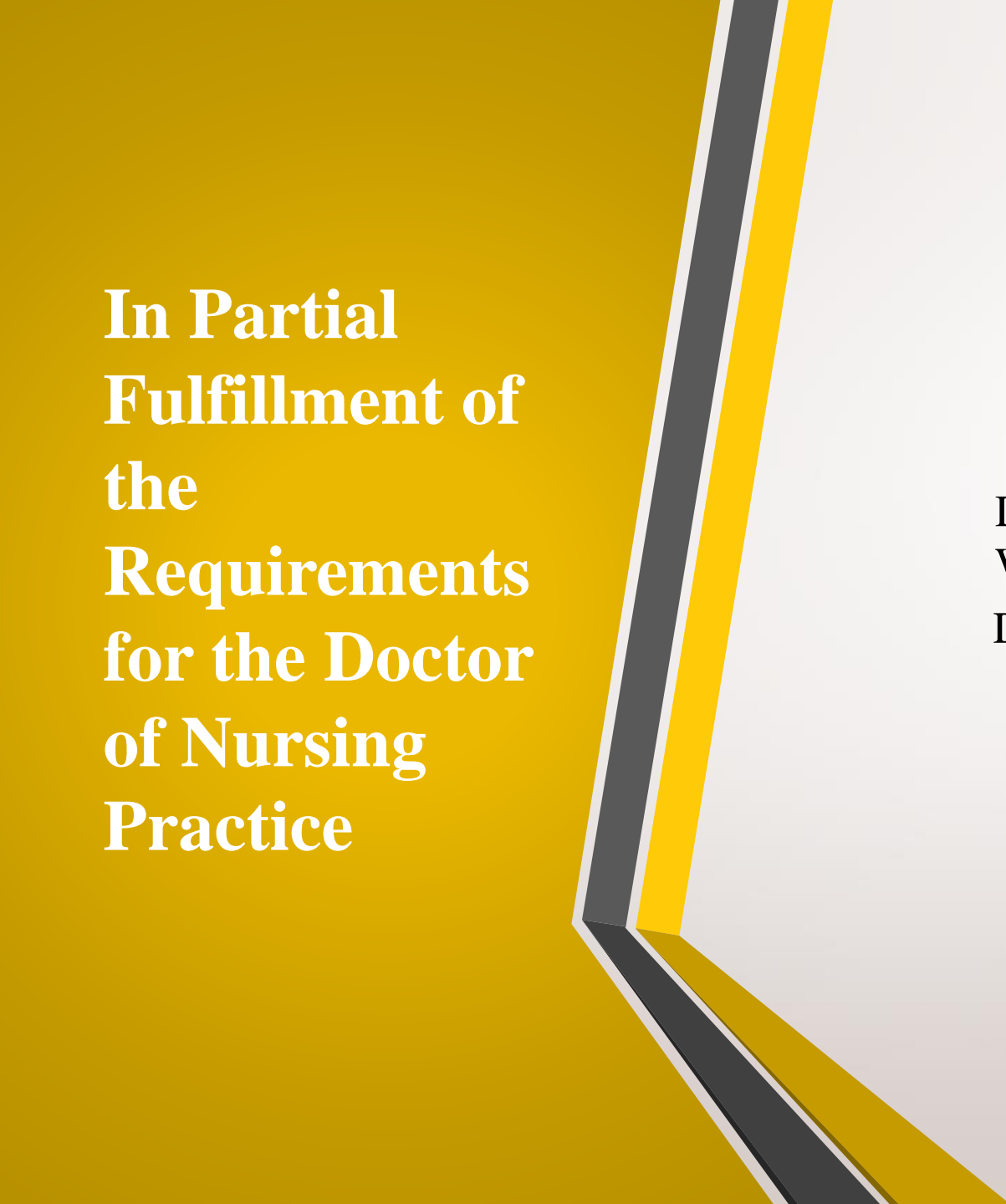


# **Improving Depression Management Referral Rates in the ED Utilizing a Nurse-Driven Depression Screening Protocol**

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**In Partial  
Fulfillment of  
the  
Requirements  
for the Doctor  
of Nursing  
Practice**

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## **Introduction**

The World Health Organization [WHO] (2020) revealed that depression affects more than 265 million people worldwide, and when it is not diagnosed and treated, it could lead to suicide. Suicide has become the second largest cause of death among 15-29/year olds. Each year over 800,000 persons commit suicide (WHO, 2020). Depression that is treated early can prevent suicides.

# Project Problem

The problem under study is the lack of consistency in depression screening in the Emergency Department (Ed). Currently depression screenings are performed at the practice site when an individual is admitted to the hospital, but not through the emergency department (ED). There is no formal policy in place for an ED nurse to screen for depression during triage.

