n elderly man walked into his bedroom, pulled a loaded handgun from the drawer beside his bed, held it to his head, and ended his life with the pull of a trigger. Just 2 days earlier, this same gentleman had visited an emergency department because of increasing fatigue and energy loss, insomnia, difficulty concentrating, and increasing and persistent pain in his knees and hips. The man’s physiologic workup was negative, and he was released from the emergency department with recommendations to follow up with his primary care physician.

It is common for persons to have visited an emergency department or seen a physician prior to a completed suicide. Research findings indicate that as many as 82% of older adults who die by suicide have seen a physician within the last 3 months of life and more than one third have seen a physician during the week of their suicide.1 The question posed by the aforementioned scenario is whether ED processes could have, or should have, included screening for depression, evaluation of suicide risk, and questioning about the presence of a gun in the house. The purpose of this article is threefold: (1) to enhance awareness of heightened suicide risk in the elderly, (2) to question whether the lack of screening for and recognition of depression as a contributing factor to suicide among the elderly predisposes the emergency department to liability, and (3) to determine whether the current ED screening processes should include screening for access to firearms and routine depression screening among elderly persons who are identified as being at highest risk.

DEPRESSION

Elders, senior citizens, or older adults, defined as people older than 65 years, are a large demographic component of ED visits. According to Centers for Disease Control and Prevention (CDC) statistics, although elders constitute only 13% to 15% of the population in the United States, 46.7% of the elderly population had at least one visit to the emergency department within the past 12 months.2 Research findings have shown that depression may be a contributory factor to the multiple ED visits among older patients.3 It is estimated that about 14% of the US population aged 65 years and older experience depressive symptoms, with major depression found in 13.5% of senior citizens who require home care.4 Depressive symptoms in older adults have been associated with increased risk of disability, decreased quality of life, and increased societal costs because of higher health care needs and poorer health behaviors.5 There is a high risk of developing depression as a consequence of neurologic diseases commonly associated with the elderly such as vascular and Alzheimer’s dementia and Parkinson’s disease, with symptoms of depression often masked by cognitive impairment.6,7 Depression is rarely screened in the primary care setting or by ED personnel, reportedly because of time constraints, reimbursement policies, and inadequate mental health referral knowledge.8

Seven million senior citizens have self-reported depression,9 and a substantial number report depressive symptoms manifesting for the first time later in life.10,11 This situation is especially true for elderly men, many of whom do not recognize depressive symptoms such as increasing fatigue, loss of appetite, interrupted sleep, and loss of interest in daily social activities. Elderly men also may be less inclined to acknowledge feelings of sadness or grief. This older population may present to the emergency department with various somatic complaints and cognitive changes such as memory loss, distractibility, irritability, and disorientation instead of the more common depressive symptoms previously listed.1,12-14 Depression lasting longer than 2 weeks and occurring almost daily is not a normal part of the aging process.
but is a symptom of a major depressive disorder. Temporary sadness, grief, and mourning are considered normal, especially when they are related to a precipitating environmental event such as the death of a spouse and the complexities of lifestyle changes associated with loss. These depressive symptoms are considered bereavement exclusions to the diagnosis of major depression because they are shorter lived, do not impair overall functioning, and do not associate overall feelings of worthlessness to the clinical picture. Clinical depression lasts longer, is not necessarily tied to a specific event, interrupts completion of daily activities such as eating, sleeping, and social interactions, and often has biochemical origins.

Adding to the complexity of recognizing depression in elders is frailty. Fatigue, weight loss, slowing of gait, and decreased activities contribute to loss of appetite, interrupted sleep, and loss of interest in daily activities. These similar clinical presentations of depression and frailty not only mask the underlying condition, but in a circular fashion, physiologic frailty may add to depressive symptoms and frailty may be increased by depression. Physiologically, depression has been shown to cause increased pain sensitivity through transmission of pain-related signals in the cortex. Depression also has been associated with a chronic low-grade inflammatory response, with increased oxidative stress leading to cytokine production and higher interleukin-6 (IL-6) levels, thus worsening the body’s adaptive response and physiologic reserve. Depression determines poorer overall medical, dietary, and treatment adherence and increases the risk of falls. In addition, depressive behaviors increase the distress of family and friends, often contributing to social isolation of the elder—a predisposing factor that places the elder at physiologic risk, and for many elders places them at high suicide risk.

