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Teaching and Evaluation of Suicidal Assessment, Five-Step Evaluation and Triage (SAFE-T) in the Emergency Department

Evangeline Rico

California State University, Northern California Consortium Doctor of Nursing Practice

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Teaching and Evaluation of Suicidal Assessment, Five-Step Evaluation and

Triage (SAFE-T) in the Emergency Department

Evangeline Rico, RN, MSN, WCC, CNL

California State University, Northern California Consortium

Doctor of Nursing Practice

A project

submitted in partial

fulfillment of the requirements for the degree of

Doctor of Nursing Practice

California State University, Northern Consortium

Doctor of Nursing Practice

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ABSTRACT

Teaching and Evaluation of Suicidal Assessment, Five-Step Evaluation and Triage (SAFE-T) in the Emergency Department

Suicide remains to be a global and a national problem, and it continues to be one of the leading causes of death in the United States (U.S.) The Emergency Department (ED), being the gateway to the hospital can provide a great opportunity to assess each patient for suicidal ideation, and evaluate if patients present with risk factors for suicide. The competency of the ED staff plays a critical role in early recognition of patients who are at risk, and in implementing a plan of care for those with positive screens. However, researchers showed that knowledge deficit and lack of education regarding suicide assessment have contributed to failure in identifying high-risks suicidal patients. Failure to identify, monitor and provide early interventions can result in adverse sentinel events.

This study examined the effect of teaching the ED nurses the Suicidal Assessment, Five-Step Evaluation and Triage (SAFE-T), an evidenced based tool for suicide assessment designed for ED triage. This study measured post-teaching intervention to assess if SAFE-T teaching increased knowledge of nurses regarding assessment and care of suicidal patients. The results showed that SAFE-T teaching increased nurse's knowledge in identifying risk and protective factors, it showed improved suicide inquiry, and increased knowledge in nursing determination of risk level and appropriate nursing intervention.

Evangeline Rico

May 2016

APPROVED

For the California State University, Northern Consortium
Doctor of Nursing Practice:

We, the undersigned, certify that the project of the following student meets the required standards of scholarship, format, and style of the university and the student's graduate degree program for the awarding of the master's degree.

Evangeline A. Rico
Evangeline Apolinario Rico

Project Author

Christine J. Ortiz
Dr. Christine Ortiz, PhD
Chairperson's name (Chair) Nursing Department name

Deborah L. Hitt
Deborah Hitt, RN, MSN, CNL
Committee member's name Nursing Department name

Kristine F. Brown
Kristine Brown, RN, MSN, CNL
Committee member's name Nursing Department name

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DEDICATION

I would like to dedicate this project to the memory of my mother, Clarina S. Apolinario. Thank you for your love, for believing in me despite everything, and for instilling in me the value of education. Achieving a doctorate degree has been a lifelong dream, and this is one for you my dear Nanay Claring! And to Mama Cely, this one's for you too! I grew up reading your books in the library. You're my inspiration and my hero! Thank you for all your love and support! You gave up so much for all of us, we will be forever grateful.
"All that I am, or hope to be, I owe to my mother." ~Abraham Lincoln.

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"For nothing will be impossible with God." ~ *Luke 1:37*

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CHAPTER 1: INTRODUCTION

Suicide remains to be a global issue, and approximately 1 million die annually all over the world (World Health Organization, 2011). According to the Centers for Disease Control and Prevention (CDC) (2007), suicide was the 11th leading cause for all Americans, and it is also the 3rd leading cause of death between 15-24 years of age (CDC, 2007). The Joint Commission (JC) (2010) stated that suicide is one of the most reported sentinel event, and 8% of suicide attempts occur in the Emergency Department (ED) (JC, 2010).

The Department of Veterans Affairs (VA) examined suicide in the military veterans and showed that an average of 18 veterans committed suicide on a daily basis (Huggins, 2011). Veterans presenting with higher suicide rate is associated with availability and knowledge in use of firearms, psychiatric conditions such as depression, post-traumatic stress disorder (PTSD) (Dausey, Desai, & Rosenbeck, 2005), and traumatic brain injury (Warden, 2006). Among all of these, PTSD is the most common mental disorder resulting from military combat and is caused by trauma, life threatening events, natural disaster, terrorist attack, accidents or personal assaults (Nayback, 2008).

Background

When a patient checks into the ED, the triage nurse makes the first contact with the patient. The triage is defined as the prioritization of care based on the symptom, disease, acuity, diagnosis and the availability of resource (Seefeld,

2008). It is very important that the triage nurse quickly identifies the patient who requires urgent medical attention and start interventions as appropriate to those who needs it the most (Trzeciak & Rivers, 2003). Efficient and effective triage is important because if assessments are done too long in the triage area, it can lead to delay in care of the incoming patients awaiting to be seen in the ED. Prolonged wait times can lead to delays in time-sensitive treatments, which can leave patients without medical assistance and can result in adverse events or contribute to poor health outcomes (Moll, 2010).

Triage is one of the most critical component of the ED, therefore it is imperative that the triage nurse is competent to perform an efficient and comprehensive assessment for suicidal ideation (SI), and suicide risk assessment. The triage nurse must be able to communicate effectively, and consistently assign a triage category that reflects the patient's clinical needs (Doyle et al., 2012; Howard et al., 2012; Marino et al., 2014). The JC (2010) also states that each patient must be screened for any suicidality (JC, 2010) and to assess for mental health, suicidal intent, psychosocial history and suicidal thoughts and ideations (Sun, Long, Boore, & Tsao, 2006).

This DNP project would be very beneficial to the VA institution by providing the ED nurses education regarding the Suicide Assessment Five-Step Evaluation and Triage (SAFE-T) tool. The SAFE-T provides an evidence-based structure for conducting a comprehensive suicide risk assessment, which includes

identification of risk and protective factors, thorough suicide inquiry, implementation of interventions that matches the risk level, and appropriate nursing documentation (Jacobs, 2007).

Statement of the Problem

This VA ED triages approximately sixty to eighty patients per day. The patient population includes different medical conditions, as well as mental health patients with depression, mood disorder, substance abuse, psychiatric problems, post-traumatic stress syndrome, or other mental health issues that may present with suicidal ideation. Currently, per hospital policy, all patients seen in the ED are triaged by the nurse, and are assessed for SI. However, it is problematic to assess patients for SI consistently due to lack of standardized education regarding screening and care of suicidal patients. As a result, the assessment and care of patients with SI is inconsistent amongst the nurses. This can potentially result in adverse event such as suicide attempt in the ED, or potential for missing high-risk SI patients during the triage assessment.

Purpose

Patients that are having SI may seek help and medical assistance in the ED. It is critical for the staff to evaluate the lethality of the situation and help in providing a safe environment of care (Mitchell, Garand, Diane, Panzak & Taylor, 2005). The CDC (2007) reported that there are approximately 100 to 200 attempts for every completed suicide. Suicide does not happen without any warning signs

(Tucker, Crowley, Davidson, & Gutierrez, 2015) and suicidal patients seek medical attention months before the suicide attempt happens (Tran et al., 2014). Therefore, it is imperative that the ED clinicians correctly identify patients who are at risk, and be able to implement safety plans to stop the suicide before it happens.

The goal of this DNP project is to provide teaching for thirty nurses at a VA ED, regarding the assessment, care, and management of suicidal patients. According to Perry et al. (2012), the risk factors associated with suicide are extensive and they have been studied by many researchers. The incidence of suicide-related events in healthcare facilities have been associated with staff related factors such as incomplete assessment and inadequate communication (JC, 2013). There are several issues identified in literature including lack of environmental assessment and inadequate staff training (Patterson & Hughes, 2008), necessity for staff training and education (Reid, 2010) and education regarding the identification of risk factors (Combs & Romm, 2007), and the reduction of environmental risk factors (Watts et al., 2012).

This DNP project included teaching 30 ED registered nurses regarding the SAFE-T tool. The SAFE-T incorporates the American Psychiatric Association Practice Guidelines for the Assessment and Treatment of Patients with Suicidal Behaviors (APAPGATPSB), as well as the recommendations from JC Patient Safety Goals on Suicide. The SAFE-T suicide assessment tool is also supported by

Screening for Mental Health Inc. and the Suicide Prevention Resource Center (Jacobs, 2007). The SAFE-T teaching included information regarding suicide assessment, recognizing risk factors, identification of protective factors, conducting suicide inquiry, and will provide guidance regarding nursing care and interventions based on the patient's suicide risks (Jacobs, 2007).

Benefits

The benefits of providing ED nurses with teaching regarding assessment, care and management of suicidal patient include satisfying the JC National Patient Safety Goal (NPSG) #15, which mandates that the organization identify safety risks present in its patient population. This include the: 1.) Assessment of variables that may increase or decrease risk of suicide, 2.) Meeting the patient's safety needs, and setting for treatments are addressed, 3.) The organization provides information to individuals and their family members for crisis situations (JC, 2013). More importantly, educating the nurses will increase safety in the ED because it will provide consistency, guidance and structure for the nurses managing this high-risk patient population.

Research Questions

The project was derived from a need to improve the nursing education regarding triage assessment of suicidal patients in the ED.

1. Would the use of SAFE-T teaching increase the knowledge regarding assessment and care of suicidal patients in the ED?

2. Would the use of SAFE-T teaching increased knowledge regarding conducting suicide inquiry and identifying risk factors?

Theoretical Framework

Hildegard Peplau's Theory of Impersonal Relations (TIR) was selected as the conceptual framework for this DNP project. Peplau's TIR is a middle-range theory developed in 1952. She stated that nursing is an interpersonal process that involves the interaction between the nurse and the patient (Peplau, 1952). Peplau stated that the nurse-patient relationship is the most basic human connection that is essential in providing nursing care. The accomplishment of a common goal can be done through the different phases between the nurse-patient relationship, and that these phases has a beginning, goes through particular stages, time-limited, and has an end (Peplau, 1952). The four sequential phases include 1.) Pre-orientation, 2.) Orientation, 3.) Working, and 4.) Resolution phase. In addition to the different phases, Peplau also believed that the nurse has six nursing roles in the nurse-patient relationship, which include stranger, resource person, educator, leader, surrogate and therapist (1952).

