

Missed Opportunities for Suicide Risk Assessment

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Case Objectives

- Recognize the types of distractors that may prevent suicide risk assessments from being completed.
- Compare and contrast the differences between suicide screening and suicide risk assessment.
- Discuss evidence-based suicide prevention strategies and treatment modalities.
- Explain the ICAR²E mnemonic for Suicide Prevention and how ED providers can use this tool.
- List three elements of a basic quality improvement plan to ensure suicide risk assessments are completed in emergency departments and medical hospitals.

The Case

Patient 1

A 46-year-old homeless male was found in the parking lot of the emergency department (ED) expressing suicidal ideation (SI) and was brought into the ED. The triage nurse entered a positive suicide screen in the flowsheet which triggered an evaluation by Psychiatric Emergency Services (PES).

The patient's medical record indicated he had multiple chronic diseases and, of note, a suspicious lesion (revealed by a recent CT scan) that the patient had been told may indicate lung cancer. This patient was a well-known "frequent flyer" with multiple ED visits associated with excessive alcohol consumption and SI. In fact, the patient had six ED visits in the previous three months and in half of those visits he had expressed SI. On one of those visits, he stated that he had tried to hang himself the day before. When seen by a social worker the next day, he denied having thoughts of suicide and was discharged; he did not qualify for a 5150 hold at that visit.

During this current ED evaluation, prior to being seen by PES, the patient was intubated due to acute hypoxia; he was extubated within 12 hours. A suicide assessment by the ED physician was not noted in chart; however, the nursing flowsheet contained two documented assessments stating no SI. No psychiatric evaluation was carried out.

The ED staff arranged for placement in a boarding home (licensed or unlicensed, short-term housing with limited care) and the patient was discharged after being prescribed Valium for delirium tremens, cardiac medications, and antibiotics for a respiratory infection. Two days later the hospital was notified by a relative that the patient was found deceased, of unknown cause, behind a retail store.

Patient 2

A 76-yr-old male with a history of hypertension and depression was brought into the hospital via ambulance after his wife reported that he was unconscious following three days of altered level of consciousness. Alcohol intoxication with possible withdrawal seizures was the admitting diagnosis. The patient was intubated and placed on continuous EEG monitoring and Neurology noted moderate to severe encephalopathy likely due to medications. The drug screen came back negative except for abnormal levels of Fluoxetine, Amitriptyline, and Nortriptyline. A social worker reviewed the case in the ED but did not see the patient after he was admitted.

The patient was extubated on hospital day two and Internal Medicine noted that a social service evaluation for alcohol abuse intervention was considered but, for some reason, was not ordered. After extubation, the patient wanted to go home and became agitated, cursing and stating, "it is wasting time" and "I should not be here." No suicide risk assessment was conducted by nursing or social services staff after the patient was extubated and able to communicate. The patient left the hospital against medical advice and was found dead by a neighbor the next day from a self-inflicted gunshot wound to head.

The Commentary

Commentary by Glen Xiong, MD and Debra Kahn, MD

Patients who have mental health challenges may present to the ED when they are experiencing acute medical problems that are not directly associated with suicidal ideation. In the cases presented here, the

patients presented to the ED for different reasons and the acute medical issues of each impacted how the medical staff perceived their mental health issues. In situations such as these, suicide risk—and its impact on patient safety—may not be the highest initial priority for the responding healthcare team. Unfortunately, the acute medical conditions and systems-based issues associated with these cases ultimately adversely impacted patient safety and resulted in the tragic outcomes.

Systems Issues: In both of these cases, the patients did not receive adequate suicide risk assessment, although for different reasons.

