Schizophrenia in the Nursing Home: 
Issues and Recommendations

Issues

- Many nursing home residents/patients have behavior issues and psychiatric symptoms.
- Nursing homes commonly admit individuals with diverse psychiatric diagnoses, including—but not limited to—schizophrenia, bipolar disorder, and schizoaffective disorder.
- Nursing homes are taking more younger adults as residents / patients, many of whom have mental health issues.
- Many individuals are admitted to the nursing home already on psychopharmacological medications or are started on psychopharmacological medications after admission.
- The rationale for psychopharmacological medications, or specific psychopharmacological medications (such as antipsychotics) is often unclear.
- Sometimes, diagnoses may be added to an individual’s record to accompany the initiation or addition or change of psychopharmacological medications.
- There is concern that some diagnoses (including, but not limited to schizophrenia) may be fabricated in order to justify the use of specific medications; primarily, antipsychotics.

Common Behavior and Psychiatric Symptoms In Nursing Home Residents (data from 1999-2010)

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression (major and minor depression)</td>
<td>20–40%</td>
</tr>
<tr>
<td>Major neurocognitive (dementia)</td>
<td>40–90%</td>
</tr>
<tr>
<td>Cognitive impairment but no dementia</td>
<td>5–30%</td>
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<tr>
<td>Delirium</td>
<td>6–16%</td>
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<tr>
<td>Delirium in a post-acute setting or a skilled nursing facility</td>
<td>5–30%</td>
</tr>
<tr>
<td>Psychotic symptoms</td>
<td>8–12%</td>
</tr>
<tr>
<td>Severe mental illness (e.g., schizophrenia)</td>
<td>0.2–5%</td>
</tr>
<tr>
<td>Behavioral symptoms occurring at least once a week</td>
<td>30–35%</td>
</tr>
<tr>
<td>Behavioral symptoms affecting others</td>
<td>15–22%</td>
</tr>
<tr>
<td>Aggressive behavior once a week</td>
<td>13–20%</td>
</tr>
<tr>
<td>Aggressive behavior injuring staff</td>
<td>3–6%</td>
</tr>
<tr>
<td>Abnormal circadian rhythms</td>
<td>90–99%</td>
</tr>
<tr>
<td>Nonaggressive behavioral symptoms once a week</td>
<td>20–30%</td>
</tr>
<tr>
<td>Frequent screaming</td>
<td>10–20%</td>
</tr>
<tr>
<td>Daytime sleeping</td>
<td>65–75%</td>
</tr>
<tr>
<td>Disturbed nighttime sleep</td>
<td>55–65%</td>
</tr>
<tr>
<td>Resistance to taking medications</td>
<td>13–15%</td>
</tr>
<tr>
<td>Resistance to activities of daily living</td>
<td>13–15%</td>
</tr>
<tr>
<td>Self-injurious behavior (pinching or scratching oneself)</td>
<td>20–25%</td>
</tr>
<tr>
<td>Residents who spend most of the time in a bed and/or chair</td>
<td>4–16%</td>
</tr>
<tr>
<td>Psychotropic medication prescriptions</td>
<td>30–60%</td>
</tr>
</tbody>
</table>

Source: Desai, Abhilash K; Grossberg, George T..  
Psychiatric Consultation in Long-Term Care 2nd ed.  
Cambridge University press, 2017

Background

- Diagnoses are a convenient way to define and describe a collection of related findings.
- Psychiatric diagnoses are not defined by any one symptom, but instead by a collection of signs and symptoms.
- Psychiatric diagnoses have specific criteria, often based on factors such as onset, duration, and recurrence of symptoms.
- There is a lot of overlap in findings between psychiatric diagnoses; that is, many conditions have similar symptoms.
- Causes of behaviors and psychiatric symptoms are diverse and must be confirmed through a competent cause identification process by knowledgeable individuals.
- A symptom does not necessarily define a diagnosis.
- Treatment decisions should consider not just the diagnosis, but other factors including the nature, severity and consequences of the symptoms.
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"Diagnostic criteria are offered as guidelines for making diagnoses, and their use should be informed by clinical judgment."