The *Pre-Orientation Phase* happens during the triage assessment when the first contact and communication happens between the nurse and the patient. The reason for triage in the ED is to prioritize the incoming patients and to identify those who need immediate medical attention, and those who can wait to be seen by the physicians based on the presenting symptoms. The triage is important

because this will determine whether the patient can safely wait for interventions, or require immediate medical care (Gilboy, Tanabe, Travers & Rosenau, 2012).

The second is *Orientation Phase* (Peplau, 1952), and this when the ED nurse and the patient gets familiar in the triage area, and starts to form trust and a connection with each other. There are many variables between the nurse-patient relationship that can affect the orientation such as belief, culture, expectations, past experiences, personal expectations, race, and values. The initial role of the nurse during the orientation phase is the “stranger,” and the initial bonding between the nurse and the patient during this phase is vital in establishing trust with one another. This is the phase where the patient problem is identified, and the nurse can decide on the course of action or plan of care for the patient (Butts & Rich, 2011). This is the phase where the relationship grows as the patient asks questions, shares more information and verbalizes their expectations. The nurse reacts, responds, explains the plan, and helps to identify issues and patient concerns. There is a time limit for this interaction, therefore it is imperative that the outcome for the patient is established within a short amount of time, and a plan of care is communicated (Butts & Rich, 2011).

The third is the *Working Phase* (Peplau, 1952), and this occurs in the ED room where therapeutic interventions are initiated by the ED nurse. The nurse portrays many different roles in this phase when the patient’s specific medical problems are attended to. For example, diagnostic tests are conducted, healing

treatments are started, and nursing care is provided. The working phase is when the nurse is actualizing the role of the caregiver and at the same time the educator, patient advocate, leader and a resource (Butts & Rich, 2011). The ED nurses' goal is to meet the needs of the patient, and to be able to communicate therapeutically in order to explore all avenues to help the patient progress towards healing.

The last is the *Resolution Phase* (Peplau, 1952), is when the crisis is over and the patient is stabilized in the ED rooms. This is basically the conclusion of the professional connection, and this is when the ED nurse-patient relationship ends (Butts & Rich, 2011), and sometimes it can be difficult for the nurse and the patient because they create a strong bond. However, the patient needs have been met at this point, and this is the time for the patient to sever the connection with the nurse. In the end, both the patient and the nurse achieve a sense of balance and develop their emotional maturity (Butts & Rich, 2011). The ED nurse portrays different nursing roles in this phase including teacher, resource, counselor, advocate and leader (Butts & Rich, 2011).

All of the phases described by Peplau happens within the nurse-patient interaction in the ED. Understanding all different phases is critical so that the nurse can identify the different roles that they assume as they transition to the next phase. Having an awareness of the interpersonal process can help the nurses create meaningful and therapeutic interactions with the patient as they both go through the pre-orientation, orientation, working and resolution phase.

Definition of Terms

The following definitions are used for the purpose of this study:

- **Acuity.** The severity of the patient's illness. The higher the acuity of the patient means the higher the severity of the illness. The implication is immediate medical care needs to be provided, otherwise it can result in loss of limb or life (Emergency Nurses Association, 2010).
- **Nursing Care Plan.** This outline and summarizes the care to be given according to the nursing diagnoses and the nursing assessment (Mosby, 2009).
- **Sentinel Event** is defined by JC as unforeseen adverse event such as fatality, or severe health risk not associated with the patient's disease process (JC, 2013).
- **Suicide Attempt.** To inflict pain or harm to one's self without any intent to die (Jacobs, 2007).
- **Suicidal Ideation.** Thoughts of harming self and causing one's death (Jacobs, 2007).
- **Suicidal Intent.** Yearning to cause do self-destructive or deadly act to one's self (Jacobs, 2007).
- **Triage.** Triage is the process used in the ED where the nurse conducts a brief problem focused assessment, and then determine the patient acuity level whether they need to be seen immediately, or the patient can safely

wait for their medical care and treatment (Gilboy, Tanabe, Travers, & Rosenau, 2012).

CHAPTER 2: LITERATURE REVIEW

The review of literature provided a framework for examining the concepts of the DNP project. The following databases were utilized: CINAHL and Pub Med. The search used the following keywords and phrases: emergency department, emergency room, suicide, suicide in the ED, suicide in the ER, suicide veterans, suicide assessment tool, suicide assessment in the ER, suicide assessment in the ER, triage assessment, triage assessment for suicide, suicide care plan, suicide care plan in the ED, suicide. The original searches generated approximately 463,000 results. The sources identified included abstracts, journals, articles, book reviews, and web resources. The search was limited to scholarly publications from 2000 to 2015. The majority of the articles were from 2007 to 2015. The original search showed publications in a broad range of subject area including medicine, public health, psychology, language and literature, biology, nursing and practice. The search was limited to adult population, veterans, suicide management, suicide risk assessment, emergency department, suicide assessment, and nursing.

Jayaram (2014) stated that there is no single measurement or technique that can precisely foresee suicide risks. There are also differences in language and clinical practice, and there is much need for education and standardization

(Jayaran, 2014). This is also supported by other studies that show insufficient evidence regarding universal suicide screening, the lack of data identifying a validated screening tool, and due to the complexity of therapies to reduce suicide attempts (Allen et al., 2013; U.S. Preventive Services Task Force [USPSTF], 2014).

One resonating theme throughout the literature review was that healthcare providers should conduct a comprehensive assessment that include mental and psychiatric health questions, history, diagnosis, suicide risk factors, plan, intent, protective and modifiable risk factors, as well the need for further education for all ED clinicians in regards to these topics (Betz et al., 2013; Chesin & Stanley, 2013; Combs & Romm, 2007; Jayaram, 2014; Tran et al., 2014; Reid, 2010).

Risk Factors for Suicide

The researcher suggested clinicians need to know the following risk factors when assessing patients for suicide. There are many health issues identified for the suicidal veteran population, and these include attitude toward death and grieving, ethics, gender, healthcare disparities, and psychiatric conditions. Literature review revealed that all of these variables showed increased risk for behavioral illness, disability and suicide (Nayback, 2008).

Health Disparities. Nayback (2008) identified poverty as one of the most influential factors that impact healthcare. The VA Healthcare System attempts to

address the issue of poverty, and to increase access of veterans to medical care. The common barriers include the lack of healthcare insurance, inconsistency in medical coverage, and receiving poor quality of care for black or hispanic (Nayback, 2008). To address these concerns, the VA developed programs that would increase access to healthcare even in remote areas such as telephone-link care, primacy care in outpatient clinics, online referrals or financial assistance, or employment program that would grant priority hiring to veterans. The focus includes the Operation Enduring Freedom and Operation Iraqi Freedom, as these populations are known to have increased rate of PTSD (Tanielian & Jaycox, 2006), and attempts are made to help them as they return back from their military tours.

Psychiatric Conditions. There are more than 1.6 million men and women who have served in the military during the Operation Iraqi Freedom (OEF) and Operation Enduing Freedom (OEF) since 2001 (Tenelian & Jaycox, 2008). These veterans were exposed to many stressors, austere environment, different surroundings and strenuous physical demands in a foreign country, traumatic events such as witnessing deaths, gunshot wounds, explosive bombs, and the constant fear of dying. The problem is that the suicide rates among the veterans are higher in comparison to the general U.S. population (McCarthy et al., 2009). Brenner et al. (2011) showed that a history of PTSD was associated with increased risk for a suicide attempt in veterans receiving mental health services, compared to

those without PTSD (Brenner et al., 2011; Jakupcak et al., 2009). It was also noted that irrespective of race, 90% of suicide-related deaths have a psychiatric condition at the time of their death that is diagnosed or not treated (Ting, Sullivan, Boudreaux, Miller, & Camargo, 2012).

Gender Issues. Ronquillo, Minassian, Vilke, & Wilson (2012) evaluated the different approaches and ways suicide are executed between genders. Results showed that women have higher rates of attempts, and the men have higher rates of completing lethal suicides. The most common suicide methods for women included drug overdose and exsanguination, while males used more lethal ways such as hanging and asphyxia. Ronquillo et al. (2012) revealed that women are the “attempters” and “survivors” of suicide attempts, while men are “completers” and employ more lethal means in their suicidal attempt. The most common method of suicide used include use of gun as weapons, hanging, medication or drug overdose, poisoning, jumping, asphyxiation, vehicular impact, drowning, exsanguination and electrocution (Tal Young et al., 2012). Differences between gender issues are important to know because the number of women veteran being seen in the ED is steadily increasing. They are considered high-risk because most of them are being treated for PTSD, mental health issues, traumatic brain injury, or military sexual trauma (Nayback, 2008).

Attitudes toward Death, Loss and Grieving. There are many different kinds of grief, and they are categorized based on the grief response and features.

The effects of suicide or profound loss on the loved ones left behind can be devastating and life changing (Tal Young et al., 2012). This is mostly the case with veterans who are left behind and witnessed their colleague die in the military tour of duty. When the military personnel is deployed to combat zones, they are subjected to harsh environment, under extreme amount of stress, and surviving in conditions where there is a constant threat to their lives. Unfortunately, not all of them survive and when they witness a death of a colleague, it creates a sense of loss that is hard to overcome. It is normal to have prolonged sadness, and go through bereavement process after a loved one dies, however, Tal Young et al. (2012) found that suicide survivors are confronted with different challenges compared to other mourning the loss of their loved ones from other types of death (Tal Young et al., 2012).

