BACKGROUNDER

Understanding Injury in Behavioral and Mental Health Settings

Based on a 2016 survey by the Substance Abuse and Mental Health Services Administration (SAMHSA), the National Institute of Mental Health (NIMH) found that 18% of adults in the U.S. had a mental illness in the previous year (National Institute for Mental Health, 2017). Prevalence varies across age groups, from 22.1% among young adults (18–25 years) to 21.1% among adults (26–49 years) and 14.5% among older adults (50+). Some of those living with mental illnesses may not even be aware of their condition; NIMH found that in the same year (2016), only 43.1% received mental health treatment.

Behavioral and mental health (BMH) patient populations may present a higher risk for self-harm or harm to others. Self-harm can be broadly defined as "all acts of intentional injury to self, regardless of intent" (James, Stewart, & Bowers, 2012). According to Corrigan, Druss, and Perlick (2014), "Suicide and violence are among the most serious consequences of mental illnesses." A meta-analysis of 44 studies found the number of suicides among psychiatric inpatients to be "disturbingly high," with an increase over the past three decades (Walsh, Sara, Ryan, & Large, 2015). However, a larger population of non-psychiatric patients identified as a low risk for suicide may actually present a higher risk burden (Roaten, Johnson, Genzel, Khan, & North, 2018). According to one study, only two of 54 non-psychiatric suicidal inpatients were identified by non-psychiatric medical staff to be at risk before their suicides (Cheng, Hu, & Tseng, 2009).

Suicide is among the top five sentinel events in The Joint Commission's (TJC) Sentinel Event Database (The Joint Commission, 2017b), but suicide ideation across settings can be difficult to identify (The Joint Commission, 2016). Approximately half of suicides take place in psychiatric units, and up to 10% of suicide attempts occur in the ED, but risk is also present in medical-surgical units, intensive care units, and clinics (Mills, DeRosier, Ballot, Shepherd, & Bagian, 2008; Mills, Watts, DeRosier, Tomolo, & Bagian, 2012; Mills, Watts, & Hemphill, 2014). This problem is not unique to the U.S. Studies conducted in Japan and Taiwan also found that

MENTAL HEALTH DISORDERS

A recent classification of mental health disorders highlights the broad range of BMH conditions, including:

- Neurocognitive and "organic" disorders, such as Alzheimer's dementia, vascular dementia, and delirium
- Substance-related disorders, such as alcohol dependence, opioid dependence, and substance-induced psychotic disorder
- Neurodevelopmental disorders, such as Autistic disorder, Asperger's syndrome, and ADHD
- Mood disorders, such as bipolar disorder, anxiety, and stress-related disorders

The Safety Toolbox is made available through a partnership with:

Copyright © 2019 by The Center for Health Design. All Rights Reserved.

The Center for Health Design: Moving Healthcare Forward

The Center for Health Design advances best practices and empowers healthcare leaders with quality research that demonstrates the value of design to improve health outcomes, patient experience of care, and provider/staff satisfaction and performance.

Learn more at www.healthdesign.org

approximately half of inpatient suicides were in medical settings, and half were in psychiatric settings (Cheng, Hu, & Tseng, 2009; Inoue et al., 2017).

The Centers for Medicare and Medicaid, along with TJC, continue to develop measures for suicide prevention in "inpatient psychiatric hospitals, inpatient psychiatric units in general acute care hospitals, and non-behavioral health units designated for the treatment of psychiatric patients," as well as those areas that may temporarily serve psychiatric patients (The Joint Commission, 2017a). The most common methods of inpatient suicide are hanging and jumping, though suicide methods may vary by unit type (Mills et al., 2008; Mills et al., 2012; Mills et al., 2014).

