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Behavioral Health Needs of Older Adults in the Emergency Department

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Synopsis

Behavioral health disorders are common among older adults, and due to limited access to resources for mental health care in the community, emergency department providers are often on the front lines of mental health crises. This chapter aims to review the available literature regarding the care of behavioral health emergencies in older adults and provides a framework for navigating the evaluation and management of older adults presenting to the emergency department with behavioral health concerns.

Keywords

Geriatric Psychiatry; Psychiatric Emergency; Late-life depression and Suicide; Agitation; Late-life Substance Abuse; Late-Life Anxiety

INTRODUCTION

Care for behavioral health disorders has increasingly shifted from inpatient settings to ambulatory environments in recent decades, with the Emergency Department (ED) becoming a common site for managing behavioral health problems in individuals of all ages, including older adults. An estimated 15 to 25% of older adults suffer from a behavioral health disorder,^{1–3} and older patients with these disorders disproportionately use the ED.^{4,5}

Access to care for behavioral health disorders outside the acute setting is often lacking due to under-recognition, inadequate numbers of trained medical professionals, and limited insurance coverage.³ In fact, nearly 60% of older adults with a behavioral health condition may go without any form of treatment.⁶ As a result, when behavioral health emergencies arise in older adults, ED providers are often on the front lines in their evaluation and management. With these access barriers and the rapid growth of the older adult population, it is critical that ED providers be prepared to manage behavioral health disorders. This chapter will focus on general approaches to behavioral health emergencies of substance abuse, depression and suicidal ideation, anxiety and panic, agitation and psychosis in older adults.

GENERAL APPROACHES

History and Physical Examination

When encountering an older adult with a behavioral health emergency, obtaining an accurate history and performing a thorough physical examination are critical to exclude acute medical illnesses and develop a treatment plan. Depending on the patient's presentation, these steps may be challenging. The patient may not be able to provide clear details due to intoxication, psychosis, or dementia. Physical examination also may be impractical in the agitated patient. Formal or informal caregivers, family or close contacts, or primary medical providers to provide collateral history and recent observations may yield useful information.

Key data to obtain include both medical and non-medical issues that could trigger the observed behaviors or symptoms, past psychiatric history, and the individual's cognitive and functional baseline. See Table 1 for medical issues that can trigger behavioral health symptoms and useful historical clues. Cognitive impairment increases risks for mood and behavioral symptoms and complicates a person's ability to manage previously well-controlled mental health issues, making a history of memory loss another valuable historical clue. Non-medical issues include recent significant life events, such as the loss of a loved one or a change in residence that can provoke behavioral health symptoms. Past psychiatric history is of particular importance because some psychiatric disorders, like depression or generalized anxiety disorder, may be recurrent or can commonly develop in late-life, while others, like schizophrenia, rarely develop in later life. Late-onset psychosis warrants a search for underlying medical causes, mood disorders or cognitive impairment.⁷

When cognitive impairment is suspected or confirmed, additional history from caregivers about the context of the behavioral symptoms can provide significant value. For individuals with behavioral and psychological symptoms of dementia (BPSD), behaviors are often a form of communication. As such, input from caregivers may provide clues as to the triggers for behaviors and help inform treatments. For agitation in particular, seek precise descriptions of what occurred. This includes what actions "agitation" describes, from verbal or physical aggression, like swearing or hitting, to restlessness or wandering. Additionally, details regarding the events preceding the behaviors – whether the individual was awoken from sleep, having personal cares completed, or seemingly unprovoked – and the events following the behavior – whether it led to some desired form of interaction or cessation of an undesired intervention – can help decipher why the behavior occurred. This data can lead to

non-drug behavioral interventions that seek to avoid behavioral triggers or that satisfy an unmet need the behavior otherwise fulfills.

A targeted physical examination provides useful data when evaluating an older adult with a behavioral emergency and helps clarify whether an underlying medical condition is contributing to the presentation. Vital signs may identify issues such as hypoxia from pneumonia or other respiratory condition or hypotension from sepsis or hemorrhage. A thorough neurologic examination can rule out focal deficits that may signal a disorder of the central nervous system. Particularly among individuals with difficulty providing a history, examination for pain is critical, including examining for abdominal tenderness (or bladder distension), tender joints, injuries, skin ulcers, oral sores and poor dentition, especially in the context of agitation. Evaluation for infection, including cellulitis, pneumonia, and pyelonephritis may help identify a delirious state causing psychiatric symptoms. Finally, because adverse drug related events are common in older adults and can account for 10% of all ED visits in this population,⁸ the examiner should look for findings that may signal intoxication or withdrawal from a drug or substance.

Laboratory and Imaging Evaluation

Laboratory and imaging studies can help exclude medical causes of behavioral symptoms, including metabolic and infectious causes. Take caution, however, when interpreting a urinalysis, as asymptomatic bacteriuria and pyuria are common in older adults, especially women, and are not diagnostic for urinary tract infection in the absence of discrete urinary symptoms.⁹ If suspicious for possible alcohol or drug intoxication or withdrawal, blood alcohol levels and other serum or urine toxicology tests may be indicated. As a general rule, routine head imaging is not necessary in the absence of a fall or focal neurologic sign or symptom. An electrocardiogram is useful not only for ruling out medical causes for symptoms, like acute coronary syndrome or arrhythmia, but also for determining a QT interval at baseline. Because many psychoactive drugs affect the QT interval, this is important information to guide therapy if a drug intervention is ultimately needed.

Disposition

Planning disposition for older adults in the ED with behavioral health concerns can be challenging for a variety of reasons, including limited mental health resources. Thus, older adults have longer ED lengths of stay and are more likely to be hospitalized than younger patients with behavioral health complaints.⁴ If discharge home is planned, understanding the environment from which the individual came and communicating with formal and informal caregivers is important. Many older adults live in long-term care settings, which have varying capacities to manage new care plans and drug therapies. Some assisted living facilities, for example, cannot obtain a new medication for a resident until the next business day, and some cannot provide medications on an as-needed basis. Similarly, for those individuals returning to their homes, providers should engage with involved formal or informal caregivers. Particularly in the case of BPSD, presentation to the ED may be a sign of caregiver burn-out.¹⁰ Social work consultations can help facilitate communication, and offering caregiver support resources in this context may also prove beneficial.