According to Tal Young et al. (2012), suicide survivors are unique, and face many variables that can affect the normal grieving process. There are certain factors that make grieving longer and more painful such as feelings of overpowering guilt, incomprehension, denial, embarrassment, anger, and feeling of stigma (Tal Young et al., 2012). Researchers also showed that those who experienced loss of a love one from suicide have a higher risk for suicidal ideation compared to other bereaved population (Krysinka, 2003; Runeson & Asberg, 2003). As a result, survivors should be evaluated for post-traumatic stress syndrome, depression and suicidal ideation (Tal Young et al., 2013). Therefore, it

is imperative to ask the patient or the family if they have strong family support. If available, therapy or support group should be offered, and they should be educated about positive coping skills so that they can go through the normal grieving process.

Epidemiological Findings. Many evidence-based risk factors identified above are missing in this VA ED suicide assessment and management. These include assessment of awareness of gender issues, patient inquiry regarding access to drugs or weapons, prior history of suicide (Gold, Applebaum, & Stanley, 2011), chronic illness, hopelessness and mental health disease such as PTSD, depression and existing mental health problems (Giordano & Stichler, 2009). Joint Commission (2013) reported that suicide remains to be a sentinel event in many acute and inpatient hospital settings, which requires an immediate investigation and response (JC, 2013). According to JC (2013), suicide remains to be one of the top five causes of sentinel events, ranking higher than medication errors, and is the 10th leading cause of death for persons 10 years of age and older (JC, 2013).

Jayaram (2014) acknowledged that the increased rates of suicide in healthcare facilities are due to environmental and staffing-related issues, which include lack of training and inadequate assessment, lack of communication, and poor information management (Jayaram, 2014). From December 1999 to June 2006, there were 52% suicides-related root cause analyses at VA hospitals. Suicide is a more prevalent cause of death in comparison to motor vehicular accident, and the rate has been increasing in

prevalence over the past two decades (Tran et al., 2014).

The evidence suggested that risk factors for suicide include health disparities, psychiatric conditions, gender issues, attitude towards death, episode of profound grief, or loss of love ones should be included in the triage assessment. The SAFE-T teaching plan included the comprehensive assessment of all of these risk factors that were identified in the studies (Jacobs, 2007).

Suicide Assessment and Management

Due to increasing sentinel events involving suicide, the JC NPSG (2013) required healthcare organizations to assess patient's risk for suicidality, and to put more focus especially on patients with primary mental health conditions (JC, 2013). In order to study if the JC mandates made a difference, Robst (2015) conducted a quantitative study that looked at the effectiveness of JC Safety Goals in reducing suicide attempts in ED using pre and post JC implementation data comparison to check for reduction of suicide attempts. Robst showed that suicide rates declined for mental health patients (2015). However, it did not show significant changes to those patients with primary medical health diagnosis. Robst raised questions whether the JC Safety Goals should be extended to include all patients coming in with all conditions, versus limiting suicidal assessment efforts to mental health patients only (2015).

In order to examine if targeted staff education will help in improving ED assessments and treatment of suicidal patients, Betz et al. (2013) evaluated the knowledge, attitudes, and practices of ED providers in the care of suicidal patients. Betz et al. (2013) explored the healthcare provider's approach, awareness, beliefs, and practices regarding screening and care for suicidal patients. He reported that the ED providers are confident with suicide screening skills, but there seems to be a lot of educational gaps particularly a comprehensive mental health assessment, counseling or referral for those that screen positive for suicide. Betz et al. also identified educational deficits with risk assessment and implementation and plan of care for this high-risk population (2013).

To examine the incidents and the number of patients presenting in the ED with suicide attempts or self-inflicted injury, Ting, Sullivan, Boudreaux, Miller & Carmargo (2012) conducted a quantitative, longitudinal study in the U.S. from 1993-2008. The data was acquired from the National Hospital Ambulatory Medical Care Survey (NHAMCS) using sample populations that were selected over 4-week period from different ED locations. The reason and timing of the ED visit, timing method of injury, mental health, alcohol abuse depressive disorders, and demographics such as age, sex, race, and socioeconomic background were all evaluated. The results showed that there is a twofold increase in suicide from all age group, and self-inflicted injury has increased over the past 20 years in all demographic sample groups. The result is consistent with many other studies

showing the increasing rate of suicide (Brickman & Mintz, 2003; Larkin, Smith & Beautrais, 2008; Jayaram, 2014).

Screening in the ED can be an important intervention in reducing the suicide risk across the different life span. Horowitz et al. (2001) studied the urban pediatric population using the 14-item screening tool Risk of Suicide Questionnaire (RSQ). The researchers showed that four questions: 1.) past, and 2.) present thoughts of suicide, 3.) prior self-destructive behavior, and 4.) current stressors) identified 98% of the at-risk adolescents. However, the study was limited to pediatric population so the results cannot be generalized to all population. The 4-item RSQ demonstrated high content validity and includes most of the risk factors identified in other studies (Horowitz et al., 2001).

In order to test the generalizability of the 4-item RSQ, Folse & Hahn (2009) conducted another study using the same 4-item RSQ. This qualitative study evaluated the reliability and validity of a 4-item version of the RSQ in the ED in the adolescent, adult and geriatric patient irrespective of the chief presenting symptom or psychiatric history. The 4-item RSQ include: 1.) Are you here because you tried to hurt yourself? 2.) In the past week, have you been having thoughts about killing yourself? 3.) Have you ever tried to hurt yourself in the past? 4.) Has something very stressful happened recently that is hard to handle? These questions proved to be reliable in the pediatric population, but literature review shows that these questions should also be included in triage assessments. All of these four

questions are included in the SAFE-T teaching.

In order to test a brief screening tool with a larger population, Allen et al. (2013) conducted a quantitative longitudinal study that tested a brief screening tool. A convenience sample from 6 ED sites, over 6 months were used. Demographic data included sex, race, age, and gender. Participants were asked 5-item questionnaire that included inquiry regarding hopelessness, depression, wanting to die, any suicidal thoughts, and prior history of suicide. The authors looked at the different factors for suicide screening such as instrument, age, training, frequency of screening, and treatment of suicidal patients in the ED (Allen et al., 2013), all of which are also incorporated into the SAFE-T teaching.

Results and Gaps in Research

Robst (2015) stated that there should be more emphasis on suicide assessment for patients presenting with medical diagnosis, and poisoning-related diagnosis. The JC safety standards should also be standardized, so that the implementation is the same for all providers. Limitations include inaccurate data related to coding, and inconsistency in the implementation of JC guideline. The focus was limited to Medicaid patients, so results cannot be generalized to all insurance (Robst, 2015).

In addition to assessment of medical diagnosis, Betz et al. (2013) showed that emphasis should not only be identification of suicidal patients. It should also

include services such as referral, counseling services or access to mental health care providers. Future implications showed there are multiple needs regarding education and skills training for identification of suicidal patients in the ED. Referral to other services such as counseling and access to mental health also needs to be addressed. Limitations include poor administrative support, inconsistency in training, limited generalizability of the results, and no verification of the self-reported answers on the survey (Betz et al., 2013).

To understand long term development of suicide in the population, Ting et al. (2012) showed the importance of knowing the epidemiological trends of suicide in the ED, as well as knowing what suicide-risk assessment tool is appropriate for the patient population. Limitations include inaccurate data, limited generalizability of the result, low screening rates and poor documentation (Ting et al., 2012).

Two studies focused on suicide assessment tools including Folse & Hahn (2009), and Allen et al. (2013). Folse & Hahn (2009) proved that the 4-item RSQ tool has a low level of reliability for all participants. The strengths include the tool's ease of use, and the ability to assess patient's emotional, psychological and mental health issues. The researchers showed that nurses need more education regarding assessment of mental health related issues in the ED triage. Limitations include the age and the size of the participants because it included adults and geriatric, but the RSQ was originally designed and trialed for the pediatric age.

The RSQ questions are sensitive and very personal in nature, so it is very unlikely that the participants would answer the questions in a consistent manner. The sample size included varied age representation, but only included African Americans and Caucasians, and this limits the generalizability of the results. The number of nurses participating was very limited, as well as the variation and unreliable documentation in the data. The 4-item questions should be asked for all patients in the ED, and should be included as part of the triage assessment (Folse & Hahn, 2009).

Allen et al. (2013) showed that prior history of suicide is the strongest predictor for suicide, passive suicide ideation was present at 79%, and depression was very common for all participants. Future implications show that all patients should be assessed for prior history of suicide, as this is the strongest predictor of suicide attempts. Depression also shows strong correlation, therefore must be addressed for all patients. Limitations include small sample size and small racial representation, limited generalizability and the instrument is not used widely and has not been validated yet. Allen et al. (2013) identified the same risk factors that are included in the SAFE-T teaching.

Summary

In summary, the literature review included information about suicide, epidemiological statistics, suicide risk factors, and the need for further studies to

test the reliability and validity of a suicide assessment tool. Although the risk factors for suicide are well documented (Perry et al., 2012), there is very limited information regarding the use of standardized suicide assessment tool because the risk factors are too many to list (Tran et al., 2014). In spite the attempts to put together these risk factors into score and create an algorithm to predict suicide (Hetta, Marlow, Sjostrom, & Waern, 2010; Jokinen, Nordstrom & Steffanson 2012), the results are poor and unreliable (Bolton, Sareen, & Spiwak, 2012; Ryan & Large, 2013). There are also very few of suicide prevention interventions (Chesin & Stanley, 2013). Researchers showed that ED presents many impediments such as inadequate research funding, limited experienced researchers, and the turbulent environment strained with patient overcrowding and restricted resources, which makes it a difficult place to conduct research (D'Onofrio et al., 2010).