In case #1, the Psychiatric Emergency Service was unable to evaluate the patient after the initial report of suicidal ideation due to his hypoxia. After extubation, the patient denied having suicidal ideation so further psychiatric consultation was not pursued. However, verbal denial of suicidal ideation after a suicide attempt is insufficient reason to forgo an in-depth suicide risk assessment. Suicide risk assessment should be based on a synthesis of the overall clinical presentation, mental status examination, and suicide risk factors, rather than on what a patient says at one point in time. It is important to avoid a “checkbox” approach. Hospitals should institute policies for training a diverse group of disciplines so that a continuum of expertise is employed depending on severity of suicide risks. Ethnic, cultural, and spiritual consultation services, and use of interpreting services, should be enlisted to overcome any cultural and linguistic barriers. The patient in this case had six previous ED visits, had expressed suicidal ideation in half of them and actual suicide attempt in one visit two months earlier. Although he did not meet criteria for involuntary psychiatric hold after psychiatric social worker evaluation during a prior visit, a past history of suicide attempt is the highest risk factor for future suicide death, and that history should have triggered additional evaluations on subsequent visits with suicidal ideation.

In Case #2, the medical team confirmed that the patient had made a suicide attempt by medication overdose. However, the patient was experiencing alcohol intoxication and withdrawal seizures and required intubation; and, after being extubated, he was discharged against medical advice and before he could be further evaluated. The suicide attempt is a trigger for assessment of suicide risk and medical decision-making capacity and while requests to leave against medical advice happen frequently, the clinical/care team should assess the patient’s capacity to leave without further care (i.e. understanding of the clinical situation, expressing a choice, ability to reason). Psychiatric consultation services routinely conduct both types of evaluations. It is not clear whether the timing of this patient’s request to leave against medical advice influenced the fact that a psychiatric consultation was not requested. For example, if the patient left AMA in the middle of the night or on the weekend when staffing for both the medical team and psychiatric services is sparse, consultation would be less likely to occur. Alternately, if the patient walked out the door while the nursing staff was attempting to contact the primary medical team (i.e. eloped), there would be little time to request a consultation. Detaining this patient would have required law enforcement involvement.

Suicide Screening: The Centers for Disease Control and Prevention ranks suicide (intentional self-injury) the 10th leading cause of death in the United States.¹ Nearly half of those who die by suicide had visited healthcare settings within 4 weeks² Starting in 2007, The Joint Commission required risk screening for all behavioral health patients in hospitals and in 2016 recommended that ALL patients presenting to any medical setting receive suicide screening (universal screening). In July 2019, The Joint Commission

implemented several suicide prevention programs as part of National Patient Safety Goal (NPSG) 15.01.01 for medical hospitals and behavioral health care organizations.^{3,4} Elements of these programs include environmental assessment, suicide assessment of patients who screen positive for suicide, staff training, and follow-up care. A number of standardized assessment tools have been developed and validated and can easily be taught to front-line medical staff for use in healthcare settings. To ensure patient safety, protocols for further assessment and referral to treatment must be linked to the outcomes of these initial screens/assessments.^{5, 6}

Beyond suicide screening, a number of quality improvement initiative may be implemented by a health system to reduce suicide deaths after ED and medical hospital discharge. The discussion below uses the 2 patient cases to discuss the large issues of 1) Prioritization of suicidal ideation and attempt, 2) Suicide risk assessment education, 3) Suicide risk reduction and treatment planning, and 4) Addressing problematic alcohol use and suicide.

Prioritizing Suicidal Ideation and Attempt on the Medical History/Problem List: Suicidal ideation or attempt should be entered on the patient's problem list along with an appropriate plan that is carried over on the daily progress note for both the nursing staff and primary medical teams. It is often easy to de-prioritize suicidal ideation and attempt among a myriad of acute medical conditions, such as hypoxia requiring intubation (Case #1) or alcohol withdrawal seizures with associated encephalopathy (Case #2). The Electronic Health Record (EHR) can help clinicians track "suicidal ideation/attempt" on the list of a patient's medical problems. It is imperative that suicidal ideation and attempt is appropriately prioritized and discussed and that care teams follow up on consultation requests. By doing so, the "problem" of suicidal ideation and attempt will be more likely to be carried over from emergency departments to intensive care, and finally to the hospitalist team (as is now done for the "problems" of hypoxia and seizures). The suicide item on a patient's problem list should carry forward until an appropriate suicide risk assessment has been conducted.