# Background

Depression impacts quality of life in a negative way (Jia et al., 2015). People who are suffering from depression often have other symptoms such as headache, chronic pain, or back pain. This makes detection and diagnosis more difficult (Jia et al., 2015). Signs and symptoms of depression include loss of appetite, loss of interest in activities that were once pleasurable, insomnia, feelings of hopelessness, and problems concentrating (CDC, 2020). Risk factors include having a family history of depression, alcohol use and abuse, and major changes in life events such as death or divorce (CDC, 2020).

# Purpose Statement

Currently, there is no depression screening protocol in the ED at the practice site. Since the staff does not screen for depression when patients come into the ED seeking care, a crucial opportunity is being missed. Due to the gap in the triage practice in the ED, and the lack of evidence of a depression screening protocol in place, this DNP quality improvement project is geared toward closing this practice gap by performing a depression screening protocol for all adult patients entering the ED.

Will a nurse-driven depression screening protocol improve depression identification and management compared to non-screening protocols over an implementation time of four to five weeks?

# Project Design

- This DNP QI measure includes the implementation of an evidenced-based depression screening protocol in the ED for patients ages 18 and older seen in the ED. Currently, there is no depression screening protocol in the ED at the practice site. Since the staff does not screen for depression when patients come into the ED seeking care, a crucial opportunity is being missed. Due to the gap in the triage practice in the ED, and the lack of evidence of a depression screening protocol in place, this DNP quality improvement project is geared towards:
  - Improving the identification of depression
  - Initiating mental health referrals
  - Reducing the risk of suicide and enhance patient outcomes.



# Project Aims

The overarching aim of this DNP project is to reduce suicide rates through the implementation of a depression screening protocol in the ED. This intended protocol will both identify and refer patients who fall in the category of moderate to severe depression within the timeframe of four to five weeks.



# Project Objectives

Develop an evidence-based depression screening protocol.

Educate the ED staff of the new protocol.

Measure the knowledge of the Ed staff before education (pre) and after (post) with a goal of 100% pass rate.

Compliance of the ED staff utilizing the screening protocol will be 100% and measured through weekly chart audits.

# Literature Review

- A literature search was conducted to find relevant studies on the project topic. A systematic review method was explored during the search process to find appropriate articles.
- Existing articles that relate to the project topic are reviewed by conducting extensive research on existing studies. Reputable search databases were used, and articles were screened and analyzed.
- During the search process, Cochrane Library, PubMed, Google Scholar, EBSCO, Medline, Touro University Library and CINAHL were used to search for relevant articles. Search terms or keywords were used to retrieve articles from reputable databases.

## Literature Review Cont.

- Several studies supported:
- Clinical efficacy of depression screening questionnaires for early and timely diagnosis (Maurer et al., 2018; O'Byrne & Jacob, 2018; O'Connor et al., 2016; Olfson et al., 2016).
- Screening should be implemented with adequate systems in place to ensure accurate diagnosis, effective treatment, and appropriate follow-up (Whooley, 2016).
- Providers fail to recognize depression in as many as half of all patients that presents to the ED, and as such these patients may remain undiagnosed (Pillaveetil, et al., 2018); Betz & Boudreaux, 2016).

# Inclusion Criteria

Based on project guidelines and articles that are applicable to a nurse-led protocol.

National guidelines which included the CDC, CMS, USPSTF, HHS

Only peer-reviewed articles, which consisted of randomized controlled studies, quasi-experimental studies, cross-sectional, observational studies, meta-analyses, qualitative and quantitative designs, and cohort studies were included.

Studies published or written in the English language, and those published within the past five years. Articles that involved both males and females aged 18 years and older were also included for review.

# Significant to Nursing/Host Site

The current literature indicates that depression is a significant problem impacting the American population (CDC, 2020). This has resulted in an increase of different types of negative outcomes, including death by suicide (Roca, et al., 2019). In response, researchers have suggested the importance of addressing depression using tools such as the PHQ-2 and PHQ-9 (APA, 2020). These tools can support diagnosis, which can lead to treatment rather than allowing depression to worsen over time.

Diagnosing depression is important because depression is a national burden that negatively impacts the well-being of individuals (Akincigil & Matthews, 2017) as well as impact society at large by reducing worker efficiency and damaging organizational performance (Aunskul et al., 2018; Loeb et al., 2016; Williams et al., 2016). Despite the economic burden of depression, and the prevalence of individuals presenting with depression in emergency departments (Beiser et al., 2019), the disease continues to go undiagnosed even under such medical care.



## **Best Practice Standards Relevant to Quality Gap**

The existing clinical evidence indicates that PHQ provides accurate information on depression symptoms that guide health care providers in evaluating whether the patient is depressed (Bélanger et al., 2019; Patel et al., 2019; Willborn et al., 2019).

The American Psychological Association [APA] (2020), endorses screening protocols that promote the use of screening tools.