The most common recommendation from all studies includes the need for physician and nursing education and development regarding risk assessment and interventions for suicidal patients (Chesin & Stanley, 2013; Coombs & Romm, 2007; Jayaram, 2014; JC, 2013; Patterson & Hughes, 2008; Reid, 2010). Researchers show overwhelming evidence that supports the education and training of clinical staff regarding suicide assessment and identification of risk factors. All of these recommendations are all included in the SAFE-T teaching to be conducted for the ED nurses.

CHAPTER 3: METHODOLOGY

Research Design and Method

According to the APAPGATPSB (2006), even though there are a number of suicide assessment tools available, they can only assist the clinician in predicting suicidality, and no such rating scale can substitute for a comprehensive and careful clinical evaluation of patients. Teaching will be conducted to all 30 ED nurses at a VA ED using SAFE-T. Permission for SAFE-T use was granted from the author Dr. Douglas Jacobs, M.D.

The SAFE-T tool was chosen because it is the only tool that was designed specifically for the ED triage area. The assessment must be concise and accurate because the triage area is the first entry to ED. The ED nurse must provide an efficient and quality care so that the next patient waiting to be seen can be given medical attention right away. Scrofine & Fitzsimons (2014) showed that longer wait times are associated to poor health outcomes, increased potential for adverse effects, and can contribute to increase length of stay.

The SAFE-T also incorporates evidence-based suicide assessment for the ED triage, and includes specific risk factors inherent in the veteran population such as access to weapons, mental health issues, traumatic brain injury, substance abuse and many other risk factors (Neyback, 2008). It also includes interventions and nursing plan of care for low, moderate and high-risk suicidal patients commonly seen at this VA ED, and more importantly, SAFE-T satisfies most of the elements required by JC (2015).

This project involved a two-step quantitative descriptive post-intervention design study. The first step was to teach the nurses about SAFE-T tool (see Appendix A), which included: 1.) identification of suicide risk factors, 2.) identification of protective factors, 3.) conducting a suicide inquiry, 4.) determination of risk level and the appropriate intervention, 5.) documentation.

The second step involved completing the Post Testing Evaluation Tool (PTET), which evaluated the knowledge learned by the nurses regarding SAFE-T tool. The participants included a convenience sample of 30 VA ED nurses. The teaching will took 3 hours to complete per staff, and was conducted over 3 weeks. The teaching was conducted by the primary investigator, and the PowerPoint teaching handout were included (see Appendix C), as well as the SAFE-T tool (see Appendix A). The location will be at the ED Conference Room at a VA Medical Center. The PTET (see Appendix B) was given to the nurses after the teaching is completed. It took approximately 5-10 minutes to complete the evaluation form.

Potential Benefits

The potential benefits of providing nurses with teaching regarding assessment, care and management of suicidal patient include satisfying the JC National Patient Safety Goal #15, which mandates that the organization identify safety risks present in its patient population. This include the: 1.) Assessment of variables that may increase or decrease risk of suicide, 2.) Meeting the patient's safety needs, and setting for treatments are addressed, 3.) The organization

provides information to individuals and their family members for crisis situations (NPSG, 2015). In addition, it will increase safety in the ED because it will provide consistency, guidance and structure for the nurses managing this high-risk patient population.

Subjects

Consent

The IRB was approved at the VA ED facility, as well as at Fresno State School of Nursing in 2015. Voluntary consent form was provided prior to the teaching session. The consent form included the problem identified, goal, timeline, date, location, and details of the study. It also stated that participation is voluntary, and they can choose to decline without any penalty or loss of benefit (see Appendix D).

Subject Characteristics. The participants included a convenience sample of 30 VA ED nurses. The nurses consisted of both male and female, ranging from 29 to 65 years old. Years of nursing experience ranged from 1-35 years of ED nursing. Education varied from Associate Degree in Nursing, Bachelors and Masters prepared nursing degrees, and all of the nurses are English proficient. There was no use of special groups or subjects whose capacity to provide informed consent may be absent or limited.

Setting

Teaching was conducted in the ED Conference Room from February 1-29, and took 3 hours per educational session with staff. The staff was provided a clean and quiet environment that is conducive for learning.

Potential Risks and Management

Identification of Risks. The subject's participation was voluntary, and they were informed that they can withdraw anytime. There were very minimal psychological, social, physical, economic and legal risks associated with participation in this quality improvement project.

Psychological and Social Risks. There was very minimal social or psychological risk for the participants. The participants were informed that in the event that personal issues or problems arise, they can be referred to Employee Assistance Program (EAP). The EAP is a toll-free number that provides 24/7 support with counselors, crisis management, educational information, and this is a free and confidential service for employees.

Physical Risks. There was no anticipated physical risk identified related to this project. The subjects were provided a safe area where the education took place. There was no physical pain, discomfort or injury that resulted from participating in the SAFE-T teaching.

Economic Risks. There was very minimal economic risk related to the staffing for the ED. The teaching time took three hours, and it was scheduled

during non-peak hours in the ED. The teaching was done during regular working hours, so there was no additional cost for the unit.

Legal Risks. There was minimal risk related to confidentiality and failure to protect the subject's identity. In order to protect the participant's privacy, the post-teaching evaluation tool was kept confidential. The evaluation forms did not include the name of any nursing staff involved in the project, and was kept in a locked file. The primary investigator was the only person who had access to the PTET.

Data Monitoring. Evaluation forms were kept in a locked environment, and the forms were destroyed after the study was completed. The evaluation forms did not include any participant identifier, and all the responses were kept anonymous to protect the participant's privacy.

Costs

The subjects of this study did not incur any costs as a result of their participation, and the Emergency Department did not incur additional cost as well. The 3 hours teaching time counted towards continuing education, and this was covered within the participant's educational benefits.

Compensation and Incentives

There was no compensation or incentive offered for anyone involved in this research project. The participation of all subjects was voluntary, and there was no compensation of any kind involved.

Post-Teaching Evaluation Tool

At the end of the teaching session, each participant was given a PTET (see Appendix B) to fill out. The PTET included demographic data such as age, ethnicity, level of education, marital status, employment status, total nursing years of experience and total years worked in the ED. It also included eleven questions that evaluated whether the content of the teaching improved the identification of risk and protective factors that can be developed, and increased overall knowledge regarding managing suicidal patients in the ED (see Appendix B).

Analyzing Data

The results of the PTET were analyzed using descriptive statistics using Statistical Package for the Social Science (SPSS). The responses included categorical or nominal data such as age, categorical data such as gender, ordinal data such as years of nursing experience, education, and knowledge in care of suicidal patients. The discussion of the sample demographics, reliability analysis, descriptive statistics, data screening, research question, and conclusions were included.

Gaps in Literature

The setting of this project was different from other research because the SAFE-T tool was recommended for use in triage for the general population, but literature has not shown it implemented in the veteran population where majority of the patient population have mental health issues. Educating the nurses about SAFE-T supported the goal of this DNP project because it included the identification and assessment of many risk factors

associated with suicide in the veteran ED population.

Study Step Sequence

1. Consent was acquired for all ED nurse participants. The consent included information such as the problem identified, and the goal of the quality improvement project in the ED.
2. Teaching was conducted in the ED Conference Room from Feb 1-29, and the teaching took 3 hours to complete per staff.
3. PTET was given to all participants after the teaching was completed, and it took approximately 10-15 minutes to complete.
4. Data collected were analyzed using SPSS.

CHAPTER 4: RESULTS

Introduction

The purpose of this study was to determine whether a teaching intervention improved the knowledge of nurses in the assessment, care and management of suicidal patients admitted to the emergency ED. A benefit of providing nurses with teaching regarding assessment, care and management of suicidal patients include satisfying the JC NPSG #15, which mandates that the organization identify safety risks present in its patient population (JC, 2013). More importantly, educating the nurses will increase safety in the ED because it will provide

consistency, guidance and structure for the nurses managing this high-risk patient population.

The teaching intervention was conducted with 30 ED nurses using Suicide SAFE-T. Permission for SAFE-T use was granted from the author Dr. Douglas Jacobs, MD. Each educational session lasted for 3 hours per staff, and was conducted from February 1-29. After the teaching intervention, the ED nurses were given a Post-Teaching Evaluation Tool (PTET) to determine to what extent their knowledge improved as a result of the intervention. Statistical analysis was conducted using the Statistical Package for Social Scientists (SPSS 8.0 for Microsoft Windows). Research hypotheses were tested at the alpha level of .05.

Chapter four is organized by a discussion of the sample demographics, reliability analysis, descriptive statistics and data screening, research question, and conclusions. The following provides a discussion of the sample demographics

Sample Demographics

The sample consisted of 30 nurses; 56.7% ($n = 17$) were 25 to 44 years of age; and the remaining 43.3% ($n = 13$) were 45 to 74 years of age. Age group is presented (see Table 1).

Table 1

Age Group of Registered Nurses

Age Group	<i>n</i>	<i>%</i>	<i>Cumulative %</i>
25-34	7	23.3	23.3
35-44	10	33.3	56.7

			38
45-54	7	23.3	80.0
55-64	5	16.7	96.7
65-74	1	3.3	100.0
Total	30	100.0	

Ethnicity, 56.7% ($n = 17$) were white or Caucasian; 40% ($n = 12$) were Asians or Pacific Islanders; and 3.3% ($n = 1$) were Native Americans or American Indians. Regarding highest level of nursing education, 13.3% ($n = 4$) had associate's degrees; 83.3% ($n = 25$) had bachelor's degrees; and 3.3% ($n = 1$) had master's degrees. Regarding marital status, 76.7% ($n = 23$) were married or in domestic partnerships; whereas 23.3% ($n = 7$) were single, never married. All (100%, $n = 30$) nurses were employed on a full-time status.