"Although some mental disorders may have well-defined boundaries around symptom clusters, scientific evidence now places many, if not most, disorders on a spectrum with closely related disorders that have shared symptoms. . ."

"Nonclinical decision makers should also be cautioned that a diagnosis does not carry any necessary implications regarding the etiology or causes of the individual's mental disorder or the individual's degree of control over behaviors that may be associated with the disorder."

- Source: DSM-5 Handbook of Differential Diagnosis

- All psychiatric diagnoses must be made or confirmed by following certain essential steps, in a specific sequence.
- The diagnosis of schizophrenia requires ruling out other possible explanations for the symptoms. No one finding is specific.
- A patient does not have to have all of the findings to have the diagnosis.
- Even when the diagnosis is correct, that alone is not enough to explain causes of behavior, to predict symptom severity, or to warrant a specific intervention.
- Uneducated guessing about diagnoses and treatments, without understanding patient-specific issues and the correct diagnostic process, is unlikely to be fruitful and is likely to be highly problematic.

"It is precisely because impairments, abilities, and disabilities vary widely within each diagnostic category that assignment of a particular diagnosis does not imply a specific level of impairment or disability."

"Nonclinical decision makers should also be cautioned that a diagnosis does not carry any necessary implications regarding the etiology or causes of the individual's mental disorder or the individual's degree of control over behaviors that may be associated with the disorder."

- Source: DSM-5 Handbook of Differential Diagnosis

- Differential diagnosis is essential to any competent psychiatric and behavior management.
- There is little that we can do to address symptoms and minimize complications unless we correctly identify underlying causes and address related symptoms in context.
- Someone can have schizophrenia and still have other things causing or exacerbating their behavior issues and psychiatric symptoms.
- It is important to weigh the patient-specific evidence carefully before concluding that schizophrenia is the sole or primary cause of their behavior or other psychiatric symptoms.

Schizophrenia Basics

**What are some key distinguishing characteristics of schizophrenia?**

Schizophrenia is a lifelong and progressive illness that occurs in approximately 1% of the general population. At the same time, more individuals with schizophrenia may be living in LTC settings due to medical comorbidities associated with schizophrenia, increased life expectancy, and inadequate resources.

Schizophrenia typically involves the emergence of symptoms in the late teens or early twenties, with another small bump in the 50-60 age group. Epidemiologic and other studies show that the incidence of schizophrenia in late life (over the age of 75) is rare (Krammer 2013; Li 2007).

Of note, individuals with schizophrenia do not tend to have dementia or progressive decline in memory (Mazeh 2005; Palmer 2003; Hanssen 2015), nor cognitive decline on common measures of dementia (e.g. MMSE) (Palmer 2003).
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Dementia that develops in individuals with schizophrenia does not appear related to common causes of dementia such as Alzheimer’s disease, Lewy Body Disease, FTD, etc. (Purohit 1998). Developing dementia followed by a new onset schizophrenia appears to be extremely unusual (Palmer 2003).

Can people with dementia develop schizophrenia?
People with schizophrenia not uncommonly become demented later in life. It is not unusual for individuals with dementia to have delusions and paranoia, or to have psychotic episodes. None of that is sufficient for the diagnosis of schizophrenia. It is very rare for a person to develop schizophrenia after the onset of dementia.

Is behavior or psychiatric symptoms in individuals with a history or diagnosis of schizophrenia necessarily related to that condition?
Individuals with schizophrenia can have other conditions or issues (for example, substance abuse disorders and pain) that cause or affect behavior. It cannot be assumed automatically that every behavior is due to schizophrenia. Over time, the impact of schizophrenia may diminish, while other conditions such as dementia or medication side effects may have a much greater impact.

