Introduction

The previous issue of Long-term Care Forum, The Role of the Geriatric Psychiatrist in the Nursing Home, described the different roles that geriatric psychiatrists can play in the nursing home setting. This issue focuses on one of those roles, ie, the geriatric psychiatrist as a nursing home mental health provider.

The following statistics define the mental health challenges confronting nursing homes today.

- At least half of all nursing home residents have a dementing illness
- The prevalence of depression in nursing homes is 20% to 25% (compared with 3% in the community)
- In a given year, 13% of residents develop a new episode of major depression—another 18% develop new depressive symptoms

In this issue of Long-term Care Forum, Barry D. Lebowitz, PhD, of the National Institutes of Health, explains how the nation’s nursing homes became the primary site for long-term care of the elderly and the mental health needs of this population. Constantine G. Lyketsos, MD, MHS, of The Johns Hopkins School of Medicine, presents a strategic approach to the psychiatric care of memory-impaired patients and the rationale for developing facilities dedicated to the care of residents with memory-impairing illnesses. Finally, Dilip V. Jeste, MD, of the University of California, San Diego, reviews the pharmacologic treatment options, with emphasis on clinical experience with conventional and atypical antipsychotic drugs in elderly individuals.

For most patients, the nursing home will be their final residence. In order to maintain the dignity and quality of life of our growing population of elderly patients, psychiatrists and other health care providers must remember that improvements in patient mental health care are almost always possible and can be of tremendous benefit in boosting patient quality of life.
Faculty Disclosures

Disclosure: The American Association for Geriatric Psychiatry requires that the authors participating in a continuing medical education activity disclose to participants any significant financial interest or other relationship: 1) with the manufacturer of any commercial services discussed in an educational presentation, and 2) with any commercial supporters of the activity. The authors reported the following:


Dilip V. Jeste, MD: Grant/research support from AstraZeneca Pharmaceuticals LP, Bristol-Myers Squibb Company, and Eli Lilly and Company. Consultant for Janssen Pharmaceuticals, Pfizer Inc, and Roche.

Barry D. Lebowitz, PhD: Has nothing to disclose.


Discussion of Unlabeled or Unapproved Uses

This educational activity may include references to the use of olanzapine, risperidone, quetiapine, ziprasidone, and clozapine for indications not approved by the FDA. Any drug selection and dosage information provided in this publication are believed to be accurate. However, readers are urged to check the package insert for each drug for recommended dosage, indications, contraindications, warnings, precautions, and adverse effects before prescribing any medication. This is particularly important when the drug is new or infrequently prescribed. © 2002 The Chatham Institute. All rights reserved including translation into other languages. No part of this publication may be reproduced or transmitted in any form or by any means – electronic or mechanical, including photocopying, recording, or any information storage and retrieval system – without permission in writing from The Chatham Institute.

Editorial Board

Jacobo E. Mintzer, MD
Editor-in-Chief
Professor of Psychiatry and Neurology
MUSC Health Sciences Foundation
Medical University of South Carolina
MUSC Alzheimer’s Research and Clinical Programs
Mental Health Service and Division of Public Psychiatry
Ralph H. Johnson VA Medical Center
Charleston, South Carolina

Dilip V. Jeste, MD
Chair in Aging, Estelle and Edgar Levi
Professor of Psychiatry and Neurosciences
Chief, Division of Geriatric Psychiatry
University of California
VA San Diego Healthcare System
San Diego, California

Barry D. Lebowitz, PhD
National Institutes of Health
Bethesda, Maryland

Constantine G. Lyketsos, MD, MHS
Professor of Psychiatry
Johns Hopkins University
Baltimore, Maryland
Academic Director
Copper Ridge Institute
Sykesville, Maryland

Accreditation Statement: The American Association for Geriatric Psychiatry (AAGP) is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The AAGP takes responsibility for the content, quality, and scientific integrity of this CME activity.

Designation Statement: The American Association for Geriatric Psychiatry designates this continuing medical education activity for up to 1.0 credit hour in category 1 of the Physician’s Recognition Award of the American Medical Association. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

Educational Grant: This activity is supported by an educational grant from AstraZeneca Pharmaceuticals LP.

Intended Audience: This activity is intended for psychiatrists.

Release date: April 2002
Expiration date: April 2003

Purpose and Overview

At least half of all nursing home residents have a dementing illness, and many such patients will respond to judicious and targeted use of psychotherapeutic medication. Psychotherapeutic medications should be used as part of a comprehensive approach to treating behaviors or symptoms that endanger the patient or others. Treatment objectives are to alleviate residents’ distress and reduce disability due to psychotropic symptoms. This newsletter will discuss the psychotherapeutic approaches to managing nursing home residents and review the antipsychotic agents that are used as part of the comprehensive treatment.

