

Suicide in the General Hospital

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Introduction

Suicide is a global medical and social problem. It is estimated by the World Health Organisation (WHO) that over 720,000 people die by suicide every year, and it has become the third leading cause of death among 15–29-year-olds (World Health Organization, 2024). In 2022, the Centres for Disease Control estimated that over 49,000 people in the United States (US) died by suicide (CDC, 2025). In the United Kingdom, there were 7055 deaths registered as suicides in 2023 alone (Kirk-Wade, 2025). Suicide is a public health concern that occurs in both the community and hospital settings. While suicide is often seen as a psychiatric issue, there is research that shows that many people die by suicide while they are medically admitted to the hospital. It is categorised as an adverse sentinel event according to the Joint Commission, a United States-based agency that accredits United States and international health care organisations, which are preventable incidents that can result in harm or death and represent a major threat to patient safety (The Joint Commission, 2024).

Methods

For this editorial, a literature review was conducted to examine the prevalence, risk factors, methods and prevention strategies related to suicide in general hospital settings. The review included peer-reviewed articles, epidemiological reports and sentinel event data published in English. There was no restriction on the geographic location of the hospital in which the studies were conducted. Sources were found through targeted searches of databases such as PubMed (https://pubmed.n cbi.nlm.nih.gov/), APA Psychinfo (https://www.apa.org/pubs/databases/psycinfo), as well as Google Scholar (https://scholar.google.com/), using a combination of search terms including "suicide", "general hospital", "suicide prevention", "preventative psychiatry", and "event, sentinel health". While the initial search focus was on studies from the past 10 years, the search was expanded to include older literature due to limited data on suicide in non-psychiatric hospital settings. Reports from the World Health Organisation, the US Centres for Disease Control and Prevention, and the Joint Commission were also reviewed. Reference lists of key articles were manually searched for additional sources. Studies addressing suicide incidence, screening practices, environmental risk factors and prevention strategies were prioritised to provide an overview of this underrecognized issue.

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Results and Discussion

Based on our search, we found that there is a discrepancy in the reported number of inpatient suicides in psychiatric and non-psychiatric hospitals within the US. Numbers have ranged from 49-65 reported inpatient suicides to as high as 1500 every year (Bowers et al, 2010; Chammas et al, 2022). Between 2012–2022, there were an estimated 18,670 suicides by patients in psychiatric and non-psychiatric hospitals in the UK and Jersey, which represented 26% of all suicides in the general population. Among this population, 4718 (27%) patients died in acute care settings, which included inpatients, those who recently were discharged and patients involved in crisis resolution/home treatment (University of Manchester, 2025). In the 2023 Joint Commission Annual Sentinel Event report alone, 71 suicides were reported and identified middle-aged or older adult male patients as the people at highest risk (Bostwick and Rackley, 2007; The Joint Commission, 2024). The means of suicide in the hospital were different based on communities, but hanging was the method most frequently reported (The Joint Commission, 2024; Williams et al, 2018). Other notable methods include jumping from heights, as well as selfinflicted injuries and medication overdoses. Racial and socioeconomic disparities, as well as end-of-life diagnoses, chronic conditions, are also significant factors that have been noted in patients who die by suicide in hospitals (Dhossche et al, 2001; Wan et al, 2020; Williams et al, 2018). Suicide is a more common occurrence in psychiatric units, given that these patients are more likely to have an identified mood disorder or prior suicide attempt, but should more screening be done for individuals without known psychiatric histories?

A significant proportion of individuals who attempt or die by suicide in the hospital setting meet criteria for a depressive disorder, even though they presented without any prior known psychiatric history (Tishler and Reiss, 2009). The difficulty in addressing this issue is that all admitted patients would need to be treated as though they have the potential to commit acts of violence towards themselves and must be screened. One study conducted in general hospitals in Hubei province in China showed that among 67 cases of self-harm or attempted suicide, psychiatric consultation was requested for only 35 patients, which suggests an area of needed improvement (Hung et al, 2000). This is further supported by a study done in Mobile, Alabama, which showed that of the 44 suicides investigated, one of the patients had a consultation to psychiatry, which emphasises that psychiatric services may be under-utilised (Dhossche et al, 2001). Another common risk factor or sign of increased risk for suicide in the literature includes agitation, and individuals suffering from delirium. Research indicates that these patients exhibited warning signs such as expression of hopelessness, withdrawal from care or sudden behavioural changes such as agitation (Hung et al, 2000; Tishler and Reiss, 2009). Staff training to ensure they are aware of these indicators is paramount to preventing suicide on medical floors, as suicide risk screenings alone are often not enough and may be subject to change as patients progress through their hospital course (Sher, 2011).