Suicide Risk Assessment: Once a patient is identified as having an elevated suicide risk, a thorough suicide risk assessment should be carried out, including collecting a wide variety of patient data and synthesizing it in a way that helps characterize acute risks, chronic risks, and factors that are amenable to treatment. Suicide risk factors can be divided into "static" factors (such as a history of childhood trauma, prior suicide attempts, gender, ethnicity, family history of suicide), "dynamic" factors (such as an active psychotic or mood episode, social stressors, level of engagement in treatment, influence of intoxication or withdrawal), acute risk factors (pain, insomnia, anxiety), and protective factors (commitments to loved ones, pets, community). Dynamic and acute risk factors are modifiable and serve as the targets for further treatment. Standardized assessment tools such as the SAFE-T⁷ and the Columbia Suicide Severity Rating Scale (C-SSRS)⁸ are available in the public domain and have been integrated into the EHR by some health systems.

As highlighted in these two cases, many patients cannot give reliable answers to a screener's questions when first admitted to the ED, often due to altered mental status or intoxication. While positive screening results should trigger protocols for observation and further risk assessment, non-responsiveness also need to be tracked, along with prompting for additional screening at regular intervals so that the necessary questions are answered as soon as possible. It is also recommended that in cases when a patient cannot

respond, reliable third-party information should be considered in the risk stratification process. This additional information can be obtained via review of an ambulance run sheet, input from close family members or friends, collateral information from outside providers, and notes from earlier in the hospital stay prior to the patient's change in mental status.

Suicide Risk Reduction and Treatment Planning: Interventions for ED or medically hospitalized patients who are found to be at high risk for suicide within the hospital include: video observation, 1:1 observation, minimization of environmental (ligature) risks, provision of safe dining equipment, room sweeps, and securing of personal items. Treatment for depression, psychosis, anxiety, pain, or other acute medical illnesses may help to decrease acute suicide risks and can begin during the hospital stay. The Brown-Stanley safety plan is a collaborative document that providers can work through with suicidal patients as they are dealing with a crisis.⁹ With this plan, providers work with patients to understand their warning signs of a suicidal crisis, identify internal coping skills, list supportive contacts, name professionals who can be of assistance, identify reasons to live, and find ways to make their environments safe. Successful completion of this exercise can be therapeutic for patients and provides very useful information for a clinician regarding a patient's social resources, coping skills, and environmental safety.⁹

In the classic systematic review of suicide prevention strategies, physician education in recognizing and treating depression and restricting access to firearms were the strategies most strongly supported by evidence.¹⁰ Results of a more recent systematic review re-emphasize the importance of restricting access to lethal means, lethal pain medications, and hot-spots for suicide by jumping.¹¹ With respect to specific therapeutic interventions, modest benefits have been documented for cognitive behavioral therapy (CBT) and dialectical behavioral therapy (DBT), and some medications have been shown to reduce suicide rates as compared to placebo.¹² More research is needed to determine the best intervention(s) for medical hospital settings since these situations are complicated by the multiple medical, psychiatric and social comorbidities experienced by each patient and, therefore, likely require multi-modal treatments.

Family members should be engaged to "mobilize" social support. Medical staff should enlist their help to ensure firearms and dangerous medications are secured and emphasize to them the importance of outpatient behavioral health follow-up. If medications have been prescribed, the supply should be provided only until outpatient follow-up. For homeless patients, secure housing is often the number one priority and help with that issue should be provided. While some patients may need psychiatric hospitalization, many patients may not. Treatment should take place in the least restrictive environment possible, and the intensity of treatment should match the severity and acuity of the psychiatric disorders that underlie the suicide risks. Care after an ED visit or acute medical hospitalization comprises a continuum of services; these can be provided through outpatient clinics, partial hospitalization programs (intensive outpatient programs), assertive community models, and acute psychiatric hospitals.

Psychiatric hospitalizations tend to be most helpful for patients that need a safe environment in which to continue treatment of acute depression, anxiety, and psychosis until the acute suicide risk subsides. However, psychiatric hospitalization may not reduce long-term risks of suicide such as poor social support, substance use disorders, and lack of secure housing.