Learning Objectives

After reading this journal, participants should be able to:

• State the prevalence of dementing illnesses and depression in nursing home residents
• List the current trends in nursing home admissions in the United States
• Identify differences in response to conventional and atypical antipsychotic drugs
• Recognize the appropriate reasons to switch patients to a newer antipsychotic drug
• List the factors that are important to maintaining quality of life in the elderly
• Identify the goals of care for nursing home residents

2 Long-term Care Forum
During the past three decades, the issue of mental illness among the nation’s elderly has received increased attention. However, despite this growing focus, the mental health needs of the 1.6 million elderly individuals who reside in 17,000 nursing homes in the United States have lagged behind.¹ This article reviews the extent and consequences of mental illness among nursing home residents, and how nursing homes came to bear the major role of coping with this problem. It concludes with guidelines to help clinicians effectively manage this important health care issue.

Dementia and depression in nursing home residents

Today, at least half of all nursing home residents have a dementing illness, most commonly Alzheimer’s disease or vascular dementia.² In addition to a loss of intellectual capacity, patients with advanced dementia have a higher risk of mortality associated with concurrent acute illnesses such as pneumonia or hip fracture.³ Although cardiovascular diseases are the most common diseases present at admission, they are not necessarily the main reasons for admission. Cognitive impairment, incontinence, and functional decline are all important factors for determining whether someone enters a nursing home.⁴

Among cognitively intact nursing home residents, depression occurs with a prevalence of 20% to 25%, compared with <3% in the community.²,⁵ The rates of new cases of depression in nursing homes are striking—13% of residents develop a new episode of major depression over a 1-year period and another 18% develop new depressive symptoms.⁵ Depression in these residents is associated with increased medical morbidity, disability, and mortality.²,⁵,⁶ In a study conducted over 12 months, patients with depression had a 59% increase in mortality.⁷

As with other potentially modifiable risk factors for disease burden in older people (eg, smoking and obesity), it is possible to modify the risk factor of depression and hopefully improve outcomes.⁸ Unfortunately, clinicians appear to be unprepared to deal effectively with the psychological problems of the institutionalized elderly. A survey of directors of nursing in nearly 900 nursing homes revealed that although 40% of their residents were in need of formal psychiatric services, only 50% or so of the facilities reportedly had adequate availability of psychiatric services. Facilities with the greatest need of additional psychiatric services were generally smaller nursing homes in rural locales.⁹

Changes in institutional health care

How did it happen that the nation’s nursing homes became the primary site for the long-term care of the elderly, many of whom have serious mental, behavioral, or emotional disorders?

Historically, three types of facilities have housed 75% or more of the institutionalized population in the United States: mental institutions (eg, mental hospitals and residential treatment centers), homes for the aged and dependent, and correctional institutions.¹⁰ The percentage of patients in correctional institutions remained relatively constant from 1950 to 1980 (17% and 19%, respectively). However, a striking change occurred in the number of residents in homes for the aged compared with mental institutions. During a time when the population of the United States escalated by 50%, the number of persons receiving care in homes for the aged rose by 38%. The percentage of the total number of persons requiring institutional care who were treated in a home for the aged increased from 19% to 57%. By comparison, the number of people in mental institutions decreased by more than...
Managing the mental health needs of the elderly in nursing homes

According to the American Association for Geriatric Psychiatry (AAGP) and the American Geriatrics Society (AGS), nursing home residents with psychiatric disorders should receive the full benefits of the broad spectrum of therapeutic options available. The nature of the site does not alter the responsibility of physicians and facilities to provide appropriate treatment, including the use of psychotherapeutic medications.

Psychiatric disorders in cognitively intact residents, as well as psychotic, affective, and behavioral symptoms (e.g., depression, mania, hallucinations, delusions, and anxiety) that occur as components of dementia, are treatable causes of excess disability. Depression, for example, can be a barrier to rehabilitation or recovery, and is associated with increased functional impairment in a number of chronic diseases. As a result, treatment of depression in LTC residents has the potential to enhance functional performance as well as reduce distressing symptoms. Other symptoms, such as affective lability, impulsivity, apathy, and dysregulation of sleep, also may respond to drug treatment.

The results of clinical research reveal that many psychiatric illnesses respond to psychotherapeutic medication. Thus, treatment objectives are to alleviate residents’ distress and reduce disability due to psychiatric symptoms. Psychotherapeutic medications should be used as part of a comprehensive psychotherapeutic approach to treat agitation and destructive behaviors that endanger the resident or others.

Research reveals that many psychiatric illnesses respond to psychotherapeutic medication. Thus, treatment objectives are to alleviate residents’ distress and reduce disability due to psychiatric symptoms.

