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Emergency Department Nurses: Post Code Pause

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Emergency Department Nurses: Post Code Pause

Presented in Partial Fulfillment of the
Requirements for the Degree of
Doctor of Nursing Practice

Nova Southeastern University
Health Professions Division
Ron and Kathy Assaf College of Nursing

Lynn A. Hauck
2019

**NOVA SOUTHEASTERN UNIVERSITY
HEALTH PROFESSIONS DIVISION
RON AND KATHY ASSAF COLLEGE OF NURSING**

This project, written by Lynn A. Hauck under direction of Dr. Victor Ospina, Project Chair, and approved by members of the project committee, has been presented and accepted in partial fulfillment of requirements for the degree of

DOCTOR OF NURSING PRACTICE

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Abstract

Background: The consistent witnessing of death and critical incidents takes an emotional toll on the emergency department (ED) nurses. In addressing critical incident events, research has shown us that debriefing nurses after a traumatic event helped reduce stress and, in turn, decreased staff turnover in the ED at an acute care facility (Hirschinger, Scott, & Hahn-Cover, 2015).

Purpose: The purpose of this DNP project was to implement a Post Code Pause (PCP) debriefing tool in conjunction with the hospital's Unit Practice Council (UPC) members and the ED direct patient care nurses for use after adult and pediatric cardiopulmonary resuscitation (CPR), evaluate the evidence-based (EB) surveys results, and present the findings to administration stakeholders for consideration as a debriefing tool.

Theoretical Framework: The theoretical framework selected for the Post Code Pause capstone project was the Crisis Intervention Stress Debriefing model by Mitchell (1997).

Methods: The quasi-experimental project statistically analyzed the data from two EB pre- and post-surveys for the PCP and linked the data for a paired t-test using SPSS version 15.

Results: The 27 pre- and post-surveys completed used a five-point Likert scale. Of the 27 pre- and post-surveys, five were linkable, which showed that 100% of the registered nurses involved in a PCP felt that it was a positive tool and 83% agreed it was a positive experience for the nurses. The nurses had a 4% increase in leadership support after the CPR event.

Conclusion: The PCP debriefing provided a new stress management tool for the ED nurses. Thus, possibly providing the tools for stress relief and teamwork lowered staff turnover, retained experienced staff, and decreased sick calls.

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Chapter 1

Nature of the Project and Problem Identification

Critical events have caused emergency personnel to experience helpless, overwhelming feelings, creating an uneasy restlessness in the emergency department (ED) nurses. When these feelings persisted without being dealt with in a timely fashion, the nurses' recovery from the critical events they witnessed was compromised. These feelings were originally described in 1992 by Joinson, an ED nurse, as compassion fatigue (CF) created by emotional and physical burnout (Figley, 2013). CF was described as related to occupational burnout caused by exposure to extremely stressful events (Stamm, 2005). In addressing CF, research showed that debriefing nurses after a traumatic situation reduced stress from exposure to critical events and, in turn, decreased staff turnover in the ED at an acute care facility (Healy & Tyrrell, 2013). The acknowledgement of the ED nurses' need for emotional support awakened the nursing community (Healy & Tyrrell, 2013). Over 200,000 cardiopulmonary resuscitations (CPRs) were performed in U.S. hospitals on a yearly basis (Guilbault, Ohlsson, Afonso, & Ebell, 2017). When in-hospital CPR was performed, only 18% of patients survived (Guilbault, Ohlsson, Afonso, & Ebell, 2017). Emergency department nurses dealt with some of the highest critical events of healthcare staff. Hirschinger, Scott, and Hahn-Cover (2015) identified the three highest critical events:

1. Pediatric death under the age of 18
2. Staff's first patient death
3. Unexpected patient demise

The consistent witnessing of death and critical events took an emotional toll on the ED nurses. As noted previously, research showed that debriefing nurses after a

traumatic situation helped reduce stress and decrease staff turnover. The implementation of debriefing after a cardiopulmonary resuscitation (CPR) provided the Post Code Pause (PCP) tool to the emergency department nurses (Copeland & Liska, 2016). It was advisable for all ED nurses who dealt with critical events to be aware that support was available through debriefing.