SUICIDE RISK

Suicide ranks as one of the top 10 leading causes of death in the United States for all age groups, and it continues to trend upward in persons with limited social interaction. More than 90% of elderly patients who die by suicide also have depression or mental illness. In the general population, the lethality of suicide attempts is 20 attempts per 1 death, whereas in the elderly population, there are 4 attempts to 1 death. Death by suicide among elderly men is 4 to 7 times higher than among elderly women. Of the 38,364 deaths by suicide in the US in 2010, white men older than 65 years were more likely to die by suicide than any other age group, almost 3 times the rate among the general population. In the adult population, depression, especially during episodes of clinical illness, is linked to death by suicide.

HANDGUNS

The third threat to consider in an elderly depressed patient is the presence of guns in the home. A primary “self-harm” contributor for all deaths by suicide is a personal firearm, particularly a handgun. With a positive screening result for depression, and even with no risk to a low risk of suicide, an appropriate step for the ED practitioner is to assess for the presence of guns in the home and or access to firearms, especially in the elderly population. More than 80% of suicides among elderly persons are completed with a firearm.

Regarding current availability of a handgun, 20% of elders in primary care practices report having a handgun available to them, and the presence of a handgun in the home increases suicide risk twofold. In one of the few studies of gun possession and cognition, researchers conducting a Veterans Health Administration study found that 40% of veterans who were mildly cognitively impaired had a gun in the home. Findings from other studies in which persons were not cognitively impaired show that within the first year after purchase, for persons older than 75 years, self-inflicted gunshots were the leading cause of death among this group.

The association between firearm availability and potential for suicide mediated by depression is high; the presence of one or more guns in a home increases the risk of suicide nearly 5 times. Many of these guns, kept for protection by older adults, are stored unloaded and unlocked, but ammunition is readily available. Because depression and cognitive changes in elders are correlated, the presence of firearms in the home can be a public health safety issue for more than just the elder. For example, the homicide-suicide rate among elders is twice as high as the homicide-suicide rate among young adults. Homicide-suicide by elders constitutes 5% of all homicides in the US. According to police reports with information obtained from interviews with decedents’ family members after a homicide-suicide, the elderly homicide victim (often the wife) was totally unaware of the spouse’s intention.

Screening for Depression

One of The Joint Commission’s National Patient Safety Goals for 2013 was to identify safety risks inherent in patient populations; the risk of suicide is certainly a safety risk. Of the approximately 1000 inpatient suicides reported to The Joint Commission since 1995, 25% of suicides in hospitals and clinics have occurred in nonpsychiatric hospital settings such as emergency departments. The Joint Commission
therefore recommends that patients outside psychiatric units be appropriately screened for depression and suicide.¹⁴

According to the Emergency Medical Treatment and Active Labor Act (EMTALA), if a patient presents to the emergency department with an emergency medical condition, the hospital must use all its resources to stabilize the patient, including an appropriate medical screening examination.²⁵,²⁶ An emergency medical condition in psychiatry exists when there is the potential for harm to self or others,²⁵ and most legal liability has originated with the failure to adequately screen these presenting patients. In a case law review of 33 liability cases involving psychiatric conditions including depression, suicide attempts, and psychiatric diagnoses, in 12 of the cases, courts found in favor of the providers because appropriate medical screening examinations were conducted.²⁵,²⁶ Therefore, a pertinent negative screening result in an elder may be as important as a positive screening result for protection against potential legal liability and EMTALA risk.

The Patient Health Questionnaire-2 (PHQ-2) and PHQ-9, which are widely accepted, validated, and frequently used screening tools for depression, could be used as prescreening tools for identifying the need for further suicide risk assessment in high-risk older adults.²⁷ Given the growing demographic of elders in the population, the growing number of seniors who have specialty-only care with no primary care oversight,²⁸ and the increasing prevalence of depression among older adults, it may be advantageous to use validated screening tools in the emergency department to identify depression and suicide risk. Although currently no evidence exists to support routine screening for depression among elderly persons, evidence does show that alleviating depression improves care integration and medical outcomes and reduces ED visits.²⁹ The PHQ-2 and PHQ-9 can be downloaded from Pfizer for free on the Internet (www.phqscreeners.com) with no copyright requirements. The PHQ-2 uses the first 2 questions from the PHQ-9, in which the patient is asked to recall during the past 2 weeks: (1) whether he or she has had little interest or pleasure in doing things and (2) whether he or she has been bothered by feeling down, depressed, or hopeless. If the answer to either of the PHQ-2 questions is no, no further screening is needed. If the answer to either question is yes, the patient screens positive for clinical depression, and administration of the PHQ-9 is recommended. The PHQ-2 is highly sensitive, and the PHQ-9 is highly specific.³⁰ Administering the PHQ-2 takes less than a minute; administering the PHQ-9 takes less than 5 minutes.³¹