Figure 1. Changes in the distribution of institutionalized residents: 1950-1980. Adapted from Kramer.
Comments
Consider treating psychiatric symptoms and behavioral disturbances in residents with dementia under the following conditions:
A. When they are distressing to the resident
B. When they impair self-care, social interactions, and participation in activities
C. When they are a source of danger to the resident or others
D. When symptoms pose a danger, the safety of the resident and others requires urgent initiation of psychopharmacologic treatment. In other cases, the timing of pharmacologic and psychosocial treatments should reflect the needs of the individual resident. However, it is important to consider that dementing illnesses, depression, and their sequelae in elderly people are generally long-term problems. Effective treatment benefits all residents in the institution, as well as the health care staff.

References

Long-term Care Forum
Constantine G. Lyketsos, MD, MHS, is Professor of Psychiatry and Director of Neuropsychiatry and Behavioral Sciences at The Johns Hopkins School of Medicine. In addition, Dr. Lyketsos is Academic Director of the Copper Ridge Institute in Sykesville, Maryland.

In this interview, Dr. Lyketsos discusses his approach to mental health treatment among nursing home residents.

**Specialized care for the elderly**

**LTC Forum:** What is your approach to mental health treatment among nursing home residents?

**Dr. Lyketsos:** Today, the majority of people admitted to nursing homes have dementing conditions. Figure 1 shows that, based on data collected in the Baltimore area, 8 of 10 people admitted to a nursing home have some type of psychiatric disorder. These data indicate that nursing homes should be modeled closer to a neuropsychiatric setting than to a nonpsychiatric residential facility. Our approach to care follows a neuropsychiatric model.

**LTC Forum:** How common is this approach?

**Dr. Lyketsos:** This type of approach is usually followed in dementia special care units. Based on the latest data, 2100 nursing homes (12.5%) presently have dementia units.

**LTC Forum:** How does staffing in a special care unit such as the one at Copper Ridge compare to most other LTC facilities?

**Dr. Lyketsos:** In these facilities, there is a higher ratio of staff to residents on all shifts, and each member of the staff has advanced training in the care of individuals with dementia. In addition, staff members participate in continuing education programs designed to upgrade their skills in this area of practice.

There also is an intensive on-site medical and psychiatric presence. Psychiatrists make rounds 4 days each week. The total on-site time for psychiatrists is approximately 0.8 full-time equivalents (FTEs). The following case history describes a common patient care problem in a nursing home and our approach to managing it.

**Case history**

An 85-year-old woman was admitted to the assisted living center 6 months ago. Initially, she adjusted well to the routine of the facility; however, she recently became agitated in response to the management of her daily care. Specifically, the patient became progressively less cooperative with the resident assistant’s attempts to help her dress. At first, the patient resisted going into her room to dress. She then became unable to decide on the clothes to wear each day, spending long periods staring into her closet. Now, she is combative when the assistant attempts to help her dress.

**Managing behavior problems in an LTC facility**

**LTC Forum:** How would you proceed with managing the behavior?

**Dr. Lyketsos:** A strategic 4-step approach to addressing this patient’s conduct is presented in Table 1. First, it is important to accurately describe the problem and then decode (or interpret) the findings in order to make the connection to the correct underlying etiology(ies). Once the assessment is complete, the psychiatrist works with the staff to devise effective interventions and monitor the outcome of care.
Describing the problem

**LTC Forum:** How do you ensure that the information you receive is an accurate description of the problem?

**Dr. Lyketsos:** The process begins by having the staff member who reported the problem present a detailed description of what was observed. In this case, the problem is limited to the time when a specific daily event, the provision of daily care, takes place. There is no evidence that this resident is experiencing problems or exhibiting agitation in other settings. Difficulty in her care is limited to her inability to select clothes and her resistance to the staff member’s attempts to assist in dressing.

Decoding

**LTC Forum:** What other information is required?

**Dr. Lyketsos:** Once the details of the specific problem are clear, it is important to obtain more information about the resident herself. For example, does she have dementia or is she experiencing delusions and hallucinations. From the resident’s perspective, she may believe that there are other people in the room who are violating her privacy. Perhaps she believes that someone is trying to cause her harm.

Depression is also a potential contributing factor. It occurs in 20% to 25% of cognitively intact nursing home residents, compared with <3% in the community. This resident initially adjusted well to life in this facility. However, we know that 13% of residents will develop a new episode of major depression over a 1-year period and another 18% will develop new depressive symptoms. Therefore, this resident’s current state of mind must be assessed.