The first authors who recognized signs of stress in ED nursing were Abendroth and Flannery (2006). These signs of stress were “depression, long work weeks, extreme empathy for patients,” and post-traumatic stress disorder (PTSD) (Abendroth & Flannery, 2006). Acknowledging these signs in conjunction with the debriefing tools was a powerful instrument for the nursing community. As indicated above, the implementation of debriefing decreased nursing stress, leading to increased staff retention and better patient outcomes (Healy & Tyrrell, 2013). The Doctor of Nursing Practice (DNP) project implemented a seven-question debriefing tool (Appendix C) for ED direct patient care nurses who received debriefing after adult and pediatric CPR.

Problem Statement

Witnessing death and critical events takes an emotional toll on emergency department nurses and the selected hospital did not have a debriefing process or tool in place at the time of the project implementation.

Purpose Statement

The purpose of this DNP project was to implement a Post Code Pause debriefing tool in conjunction with the hospital’s Unit Practice Council (UPC) members and the emergency department direct patient care nurses for use after adult and pediatric

cardiopulmonary resuscitation to evaluate the evidence-based surveys results and to present the findings to the administration stakeholders for consideration as a debriefing tool.

Project Objectives

The following were the objectives for this capstone project:

1. Created a PowerPoint to describe the Post Code Pause (PCP) debriefing tool to the ED nursing staff and UPC members for future presentation.
2. The co-investigator (CI) and/or primary investigator (PI) implemented a PCP debriefing tool.
3. Two EB surveys, pre- and post-implementation, were developed for data collection. A compilation of the PCP evaluation statistics was used for additional data collection.
4. A PowerPoint of findings was presented to administrative stakeholders with the intent of facility adaptation and sustainability of a PCP.

Theoretical Foundation

The theoretical framework selected for the Post Code Pause DNP project was the Crisis Intervention Stress Debriefing Model by Mitchell (1997).

Mitchell's Crisis Intervention Stress Debriefing Model

Mitchell (Tuckey & Scott, 2014) developed the Crisis Intervention Stress Debriefing Model for use after a critical event (Crisis Intervention International [CIT], 2015). The Mitchell Model (1997) was the first model developed that provided a verbal outlet or emotional support for emergency personnel who were exposed to critical events

daily. The Mitchell model was the only Crisis Intervention Stress Management (CISM) Model that incorporated multiple nursing and psychological theories for a caring concept.

Caring concepts in nursing were not new or innovative. Nightingale (1840/1969) introduced the importance of caring in her education of nurses in 1840. Watson discussed caring in her 1979 philosophy (Parker, 2015). Boykin used caring concepts as a philosophical basis for the Christine E. Lynn School of Nursing at Florida Atlantic University in the 1990s (Boykin & Schoenhofer, 2001). All the aforementioned theorists developed their caring ideas for the nurse to implement in patient care and did not apply the concepts to the care of the nurse. ED nurses addressed their need for emotional support after CPR or a patient death by providing debriefing for stress management. Oren's self-care deficit nursing theory addressed the need for nurses to develop self-care before they could care for their patients (Rustoen et al., 2014). CISM realized that there was a need to decrease stress in the day-to-day life of emergency personnel. The International Critical Incident Stress Foundation (ICISF) implemented and developed a critical incident event debriefing protocol. That debriefing protocol used the Mitchell Model for debriefing after a critical event (CIT, 2015) and was the basis for the Post Code Pause debriefing tool.

Theory Selection Support

The Mitchell model illustrated in Figure 1 was adapted for emergency personnel usage in policies/procedures at local, state, national, and international levels (CIT, 2015). Mitchell, once a paramedic in Australia, provided emotional support to his peers by using his idea of critical incident stress management as the basis for his theory (Pack, 2014).

Mitchell's Model provided a personal approach involving emergency personnel on site for the debriefing process (Pack, 2014). This debriefing process took place on site or at the job site within 24-72 hours after the critical event. Mitchell's Model provided emergency personnel debriefing from traumatic incidents beginning in 1999 (Pack, 2014). Table 1 depicts the seven core concepts of the CISM.