Finally, ED providers need to consider an appropriate follow-up plan whether the adult is discharging home or to a long-term care facility. They need connections to behavioral health services, when available, and with primary care, particularly if drug changes are made to facilitate monitoring for adverse effects and efficacy. Consequently, an effective discharge plan must include follow-up in the near term. In older adults, social work consultation to address barriers to accessing services, including transportation and insurance issues and mental health stigma, can help the patient receive appropriate treatment.

In cases where a medical cause for the behavioral symptoms is identified, where the etiology is unclear, or where the behavioral health issue has rendered return to the home environment impossible, hospitalization, either to a medical or psychiatric unit, may be necessary. As an additional consideration, EMTALA requires that patients be stabilized medically and behaviorally prior to transfer to another facility. Early involvement of behavioral health services to provide guidance for managing the symptoms is wise. If psychiatric hospitalization is indicated, legal implications must be considered, including whether the status of the admission is voluntary or not, and, if involuntary, whether there is adequate cause to emergently detain the patient. Close involvement of a psychiatry consultant is usually necessary. Ideally, disposition planning requires a plan that is safe, acceptable to all parties, and provides adequate follow-up care, whether the patient returns home from the ED or is admitted to the hospital.

SUBSTANCE ABUSE

Background and Epidemiology

Substance use disorders are among the most frequently overlooked problems faced by older adults, and are common causes of ED use. According to a Substance Abuse and Mental Health Services Administration (SAMHSA) report, over 1 million US adults over 65 met criteria for a substance use disorder in 2014, with nearly 950,000 met criteria for an alcohol use disorder (AUD), and over 150,000 met criteria for other illicit drug use disorder.¹¹

Screening and Evaluation

The Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM5), revised the diagnostic criteria for AUD). To meet criteria for AUD, patients must meet two of eleven criteria over a period of 12 months. Criteria include consuming alcohol in larger quantities than intended, desire or unsuccessful efforts to cut down use, considerable time spent in activities needed to obtain, use, or recover from effects of alcohol, craving to use alcohol, recurrent use resulting in failure to fulfill major life roles or giving up important activities, continued use despite problems related to alcohol use, tolerance or withdrawal from alcohol. In DSM 5, severity is specified and determined by the number of criteria met.¹² The majority of older adults with AUD started drinking in earlier years, but some older adults will develop AUD later in life.¹³ For healthy older adults, the National Institute on Alcohol Abuse and Alcoholism has recommended to limit alcohol intake to 3 drinks/day or 7 drinks/week.¹⁴ Given differences in metabolism and circulation, older adults are at greater risk of intoxication with smaller amounts of alcohol, have slower metabolizing of the alcohol, and may be more prone to dangerous withdrawal symptoms. Older adult drinkers

who present to the ED may present with confusion, falls, or gastrointestinal concerns.¹⁵ Thus, these symptoms could be red flags to prompt consideration of alcohol or drug misuse. As part of the evaluation, providers should consider obtaining a blood alcohol level and metabolic panel transaminases, and other testing as appropriate. The Clinical Institute Withdrawal Assessment (CIWA)¹⁶ should be used to assess for alcohol withdrawal, symptoms of which may include tremulousness, nausea and vomiting, sweating, tactile, auditory, and visual disturbances, headache, anxiety and agitation, and disorientation or clouded sensorium.

To identify individuals at risk for AUD or other substance use disorders, which are frequently under-detected in older adults,¹⁷ the CAGE,¹⁸ or the CAGE-Adapted to Include Drugs (CAGE-AID),¹⁹ can be used. The CAGE-AID (Table 2) is limited as it does not assess for current or history of lifetime use, so the ED provider will need to obtain additional history about current and history of lifetime use of alcohol or drugs, associated complications such as social, legal, health or functional problems associated with use, and other medications used which may interact with alcohol or drugs. The Alcohol Use Disorders Identification Test (AUDIT), developed by the World Health Organization, is another screen that can be used to identify patients at risk for AUD.²⁰

Regarding opioids, there are no broad recommendations for screening in place, but we recommend screening all older adults with the following risk factors: (1) a current opioid prescription (2) diagnosis of chronic pain (3) suspicious signs/symptoms.^{11,13} Laboratory testing can assess for metabolic derangements. Some debate exists as to the value of drug testing. Keep in mind that many urine drug screens do not test for all opioids, and oxycodone and others may need to be ordered separately. Further laboratory testing could include screens for hepatitis, HIV, and other potential infections spread by IV drug use, if this is a concern. Withdrawal consists of piloerection, sweating, lacrimation, salivation, diarrhea, nausea, vomiting, mydriasis, pain, yawning, anxiety, tremor, tachycardia, and restlessness and can be assessed with the Clinical Opiate Withdrawal Scale (COWS).²¹

Finally, providers must also consider that comorbid psychiatric disorders are common in the setting of substance use disorders, and in older adults in particular. For instance, AUD is associated with cognitive impairment, depressive and sleep disorders,²² and older adults with depression and comorbid substance use disorders are at higher risk for suicide.²³ Thus, providers should assess for comorbidities, particularly cognitive impairment, depression and suicidal ideation.