**LTC Forum:** Is it possible that the problem is simply related to an inability to communicate with the caregiver?

**Dr. Lyketsos:** It is possible that this patient’s dementia is accompanied by aphasia. She may not understand what the resident’s assistant is telling her, or she may be unable to communicate her thoughts to the assistant. In addition, she may suffer from agnosia and not recognize her clothes. She may think the clothes in her closet belong to someone else.

The staff may unknowingly contribute to the problem. For example, the assistant’s tone of voice or body language may be perceived as threatening to the patient. Lighting in the room, temperature, and ambient noise may also contribute to the resident’s discomfort and lack of cooperation.

**LTC Forum:** What medical problems might contribute to her behavior?

**Dr. Lyketsos:** Medical problems such as an early bladder infection might contribute in that it may be uncomfortable for her to adjust the belt on her slacks. It would be useful to assess her glucose control. Fluctuation in blood glucose levels can lead to mental confusion. Other conditions, such as the pain from arthritis, a stroke, hypothyroidism, constipation, and poorly controlled heart disease, also can contribute to agitation and/or confusion.

**LTC Forum:** What is the best source of information about this resident and her problem?

**Dr. Lyketsos:** Most of the description and decoding information comes from the front-line staff, such as the aides who take care of her. Therefore, it is essential to interview these staff members. In fact, if the problem occurs at night but the psychiatrist makes rounds in the morning, it might be necessary to speak with the staff member from the relevant shift by telephone.

Devising interventions

**LTC Forum:** Based on what is known about this patient, what would be the most appropriate treatment?

**Dr. Lyketsos:** In this case, it may be necessary to alter the way in which the staff interacts with this patient. If aphasia is a contributing factor, nonverbal communication is
an obvious intervention. If this resident does not recognize her clothes, a staff member may preselect the resident’s clothes and put them on the bed. This reduces the number of choices she must make.

Another factor that may affect the interaction between the resident and staff member is their physical relationship during conversations. For example, staff members who speak while standing in front of a seated resident may be intimidating. This can be remedied by having the staff member sit next to the resident when speaking to her.

**LTC Forum:** These suggestions are intuitive.

**Dr. Lyketsos:** They are, but it must be remembered that staff members in LTC facilities are very busy and often overworked. Under these circumstances, it may not occur to them to take time to determine how the relationship between them and the residents influences communication. The staff may not think they can afford the extra time needed to preselect clothes for a resident.

**LTC Forum:** What is the appropriate role for drug treatment?

**Dr. Lyketsos:** As a general guide, drug therapy in these residents should be judicious and targeted to treat a symptom or syndrome for which there is evidence that drugs can produce a benefit. We must be careful because if this resident was uncooperative with dressing because she was constipated, treatment with an antipsychotic drug would probably exacerbate the constipation as well as the behavioral problem.

**LTC Forum:** When do you consider drug treatment?

**Dr. Lyketsos:** When I complete the detailed decoding process and conclude that the resident is psychotic or agitated as a consequence of dementia, then atypical antipsychotic drugs or mood-stabilizing anticonvulsants may be useful. In these circumstances, as many as two thirds of residents treated with an atypical antipsychotic drug will improve.

Olanzapine, risperidone, and quetiapine can make a positive contribution under these circumstances. Clinical studies with olanzapine and risperidone support the value of atypical antipsychotic drugs.

Quetiapine, which is relatively more sedating, may be useful in agitated residents who present with behavior problems at night, or if the agitation is associated with sleep disturbances. Quetiapine also has a lower incidence of extrapyramidal reactions than the other atypical antipsychotic drugs.

Each of these drugs has an advantage over clozapine, a fourth atypical antipsychotic, which requires frequent monitoring of the white blood cells and differential counts.

**Determining outcomes**

**LTC Forum:** How do you measure the response to treatment?

**Dr. Lyketsos:** Once the treatment plan is in place, it becomes important to set goals to define success. If the intervention is to treat the psychosis with antipsychotic drugs, it is appropriate to set a time limit for the expected response and to monitor for side effects.

If the problem is the manner in which the caregiver is approaching the patient, it may be necessary to assign a senior staff member to work with the caregiver and the resident to identify the best approach to dressing her. If this is successful, it will be necessary to teach the new approach to all staff members.

Individuals with dementia have a variety of problems for which they require care. They may need assistance with daily living activities and help in managing behavior disturbances that are likely to develop. They are also likely to have comorbid medical illnesses that require care, such as assistance...
in taking medicine. Assisted living facilities that house patients with more extensive problems related to memory require a more structured approach to care.