Participants had varying years of nursing experience. For example, one-third (33.3%, $n = 10$) of nurses had less than 10 years of experience; 30% ($n = 9$) had 15-19 years; and 30% ($n = 9$) had more than 20 years of experience. Years of nursing experience are presented (see Table 2).

Table 2
Years of Nursing Experience

Experience	<i>n</i>	%	<i>Cumulative %</i>
1-4 years	5	16.7	16.7
5-9 years	5	16.7	33.3
10-14 years	2	6.7	40.0
15-19 years	9	30.0	70.0
20-24 years	4	13.3	83.3
25-29 years	2	6.7	90.0
35 years or more	3	10.0	100.0
Total	30	100.0	

Regarding emergency department experience, 36.7% ($n = 11$) had 1 to 9 years of experience; a third (33.3%, $n = 10$) had 15-19 years of experience; and 23.3% ($n = 7$) had 20 or more years of experience. Emergency department experience is presented (see Table 3).

Table 3
Emergency Department Years of Experience

Experience	<i>n</i>	%	<i>Cumulative %</i>
1-4 years	5	16.7	16.7
5-9 years	6	20.0	36.7
10-14 years	2	6.7	43.3
15-19 years	10	33.3	76.7
20-24 years	4	13.3	90.0
35 years or more	3	10.0	100.0
Total	30	100.0	

Reliability Analysis

The reliability of the PTET was tested with Cronbach's alpha. For knowledge improvement, $\alpha = .62$. The minimum acceptable reliability is .70. An inter-item analysis was conducted. Based on the analysis, the reliability could not be improved substantially by removing any of the items. The item total statistics are presented (see Table 4).

Table 4

Inter-Item Analysis

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. Did the care plan teaching increase knowledge in identifying the different risk factors associated with suicide?	45.10	6.60	.444	.552
2. Did the care plan teaching increase knowledge in identifying two protective factors that may, or may not offset acute risk?	45.03	7.39	.224	.605
3. Did the care plan teaching increase knowledge in identifying the three different suicide risk levels and their clinical presentation?	44.97	6.89	.439	.559

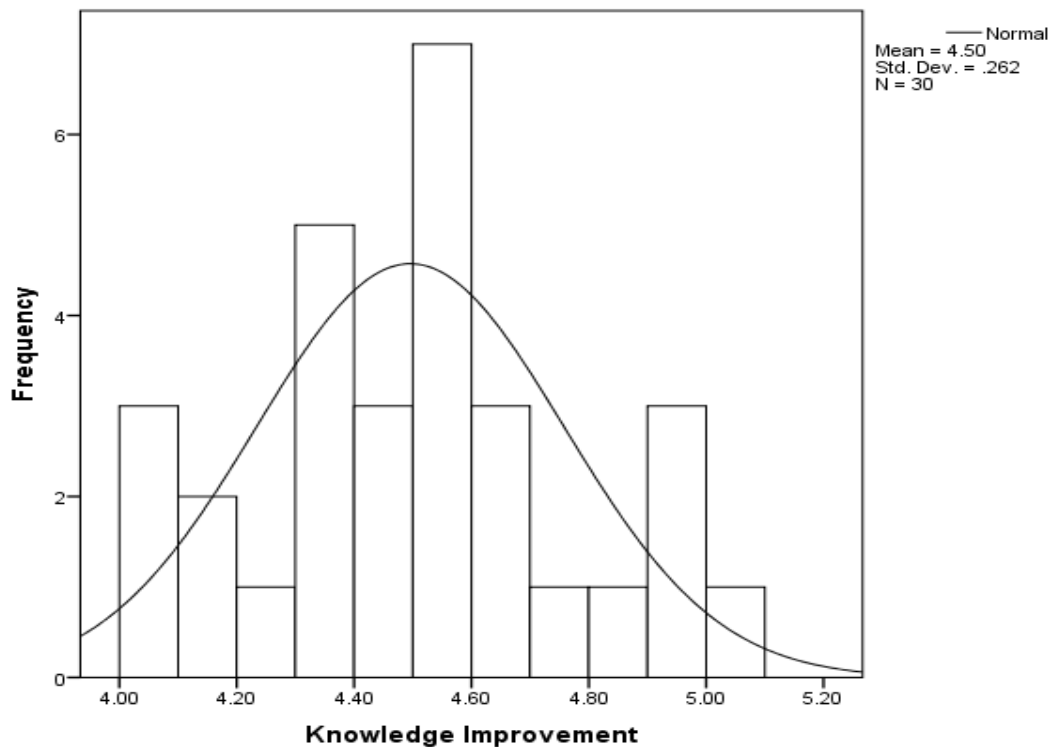
4. Did the care plan teaching increase knowledge in identifying specific questions related to suicidal thoughts, plans, behavior and intent?	44.76	8.19	.041	.634
5. Did the care plan teaching increase knowledge regarding possible interventions for high-risk suicidal patients?	44.79	7.60	.201	.608
6. Did the care plan teaching increase knowledge regarding possible interventions for moderate risk suicidal patients?	45.07	7.42	.220	.606
7. Did the care plan teaching increase knowledge regarding possible interventions for low-risk suicidal patients?	45.07	6.28	.432	.552
8. Did the care plan teaching increase knowledge regarding what information should be included in the patient teaching?	44.93	7.07	.317	.584
9. Did the care plan teaching increase knowledge in identifying critical times when additional documentation is needed for suicide risk assessment?	44.86	7.55	.262	.597
10. Did the care plan teaching increase knowledge regarding information that should be included in the nursing documentation?	44.93	7.85	.150	.617

11. Overall, did the teaching increase knowledge regarding assessment and care of suicidal patients in the ED?	44.62	7.74	.272	.597
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Descriptive Statistics and Data Screening

Knowledge improvement was computed by calculating the mean responses. Values could range from 1 (disagree) to 5 (strongly agree) with higher values indicating higher agreement that the teaching intervention resulted in knowledge improvement. For the sample of nurses, scores ranged from 4 to 5 ($M = 4.50$, $SD = 0.26$). Data were screened for normality with skewness and kurtosis statistics. In SPSS, distributions are considered to be normal if their absolute values are less than two times their standard errors. The skewness = 0 ($SE = .43$) and the kurtosis = -0.28 ($SE = 0.83$). Therefore, the distribution of scores was within normal limits (see Figure 1).

Figure 1: Histogram for Knowledge Improvement



Research Question

One research question was formulated for investigation. It was as follows:

Would the teaching and introduction of an evidence based triage tool increase the nurses' knowledge regarding assessment and management of suicidal patients in the Emergency Department? The research question was answered with descriptive statistics. Frequency distributions were generated for each item on the PTET and their associated responses. As indicated in Table 5, no nurses disagreed that the teaching intervention increased knowledge. Five or less were neutral in their

feedback depending on the question, but the majority of nurses agreed or strongly agreed that the training module improved knowledge.

Table 5

Summary of Responses

Question	Disagree Count	Strongly Disagree Count	Neither Agree or Disagree Count	Agree Count	Strongly Agree Count
1. Did the care plan teaching increase knowledge in identifying the different risk factors associated with suicide?	0	0	3	14	13
2. Did the care plan teaching increase knowledge in identifying two protective factors that may, or may not offset acute risk?	0	0	2	14	14
3. Did the care plan teaching increase knowledge in identifying the three different suicide risk levels and their clinical presentation?	0	0	1	14	15
4. Did the care plan teaching increase knowledge in identifying specific questions related to suicidal thoughts, plans, behavior and intent?	0	0	0	11	19
5. Did the care plan teaching increase knowledge regarding possible interventions for high-risk suicidal patients?	0	0	1	9	20

6. Did the care plan teaching increase knowledge regarding possible interventions for moderate risk suicidal patients?	0	0	2	16	12
7. Did the care plan teaching increase knowledge regarding possible interventions for low-risk suicidal patients?	0	0	5	10	15
8. Did the care plan teaching increase knowledge regarding what information should be included in the patient teaching?	0	0	2	12	16
9. Did the care plan teaching increase knowledge in identifying critical times when additional documentation is needed for suicide risk assessment?	0	0	0	13	16
10. Did the care plan teaching increase knowledge regarding information that should be included in the nursing documentation?	0	0	0	15	15
11. Overall, did the teaching increase knowledge regarding assessment and care of suicidal patients in the ED?	0	0	0	6	24

As previously mentioned, knowledge improvement was also computed by calculating the mean responses. Values could range from 1 (disagree) to 5 (strongly agree) with higher values indicating higher agreement that the teaching intervention resulted in knowledge improvement. For the sample of nurses, scores ranged from 4 to 5 ($M = 4.50$, $SD = 0.26$). Four represented “agree” and 5

represented “strongly agree.” Therefore, nurses agreed and strongly agreed that the training module improved knowledge.

Ancillary Analyses

Ancillary analyses were conducted in order to determine what, if any additional factors were associated with knowledge improvement besides the training module. Specifically, years of nursing experience, years of emergency department experience, and nurses’ ages were examined. The Pearson Product Moment correlation (Pearson r) was used to investigate the bivariate relationships. A correlation matrix is presented (see Table 6).

Table 6

Correlation Matrix

Variable	Knowledge Improvement	Years of Nursing Experience	Emergency Department Experience	Age
Knowledge Improvement	—	.572**	.449*	.446*
Years of Nursing Experience		—	.841**	.819***
Emergency Department Experience			—	.659***
Age				—

Note. *** $p < .001$, ** $p < .01$, * $p < .05$; $N = 30$. Although some variables were on an ordinal scale of measurement, the Spearman’s who would have yielded similar results.

Years of nursing experience was significantly and positively related to knowledge improvement, $r(28) = .57, p = .001$, two-tailed. As years of nursing

experience increased, there was a corresponding increase in knowledge improvement. Emergency department experience was significantly and positively related to knowledge improvement, $r(28) = .45, p = .013$, two-tailed. As emergency department experience increased, there was a corresponding increase in knowledge improvement. Age was significantly and positively related to knowledge improvement, $r(28) = .45, p = .013$, two-tailed. As age increased, there was a corresponding increase in knowledge improvement. A scatterplot matrix is presented (see Figure 2).