Management and Disposition

First and foremost, regardless of the substance of abuse, older adults with substance use disorders are highly likely to have medical comorbidities, and these should be the first focus of concern after safety is assured. Alcohol and benzodiazepine withdrawal can be life threatening, so avoiding delay in treatment is essential. Supportive care should be provided, along with parenteral thiamine preceding rehydration or nutrition containing glucose to prevent Wernicke's encephalopathy and Korsakoff's syndrome. The CIWA protocol can be used to manage withdrawal.¹⁶ Generally, withdrawal seizures or delirium tremens are possible complications of withdrawal, and patients presenting with these will likely require

an intensive level of care. The most common causes for hospital admission from the ED for older adult drinkers are falls and delirium.¹⁵ Generally, the use of chlordiazepoxide prescription and discharge without appropriate outpatient follow up is discouraged in older adults.¹³ If benzodiazepines are indicated, ED providers should consider using options that have minimal hepatic metabolism nor long-acting metabolites, e.g., lorazepam.

An evidence-based model to reduce alcohol-related complications and improve health outcomes is SAMHSA's screening, brief intervention, referral to treatment (SBIRT) and involves initial screening, followed by a 5–10 minute brief intervention that utilizes motivational interviewing, followed by a referral for treatment.²⁴ SBIRT has been implemented in various healthcare settings, including the ED,^{25,26} and with providers who care for older adults.²⁷ Regarding opioid withdrawal, though typically not life threatening, older adults are at greater risk of dehydration and other issues due to vomiting and diarrhea. The treatment regardless is supportive care. The COWS may be used to rate withdrawal symptom severity,²¹ and many institutions have protocols for symptomatic management of opioid withdrawal.¹³

DEPRESSION AND SUICIDAL IDEATION

Background and Epidemiology

Older adults seen in the ED have a higher prevalence of depression, with one study reporting that nearly one third of older adults seen in the ED screened positive for depression.²⁸ Although depression in older adults occurs less frequently than it does in younger adults,²⁹ consequences are significant. Late-life depression is associated with cognitive decline, disability, decreased quality of life, and higher mortality from medical conditions.^{30,31} Suicide is another important consequence of depression for which older age is a risk factor and often presents acutely in the ED. In 2004, though older adults comprised only 12% of the adult population, they accounted for 16% of all suicides.³² In fact, completed suicide rates are highest in those aged 70 years or older in most regions.³³ Particularly white older men have especially high rates of completed suicide compared to other populations.³⁴ Additionally, older adults are more likely to plan out their suicides and less likely to show warning signs compared to younger adults.³⁵ Despite the high prevalence of suicide, Betz, et al., showed that ED providers were less likely to screen for suicidal ideation in older adults,³⁶ and significantly fewer suicidal older adults who were discharged home from the ED received a mental health evaluation compared to suicidal younger patients.³⁷

Screening and Evaluation

Depression—The DSM 5 criteria for major depressive disorder state that a patient must have five symptoms during the same two-week period. At least one of the symptoms must be depressed mood or loss of interest/pleasure. Other symptoms include significant unintentional weight change, sleep disturbance, psychomotor disturbance, loss of energy, feelings of worthlessness or excessive guilt, decreased concentration, and thoughts of death or suicide.¹² However, it should be noted older adults commonly have subsyndromal depression which also carries high morbidity.³⁸ Brief screening tools to identify patients at risk for depression have been validated for use in older adults, including the Patient Health

Questionnaire (PHQ-2, PHQ-9) and the Geriatric Depression Scale (GDS).^{39–42} The shorter PHQ-2 could be administered as the initial screen, followed by the nine-item PHQ-9 if the PHQ-2 is positive. The advantage of the short-form of the GDS is that it focuses on behaviors and thinking associated with late-life depression as opposed to neurovegetative symptoms that may be attributable to other medical comorbidities. Generally, these screening tools have not been validated in individuals with significant cognitive impairment.⁴³ A three-item ED-specific depression screening instrument (ED-DSI) has been developed but was limited when used in older adults with severe illness, cognitive impairment or acute mental status changes.⁴⁴ In general, for people with neurocognitive disorders, further information from collateral sources, such as caregivers or family, are especially important in identifying depression as depression screens are less reliable.

When the depression screen is positive or if otherwise clinically indicated, the depression evaluation consists of a thorough history, including asking about depressive symptoms found in the DSM5,¹² as well as symptoms of hopelessness, worthlessness and helplessness. Additionally, the evaluation should include a physical exam and appropriate laboratory studies, to assess for possible medical or substance-induced depression. Basic lab work up for depression includes blood counts, basic metabolic panel, vitamin B12 and thyroid stimulating hormone, while other labs may be appropriate depending on clinical concerns. Differential diagnosis for depressive symptoms in older age may include but is not limited to: anemia, vitamin B12 deficiency, thyroid disease, neurocognitive disorders, or depression secondary to alcohol, opioid, prescription medications or other substance abuse. Also, special consideration should be given to delirium as a cause of depressive symptoms as hypoactive delirium can mimic depression. These patients also will have fluctuating attention, altered mental state and confusion but will present with apathy or passive symptoms including the desire to stay in bed, sleepiness, and little interest in eating or drinking.⁴⁵ In geriatric patients, specific attention to neurological problems, cognitive assessment, medications being taken, past psychiatric history, and collateral sources of information need to be considered.

Suicidal ideation—Suicide risk is particularly elevated in the geriatric depressed population and should be screened for in a detailed, step-wise fashion in older adults who are suspected of having depression.⁴² As previously noted, older adults are less likely to show warning signs of suicide and are more likely to plan out their suicides making this age group particularly dangerous.³⁵ Notably all suicide threats should be taken seriously and further evaluated by the ED provider. Universal screening in the ED is one approach with promise and may be particularly useful in the older adult population who are less likely to reveal their ideation. Specifically, the ED Safety Assessment and Follow-up Evaluation Screening Outcome Evaluation (ED-SAFE) study showed that universal screening using the Patient Safety Assessment Screener-3 in a general adult ED population led to nearly a twofold increase in risk detection.⁴⁶ Although there is no specific recommendation for which tool to use in screening for suicide,⁴⁷ use of a widely available evidence based screener such as the Columbia-Suicide Severity Rating Scale (C-SSRS)⁴⁸ which has a screen designed for the ED is a good start. This screener begins with two questions regarding wish to be dead and suicidal thoughts and further questions to clarify if these are positively

answered. These questions should preferably be asked with the patient's family or friends out of the room and should be conducted confidentially given the stigma of suicidal thoughts.⁴²

