

Improving Licensed and Unlicensed Staff's Recognition of Ligature Risk in the Emergency Department

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IMPROVING LICENSED AND UNLICENSED STAFF'S RECOGNITION OF LIGATURE RISK IN THE EMERGENCY DEPARTMENT

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BACKGROUND

- Suicide is now the 10th leading cause of death in the US. Although the vast majority of suicides occur outside of health care facilities, many suicides occur every year within health care facilities, including psychiatric hospitals, psychiatric units within general hospitals, general med-surg wards and emergency departments (TJC, 2017).
- Over the last 5 years, approximately 85 suicides per year were reported as sentinel events to TJC (TJC, 2017).
- Between 8/1/17 and 8/27/18, there have been 3 suicide attempts in the LVHN Emergency Departments (LVHN, 2017-18).

PICO

P – RNs and TPs at LVH-M and LVH-17th St EDs

I – education about ligature risks in patient room using visual aids (TLC) in the emergency department

C – compared to no education/pre and post education

O – improved knowledge about ligature and increased safety for patients

In RNs and TPs, how does education about ligature risk, using visual aids, result in improved identification of ligature risks compared to no education?

EVIDENCE

- Hanging is one of the most commonly used methods for suicide worldwide.
- Around 50% of hanging suicides are not fully suspended – ligature points below head level are commonly used.
- Strategies to reduce suicide by hanging should focus on the prevention of suicide in controlled environments, the emergency management of 'near-hanging' and on the primary prevention of suicide in general. (Gunnell et. al, 2005).



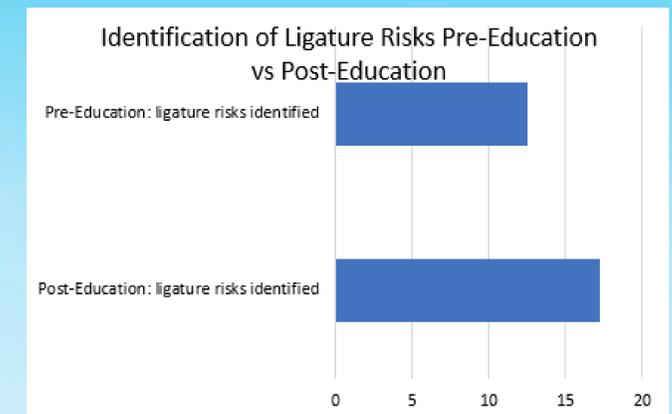
*Ligature risks in a medical room at LVHN 17th St. Emergency Department

PROCESS/IMPLEMENTATION PLAN

- Implementation:
 - Nurse residents passed out a picture of a room with ligature risks to RNs and TPs and asked them to circle ligature risks.
 - Residents graded these pre-tests.
 - Residents created TLC to educate RNs and TPs.
 - Residents handed out post-test, graded them, and then compared with pre-test scores.
- Process and Outcome Indicators:
 - **Process:**
 - TLC provided after pre-test
 - **Outcome:**
 - RNs and TPs able to identify a greater number of ligature risks in the ED environment.
 - Increased conversation regarding patients and ligature risks

OUTCOMES

- 57 out of 61 pre-tests completed. Average score: 12.52 out of 25 items.
- 43 out of 45 post-tests completed. Average score: 17.18 out of 25.
- Most commonly missed items in both tests: otoscope specula container, drop ceiling, horizontal ceiling piece, wall hand sanitizer



LESSONS LEARNED

- Overall, the average number of ligature risks identified increased from 12.52 to 17.18 out of 25 after TLC education.
- We recommend further investigation with larger sample size.
- Limits:
 - No set scheduled time between TLC and post-test.
 - Education form should have been more interactive to ensure proper understanding and recall of information
 - Less submitted post-tests vs pre-tests.
 - Small sample size prohibited determining statistical significance of results

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