Maintaining quality of life

**LTC Forum:** What factors have the most impact on a resident’s quality of life?

**Dr. Lyketsos:** Overall, there is a clear association between a decline in quality of life and advancement of the underlying disease. Using the Alzheimer’s Disease Related Quality of Life scale, we interviewed 32 facility staff members about 120 patients who met the DSM-IV (*Diagnostic and Statistical Manual of Mental Disorders, 4th edition*) criteria for dementia. Our multivariate analysis revealed that quality of life in long-term residents was associated with worse orientation, greater physical dependency, depression, and anxiolytic treatment. Quality of life was not associated with the resident’s gender or race, or with the caregiver’s race or education. It also was not associated with the amount of time each day that was spent caring for the resident.4

**LTC Forum:** Can you explain why anxiolytic treatment had a negative impact on quality of life?

**Dr. Lyketsos:** Most patients taking anxiolytics were using benzodiazepines. It is possible that these residents had severe behavioral symptoms that were resistant to other drugs and were prescribed anxiolytics as a last resort. Nevertheless, benzodiazepines in dementia patients are best used in short-term situations.4

**LTC Forum:** What are your recommendations to clinical and administrative staff in other LTC facilities for optimizing care of patients with memory-imparing illnesses?

**Dr. Lyketsos:** Staff education is an essential component in the care of these patients. The staff should be presented with basic facts and terminology about psychiatric disorders, as well as information about available treatments and their efficacy. Staff members should learn how to obtain histories from patients. They must understand the process of neuropsychiatric diagnosis and develop optimal clinical approaches and environmental modifications. Basic rating scales such as the Mini-Mental State Exam can be used to facilitate patient evaluation and outcomes assessment. Knee-jerk responses or prescribing medications for poorly defined problems should be avoided.

For most patients, the nursing home will be their final residence for 3 to 4 years before death. The goals of care relate to quality of life (being symptom-free and comfortable), functioning (maintain the highest possible levels), longevity, and maintaining dignity. The staff must adopt a “can-do” rather than a nihilistic philosophy. Small improvements are almost always possible and can be of tremendous benefit in boosting patient and staff morale.3

---

**References**


Comparison of Conventional vs Atypical Antipsychotic Drugs: Focus on Elderly Patients

Dilip V. Jeste, MD
Chair in Aging, Estelle and Edgar Levi Professor of Psychiatry and Neurosciences
Chief, Division of Geriatric Psychiatry
University of California
VA San Diego Healthcare System
San Diego, California

Antipsychotic agents are among the most commonly used psychotherapeutic tools in nursing homes. Although they are not curative, these compounds provide symptom relief and are indicated for elderly patients with schizophrenia and other psychotic disorders.

Given the wide use of antipsychotics in the nursing home setting, the following section discusses this drug class. Based on limited data with antipsychotics in the elderly, this article provides guidelines for the safe and effective use of both conventional and newer antipsychotics in elderly patients.

Conventional neuroleptics

Conventional neuroleptics have been available since the introduction of the low-potency agent chlorpromazine in 1952. High-potency neuroleptics such as haloperidol, and intermediate-potency agents such as loxapine, subsequently became available. Each of these drugs blocks dopamine (especially D2) receptors in the brain, an action that confers both benefits and drawbacks.

Although conventional neuroleptics are effective for the positive symptoms of schizophrenia (ie, delusions or hallucinations), they have relatively little effect on the negative symptoms of this disease (ie, anergy, apathy or social withdrawal). Furthermore, their side-effect profile is of particular concern in elderly patients, because these individuals are more susceptible to sedation, urinary retention, constipation, dry mouth, glaucoma, and confusion. In addition, extrapyramidal symptoms (EPS) such as parkinsonism and akathisia occur.

There is a higher risk of tardive dyskinesia (TD) in middle-aged and elderly patients, even with low doses of conventional neuroleptics. In a study of more than 400 outpatients (mean age 65 years) treated with conventional neuroleptics, mainly haloperidol or thioridazine, at relatively low doses (usually less than 150 mg chlorpromazine equivalent daily), the cumulative incidence of TD was found to be 29%, 50%, and 63% after 1, 2, and 3 years, respectively. This compares to an annual cumulative incidence of 4% or 5% for TD in younger adults treated with conventional neuroleptics. The risk factors for TD in the elderly are listed in Table 1.

In the majority of patients with behavioral disturbances of dementia, the risk of TD may be reduced by discontinuing neuroleptic treatment or lowering the dosage. In patients with schizophrenia, however, drug withdrawal is usually difficult to accomplish because of the risk of relapse. An alternative option is to prescribe newer antipsychotic medications, which usually are somewhat more effective and have fewer side effects than conventional neuroleptics.

Newer or atypical antipsychotics

Five newer antipsychotic drugs are approved for use in the United States: clozapine, risperidone, olanzapine, quetiapine, and ziprasidone. Unlike conventional neuroleptics, the atypical agents are potent central serotonin antagonists in addition to being central dopamine receptor antagonists.