In order to reduce the incidence of suicide in general hospital settings, an interdisciplinary approach that prioritises system-based solutions to increase screening, promote staff training and implementation of better safety measures is needed. Universal suicide/violence screening across all hospital departments is imperative to achieve this goal. In 2019, the Joint Commission issued an updated report on the National Patient Safety Goal, which required all participating hospitals to ensure that patients being evaluated for behavioural health conditions as their primary reason be screened for suicidal ideation (The Joint Commission, 2019). The challenge remains that identifying such patients is difficult, given the ambiguity of behavioural health issues and the stigma often associated with them. Screening tools such as the Columbia-Suicide Severity Rating Scale and Patient Health Questionnaire-9 can be administered by all non-psychiatric clinicians and are the first step in determining if a patient is at high risk (Thom et al, 2020). In an effort to reduce suicide, these tools should be used regularly in all departments, regardless of speciality, especially for individuals in pain, those with newly diagnosed chronic illness that changes their functional status and those who have had periods of agitation (Bostwick and Rackley, 2007; Tishler and Reiss, 2009). Ideally, these assessments would be reviewed at different points during a patient's hospitalisation and developing a culture for having a low threshold to consult psychiatry would further prevent self-directed violence. The hospital itself is an environment that provides means for injury, which can make observation and prevention a particular challenge.

It has been noted that most suicides in the hospital setting were provided by lethal measures often found in the immediate hospital environment (Ballard et al, 2008; Tishler and Reiss, 2009). Given that suicide by hanging is the most commonly reported method in the United States, removing ligature fixation points is crucial to promoting a safer environment. Jumping and death from lacerations were the second most reported method of suicide, which stresses the importance of ensuring windows in all rooms, sharps are secured, and constant observation by staff is used if there is any concern for self-harm behaviour requiring redirection (The Joint Commission, 2024; Williams et al, 2018). Of note, one study highlighted the relation between hospitals having a high nurse-to-bed ratio and the number of attempted suicides, which suggests that more staff can lead to improved outcomes (Wan et al, 2020). It is worth mentioning as well that death by firearm is rarely reported as a lethal method in the inpatient setting, but was a leading means by which patients died by suicide within 72 hours of discharge (The Joint Commission, 2024).

Direct research on post-discharge suicide prevention for medical inpatients admitted for non-psychiatric reasons is limited, but data from the Joint Commission suggests that this issue should be more closely examined. Based on a 2023 survey on Joint Commission Accredited Hospitals, the majority of hospitals who answered did implement some safety planning with patients, but few included all of the key recommendations, which include formal safety planning, planning for lethal means safety, providing warm handoffs to outpatient care, and post-discharge follow-up (Chitavi et al, 2024). It is important to ensure there is a continuity of care for all discharged patients to reduce suicide risk, which is more commonly done in inpatient psychiatric units, so why not others? An argument can be made that, given the degree of uncertainty and stress that comes after a prolonged hospitalisation and/or receiving a life-limiting diagnosis, there should be a strong consideration to

expand this practice to include patients admitted to the hospital for non-psychiatric reasons.

Given the complex and preventable nature of inpatient suicide, the following summary lists the primary strategies recommended to reduce suicide risk in medically admitted patients:

- (1) Screen all patients for suicide risk, regardless of psychiatric history.
- (2) Use validated screening tools during admission and throughout hospitalization.
 - (3) Encourage early psychiatric consultation in non-psychiatric units.
- (4) Train staff to recognise early warning signs like agitation, hopelessness or delirium.
- (5) Enhance environmental safety by securing ligature points, sharps and windows.
- (6) Maintain adequate staffing and provide close observations for high-risk patients.
- (7) Ensure thorough discharge planning, including safety plans, follow-up care and lethal means counselling.
- (8) Follow established guidelines from organisations like the Joint Commission and WHO.
- (9) Increase the number of psychiatrists trained in consultation-liaison psychiatry.

Suicide in the general hospital is a preventable tragic event that requires a unified approach across all specialities and divisions in a hospital system. Psychiatrists are responsible for managing mood and other psychiatric disorders, agitation, and further mitigating suicide risk, but this is not possible without interdisciplinary efforts to identify patients most susceptible to suicide. By strengthening screening measures, improving interdisciplinary training on known suicide risk factors and promoting the safety measures outlined by organisations such as the Joint Commission, hospitals can better protect the safety of patients. Suicide prevention cannot be seen as solely a psychiatric issue, but an important part of healthcare that all admitted patients in the hospital should receive regardless of their psychiatric history.

Conclusion

Research on suicide in the hospital for patients admitted to medical/surgical units is limited compared to psychiatric units. Suicide is commonly seen as solely a psychiatric issue, but given its prevalence in different medical settings, further research and interdisciplinary collaboration are warranted to reduce the rates of this preventable sentinel event. Through an interdisciplinary approach and incorporation of the strategies suggested, hospitals can improve patient safety to prevent this tragic and avoidable outcome.

Key Points

- Suicide in general hospitals is a critical but underrecognized patient safety concern.
- Universal screening, early psychiatric input, and environmental safety can help prevent inpatient suicides.
- Strong post-discharge planning and interdisciplinary care are essential to reduce suicide risk.

Availability of Data and Materials

All the data of this study are included in this article.

Author Contributions

RB and LS designed the research study and performed the literature review. RB drafted the manuscript. Both authors contributed to the important editorial changes in the manuscript. Both authors read and approved the final manuscript. Both authors have participated sufficiently in the work and agreed to be accountable for all aspects of the work.

Ethics Approval and Consent to Participate

Not applicable.

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Conflict of Interest

The authors declare no conflict of interest.

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