While self-harm (suicide or non-suicidal harm) is one area of concern, aggression and violence can also lead to physical and/or psychological harm against staff and other patients. Violent crime in hospitals has been on the rise, rising from 2 to 2.8 events per 100 beds between 2012 and 2015 (Gooch, 2018). In fact, physical violence affects nurses in nearly all work environments across every region of the world (Gillespie, Gates, & Berry, 2013), with the most risk associated with emergency departments and inpatient mental health units violence (Lenaghan, Cirrincione, & Henrich, 2017; Perkins, Beecher, Aberg, Edwards, & Tilley, 2017). One meta-analysis found that 17% of patients in mental health units committed at least one act of violence (Iozzino, Ferrari, Large, Nielssen, & de Girolamo, 2015). The Bureau of Labor Statistics collects data on workplace violence by industry (Bureau of Labor Statistics, n.d.), and NIOSH and OSHA (2016) provide guidance on harm prevention programs.

However, it is essential to recognize that the BMH spectrum covers a vast array of ages and disorders, and each patient population may represent unique situations and needs (Kessler & Wang, 2008; NIMH, n.d.; Reed et al., 2013). There is often a stigma associated with mental illness at the individual and/or societal level (Corrigan et al., 2014), and this stigma may heighten perceived danger (Schneeberger et al., 2017). When designing the environment for vulnerable BMH populations, it is important to balance safety with patient comfort, as overly restrictive environments may reinforce stigmas, contribute to patient trauma, and increase suicide risk (Sakinofsky, 2014; Walsh et al., 2015). The degree of potential harm in different locations must be evaluated in order to establish priorities during the caregiving process. Refer to the associated Issue Brief, Design Strategies, and SRA toolkit for additional guidance.

Copyright © 2019 by The Center for Health Design. All Rights Reserved.

References

Bureau of Labor Statistics. (n.d.). Injuries, Illnesses, and Fatalities. Retrieved September 1, 2015, from http://www.bls.gov/iif/#Data

Cheng, I.-C., Hu, F.-C., & Tseng, M.-C. M. (2009). Inpatient suicide in a general hospital. *General Hospital Psychiatry*, *31*(2), 110–115. https://doi.org/10.1016/j.genhosppsych.2008.12.008

Corrigan, P. W., Druss, B. G., & Perlick, D. A. (2014). The Impact of Mental Illness Stigma on Seeking and Participating in Mental Health Care. *Psychological Science in the Public Interest*, *15*(2), 37–70. https://doi.org/10.1177/1529100614531398

Gillespie, G. L., Gates, D. M., & Berry, P. (2013). Stressful Incidents of Physical Violence Against Emergency Nurses. *Online Journal of Issues in Nursing*, *18*(1), 13.

Gooch, P. (2018). Hospital Workplace Violence Prevention in California: New Regulations. *Workplace Health & Safety*, *66*(3), 115–119. https://doi.org/10.1177/2165079917731791

Inoue, K., Kawanishi, C., Otsuka, K., Cho, Y., Shiraishi, M., Ishii, T., … Hirayasu, Y. (2017). A large-scale survey of inpatient suicides: comparison between medical and psychiatric settings. *Psychiatry Research*, *250*, 155–158. https://doi.org/10.1016/j.psychres.2017.01.076

Iozzino, L., Ferrari, C., Large, M., Nielssen, O., & de Girolamo, G. (2015). Prevalence and Risk Factors of Violence by Psychiatric Acute Inpatients: A Systematic Review and Meta-Analysis. *PLOS ONE*, *10*(6), e0128536. https://doi.org/10.1371/journal.pone.0128536

James, K., Stewart, D., & Bowers, L. (2012). Self-harm and attempted suicide within inpatient psychiatric services: a review of the literature. *International Journal of Mental Health Nursing*, *21*(4), 301–309. https://doi.org/10.1111/j.1447-0349.2011.00794.x

Kessler, R. C., & Wang, P. S. (2008). The Descriptive Epidemiology of Commonly Occurring Mental Disorders in the United States. *Annual Review of Public Health*, *29*(1), 115–129. https://doi.org/10.1146/annurev.publhealth.29.020907.090847

Lenaghan, P. A., Cirrincione, N. M., & Henrich, S. (2017). Preventing Emergency Department Violence through Design. *Journal of Emergency Nursing*, in press. https://doi.org/10.1016/j.jen.2017.06.012

Mills, P. D., DeRosier, J. M., Ballot, B. A., Shepherd, M., & Bagian, J. P. (2008). Inpatient suicide and suicide attempts in Veterans Affairs hospitals. *Joint Commission Journal on Quality and Patient Safety*, *34*(8), 482–488.