The newer neuroleptic agents have several advantages. They tend to be more effective for both the positive and negative symptoms of the disease, and are associated with a lower incidence of EPS than conventional neuroleptics. The incidence of TD with atypical antipsychotics is also likely to be lower, although determination of the exact risk of TD with some of these newer drugs needs long-term studies.

The potential for atypical antipsychotics to enhance cognition is an intriguing aspect of their clinical profile, particularly in older patients with schizophrenia.
Table 2

Usual Recommended Doses of Common Antipsychotics for Elderly Psychotic Patients

<table>
<thead>
<tr>
<th>Antipsychotic</th>
<th>Starting Dose*</th>
<th>Maintenance Dose*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haloperidol</td>
<td>0.25 to 0.5 mg</td>
<td>1 to 3.5 mg</td>
</tr>
<tr>
<td>Thioridazine</td>
<td>10 to 25 mg</td>
<td>50 to 100 mg</td>
</tr>
<tr>
<td>Clozapine</td>
<td>6.25 to 12.5 mg</td>
<td>50 to 150 mg</td>
</tr>
<tr>
<td>Risperidone</td>
<td>0.25 to 0.5 mg</td>
<td>1 to 2.5 mg</td>
</tr>
<tr>
<td>Olanzapine</td>
<td>2.5 to 5 mg</td>
<td>5 to 15 mg</td>
</tr>
<tr>
<td>Quetiapine</td>
<td>12.5 to 25 mg</td>
<td>75 to 200 mg</td>
</tr>
</tbody>
</table>

* Daily dose.

Table 1

Principal Risk Factors for Tardive Dyskinesia in the Elderly

- Duration of prior neuroleptic use at baseline
- Cumulative amount of high-potency neuroleptics
- History of alcohol abuse/dependence
- Borderline or minimal dyskinesia
- Tremor on instrumental assessment

Data from Jeste et al.

Clozapine

Clozapine has been available in the United States since the late 1980s. It may be considered for use in elderly patients with Parkinson’s disease accompanied by psychotic symptoms, and for patients with chronic psychotic disorders that do not respond to other antipsychotic medications. It also may be considered for individuals with severe TD. For these patients, starting dosages should be much lower compared with younger patients, 6.25 to 12.5 mg/day, with increases of no more than 6.25 to 12.5 mg once or twice a week. Maintenance doses of clozapine should generally be 50 to 150 mg/day (Table 2).

The side effect profile of clozapine limits its use in this population. Patients taking the drug are at risk for leukopenia and agranulocytosis, necessitating weekly blood monitoring, and elderly individuals may have difficulty complying with the need for weekly blood draws.

Clozapine can lower the seizure threshold, and also cause sedation and confusion. In patients with dementia or glaucoma, or in men with prostatic hypertrophy, the anticholinergic side effects of this drug can limit its use.

Risperidone

Risperidone has better tolerability and somewhat better efficacy compared with a conventional neuroleptic such as haloperidol. My colleagues and I have published the results of 3 open-label studies of patients aged 45 to 100 years. Most of these patients had schizophrenia or related psychoses such as delusional disorder, and the remainder had psychotic symptoms associated with Alzheimer’s disease. With low doses of risperidone (usually less than 3 mg/day) 40 of the 53 enrolled patients (76%) experienced a noticeable symptomatic improvement. Improvement in the positive symptoms of schizophrenia, such as delusions and hallucinations, occurred within 6 weeks after starting treatment. Negative symptoms such as social withdrawal, blunted affect, and apathy improved after 6 to 10 weeks of treatment.

Based on available data, it is premature to suggest that risperidone directly enhances cognition in patients with schizophrenia. Such effects may be indirect, resulting from its favorable effects on the positive and negative symptoms of schizophrenia and its low incidence of EPS at the doses used in these studies. Nonetheless, a positive effect on cognition may be of particular importance in light of the association between cognitive performance and functioning in daily life. It should be stressed that there is no evidence to suggest that any of the atypical antipsychotics improve cognition in demented patients.

In a large double-blind trial of dementia patients in nursing homes, psychosis or agitation was treated with risperidone or placebo. The patients received placebo or 0.5, 1, or 2 mg/day of risperidone. Both the 1-mg/day and 2-mg/day risperidone doses were significantly more effective than placebo, but the 2-mg/day dose was associated with more EPS.
In the elderly, postural hypotension, sedation, and EPS are the most common adverse effects during risperidone therapy. These side effects (especially EPS) are dose-related, suggesting a need for caution in raising the dose.