Addressing Problematic Alcohol Use and Suicide Risk: Alcohol use was associated with both of these cases. Problematic alcohol use is a known risk factor for suicidal ideation, attempts, and deaths, and affects people regardless of age, gender, and race/ethnicity.¹³ Patients with recurrent problematic alcohol use often come in contact with the ED or medical hospitals to treat the physical sequelae but they often do not get treatment for the recurrent alcohol use disorder. Evidence-based medication treatments for “maintenance treatment” of alcohol use disorders are underutilized after treatment of acute alcohol withdrawal. While hospital-based substance abuse counselors often provide counseling and resources, they are often not formally incorporated into the inpatient medical team.

Many clinicians feel relatively helpless when patients with problematic alcohol use present as a “frequent flyer.” Such patients require treatment planning that takes a long-term perspective that includes prevention of future readmissions and extension of treatment beyond the ED and hospital. Both of these cases illustrate that hospital-based, collaborative, multidisciplinary, systems-based approaches are critically needed to address the dual problem of high-risk, problematic alcohol use and suicide deaths.¹⁴

Improving Systems Quality: The American College of Emergency Physicians (ACEP) and the American Foundation for Suicide Prevention (AFSP) have developed a work group and created a suicide prevention tool (ICAR²E) for ED providers.¹⁵ This tool is consistent with fundamentals of patient safety improvement and can be incorporated into the PDSA (plan, do, study, act) model of quality improvement.

The ICAR²E acronym succinctly summarizes the points made in this Commentary, ED staff should follow the steps contained within this acronym to safely manage patients at risk for suicide: **I**dentify suicide risk, **C**ommunicate *across disciplines and service*, **A**ssess for life threats (and ensure safety *especially from firearms and dangerous medications*), **R**isk assessment for suicide *based on a synthesis of multiple risk factors*, **R**educe suicide risks *by treating modifiable risk factors*, and **E**xtend care beyond the ED by using a continuum of behavioral health and community services.

Take-Home Points

- Suicide is a common cause of death that impacts Patient Safety in EDs and medical hospitals. Suicide screening is indicated for patients who receive medical care in EDs and medical hospitals, in addition to those in behavioral health settings.
- Patients who present with possible suicide attempts from medication overdose, alcohol intoxication, or repeated ED visits associated with suicidal ideation, gestures, or attempts should all receive a comprehensive suicide risk assessment. Even if they deny suicidal thoughts during an interview, a more in-depth suicide risk assessment is required.
- Suicide risk assessment is a comprehensive evaluation based on a synthesis of multiple acute, chronic, static, and dynamic risk factors.
- Evidence-based suicide prevention strategies include restricting access to firearms, lethal medications, and hot-spots for suicide by jumping.

- Aftercare treatment for suicidal ideation or attempt may include a continuum of services offered through outpatient clinics, partial hospitalization, crisis residential programs, and acute psychiatric hospitals. The intensity of treatment should match the severity and acuity of the psychiatric disorders that underlie the suicide risks.
- Treatment for depression, psychosis, anxiety, pain, or other acute medical illnesses may help to decrease acute suicide risks and can begin during the hospital stay, including in the ED.
- Recurrent problematic alcohol use accompanied by suicidal ideation increases the risk of death by suicide after hospitalization and deserves special multidisciplinary treatment approaches.
- Standardized assessment tools such as the SAFE-T and the Columbia Suicide Severity Rating Scale (C-SSRS) tool are available in the public domain.
- **ICAR²E** is a suicide prevention tool which stands for: **I**dentify suicide risk, **C**ommunicate, **A**ssess for life threats (and ensure safety), **R**isk assessment for suicide, **R**educe suicide risks, and **E**xtend care beyond the ED.

Glen Xiong, MD

Clinical Professor

Department of Psychiatry & Behavioral Sciences

University of California, Davis

Debra Kahn, M.D.

Clinical Professor

Director, Psychiatry Consult-Liaison Service

Department of Psychiatry & Behavioral Sciences

University of California, Davis

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