Mills, P. D., Watts, B. V., DeRosier, J. M., Tomolo, A. M., & Bagian, J. P. (2012). Suicide attempts and completions in the emergency department in Veterans Affairs Hospitals. *Emergency Medicine Journal*, *29*(5), 399–403. https://doi.org/10.1136/emj.2010.105239

Copyright © 2019 by The Center for Health Design. All Rights Reserved.

Mills, P. D., Watts, B. V., & Hemphill, R. R. (2014). Suicide attempts and completions on medical-surgical and intensive care units. *Journal of Hospital Medicine: An Official Publication of the Society of Hospital Medicine*, *9*(3), 182–185. https://doi.org/10.1002/jhm.2141

National Institute for Mental Health (NIMH). (2017). Health Information: Mental Illness [NIMH]. Retrieved August 31, 2018, from https://www.nimh.nih.gov/health/statistics/mental-illness.shtml

NIMH. (n.d.). Mental Health Information. Retrieved September 1, 2015, from https://www.nimh.nih.gov/health/topics/index.shtml

OSHA. (2016). *Guidelines for Preventing Workplace Violence for Health Care & Social Service Workers* (Guidelines No. OSHA 3148-06R 2016) (pp. 1–53). Washington, D.C.: U.S. Department of Labor, Occupational Safety and Health Administration. Retrieved from https://www.osha.gov/Publications/osha3148.pdf

Perkins, C., Beecher, D., Aberg, D. C., Edwards, P., & Tilley, N. (2017). Personal security alarms for the prevention of assaults against healthcare staff. *Crime Science*, *6*, 11. https://doi.org/10.1186/s40163-017-0073-1

Reed, G. M., Roberts, M. C., Keeley, J., Hooppell, C., Matsumoto, C., Sharan, P., … Medina-Mora, M. E. (2013). Mental Health Professionals' Natural Taxonomies of Mental Disorders: Implications for the Clinical Utility of the ICD-11 and the DSM-5. *Journal of Clinical Psychology*, *69*(12), 1191–1212. https://doi.org/10.1002/jclp.22031

Roaten, K., Johnson, C., Genzel, R., Khan, F., & North, C. S. (2018). Development and Implementation of a Universal Suicide Risk Screening Program in a Safety-Net Hospital System. *Joint Commission Journal on Quality and Patient Safety*, *44*(1), 4–11. https://doi.org/10.1016/j.jcjq.2017.07.006

Sakinofsky, I. (2014). Preventing Suicide Among Inpatients. *Canadian Journal of Psychiatry. Revue Canadienne de Psychiatrie*, *59*(3), 131–140.

Schneeberger, A. R., Kowalinski, E., Fröhlich, D., Schroeder, K., Felten, S., Zinkler, M., … Huber, C. G. (2017). Aggression and violence in psychiatric hospitals with and without open door policies: A 15-year naturalistic observational study. *Journal of Psychiatric Research*, *95*, 189–195. https://doi.org/10.1016/j.jpsychires.2017.08.017

The Joint Commission. (2016). Sentinel Event Alert 56: Detecting and treating suicide ideation in all settings. The Joint Commission. Retrieved from https://www.jointcommission.org/assets/1/18/SEA_56_Suicide.pdf

The Joint Commission. (2017a). Ligature Risks: Assessing and Mitigating Risk for Suicide and Self-Harm. Retrieved July 19, 2017, from http://www.jointcommission.org/standards_information/jcfaqdetails.aspx

The Joint Commission. (2017b). Now effective: Surveying, scoring of ligature, suicide, self-harm in inpatient psychiatric setting. Retrieved August 31, 2018, from http://www.jointcommission.org/issues/article.aspx

Walsh, G., Sara, G., Ryan, C. J., & Large, M. (2015). Meta-analysis of suicide rates among psychiatric in-patients. *Acta Psychiatrica Scandinavica*, *131*(3), 174–184. https://doi.org/10.1111/acps.12383

Copyright © 2019 by The Center for Health Design. All Rights Reserved.