Starting and maintenance dosages of risperidone in elderly patients are much lower than those recommended for younger patients. A starting dosage of 0.25 to 0.5 mg/day is appropriate for older patients. The dosage should be increased by no more than 0.25 mg to 0.5 mg once or twice a week, generally to a maximum of 1 mg to 2.5 mg daily. Patients with dementia, Parkinson’s disease, or significant hypotension should usually not receive more than 1 mg/day of risperidone (Table 2).

Olanzapine

Olanzapine was approved by the Food and Drug Administration (FDA) for clinical use late in 1996. In an open-label study, Wolters and colleagues were able to successfully treat 15 nondemented parkinsonian patients with drug-induced psychosis with olanzapine at doses of 1 to 15 mg/day (mean 7 mg).7 One patient discontinued treatment due to drowsiness.7

In a randomized, double-blind, placebo-controlled study, 206 elderly nursing home residents with psychotic symptoms and behavioral disturbances associated with Alzheimer’s disease were randomly assigned to 5, 10, or 15 mg/day of olanzapine or placebo for up to 6 weeks. Greatest improvement was seen with low-dose olanzapine (5 and 10 mg/day).8 There was no difference in EPS between any dose of olanzapine and placebo.

A starting dose of olanzapine, 2.5 to 5 mg daily, is recommended in the elderly, and a maintenance dose of 5 to 15 mg daily (Table 2).

Quetiapine

Quetiapine was introduced into clinical practice in 1997. It has been shown to be well tolerated and clinically effective in the treatment of schizophrenia.1

Quetiapine has an exceptionally low potential for EPS, even at higher doses, and little anticholinergic or prolactin elevating action. The principal adverse effects in humans include drowsiness and postural hypotension.

In an open-label study of 89 elderly patients who were treated with quetiapine for psychosis, following 1 year of treatment, there was a significant decrease from baseline in psychopathology on the Brief Psychiatric Rating Scale.9

A starting dose of quetiapine 12.5 to 25 mg daily is recommended, with an optimal target dose of 75 to 200 mg per day (Table 2).

Ziprasidone

Ziprasidone is the newest FDA-approved antipsychotic. So far, there are limited published data on its use in elderly patients.

Switching from a conventional neuroleptic to a newer antipsychotic

Needless to say, changing from a conventional to a newer antipsychotic agent may not be warranted in patients who respond optimally. However, if a change is warranted, guidelines for this procedure are provided here.

(A) If the conventional neuroleptic is ineffective: The dose of the current drug is maintained while that of the newer antipsychotic is slowly increased to the optimal maintenance dose. Then, the dose of the conventional neuroleptic can be slowly decreased and ultimately discontinued.

(B) For patients with moderate or distressing side effects, such as EPS: The dose of the conventional neuroleptic is slowly tapered while the dose of the newer antipsychotic is slowly increased.

Thus, in both scenarios (A) and (B), the conventional neuroleptic should not be stopped suddenly; otherwise, there may be a risk of relapse. In all cases in which a patient receives an anticholinergic drug along with the conventional neuroleptic, the anticholinergic agent may be continued for a few days after neuroleptic withdrawal. This reduces the chances of cholinergic rebound with resultant nausea, vomiting, and other symptoms.

(C) If a patient is experiencing life-threatening side effects, such as neuroleptic malignant syndrome: The offending neuroleptic drug must be discontinued immediately. The newer antipsychotic may then be started and slowly titrated to the most effective dose.

Whenever possible, once-daily dosing is preferred. Once-daily dosing increases the likelihood of compliance, particularly among patients with chronic schizophrenia who typically require antipsychotic medication for most of their life.
taking medication once daily are, however, at an increased risk for side effects such as sedation or postural hypotension following drug administration during the first few days. To avoid this problem, the clinician may prescribe smaller divided doses initially, then switch to a once-daily regimen after a steady-state drug level is achieved.

When prescribing antipsychotics for elderly patients, start with a low initial dose then increase this dose slowly until the lowest effective dose is reached. Finally, antipsychotics provide symptomatic relief, but they do not cure the underlying illness. Therefore, a comprehensive treatment approach for psychotic and other severe behavioral disorders must combine drug therapy with appropriate psychosocial interventions.

References
CME Self-Assessment Test
Psychotherapeutic Management of the Long-term Care Patient

On the answer form located on the back cover, please circle the letter that corresponds to the single most appropriate answer for each of the following questions. Deadline to receive credit is one calendar year from date of publication.