It should, however, be noted that screening tools are limited and are not a substitute for a thorough interview and assessment of risk factors. Specifically, one should ask questions about hopelessness, passive wish to be dead, and suicidal thoughts. If any of these are positive further information regarding plans, intent, means, and access to means should be obtained. The ED provider should ask about access to firearms, the most commonly used method in completed suicides in older adults.⁴⁹ Specific to suicide plans, the lethality of the method and chance of rescue may also be considered. Other components to review include previous suicide attempts, current or past psychotic symptoms, substance abuse, and recent stressful life events. Risk factors for suicide should also be assessed in older adults with depression. Table 3 outlines risk factors for suicide in older adults, which can be separated into modifiable and unmodifiable risk factors. Notably this list of risk factors is not exhaustive, and risk factors must be considered in the context of the patient.

Management and Disposition

As depression and suicidal ideation in older adults are often underdiagnosed and undertreated by providers, ED can play an important role in identification and referral for care.⁵⁰ The first consideration for the emergency provider is one of safety. Suicidal patients in the ED should be placed with adequate supervision and limited access to means of self-harm while being evaluated. Patients with suicidal ideation with a plan, intent to kill themselves, access to lethal means, psychotic symptoms, and risk factors for suicide should be considered for inpatient psychiatric hospitalization. Additionally, patients with severe depressive symptoms resulting in inability to care for themselves or other severe difficulties in functioning should be evaluated for inpatient psychiatric hospitalization. In these cases, it is often important to involve adult family or other caregivers in the discussion to ensure safety of the patient. Referral to onsite psychiatric consultant can facilitate evaluation, management and disposition. In situations when the ED or mental health provider does not feel there is high or imminent risk to warrant inpatient hospitalization or the patient refuses to consider hospitalization and does not meet criteria for emergency detention, the providers should collaborate with the patient and family, if available, to develop a safety plan. The safety plan should outline steps to help mitigate risk such as identifying warning signs and triggers, problem-solving distraction and soothing strategies and supports that can be called upon if strategies are ineffective at relieving distress, removal of means of suicide, and referral for treatment of mental illness. Suicide contracts have not been found to be reliable.⁵¹ While voluntary hospitalization is preferred as the patient is more likely to participate in care, there will be situations in which the patient poses an imminent threat to themselves or others and does not agree to inpatient hospitalization. In these cases, involuntary psychiatric hospitalization is likely warranted so long as the danger is likely attributed to a mental illness. ED providers should follow their state statutes for criteria for emergency detention. ED providers should confirm whether the patient is currently under the care of a mental health provider in the community, and efforts to coordinate follow up and disposition optimally would include outpatient provider input. In one study, 80% of older adult ED

patients with positive depression screens had no prior history of depression.⁵⁰ If patients are not currently receiving mental health services, referrals to mental health should be given. If a patient declines to follow up with mental health, then coordination with her or his primary care provider can be facilitated. Generally, ED providers do not start anti-depressant medications independently.

ANXIETY AND PANIC

Background and Epidemiology

Anxiety is the most common psychiatric symptom in older adults, affecting up to 15% of community populations and up to 28% of patients in medical settings.⁵² Generalized anxiety disorder (GAD) is the most common anxiety disorder in older adults, and approximately 50% of GAD patients develop the condition later in life; whereas, other types of anxiety disorders, with the exception of fear of falling, are less common to develop newly late in life.⁵² Like depression, anxiety can be secondary to other medical, neurocognitive, substance use and prescription medications. Anxiety symptoms do affect medical outcomes, including associations with higher risks for mortality⁵³ and disability progression in older adults.⁵⁴ Anxiety symptoms in older adults pose a unique challenge for ED providers. Firstly, many common medical conditions in older adults such as heart and lung disease and Parkinson's disease can exacerbate anxiety. Additionally, ED providers usually see patients in a high stress emergency where anxiety is likely to be provoked regardless of whether the patient has an anxiety disorder or not. It can therefore be very difficult to tease out physical symptoms and anxiety and know which problem to treat in an emergency situation.⁵⁵ This is further complicated by polypharmacy, and benzodiazepines particularly pose a challenge as they are often used for anxiety in late-life though are associated with higher rates of adverse events like cognitive impairment and falls in older adults.⁵² In spite of these adverse events in older adults, older adults visiting EDs with anxiety were twice as likely to receive benzodiazepines in 2010 compared to 2001.⁵⁶

Screening and Evaluation

The majority of anxiety measures and screening tools have not been specifically designed for older adults; however, some have been found to be appropriate for use in older adults.⁵⁷ The Geriatric Anxiety Inventory (GAI) – short form is a 5-item version that has been validated in older adults.⁵⁸ Evaluation of an anxious older adult should begin by eliciting information to screen for symptoms such as excessive worries or catastrophizing, autonomic hyperactivity, psychomotor restlessness or tension, and avoidant behaviors. As new onset anxiety in older adults are commonly associated with comorbid medical or medication use, evaluate for potential medical or pharmacological causes of these symptoms. Basic evaluation, including a thorough physical exam, EKG and basic labs such as blood glucose check, should be performed as medical conditions common in older adults, including hypoglycemia and heart arrhythmias, may cause feelings of anxiety. Differential diagnosis for medical causes of anxiety includes, but is not limited to: stimulant use, angina, arrhythmia, lung disease, pulmonary embolism, hypoglycemia, and seizure disorder (specifically temporal lobe epilepsy). Care should be taken to elicit any recent medication changes, which may also contribute to feelings of anxiety. Abrupt discontinuation or

