

## Introduction

Suicide is the 10th leading cause of death in the US among all age groups (CDC, 2018). Depression is the biggest risk factor (Turecki & Brent, 2016). The national cost of suicide/suicidal injuries accounts for about \$70 billion a year in medical and work-loss costs (CDC, 2018). One in 5 people who die from suicide visited a hospital within the four weeks prior to their death (TJC, 2014). At present, there is no evidence-based standard for screening. This project will attempt to identify if suicide screening in the emergency department will foster increased recognition of suicidal ideation and decrease rates of suicide. It will also determine the potential barriers to screening effectiveness.

## Background and Significance

### Who is Affected?

- ❖ Depression can affect anyone at any time.
- ❖ One out of every 6 adults will have depression at some point in their life, affecting about 16 million American adults every year (CDC, 2018).
- ❖ Those with depression have a fivefold increase of having suicidal thoughts and behaviors (Shapero et al., 2019).

### What is Current Practice?

- ❖ Despite increased rates of suicide, not all emergency rooms routinely screen for suicide.

### Why Should We Care?

- ❖ Increased screening = Better detection

### What Do We Need to Know?

- ❖ Does utilizing a suicide screening tool in the ED better detect suicidal patients?
- ❖ Is there stigma against suicide? Does this affect screening?

### The Joint Commission:

- ❖ Published Sentinel Alert 56
- ❖ Suggest steps be taken to detect suicide ideation

## Clinical Question

For emergency room patients (P), does utilizing a depression and suicide screening tool (I), compared to not utilizing a screening instrument (C), increase proper diagnosis and treatment as well as improve nursing perception of suicide, affecting screening compliance (O).

## Theoretical Framework

The Plan-Do-Study-Act (PDSA) Cycle  
Testing and Implementing Changes



## Methodology

This project was a quality improvement study that used a quasi-experimental approach, involving retrospective and prospective chart-review data.

Two large trauma academic medical center EDs in central New Jersey.

The study population included two groups: Patients

- ❖ Convenience sample of 384 ED patients at each setting
- ❖ Inclusion: Adults ages 22 years and older
- ❖ Exclusion: 21 years old and younger, patients with an acuity level of 1, severe trauma, and acute intoxication

Nurses

- ❖ Inclusion: Full-time, part-time, and per-diem
- ❖ Exclusion: Medical leave, agency nurses, and float nurses

Patient recruitment was not necessary for chart-audits  
Nurse recruitment flyers displayed in ED conference room. An email was distributed to the ED staff.

Consent was obtained from the nursing staff

Participation in this study posed minimal risk. Each participant was assigned a number in order to be deidentified.

There was no cost to participate in this study and no monetary compensation was given for participation.

## Evaluation Plan

- ❖ Cronbach's alpha was used to assess the reliability of the SOSS survey.
- ❖ A paired *t*-test was performed to determine statistical difference between pre- and post-surveys.
- ❖ Pearson's correlation coefficient was calculated to assess the relationship between the screening tools and psychiatric referrals.

## Results

### Middlesex County ED

#### Nursing Population

- N=30
- Average pre- and post- survey score indicated lower levels of stigma.
- Paired *t*-test showed statistical difference between the pre- and post- survey.
- Most responded "strongly disagree" to embarrassment.
- Most responded "strongly agree" to lonely.

#### Patient Population

- N=384
- Average age = 55 years old.
- Most common chief complaint: chest pain.
- Retrospective findings: 1 psychiatric consult, 1 admission.
- Prospective findings: 2 psychiatric consults, 2 admissions.
- C-SSRS scores and psychiatric referrals were strongly correlated.

### Monmouth County ED

#### Nursing Population

- N=32
- Average pre- and post- survey score indicated a neutral level of stigma.
- Paired *t*-test showed no statistical difference between the pre- and post- survey.
- Most responded "strongly disagree" to embarrassment.
- Most responded "strongly agree" to lost.

#### Patient Population

- N=384
- Average age = 66 years old.
- Most common chief complaint: chest pain.
- Retrospective findings: 20 psychiatric consults, 12 admissions.
- Prospective findings: 28 psychiatric consults, 19 admissions
- PSS-3 scores and psychiatric referrals were strongly correlated.

## Implications

### Clinical Practice

- ❖ The ED proves to be an ideal setting for diagnosing and treating mental health disorders.
- ❖ Screening should be completed on everyone no matter the chief complaint.

### Healthcare Policy

- ❖ This study follows the suggestions published by The Joint Commission (Sentinel Alert Event 56) that steps be put in place to detect suicide ideation.

### Quality and Safety

- ❖ Prevention and screening have the potential to greatly reduce suicide rates, promoting quality care.

## References

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