1. In addition to a loss of intellectual capacity, patients with advanced dementia have a higher risk of mortality associated with concurrent acute illnesses such as pneumonia or hip fracture.
   a. True
   b. False

2. What is the prevalence of depression among cognitively intact nursing home residents versus the community?
   a. 3% vs 20% to 25%
   b. 20% to 25% vs 3%
   c. 50% vs 50%
   d. 25% vs 25%

3. What are the rates of new episodes of major depression and new depressive symptoms in nursing homes over 1 year?
   a. 3% and 8%
   b. 13% and 18%
   c. 73% and 88%
   d. 50% each

4. Select the correct trend in nursing home admissions.
   a. People enter nursing homes later in life
   b. Residents in nursing homes are sicker than before
   c. Residents in nursing homes are healthier than before
   d. Both a and b
   e. Both a and c

5. Dementia care units are available in what percentage of long-term care facilities?
   a. 12.5%
   b. 25%
   c. 50%
   d. 75%

6. Which atypical antipsychotic drug has the lowest incidence of extrapyramidal symptoms (EPS)?
   a. Olanzapine
   b. Quetiapine
   c. Risperidone
   d. The incidence is the same among these drugs

7. What factors have a negative impact on a resident’s quality of life?
   a. Physical dependency
   b. Depression
   c. Anxiolytic treatment
   d. All of the above
   e. Both a and b

8. Identify the goal(s) of care for nursing home residents.
   a. Quality of life (symptom-free and comfortable)
   b. Functioning (highest possible levels)
   c. Longevity and dignity
   d. All of the above
   e. Both a and c

9. What is the cumulative incidence of tardive dyskinesia (TD) after 1, 2, and 3 years, respectively, of outpatient treatment with conventional neuroleptics?
   a. 2%, 5%, and 10%
   b. 10%, 12.5%, and 20%
   c. 29%, 50%, and 63%
   d. 52%, 62%, and 69%

10. What is (are) the principal risk factor(s) for TD in the elderly?
    a. Duration of prior neuroleptic use at baseline
    b. Cumulative amount of high-potency neuroleptics
    c. History of alcohol abuse/dependence
    d. All of the above

11. What are the advantages of newer neuroleptic agents?
    a. Effective for positive symptoms
    b. Effective for negative symptoms
    c. Lower incidence of EPS versus conventional neuroleptics
    d. All of the above
    e. Both a and c

12. Identify the appropriate reason(s) to switch to a newer antipsychotic drug.
    a. The conventional neuroleptic is ineffective
    b. Patient has moderate or distressing side effects, such as EPS
    c. When neuroleptic treatment is needed for a short period
    d. All of the above
    e. Both a and b
PERSONAL INFORMATION

I certify that I have completed this educational activity and posttest.
Expiration date: April 2003

Name _________________________________________________________ Degree ____________________________________________
Address ________________________________________________________________________________________________
City ______________________________ State __________________ Zip __________________

Phone Number __________________________ Specialty ___________________________________

PROGRAM EVALUATION

You must complete this evaluation to ensure processing of your self-assessment test.
Please circle or check the answer that best applies.

Have the activity’s educational objectives been met?
State the prevalence of dementing illnesses and depression in nursing home residents ___Yes ___No
List the current trends in nursing home admissions in the United States ___Yes ___No
Identify differences in response to conventional and atypical antipsychotic drugs ___Yes ___No
Recognize the appropriate reasons to switch patients to a newer antipsychotic drug ___Yes ___No
List the factors that are important to maintaining quality of life in the elderly ___Yes ___No
Identify the goals of care for nursing home residents ___Yes ___No
Did you find this activity to be fair balanced and free of commercial bias? ___Yes ___No

Comments ________________________________________________________________________________________
______________________________________________________________________________________________

Relevance to your practice:
Very relevant

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Amount of knowledge gained:
Great

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Level of material presented:
Too advanced

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Overall evaluation of activity:
Excellent

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Effectiveness of this method of presentation
Excellent

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Hour(s) spent reading this issue (circle one): 1.0 1.25 1.5

Would you recommend this publication to a colleague?
Yes  No

Ideas for future publications and/or your comments: ________________________________________________________________________________________
______________________________________________________________________________________________
Long-term Care Forum – Psychotherapeutic Management of the Long-term Care Patient

CME SELF-ASSESSMENT TEST

ANSWER FORM

A CME Certificate or Certificate of Completion will be sent to you should you earn a passing grade of at least 70%.

Please circle the letter that corresponds to the single most appropriate answer and fax both the Personal Information and CME Self-Assessment Test to the American Association for Geriatric Psychiatry at 301-654-4137 or mail your response to:

American Association for Geriatric Psychiatry
Education Department
7910 Woodmont Ave., Suite 1050
Bethesda, MD 20814

1. a b
2. a b c d
3. a b c d
4. a b c d e
5. a b c d
6. a b c d
7. a b c d e
8. a b c d e
9. a b c d
10. a b c d
11. a b c d e
12. a b c d e