nonadherence with antidepressants or other psychotropic medications can cause withdrawal symptoms, including anxiety. As with depression, consider neurocognitive disorders and substance abuse (including caffeine use). History of trauma may be important in considering post-traumatic stress disorder. If medical causes are ruled out after evaluation, further evaluation for possible anxiety disorder by a mental health provider would be warranted. Other questions important in assessment include a history of past psychiatric illnesses including anxiety and mood disorders, comorbid depressive symptoms, recent stressful life events, current living situation and supports, the context in which the anxiety is occurring, and how the person deals with stress. Collateral information from family and caregivers can be helpful. When perceived challenges outweigh perceived resources, individuals may exhibit maladaptive coping that can exacerbate anxiety. Additionally, living situation may contribute to differences in how older adults in skilled nursing facility or other institutions experience anxiety though specific differences are not well examined.⁵⁹ Anxiety comorbid with late life depression is common and associated with higher treatment resistance.⁵² Additionally, screening for suicidal thoughts or self-harm is important, as anxiety can increase risk for suicide.⁶⁰

Management and Disposition

First and foremost, safety of providers and patient are key, especially if the patient is presenting with agitation as a symptom of anxiety. ED providers can follow the approach outlined in Figure 1 to manage agitation. Afterward, treating any physical illness that is identified during the evaluation may potentially resolve the patient's anxiety. Furthermore, physical illness that presents with anxiety could be potentially life threatening, whereas anxiety alone is not generally life threatening in itself. If no medical cause is suspected or if medical causes are adequately treated, then psychoeducation about anxiety, reassurance that no life threatening medical issues are contributing can often be calming. Referral back to the primary care provider or to mental health treatment after discharge from the ED is appropriate.

Pharmacologic treatment of panic attacks in older adults is not well studied. Benzodiazepines, unlike antidepressants that have delayed onset of effect, can provide acute relief from panic attack and can be useful for treatment in an ED setting. However, extra caution must be used. Many studies have shown increased rates of adverse events with benzodiazepine use in older adults compared to younger adults, including falls, hip fracture, memory issues, delirium, and motor vehicle crashes.⁵⁶ Given this information, if a benzodiazepine is needed in an older adult in the ED, low doses of a shorter acting benzodiazepine should be used. Furthermore, the goal should be the lowest possible exposure for these types of medications after determination that benefits far outweigh the risks. When discharged from the emergency room and a prescription is felt to be necessary, consider only short-term and limited quantities along with close follow-up which is essential for ongoing safety monitoring. After the initial panic attack has been treated, psychoeducation about anxiety and referral for long term treatment to an appropriate provider should be pursued. Generally, new psychotropic medications are not prescribed from the ED unless care can be coordinated with the patient's outpatient provider.

AGITATION

Background and Epidemiology

Agitation among older adults in the ED is a common and potentially life-threatening emergency. Major neurocognitive disorders and delirium are the greatest contributors to incidents of agitation or aggression necessitating behavioral response. The causative etiologies are broad, and can include pain, delirium, BPSD, adverse medication reactions, substance intoxication and withdrawal, mania, and psychosis, but differentiation can be difficult. When dealing with such a situation, the evaluation and management are often happening in tandem, and choices and decisions must be made quickly to avoid harm to the older patient and to ED staff. Some common conditions leading to these symptoms are highlighted in Table 1. Additionally, two relatively rare, but potentially fatal iatrogenic psychopharmacologic emergencies –serotonin syndrome and neuroleptic malignant syndrome (NMS) should also be considered in patients who are exposed to psychoactive medications (Table 4).

Screening and Evaluation

Agitation consists of different behaviors that range from verbal, e.g., calling out or yelling, to physical, e.g., motor restlessness, pacing, hitting, and kicking or a combination. Generally, patients will present with these problems to the ED or these behavioral problems develop when in the ED setting. Figure 1 outlines an approach for evaluation of the agitated patient. To establish the causative etiology, vital signs may provide the first clue; however, in most cases they will likely only reveal an elevated heart rate and possible hypertension, as expected. Other fundamental factors to consider include:

- Where did the patient come from? (e.g., home, assisted-living or skilled-nursing facility)
- Does the patient have vital sign abnormalities and/or an altered sensorium?
- Does the patient have baseline cognitive impairment?
- Who is with the patient, or who knows the patient and is immediately available? (e.g., nursing assistant, spouse, child, friend, neighbor, doctor, social worker)

If the patient is able to converse, the use of de-escalation techniques, such as providing familiar family or caregivers to provide reassurance or keeping calm and reorienting the patient, can help soothe the patient while additional history and evaluation are pursued. If these approaches do not work, then the ED provider may have to consider judicious use of medication to reduce agitation to allow for additional evaluation and treatment. Once the patient is sufficiently calm to undergo workup, a thorough medical evaluation is needed as delirium is the most common causative etiology of agitation. The ED provider must consider potential sources or location for pain, such as dentition, constipation, urinary retention, or skin sores, especially in a cognitively-impaired older adult who may not be able to clearly communicate his or her symptoms. A medical workup in the setting of agitation is challenging, as the limits of the testing may be difficult to determine. The ED provider should consider a complete blood count, complete metabolic panel, and urinalysis. Further

testing should be added as history and clinical suspicion warrants, including a chest radiograph, bladder scan, brain imaging, cardiac evaluation, or lumbar puncture.