Does the presence of certain symptoms such as delusions, hallucinations, and paranoia necessarily indicate that a person has schizophrenia or another mental illness?
No. These may be—but are not necessarily—evidence of underlying psychosis. Many so-called “normal” people may have transient paranoia. For example, paranoia can accompany hearing deficits and with various personality disorders. Transient sleep-related hallucinations are also not uncommon. Delusions are common in individuals with dementia and are generally simple, not well organized or systematic and are related to cognitive deficits (e.g., due to memory problems, the person suspects someone stole their belongings).

However, the delusions in individuals with schizophrenia are typically complex, well organized, systematic, intense, extreme, obsessive, and at times bizarre (outside the realm of normal human experience (for example, the belief that other people can read their thoughts), in contrast to misinterpretation of everyday events and ordinary interactions with other people.

Similarly, visual hallucinations may be due to medications, acute decline in vision, or as part of delirium, and do not indicate schizophrenia. In schizophrenia, visual hallucinations are typically accompanied by vivid auditory hallucinations.

Recommendations for Practice

What should facilities and practitioners consider to identify whether someone has schizophrenia?
Schizophrenia is a clinical diagnosis (e.g. there are no laboratory or radiologic tests to establish the diagnosis). The diagnosis of schizophrenia requires thorough evaluation of the patient and history. While DSM-V criteria provide the basic diagnostic framework, clinicians must use additional information to support the diagnosis, especially in nursing home residents / patients with cognitive impairment.

What steps should facilities and practitioners follow to establish or validate a diagnosis of schizophrenia?
Follow the basic steps as outlined in authoritative references for the practicing clinician such as the DSM-V manual and the DSM-V Handbook of Differential Diagnosis.
All psychiatric diagnoses must be based on patient-specific evidence, including symptom details and as much detail as possible of the individual’s past and recent history.
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Based on recommended steps in authoritative references (DSM-5 Handbook of Differential Diagnosis), medical practitioners and facilities should collaborate to get the details of any current symptoms and as much detail as possible about their background and history.

Efforts should be made to obtain a thorough psychiatric history from the patient and family or caregivers. Given that schizophrenia is normally a lifelong illness, validation of the existence of symptoms in the past supports the diagnosis of schizophrenia. Especially helpful is information related to past diagnosis, treatment, participation in outpatient day treatment, and hospitalizations.

Psychiatric diagnoses are defined by a collection of signs and symptoms—not by a single symptom. Key diagnostic criteria for schizophrenia include the need to have at least two characteristic symptoms for more than 6 months and not to have other causes such as substance abuse or pharmacologic or clinical diagnoses that may explain the symptoms.

Assessment of residents/patients should include an evaluation for symptoms including delusions, hallucinations, disorganized speech, disorganized or catatonic behavior, and negative symptoms including diminished emotional expression. Such symptoms cause typically impair major areas of functioning including activities, interpersonal relationships, or self-care.

Additionally, some of the symptoms must last continuously for a period of at least six months and cannot be explained by other diagnoses such as Alzheimer’s disease or other types of dementia.

Documentation of previous impairment in functioning including work, relationships, and self-care can also support the diagnosis but must also be distinguished from progressive forms of dementia, particularly those impacting executive function.

What are other diagnostic considerations?

Many other diagnoses can mirror the symptoms of schizophrenia, for short or long periods of time. These can become more frequent or likely in the aging adult.

A diagnosis of schizophrenia should be distinguished from other medical or psychiatric diagnoses with overlapping symptoms, such as bipolar disorder or schizoaffective disorder, as well as delirium, personality disorders, psychosis (e.g., post-stroke, postoperative, etc.) as those with different forms of dementia (e.g. Alzheimer’s dementia, Lewy body dementia, frontotemporal dementia, etc.).

Medical conditions and countless medications that are known to cause or exacerbate psychiatric symptoms (Beers List, AGS, 2019; Drugs that may cause psychiatric symptoms. Med Lett Drugs Ther 2002; 44:59) should be reviewed carefully and addressed.

“The first question that should always be considered in the differential diagnosis is whether the presenting symptoms arise from a substance that is exerting a direct effect on the central nervous system (CNS). Virtually any presentation encountered in a mental health setting can be caused by substance use. Missing a substance etiology is probably the single most common diagnostic error made in clinical practice. This error is particularly unfortunate because making a correct diagnosis has immediate treatment implications.