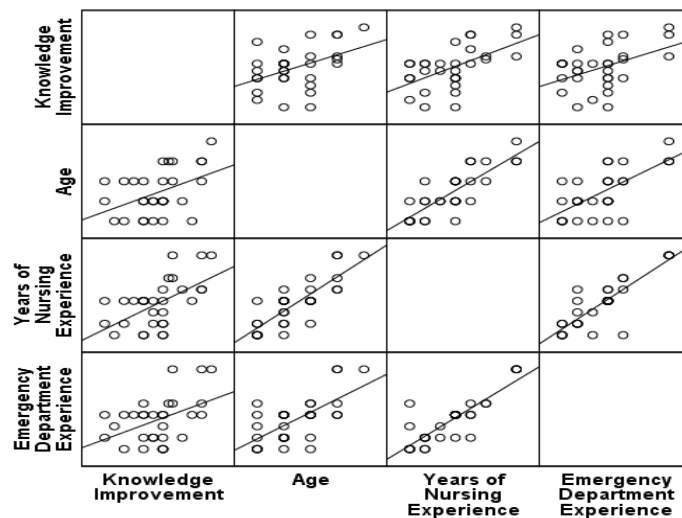


Figure 2. Scatterplot Matrix of Knowledge Improvement and Related Variables

Conclusions

The research question was formulated for investigation. It was determined that nurses “agreed” and “strongly agreed” that the training module improved knowledge. Additional analyses were conducted. Specifically, years of nursing experience, years of emergency department experience, and nurses’ ages were

examined in order to determine if they were also associated with knowledge improvement. Years of nursing experience was significantly and positively related to knowledge improvement. Emergency department experience was significantly and positively related to knowledge improvement. Age was significantly and positively related to knowledge improvement.

CHAPTER 5: CONCLUSION

Discussion

Suicide remains to be one of the top 10 reasons for death in the country, and in 2013, there are approximately 113 suicides daily, or one every 13 minutes (CDC, 2013). The ED visit provides an opportunity to initiate the suicide assessment and screening when the patient presents there for medical care. The ED triage is where the first nurse-patient interaction happens, therefore the triage nurse plays a critical role in the assessment of all patients seen in the ED. It is imperative that the triage nurse is educated regarding suicidal assessment, identifying risk factors, knowing the risk levels and appropriate interventions, exploring thought process, and implementing care of those with positive suicide screens in the ED (Jacobs, 2007). It is imperative that the nurses are provided proper education and training because inconsistency in suicide assessment can lead to delay in care, possible adverse events such as a suicidal attempt in a hospital, which is considered a “never event.” (Centers for Medicare and Medicaid Services, 2006).

This quality improvement DNP project provided education to registered nurses regarding assessment, care and management of suicidal patients using SAFE-T triage tool. It was hypothesized that the implementation of SAFE-T teaching would increase their overall knowledge in assessing and managing suicidal patients in the ED, and this was supported by the results of the investigation. The results showed that nurses that the training module improved knowledge. There were also strong correlations when additional analyses were conducted. These include years of nursing experience, years of emergency department experience, and nurses' ages were examined in order to determine if they were also associated with knowledge improvement. Years of nursing experience was significantly and positively related to knowledge improvement. Emergency department experience was significantly and positively related to knowledge improvement. Age was significantly and positively related to knowledge improvement.

Limitations

Limitations for this study included the lack of pre-test and small sample size (n=30 nurses). The sample size was limited to convenience sample of full-time emergency department nurses at the VA ED that were mostly females, and were not ethnically diverse. The VA ED where the project was conducted may not have the same patient population compared to other EDs, and this can minimize the generalizability of the results.

Implications for Nursing Practice

This DNP quality improvement project originated as a result of an observed need to provide teaching and education to ED nurses in order to improve the triage and assessment of suicidal patients, and more importantly, to comply with NPSG #15. Researchers showed that there is a need for nursing education and training regarding suicide assessment, the use of improved screening, and implementation of safety measures (Harowitz et al., 2013; Jayaram, 2014; Patterson & Hughes, 2008; Reid, 2010) also identified the absence of appropriate patient assessment was the primary reason for 80% of hospital-related suicides.

This project is unique because this VA sees a lot of suicidal patients, but lacks a formal and standardized suicide assessment, education and training for the nurses in the ED. Teaching the SAFE-T triage tool is the first evidence-based triage suicide tool that has been introduced to the this VA ED nurses, and this is an important contribution to improve safety and quality of the nursing practice. The overall cost to educate the nurses is very minimal, and it took a very short time to achieve this goal. Suggestions for future research include continued training for all of the nursing staff in the ED, including part-time and intermittent per diems. Obtaining a pre-test would also help with accurate data collection and analysis. It would also be helpful to include barriers to learning that are identified by participants.

Conclusion

In conclusion, this quality improvement DNP project supports evidence-based research regarding nursing education for assessment, care and management of suicidal patients in the ED. The U.S. Preventive Services Task Force (USPSTF) (2004) reported that there is more research to be done regarding universal screening for suicide, and that there is limited evidence on the accuracy of screening tools to help identify suicidal risk. However, many organizations are implementing policies to comply with NPSG #15 (USPSTF, 2004). The introduction of the SAFE-T triage tool satisfies the NPSG #15 by providing a structure and formal education addressing the suicidal-risk population.

The results showed that SAFE-T triage tool reflected the nurses' response that they "agreed" and "strongly agreed" that the training module improved overall knowledge. It is the goal, that by educating the nurses regarding SAFE-T triage tool, the patients presenting to ED with suicidal ideation can be accurately identified, a safety plan can be implemented and the treatment plans can be started as soon as possible without any delays. The SAFE-T triage tool supports the strong need to increase nursing level of awareness, knowledge and competence in taking care of suicidal patients.

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APPENDIX A: SUICIDE ASSESSMENT FIVE-STEP
EVALUATION AND TRIAGE (SAFE-T)

APPENDIX A: SUICIDE ASSESSMENT FIVE-STEP EVALUATION AND TRIAGE (SAFE-T)


RESOURCES

- Download this card and additional resources at <http://www.sprc.org>
- Resource for implementing The Joint Commission 2007 Patient Safety Goals on Suicide <http://www.sprc.org/library/jcsafetygoals.pdf>
- SAFE-T drew upon the American Psychiatric Association Practice Guidelines for the Assessment and Treatment of Patients with Suicidal Behaviors http://www.psychiatryonline.com/pracGuide/pracGuideTopic_14.aspx
- Practice Parameter for the Assessment and Treatment of Children and Adolescents with Suicidal Behavior. *Journal of the American Academy of Child and Adolescent Psychiatry*, 2001, 40 (7 Supplement): 24s-51s

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National Suicide Prevention Lifeline
1-800-273-TALK (8255)



http://www.sprc.org

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Substance Abuse and Mental Health Services Administration
www.samhsa.gov

SAFE-T

Suicide Assessment Five-step Evaluation and Triage

1
IDENTIFY RISK FACTORS
Note those that can be modified to reduce risk

2
IDENTIFY PROTECTIVE FACTORS
Note those that can be enhanced

3
CONDUCT SUICIDE INQUIRY
Suicidal thoughts, plans, behavior, and intent

4
DETERMINE RISK LEVEL/INTERVENTION
Determine risk. Choose appropriate intervention to address and reduce risk

5
DOCUMENT
Assessment of risk, rationale, intervention, and follow-up

Suicide assessments should be conducted at first contact, with any subsequent suicidal behavior, increased ideation, or pertinent clinical change; for inpatients, prior to increasing privileges and at discharge.

1. RISK FACTORS

- Suicidal behavior:** history of prior suicide attempts, aborted suicide attempts, or self-injurious behavior
- Current/past psychiatric disorders:** especially mood disorders, psychotic disorders, alcohol/substance abuse, ADHD, TR, PTSD, Cluster B personality disorders, conduct disorders (antisocial behavior, aggression, impulsivity)
Co-morbidity and recent onset of illness increase risk
- Key symptoms:** anhedonia, impulsivity, hopelessness, anxiety/panic, global insomnia, command hallucinations
- Family history:** of suicide, attempts, or Axis I psychiatric disorders requiring hospitalization
- Precipitants/Stressors/Interpersonal:** triggering events leading to humiliation, shame, or despair (e.g. loss of relationship, financial or health status—real or anticipated). Ongoing medical illness (esp. CNS disorders, pain). Intoxication. Family turmoil/chaos. History of physical or sexual abuse. Social isolation
- Change in treatment:** discharge from psychiatric hospital, provider or treatment change
- Access to firearms**

2. PROTECTIVE FACTORS

Protective factors, even if present, may not counteract significant acute risk

- Internal:** ability to cope with stress, religious beliefs, frustration tolerance
- External:** responsibility to children or beloved pets, positive therapeutic relationships, social supports

3. SUICIDE INQUIRY

Specific questioning about thoughts, plans, behaviors, intent

- Ideation:** frequency, intensity, duration—in last 48 hours, past month, and worst ever
- Plan:** timing, location, lethality, availability, preparatory acts
- Behaviors:** past attempts, aborted attempts, rehearsals (tying noose, loading gun) vs. non-suicidal self-injurious actions
- Intent:** extent to which the patient (1) expects to carry out the plan and (2) believes the plan/act to be lethal vs. self-injurious.
Explore ambivalence: reasons to die vs. reasons to live
- For Youths: ask parent/guardian about evidence of suicidal thoughts, plans, or behaviors, and changes in mood, behaviors, or disposition*
- Homicide inquiry: when indicated, esp. in character disordered or paranoid males dealing with loss or humiliation. Inquire in four areas listed above*

4. RISK LEVEL/INTERVENTION

- Assessment of risk level** is based on clinical judgment, after completing steps 1-3
- Reassess** as patient or environmental circumstances change

RISK LEVEL	RISK/PROTECTIVE FACTOR	SUICIDALITY	POSSIBLE INTERVENTIONS
High	Psychiatric diagnoses with severe symptoms or acute precipitating event; protective factors not relevant	Potentially lethal suicide attempt or persistent ideation with strong intent or suicide rehearsal	Admission generally indicated unless a significant change reduces risk. Suicide precautions
Moderate	Multiple risk factors, few protective factors	Suicidal ideation with plan, but no intent or behavior	Admission may be necessary depending on risk factors. Develop crisis plan. Give emergency/crisis numbers
Low	Modifiable risk factors, strong protective factors	Thoughts of death, no plan, intent, or behavior	Outpatient referral, symptom reduction. Give emergency/crisis numbers

(This chart is intended to represent a range of risk levels and interventions, not actual determinations.)