Management and Disposition

Whether caused by an underlying illness or a psychiatric disease, management of agitation and aggression first requires assessment for staff and patient safety. If the patient displays dangerous behaviors that put him- or herself or those caring for the patient at immediate risk for harm, drug therapy to promote safety may be necessary. In all cases, using the lowest effective dose is recommended because physiologic changes of aging affect drug metabolism such that smaller doses will have the desired effect.⁶¹ Antipsychotics are often a first choice, as they are readily available and can be effective for sedation. They are not risk free. Individuals with Parkinsonism may experience worse movement symptoms and extrapyramidal side effects.⁶² Further, antipsychotic use is associated with increased mortality risk in adults with dementia⁶³ and can prolong the QT interval, which may limit dosing. Benzodiazepines may also have utility in the sedation of the acutely agitated and dangerous patient, if clinical suspicion for alcohol or benzodiazepine withdrawal is high. For older adults, though, these drugs are problematic. Benzodiazepines increase the risk for confusion, falls and fractures in older adults, and chronic use may be associated with higher all-cause mortality.⁶⁴

Though necessary in situations of severe agitation that poses risk to patient and staff safety, medications are not required for all behavioral health symptoms in older adults. Often, non-drug or behavioral interventions can be effective and have the added benefit of limited side effect profile. For agitation with known triggers, developing a plan that avoids those triggers can obviate the need for a drug. In the ED, optimizing physical discomfort such as blanket if cold or offering food or drink, weighted blankets for sense of security, turning down bright lights if overstimulated are examples of approaches to consider that may be soothing. For a confused patient, using a 1:1 sitter may help to offer reassurance and redirection, preferably if it is someone already familiar to the patient, like a family member or caregiver from the sending facility. Proposed management of the agitated older adult patient is included in Figure 1.

The ED provider may need to consider the use of physical restraints to protect patients who are agitated.⁶⁵ For instance, the older adult who is confused and pulling at an intravenous catheter may benefit from mitts or soft wrist restraints while an agitated patient who is actively suicidal and attempting self-harm may require more aggressive interventions. In most settings, however, restraint use has decreased in the last 20 years- with careful nursing strategies to provide safe care for these vulnerable individuals. The ED provider implementing restraints should follow a few basic approaches. She/he should use the least restrictive restraint possible, should continually reevaluate the need for the restraint and remove them as soon as possible, and should be knowledgeable of state and facility policies guiding the use of restraints, including documentation requirements.

The ED provider may consider consulting with available on-site psychiatric consultants to help guide dosing and selection of pharmacological treatments to manage agitation, to provide additional diagnostic clarity if underlying medical etiologies have been ruled out,

and to help with determining whether patients need to be admitted for psychiatric hospitalization or alternative disposition with psychiatric follow-up arranged to facilitate discharge back to the community.

PSYCHOSIS

Background and Epidemiology

Psychotic symptoms among older adults in the ED are not uncommon. Patients with psychoses present with delusions, hallucinations, or disorganized speech and behavior. The most common etiologies of psychosis seen in older adults in the ED are delirium and dementia, which will be covered in Chapter 3. This section will focus on mood-related psychosis and primary psychotic disorders. There are additional potential medical causes for psychosis (Table 1).

Following psychosis related to delirium/medical conditions and dementia, mood-related psychoses are the next-most-common etiology, specifically psychotic depression and psychotic mania. In psychotic depression, patients display signs of depression and also tend to have mood congruent delusions of decay, guilt, or persecution. They may have hallucinations as well. Likewise, patients with mania may exhibit similar symptoms of delusions and hallucinations; however, the themes may be grandiose or religious in nature, accompanied by other symptoms of mania, such as: reduced sleep, distractibility or disorganization, and pressured speech.

It is estimated that the prevalence of schizophrenia among older adults ranges from 0.1 to 0.5%, accounting for surviving people with early-onset (before age 40) which is most common, as well as those with later onset schizophrenia (onset between ages 40–60) and very-late onset schizophrenia-like psychosis (VLOSLP, after age 60). Risk factors and clinical presentation are similar between early- and late-onset groups; however, VLOSLP differs in several ways. Female predominance, less genetic loading, lower likelihood of childhood adjustment issues, fewer incidence of negative symptoms and thought disorganization, and greater risk of tardive dyskinesia in response to antipsychotic treatment are characteristics of VLOSLP. Estimates for the prevalence of VLOSLP among all adults with schizophrenia are not readily available, but have ranged from as low as 3% to as high as 14%.⁶⁶

Screening and Evaluation

Providers can ask about whether the patient has experiences in which they thought their eyes or ears were “playing tricks on them”, such as seeing things that no one else could appreciate, or hearing someone (or multiple people) talking to them or about them, but they couldn’t see anyone and no one else could hear the voices. Screening for delusional symptoms could include questions about whether there were concerns that others were out to get them, or that they had special powers or abilities or beliefs that others didn’t accept.

Given the fact that new onset of psychosis after age 65 is more likely to have a non-psychiatric cause, thorough medical workup in any older adult presenting with potential first episode of psychosis is recommended. With a broad initial differential, careful history

taking, including information about baseline cognitive functioning, is critical. Obtaining collateral information if possible is ideal. Physical and neurological exams to evaluate for possible medical or neurological conditions causing the psychotic symptoms are essential. Diagnostic tools should include a complete blood count, comprehensive metabolic panel, thyroid stimulating hormone with reflex or added thyroxine level, urinalysis and urine screen for drugs of abuse. Further testing may include EEG, CT or MRI of the brain, or lumbar puncture.

Once the patient has a negative initial medical workup, and is confirmed to be free of prior cognitive impairment, then primary psychotic disorder or psychosis secondary to psychiatric disorder (e.g., mood disorder) can be considered. Generally, when medical causes have been ruled out in someone presenting with new psychotic symptoms or change from baseline in patients with history of chronic mental illness, psychiatric consultation to further evaluate psychiatric etiology can be beneficial. When working with an older adult with chronic psychosis (schizophrenia or schizoaffective disorder), collateral information and past treatment history are key, if available. Additional questions to consider during the evaluation for the psychotic older adult can be found in Table 5.

Management and Disposition

Assuming that delirium and dementia have been ruled out, in terms of management of the acutely psychotic patient, the approach is similar to guidelines followed for the agitated patient and includes both non-pharmacological and pharmacological approaches (Figure 1). Generally, obtaining on-site psychiatric consultation to help guide management and consideration for inpatient psychiatric hospitalization is helpful. Involuntary treatment laws vary widely from state to state, and interpretations of the law may vary by county or municipality, so the ED provider needs to be well versed in the statutes of the areas in which he or she practices.

