires an integrated approach that alleviates social isolation and environmental stressors. Medications may or may not be needed, and the presence of dementia does not appear to be an obstacle to recovery.

Our study shows that a program of self-determined social activities reduces social isolation and is a highly effective antidepressant treatment for nursing home residents, even in the presence of cognitive deficits.

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NOTES

1. Sube Banerjee et al., "Sertraline or Mirtazapine for Depression in Dementia (HTA-SADD): A Randomized, Multicenter, Double-Blind, Placebo-Controlled Trial," *Lancet* 378, no. 9789 (July 30, 2011): 403-11.
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3. Raymond L. Ownby et al., "Depression and Risk For Alzheimer Disease: Systematic Review, Meta-Analysis, and Metaregression Analysis," *Archives of General Psychiatry* 63, no. 5 (May 1, 2006): 530-38.
4. Jules Rosen et al., "Control-Relevant Intervention in the Treatment of Minor and Major Depression in a Long-Term Care Facility," *American Journal of Geriatric Psychiatry* 5, no. 3 (Summer 1997): 247-57.

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