5. DOCUMENT

Risk level and rationale; treatment plan to address/reduce current risk (e.g., medication, setting, psychotherapy, E.C.T.); contact with significant others; consultation; firearms instructions, if relevant; follow-up plan. For youths, treatment plan should include roles for parent/guardian.

APPENDIX B: POST-TEACHING EVALUATION FORM

APPENDIX B: POST TEACHING EVALUATION FROM**Evaluation of Knowledge Improvement Post-Teaching Implementation of Suicide Assessment
Five-Step Evaluation and Triage****(SAFE-T) Teaching in the Emergency Department:****DEMOGRAPHIC DATA:**

What is your age?

- 22-24 years old
- 25-34 years old
- 35-44 years old
- 45-54 years old
- 55-64 years old
- 65-74 years old
- 75 years or older

What is your ethnicity?

- White or Caucasian
- Hispanic or Latino
- Black or African American
- Native American or American Indian
- Asian or Pacific Islander
- Other- please specify

What is your highest level of education?

- Associate's Degree
- Bachelor's Degree
- Master's Degree
- Doctoral Degree

What is your marital status?

- Single, never married
- Married or domestic partnership
- Widowed
- Divorced
- Separated

What is your employment status?

- Full time
- Part-time
- Intermittent/Per diem

How many years of nursing experience do you have?

- 1-4 years
- 5-9 years
- 15-19 years

- 20-24 years
- 25-29 years
- 30-34 years
- 35 years or more

How many years have you worked in the Emergency Department?

- 1-4 years
- 5-9 years
- 15-19 years
- 20-24 years
- 25-29 years
- 30-34 years
- 35 years or more

**Evaluation of Knowledge Improvement Post-Teaching Implementation
of Suicide Assessment Five-Step Evaluation and Triage
(SAFE-T) Teaching in the Emergency Department:**

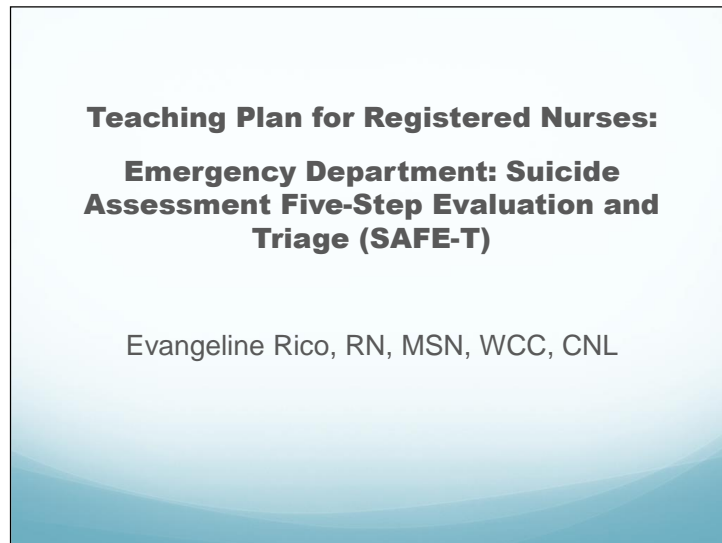
Rating Scale	Disagree 1	Strongly Disagree 2	Neither Agree or Disagree	Agree 4	Strongly Agree 5
1. Did the care plan teaching increase knowledge in identifying the different risk factors associated with suicide?					
2. Did the care plan teaching increase knowledge in identifying two protective factors that may, or may not offset acute risk?					
3. Did the care plan teaching increase knowledge in identifying the three different suicide risk levels and their clinical presentation?					
4. Did the care plan teaching increase knowledge in identifying specific questions related to suicidal thoughts, plans, behavior and intent?					
5. Did the care plan teaching increase knowledge regarding possible interventions for high-risk suicidal patients?					
6. Did the care plan teaching increase knowledge regarding					

possible interventions for moderate risk suicidal patients?					
7. Did the care plan teaching increase knowledge regarding possible interventions for low-risk suicidal patients?					
8. Did the care plan teaching increase knowledge regarding what information should be included in the patient teaching?					
9. Did the care plan teaching increase knowledge in identifying critical times when additional documentation is needed for suicide risk assessment?					
10. Did the care plan teaching increase knowledge regarding information that should be included in the nursing documentation?					
11. Overall, did the teaching increase knowledge regarding assessment and care of suicidal patients in the ED?					

APPENDIX C: EDUCATION MATERIALS

APPENDIX C: EDUCATION MATERIALS

Slide 1



Good morning everyone, and thank you for agreeing to participate in this project. My name is Evangeline Rico, and I am pursuing a doctorate in nursing practice at the California State University Fresno. The goal of this quality improvement project is to educate the nurses about a Nursing Care Plan regarding the Assessment and Management of Suicidal patients in the Emergency Department. The teaching will include information from Suicide Assessment Five-Step Evaluation and Triage (SAFE-T), which is developed as a collaboration between Dr. Douglas Jacobs, Screening for Mental Health Inc., Suicide Prevention Resource Center and Substance Abuse and Mental Health Services Administration.

Once the teaching is completed, a questionnaire will be passed out to evaluate if the teaching increased the understanding of nurses regarding suicide assessment and management.

The evaluation would include:

- 1.) identification of the different risk factors associated with suicide
- 2.) identification of internal and external protective factors that may, or may not offset acute risk.
- 3.) inquiry or questions related to suicidal thoughts, plans, behavior and intent.

4.) nursing assessments for risk level, and discussion of possible interventions for low, moderate and high risk suicidal patients.

Slide 2

Background:

- According to the Center for Disease Control and Prevention (2007) suicide was the 11th leading cause of death for all ages, and that there are approximately 100 to 200 attempts for every completed suicide (CDC, 2007). The Joint Commission (JC) Sentinel Event Alert (2010) reported that suicide is one of the most reported sentinel event, and 8% of suicide attempts occur in the Emergency Department (JC, 2010). As a result, the JC created National Patient Safety Goal (NPSG) 15.01.01 in 2010, that states all patients will be assessed to identify risk for suicidal ideation (SI) (JC, 2010).

Slide 3

Background: cont.

- The Department of Veterans Affairs examined suicide in the military veterans, and it showed that an average of 18 veterans committed suicide on a daily basis (Huggins, 2011). Veterans presenting with higher suicide rate is associated with availability and knowledge in use of firearms, psychiatric conditions such as depression, post-traumatic stress disorder (PTSD) (Desai, Dausey, & Rosenbeck, 2008), and traumatic brain injury (Warden, 2006). Among all of these, PTSD is the most common mental disorder resulting from military combat, and is caused by trauma, life threatening events, natural disaster, terrorist attack, accidents or personal assaults such as rape (Huggins, 2011).

Slide 4

Problem:

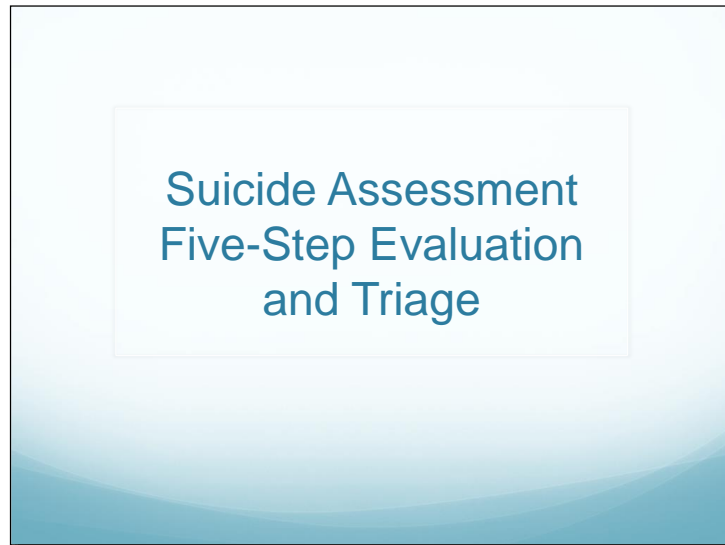
- The San Francisco Veterans Affairs Medical Center Emergency Department (SFVAMC ED) triages approximately seventy to one hundred patients per day. These include mental health patients with depression, mood disorder, substance abuse, psychiatric problems, PTSD, or other mental health issues that presents with suicidal ideation (SI). Currently, per Joint Commission requirement, hospital policy, all patients seen in the ED are triaged by the nurse, and are assessed for SI. However, it is problematic because there is no standardized evidence-based triage tool used to in triage to assess patients, resulting in high risk suicidal patients not being correctly identified.
- In addition, once the patient is identified as suicidal, there is no standardized clinical pathway or plan of care for these high-risk patients.