SUMMARY

As the population ages and resources become further limited, older adults with behavioral health emergencies will continue to present challenges to ED providers. Given that the ED often is on the front line of mental health crises, it is important that emergency providers receive adequate training and education in psychiatric management. This chapter reviewed available literature and provides a framework for navigating the evaluation and management of older adults presenting to the ED with behavioral health concerns. Additional research is needed to better inform the best practices for screening, evaluation and management of late-life psychiatric conditions in the ED.

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Key Points

- Behavioral health disorders are common among older adults and frequently lead to presentation in the emergency department setting for evaluation and management.
- Many medical illnesses can manifest as behavioral health emergencies in older adults, so thorough history-taking and targeted physical examination, laboratory evaluation, and imaging studies are critical to diagnosis and treatment.
- Understanding the past psychiatric history, baseline cognitive status, living situation, social supports, and safety concerns of an older adult patient with a behavioral health emergency are key to effective management in the emergency department setting.
- Input from caregivers can provide the emergency department provider with important clues regarding the older adult's baseline functioning, triggers for behaviors and help inform behavioral management.
- Planning disposition for older adults in the ED with behavioral health concerns can be challenging for a variety of reasons, including limited mental health resources.

Figure 1. Evaluation and Management of the Agitated Older Adult in the Emergency Department

CMP: comprehensive metabolic panel

UA: urinalysis

UDS: urine drug screen

BPSD: behavioral and psychological symptoms of dementia

BZD: benzodiazepine

Data from: Peisah C, Chan DKY, McKay R, et al. Practical guidelines for the acute emergency sedation of the severely agitated older patient. *Intern Med* 2011;41(9):651–7; Aftab A, Shah AA. Behavioral emergencies: special considerations in the geriatric psychiatric patient. *Psychiatr Clin North Am* 2017;40(3):449–62.

Table 1.
Medical Differential Diagnosis and Historical Clues for Behavioral Symptoms in the Older Patient

Symptom	Possible Medical Diagnoses	Useful Historical Clues
Agitation	Delirium	<ul style="list-style-type: none"> • Acute onset of symptoms • Fluctuating attention and alertness • Evidence of a medical illness (leukocytosis, fevers, cough, dyspnea, urinary frequency, new incontinence, nuchal rigidity, skin or joint changes, changes in bowel habits, weight changes, jaundice, changes in appetite, head trauma, substance use or abuse, recent medication changes, new aphasia or weakness)
	Akathisia	<ul style="list-style-type: none"> • Use of antipsychotics, prokinetic agents, or antiemetics
	Pain	<ul style="list-style-type: none"> • Falls or other injuries, new bruising, history of arthritis or chronic pain, abdominal pain, recent changes in bowel or bladder habits
Psychosis	Delirium	<ul style="list-style-type: none"> • See above.
	Drug Intoxication	<ul style="list-style-type: none"> • New medications (prescribed and over the counter), illicit substance use history
	Drug Withdrawal	<ul style="list-style-type: none"> • Recent medication changes, illicit substance use history
	Thyrototoxicosis	<ul style="list-style-type: none"> • Development of a goiter, dysphagia, tremor, heat intolerance, weight loss, increased appetite, increased perspiration, weakness, palpitations
	Hyperparathyroidism	<ul style="list-style-type: none"> • History of nephrolithiasis, weakness, bone pain, anorexia, polyuria, polydipsia, nausea, constipation
	Adrenal Insufficiency	<ul style="list-style-type: none"> • Hyperpigmentation, vitiligo, weight loss, stomach upset, weakness
	Seizure Disorder	<ul style="list-style-type: none"> • Episodes of unresponsiveness, automatisms, tonic or tonic-clonic movements
	Brain Mass	<ul style="list-style-type: none"> • Headaches, worsening of headaches with position changes, seizures or unresponsive episodes, syncope, falls, new aphasia, new sensory impairments
	Anemia	<ul style="list-style-type: none"> • History of chronic kidney disease, poor or limited diet, paresthesias, restless legs, dyspnea on exertion
	Thyroid Disease	<ul style="list-style-type: none"> • Symptoms of thyrotoxicosis, as described above, hypothyroidism symptoms, including cold intolerance, hair or nail changes, decreased perspiration, new leg edema (non-pitting), constipation, median neuropathy
Depressed Mood	Substance abuse	<ul style="list-style-type: none"> • Illicit substance use history, opioid or other scheduled medication use history, falls, symptoms of withdrawal or intoxication

Symptom	Possible Medical Diagnoses	Useful Historical Clues
Anxiety/Panic	Stimulant use	<ul style="list-style-type: none">• Prescribed or illicit stimulant drug use, history of substance abuse
	Angina	<ul style="list-style-type: none">• History of cardiac disease or risk factors, exertional symptoms, chest pain or pressure
	Arrhythmia	<ul style="list-style-type: none">• History of hypertension, coronary artery disease, and valvular heart disease, dyspnea, exertional symptoms, palpitations
	Lung disease	<ul style="list-style-type: none">• History of tobacco use or occupational exposures, dyspnea, wheezing, cough
	Pulmonary embolism	<ul style="list-style-type: none">• History of venous thromboembolism, recent period of inactivity or surgery, dyspnea, exertional symptoms
	Hypoglycemia	<ul style="list-style-type: none">• History of diabetes, low A1c values, diaphoresis, tremor, palpitations, hunger
	Seizure Disorder, specifically temporal lobe epilepsy	<ul style="list-style-type: none">• Aura preceding symptoms, unresponsive episodes followed by lethargy or confusion, automatisms

Table 2.
The CAGE-AID Screening Tool for Detecting Alcohol and Substance Use Disorders

CAGE-Adapted to Include Drugs (CAGE-AID)	
One can adapt these questions to screen for specific drugs. One of more positive responses indicates a positive screen.	
1	Have you ever felt that you should <u>C</u> ut down on your drinking or drug use?
2	Have people <u>A</u> nnoyed you by criticizing your drinking or drug use?
3	Have you ever felt bad or <u>G</u> uilty about your drinking or drug use?
4	<u>E</u> ye opener: Have you ever had a drink or used drugs first thing in the morning to steady your nerves or to get rid of a hangover?