“After ruling out a substance/medication-induced etiology, the next step is to determine whether the psychiatric symptoms are due to the direct effects of a general medical condition. . . (T)he need to first rule out substances and general medical conditions as specific causes of the psychiatric symptomatology remains crucial.

“From a differential diagnostic perspective, ruling out a general medical etiology is one of the most important and difficult distinctions in psychiatric diagnosis.”

- Source: DSM-5 Handbook of Differential Diagnosis

In the PALTC setting, a new diagnosis of schizophrenia should be rare. It should rely on the DSM-V criteria and involve a qualified and licensed clinician who has explored and documented the patient history and has ruled out other possible causes of the observed symptoms.

Once the diagnosis has been established, good clinical practice for patients on
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Psychopharmacological medications includes ongoing vigilance to ensure that the patient receives the fewest possible medications at the lowest possible effective doses, and closely monitored and adjusted as needed.

**What other general approaches should a facility have?**

Every facility should have a culture that emphasizes competent cause identification and strictly limits guessing and “inventing” diagnoses, however well intended.

The entire interdisciplinary team should contribute objective, detailed information about mood, cognition, and behavior, and should help search for causes of behavior, based on knowledge of diagnostic considerations and use of authoritative references.

Because people over the age of 75 (a significant proportion of nursing home residents/patients) hardly ever develop schizophrenia, a diagnosis of new onset schizophrenia in a post-acute and long-term care (PALTC) setting should only be made by a qualified health care practitioner with relevant training, using DSM-V criteria, and should never be made primarily or solely to justify the use of an antipsychotic.

It violates good clinical practice and medical ethics to give a diagnosis that a person does not have in order to justify some desired outcome, such as the use of a particular type of medication.

“Use of DSM-5 to assess for the presence of a mental disorder by nonclinical, nonmedical, or otherwise insufficiently trained individuals is not advised. Nonclinical decision makers should also be cautioned that a diagnosis does not carry any necessary implications regarding the etiology or causes of the individual’s mental disorder or the individual’s degree of control over behaviors that may be associated with the disorder.”

*Source: DSM-5 Handbook of Differential Diagnosis*

**Shouldn’t we accept diagnoses made elsewhere as being valid, since we cannot necessarily confirm them?**

Much depends on the story and whether it makes sense.

It is common for troubled individuals to get labeled with a mental illness diagnosis, which then sticks for years or decades. Frequently, the original diagnosis was incorrect or no longer applies. For example, many people with developmental issues, head injuries, a troubled upbringing, personality disorders, or traumatic life histories wind up getting labeled as having schizophrenia or a related mental illness.

If the patient’s symptoms or history do not match the DSM-5 criteria for schizophrenia, then the diagnosis should be reconsidered.

**What do we do if we are not sure if a patient needs an antipsychotic or needs their current dose of an antipsychotic medication?**

Review for whether the individual has psychosis or another symptom that would warrant the use of antipsychotics, for evidence that current antipsychotics have helped address the symptoms, and that other causes and contributing factors (e.g., hypothyroidism, medication side effects) of symptoms have been considered and addressed, where relevant.

Consider reduction or discontinuation of other problematic medications (e.g., opioids, anticholinergics, muscle relaxants, etc.)

As indicated, modify antipsychotic doses in steps while monitoring for return of symptoms that are clinically significant enough to warrant stopping further reductions or restoring prior doses. Be especially careful with patients who have had extreme symptoms such as physical violence or suicide attempts (e.g., patients with paranoid schizophrenia), in considering any dosage reductions. The risks of a severe decompensation may appropriately lead to a clinical decision NOT to reduce dosage. In such cases, it may be prudent to engage a mental health consultant.
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If the diagnosis is clear and previous attempts at reduction have resulted in a return of clinically significant symptoms, then additional attempts at dose reduction may be clinically contraindicated. However, the determination of clinical contraindication should be based on patient-specific evidence, not just someone’s assertion.

REFERENCES
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