Slide 5

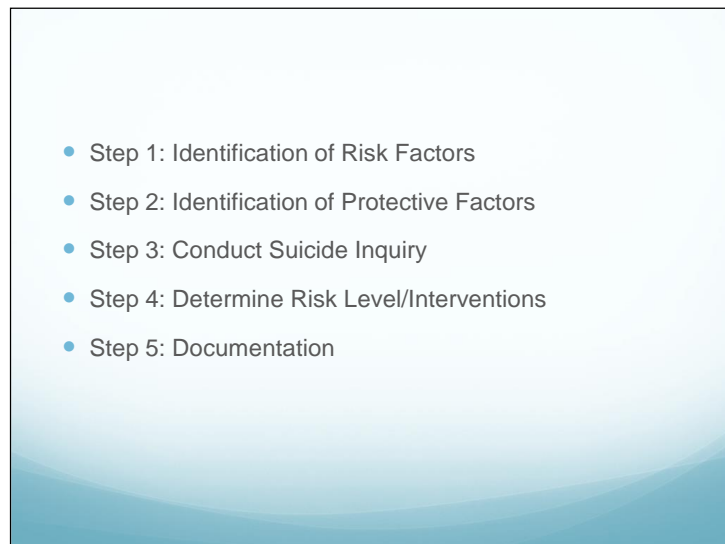
Outcomes

- The participants will be able to identify the different risk factors associated with suicide.
- The participants will be able to identify internal and external protective factors that may, or may not offset acute risk.
- The participant will inquire about questions related to suicidal thoughts, plans, behavior and intent.
- The participant will assess for risk level, and discuss possible interventions.

Slide 6



Slide 7



Slide 8

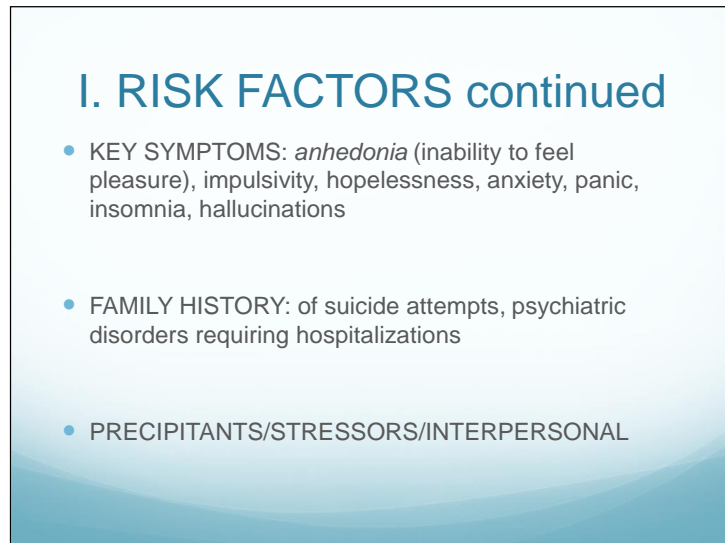
- All patients seen at the San Francisco Veterans Affairs Medical Center must be assessed by the triage nurse for suicidal ideation.
- Suicide assessment should be done at the first contact with the patient.

Slide 9

I. RISK FACTORS

- **SUICIDE BEHAVIOR:** history of prior suicide, aborted suicide attempts, or history of any self-injury
- **CURRENT/PAST PSYCHIATRIC DISORDERS:** especially mood disorders, psychotic disorders, alcohol/substance abuse, ADHD, TBI, PTSD, conduct disorders (antisocial, aggression, impulsivity)

Slide 10

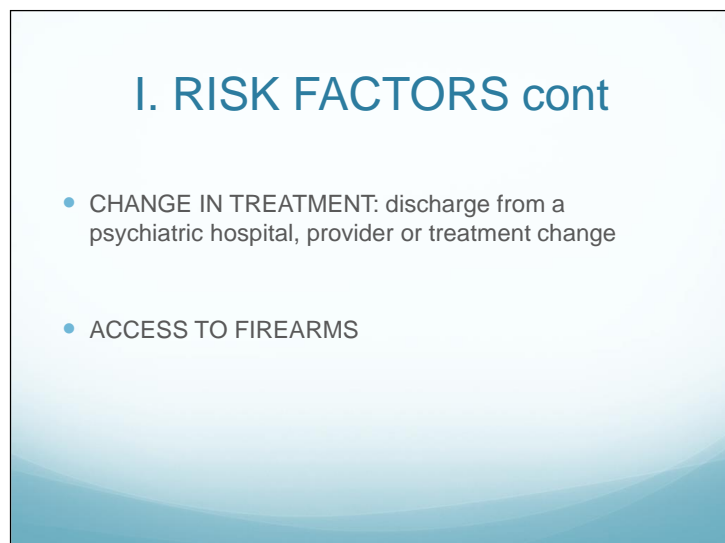
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I. RISK FACTORS continued

- KEY SYMPTOMS: *anhedonia* (inability to feel pleasure), impulsivity, hopelessness, anxiety, panic, insomnia, hallucinations
- FAMILY HISTORY: of suicide attempts, psychiatric disorders requiring hospitalizations
- PRECIPITANTS/STRESSORS/INTERPERSONAL

Precipitants/Stressors/Interpersonal: Financial or health status, real or anticipated, triggering events, humiliation shame or despair, ongoing medical issues (i.e. CNS disorders, pain). Intoxication, family

Slide 11

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I. RISK FACTORS cont

- CHANGE IN TREATMENT: discharge from a psychiatric hospital, provider or treatment change
- ACCESS TO FIREARMS

Slide 12

II. PROTECTIVE FACTORS

- INTERNAL :ability to cope with stress, religious beliefs, frustration tolerance
- EXTERNAL: responsibility to children or pets, positive therapeutic relationships, social support

Slide 13

III. SUICIDE INQUIRY

- IDEATIO: frequency, intensity, duration
- PLAN: timing, location, lethality, access to weapon, preparation
- BEHAVIORS: past/aborted attempts, rehearsals versus self-injuries, explore ambivalence
- INTENT: 1.) extent to carry out the plan, 2.) lethal plan vs self-injury

III. SUICIDE INQUIRY- specific questioning about thoughts, plans, behaviors and intent

Ideation: frequency, intensity, duration

Plan: Behaviors: rehearsals (loading a gun, tying noose),

Intent: explore reasons to die versus reasons to live

Slide 14

IV. RISK LEVEL/INTERVENTION

- ASSESSMENT OF RISK: risk level is based on clinical judgment
 - High
 - Moderate
 - Low
- REASSESS as patient or environmental circumstance change

Slide 15

IV. RISK LEVEL/INTERVENTION cont.			
RISK LEVEL	PROTECTIVE FACTOR	SUICIDALITY	POSSIBLE INTERVENTIONS
HIGH	<ul style="list-style-type: none"> ✓ Psychiatric Diagnosis ✓ severe symptoms ✓ Acute precipitating event ✓ Protective factors not relevant 	<ul style="list-style-type: none"> • Potentially lethal suicide attempt • Persistent ideation • Strong intent • Suicidal rehearsal 	<ul style="list-style-type: none"> • Admission generally indicated • Suicide precaution
MODERATE	<ul style="list-style-type: none"> ✓ Multiple risk factors ✓ Few protective factors 	<ul style="list-style-type: none"> • Suicidal ideation with plan, but NO intent or behavior 	<ul style="list-style-type: none"> • Admission depending on risk factors. • Develop crisis plan. • Give emergency crisis number.
LOW	<ul style="list-style-type: none"> ✓ Modifiable risk factors ✓ Strong protective factors 	<ul style="list-style-type: none"> • Thoughts of death, NO plan intent or behavior 	<ul style="list-style-type: none"> • Outpatient referral • Symptoms reduction. • Give emergency crisis number.

Slide 16

Expected Outcome:

- The use of an evidence based suicidal screening tool will increase the rate of identification of high risk suicidal patients triaged in the ED.
- Nursing interventions will be created based on the identified suicide risk level such as low, moderate or high-risk suicide. This will create a safer environment for the patient, as well as the staff, because interventions will be based on the patient's risk level for suicidality.
- The implementation of the project will also be beneficial for the hospital because it satisfies and complies with the JC guideline, and the National Patient Safety Goal for suicidal patients.

Slide 17

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APPENDIX D: VOLUNTARY CONSENT FORM

APPENDIX D: VOLUNTARY CONSENT FORM

PROJECT TITLE: Teaching and Evaluation of Suicide Assessment Five-Step Evaluation and Triage (SAFE-T) in the Emergency Department

Dear Prospective Research Participant:

I am asking for your help and cooperation in participating in a Quality Improvement study in the Emergency Department. This study would be very beneficial to the institution and the nursing staff by providing education regarding Suicide Assessment Five-Step Evaluation and Triage (SAFE-T). The SAFE-T teaching will include identification of risk and protective factors, comprehensive suicide inquiry, determination of risk level and appropriate nursing interventions. The 3-hour teaching will provide vital information regarding accurately identify high-risk suicidal patients, and creating nursing interventions designed to decrease risk for those with positive suicidal screen. Teaching will start February 1-29, 2016 and will be located in the ED conference room.

Your decision to participate is completely voluntary. This QI project has no known economic, physical, psychological or social risks to participants. You are not required to participate, and declining will involve no penalty or loss of benefits to which you are entitled. If you agree to participate, you may choose not to answer any given questions, and you may discontinue participation at any time without penalty or loss of benefits.

Any information obtained from your participation will remain confidential. There will be an 11-item post-teaching evaluation form that will be filled out anonymously at the end of the teaching session. The teaching will not cost you anything, and there will be no compensation for participation.

If you have any questions or concerns, please contact investigator, Evangeline Rico (650) 228-3178. Thank you for your consideration in helping this quality improvement study.

Your signature below indicates that you have decided to participate, having read the information provided above.

Date: _____

Signature _____

Signature of Witness (if any) _____

Signature of Investigator _____