For a patient who screens positive for depression, several suicide risk screening tools could be used by a busy ED nurse to determine initial and immediate suicide risk.³² For example, the Columbia-Suicide Severity Rating Scale (CSSRS), a validated screening tool, initially involves 2 questions: (1) asking the patient if he or she wishes to be dead or to go asleep and not wake up, and (2) asking if the patient has any thoughts of killing himself or herself. The Ask Suicide Screening Questions to Everyone in Medical Settings (AsQ’em) screening tool, originally based on the Ask Suicide Questionnaire (ASQ) validated for youth and young adults by the National Institute of Mental Health (NIMH), is another 2-question screening tool for all medical patients and is undergoing current validation in older populations by the NIMH. The AsQ’em questions are: (1) In the past month, have you had thoughts about suicide? and (2) Have you ever made a suicide attempt? This screening questionnaire is currently under further validation by the NIMH to broaden its population use to adults.³³ If the answer to question 1 or question 2 on the AsQ’em or the CSSRS is yes, then further conversation with a provider and a referral to someone who is trained to talk with patient about suicidal thoughts is warranted.

**Actions After Screening**

For a patient identified as a suicide risk, the first step is to triage the patient using a 3-level suicide risk triage: high, moderate, and low risk.³⁴ Specific action steps are recommended for each level of risk, including psychiatric consultations, referrals, and inpatient admissions; exploration of these steps is beyond the scope of this article. General actions, however, would be to check the patient for any items that could be used to commit suicide, call a family member to sit with the patient until adequate support services can be found, and clearly communicate the suicide risk during handoffs or transition times.³⁵ Additionally, for a patient identified as having the highest suicide risk, the ED nurse must suicide-proof the identified patient’s environment for the duration of the patient’s stay in the emergency department and remove any means of self-harm (eg, call bell cords, bandage rolls, extra sheets, restraint belts, plastic bags, elastic tubing, and oxygen tubing). Of reported suicides in all hospital settings, 8% have occurred in the emergency department. The Joint Commission determined that 73% of these suicides were due to deficiencies in environmental safety.³⁶

In a speech delivered on January 16, 2013, President Obama clarified that the Patient Accountability and Affordability Care Act (“ACA”) allows providers to question patients about guns in their home if there is believed to be a risk to the patient’s health.³⁷ Inclusion of the elderly patient’s caregiver or other family members in a firearm assessment is critical, especially in the emergency department, where victims of gun violence often present and the
opportunity for dialogue may be the greatest. Remaining sensitive to the elder’s need for protection, but restricting the means to guns and ammunition, either through trigger locks and locked storage or the transfer of gun ownership to children, is a conversation that may be recommended and initiated by the ED nurse prior to discharge. Legal enforcement for removal of guns from elders is limited in most states, and thus the conversation initiated in the emergency department regarding elders and gun possession may truly be a family’s best option.

Conclusion

The ED nurse is a frontline provider in keeping patients safe, as well as ensuring patient- and family-centered care that focuses on desired health outcomes. As such, ED nurses need to be aware of the prevalence of depression and heightened successful suicide incidents among the high-risk older adults. Given that (1) elderly persons constituted 23% of all ED visits in 2012, (2) depression affects 20% of all seniors, and (3) 80% of the elderly patients who committed suicide had a health encounter within the last 3 months of life, suicide screening and intervention may improve patient-centered care, reduce the legal liability of the ED nurse, and ultimately save lives.

REFERENCES


2. Garcia TC, Bernstein AB, Bush MA. Emergency department visitors and visits: who used the emergency room in 2007?. http://www.cdc.gov