The USPSTF (2016), recommends screening for depression in the general adult population

The Joint Commission (JC, 2019) National Patient Safety Goals recommend depression screening for the general population

The Veterans Affairs and Department of Defense (VA/DoD) Clinical Practice (2016) recommended that in addition to screening with the PHQ-2 in the general population, several high-risk subpopulations may require a more frequent or rigorous screening.

A compelling body of evidence identifies concomitant diseases in many patients with depressions (Peterson, et al., 2019). According to Beiser et al. (2019), depression impacts many people and there is increased prevalence of this disease among persons of low socioeconomic status who often seek care in the ED.



## **Impact of the Problem**

### **Individual**

Predisposes an individual to adverse health impacts, including premature deaths, self-harm, and the development of health comorbidities (Akincigil & Matthews, 2017).

### **Societal Burden**

When left undiagnosed and untreated, can lead to increased morbidity and mortality worldwide (Akincigil & Matthews, 2017; Aunskul et al., 2018; Whooley, 2016).

### **Health Care**

Increase in health care cost



# **Impact Of The Problem Cont.**



# Theoretical Framework

Donabedian Model, is a middle range theory

Donabedian model is widely known for three standards; structure, process, and outcomes, proposed to evaluate the quality of healthcare

## Major Tenets

Structure - the setting where the DNP depression screening protocol will be implemented, infrastructure, equipment, putting staff together to form a team and the methodology of training staff

Process - action steps to be taken to achieve the intended outcome or outcomes

Outcome - measurement, evaluations, and assessments of the process, new knowledge gained

# Implementation

- Depression screening protocol
- Educational training for participants ( ED nurses,& Providers)
- Pre and post test to test staff knowledge
- Random chart audit to monitor staff compliance with the protocol
- Paired T-Test used to measure whether the score of staff knowledge (pre/post test) improved or remained the same
- Fisher's Exact Test-measure staff compliance (useful for size, provided direct answers, yes or no).

# Evaluation

Prior to the implementation of the project, there was no established depression screening protocol in the ED

Paired T test measure pre/post test results = 51% increase in staff knowledge

Depression screening went from 0% to 100% over the course of four weeks.

Fisher's Exact Test for staff compliance indicates out of 162 who tested positive for moderate, 160 were referred (99% compliant rate)

Out of 8 who tested positive for severe, all 8 were referred (100% compliant rate)

The overall outcomes of the analysis revealed 95% of providers completed the depression screening and mental health referral



# Significance/Implications for Nursing

- Recent studies suggested that the occurrence of depression among patients in the emergency department (ED) is substantially higher than in the general population (Abar, Hong, Aaserude, Holub, & DeRienzo, 2017).
- Screening for depression, supported by referral to mental health services, was found to be an essential element in the identification and management of patients seen in the ED setting.
- The ED providers/nurses are at the front line and are the gate way to implement evidenced-based depression screening protocol to capture patients in need of mental health services.

# Dissemination

Knowing the characteristic of the audiences, that findings will be shared with, are paramount in shaping a dissemination strategy for this project (Brownson, Eyler, Harris, Moore, & Tabak, 2018).

The project results will be shared with stakeholders to include nurses, medical providers, and leadership at the project site using a PowerPoint presentation. Nursing leadership confirmed the educational presentation will be included in orientation training of new hires in the ED .

## **Dissemination Cont.**

This quality improvement project will be filed in the Doctoral of Nursing Practice Project Repository ([doctorsofnursingpractice.org](http://doctorsofnursingpractice.org)), which allow DNP graduates to share their project in a scholarly environment. Articles on this website are not peer-reviewed; however, it provides an opportunity to disseminate the contents of the project as available resources to other DNP students and health care professionals. The project results will also be shared with Touro University Nevada faculty and student colleagues using a Power Point presentation. American Association of Nurse Practitioner (AANP) for consideration to submit my proposal.

# Limitations

- Short implementation phase of four weeks to collect substantial amount of data to determine long term effect and staff continued adherence for sustainability.
- Small sample size jeopardizes the generalizability of the result, to draw assumptions from sample to wider population (Vasileiou, Barnett, Thorpe & young, 2018).
- Limited ability to determine if patients follow through with referred to mental health services.

## Conclusion

In conclusion, depression is a major health disorder that is treatable. Untreated depression has the potential to be associated with poor outcomes and increased risk for suicide. A major issue at stake for a person suffering from depression is their life. The importance of screening for depression in patients seen in an ED setting cannot be overemphasized. In the absence of screening, many patients affected by depression may go unnoticed. Therefore, the utilization of a depression screening protocol serves as an effective tool for early identification, treatment, and referral to mental health services. Information obtained in this project indicated that implementation of the depression screening protocol can be used in any setting to capture those at risk. The assumption is that ED providers, that are trained and familiar with depression screening, will be better informed and equipped to identify signs of depression in their patients. Findings from this project suggest that implementation of a depression screening protocol has the potential for significant benefits.



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