Data from: Hinkin CH, Castellon SA, Dickson-Fuhrman E, et al. Screening for drug and alcohol abuse among older adults using a modified version of the CAGE. *Am J Addict* 2001;10(4):319-26.

Table 3.

Suicide Risk Factors in Older Adults

Modifiable
<ul style="list-style-type: none">• Substance use disorder• Affective (Mood) disorder• Physical illness• Social isolation• Family history of suicide• Impulsivity• Psychosis• Access to means• Physical illness• Chronic pain• Stressful life event (bereavement, family discord, financial distress, etc.)
Unmodifiable
<ul style="list-style-type: none">• Older age• Male gender• White race• Unmarried status• Previous suicide attempt• Psychiatric hospitalization in last 3 months

Data from: Conwell Y, Duberstein P, Caine E. Risk factors for suicide in later life. *Biol Psychiatry* 2002;52(3):193–204; Grossberg GT, Beck D, Zaidi SNY. Rapid depression assessment in geriatric patients. *Clin Geriatr Med* 2017;33(3):383–91; Lefevre ML, US Preventive Services Task Force. Screening for suicide risk in adolescents, adults, and older adults in primary care: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med* 2014;160(10):719–26.

Table 4.**Serotonin Syndrome vs. Neuroleptic Malignant Syndrome (NMS)**

	Serotonin Syndrome	Neuroleptic Malignant Syndrome (NMS)
Causative Etiology	SSRIs, MAOIs, TCAs, opioids, antimigraine agents, anti-emetics	Greatest risk with high potency neuroleptics (haloperidol, fluphenazine), also other typical and atypical antipsychotics, some anti-emetics
Presentation	Autonomic Instability and Agitation	Autonomic Instability and Agitation
	Confusion	Confusion
	Hyperthermia	Hyperthermia
	Myoclonus and tremor	Muscular rigidity
	Increased deep tendon reflexes	Decreased deep tendon reflexes
Diagnostics	Mydriasis	Normal pupillary dilation
	Leukocytosis	Leukocytosis
	Creatine phosphokinase elevation	Creatine phosphokinase elevation
Management	Discontinuation of causative agent(s)	Discontinuation of causative agent(s)
	Supportive care	Aggressive hydration
	Benzodiazepines	Assist with cooling
	Cyproheptadine	Bromocriptine or dantrolene

Data from: Borja B, Borja CS, Gade S. Psychiatric emergencies in the geriatric population. *Clin Geriatr Med* 2007;23(2):391–400; Sikka V, Kalra S, Galwankar S. Psychiatric emergencies in the elderly. *Emerg Med Clin Nor Am* 2015;33(4):825–39.

Table 5.**Additional Questions to Consider During Psychosis Evaluation**

1) Safety?	<ul style="list-style-type: none"> Is the patient agitated or threatening, or likely to become so imminently? If so, institute non-pharmacologic strategies, and failing these, pharmacologic strategies to manage agitation. Is the patient having persecutory delusions or hallucinations such that they may become agitated or aggressive out of fear? Is the patient having command hallucinations to harm themselves or others? If an immediate threat to the patient or to others is present, or would be if the patient were to discharge back to the community, is the patient voluntary (willing to consent to treatment)?
2) Is this baseline?	<ul style="list-style-type: none"> Do the current psychotic symptoms represent the patient's baseline psychopathology? Acute worsening? New onset? Patients with severe and persistent mental illness or chronic psychotic symptoms often have residual "positive" psychotic symptoms such as thought disorganization, hallucinations, or delusions that are present even when they are most optimally treated. What is the patient's baseline when they are well?
3) How to work with a psychotic patient?	<ul style="list-style-type: none"> Avoid challenging delusions Radiate acceptance (not necessarily agreement) of the patient's ideas so that they will feel comfortable engaging and you can best understand their thought process. It can help to acknowledge their level of distress, e.g., "I may not understand everything that is happening to you, but my goal is to help you feel safe and well."
4) To admit or not admit?	<ul style="list-style-type: none"> If safety is a concern, admission is recommended, if legally possible If the patient is experiencing a severe decline in functioning (i.e., ability to safely care for oneself) in her or his current living environment, admission should be considered Admission may not be required for patients who have adequate outpatient treatment, support network and care established
5) Are medications needed? If so, what should be used and how much?	<ul style="list-style-type: none"> Older adults are at greater risk for adverse effects of antipsychotic medications. Extra-pyramidal side effects such as tremor and dystonia are more likely, as are tardive dyskinesia, orthostasis, and cardiac concerns (primarily QT prolongation). Older adults with dementia have an increased risk of death associated with antipsychotics. The Food and Drug Administration has placed a Black Box Warning on all antipsychotics for this reason. Typical antipsychotics have higher risk of motor and cardiac side effects, while atypical antipsychotics have greater risk of weight gain, hyperglycemia, and hyperlipidemia. If immediate sedation is needed, follow the suggestions put forth in the section on agitation. In general, it is best to follow your facility policies and pharmacologic practices, to choose the antipsychotic with the least side effect burden and the greatest likelihood of benefit, and as in all geriatric medicine, to "start low and go slow." Start with the lowest effective dose and allow more time for effect than you might for a younger patient, as older adults may have decreased absorption or circulatory time. If you plan to place a psychiatric consult, best consider whether the medication you are using will allow the patient to engage meaningfully in the consultation visit. Additionally, if the patient is over-sedated, you will likely have to admit, most likely to a medical service, which will increase the risk of pneumonia and other hospital-acquired illnesses.