Table 1

Critical Incident Stress Management: The seven core components (Hauck, 2019, adapted from Everly & Mitchell, 1997).

Intervention	Timing	Activation	Goals	Format
Pre-crisis preparation	Pre-crisis phase	Anticipation of crisis	Set expectations, improve coping, stress management	Group
De-mobilization & staff consult (rescuers). Group Info. Briefing for civilians, schools, businesses.	Post-crisis; shift disengagement	Event driven	To inform, consult. Allow psychological decompression. Stress management.	Large Group, Organization
Defusing	Post-crisis (within 12 hours)	Usually symptom driven.	Symptom mitigation. Possible closure. Triage.	Small Group

Critical Incident Stress Debriefing (CISD)	Post-crisis (1 to 7 days)	Usually symptom driven. Can be event driven.	Facilitate psychological closure. Symptom mitigation. Triage.	Small Group
Individual Crisis Intervention (1:1)	Anytime Anywhere	Symptom driven	Symptom mitigation. Return to function, if possible. Referral, if needed.	Individual
Family CISM	Anytime	Either symptom driven or event driven	Foster support, communications. Symptom mitigation. Closure, if possible. Referral, if needed.	Families, Organizations
Follow-up, referral	Anytime	Usually symptom driven	Assess mental status. Access higher level of care.	Individual, Family

The multiple components were divided into stages for ease of use and implementation.

Unfortunately, the ED environment did not allow for a Crisis Intervention Stress Management team to be called after each critical event (Copeland & Liska, 2016).

Application of Theory

The co-investigator provided a debriefing tool for implementation in the ED. The PCP debriefing tool was utilized by ED direct patient care nurses after CPR. The CI facilitated the PCP debriefing by a simple pause 10 to 15 seconds after a CPR event to pay homage to the patient. The PCP was completely confidential and protected by HIPPA

and the state law Florida Statute 401.30(4)(e). The emotional support that was available through the PCP debriefing was the beginning of stress management for ED nurses (Copeland & Liska, 2016).

The theory application took place at a not-for-profit community hospital located in Florida. The acute care facility housed over 12 patient care units in a 142-bed facility plus 44 beds in the emergency department with a separate pediatric emergency unit. The hospital also provided care to cardiac, stroke, and neurological patients from multiple city and county emergency medical systems. Trauma-hawk delivered patients to the hospital's heliport from the surrounding areas. The constant exposure to critical events took an emotional toll on the ED nurses. In order to retain staff, the development and subsequent implementation of a debriefing tool after CPR were imperative to provide timely stress management support to nurses.

Significance of the Project

Successful completion of this project provided stress management support to the direct patient care nurses in the ED after a critical event. The adaptation of the debriefing tool for PCP occurred on site and bedside. The project analyzed the linked data from two EB pre- and post- surveys by Copeland and Liska (2016). The surveys were completed pre- and post- implementation of the project by the direct patient care nurses in the ED. The survey results were presented to the emergency department UPC and administrative stakeholders. The added emotional support that PCP debriefing provided was a key support to nurses that was missing in emergency departments. When implemented, the project provided debriefing support for healthcare nurses, thus complying with the

educational benefit of the DNP Essentials II: Organizational and Systems Leadership for Quality Improvement and Systems Thinking (AACN, 2006).

Nursing Practice

The project impacted nursing practice by providing and implementing a debriefing tool that created a new avenue for support. The nurses who witnessed or were involved in critical incidents needed support to relieve the stressors that followed these events. The nurses' continued stress sometimes led to multiple issues, including increased job-related injuries and increased workman compensation claims, increased drug usage and alcohol abuse in an attempt to self-medicate, increased sick calls due to stress-related illnesses, and eventually increased numbers of individuals who left the facility or the nursing profession (Letvak, 2014). The linkable surveys showed that the PCP debriefing increased leadership support to the RNs by 4%.

Healthcare Outcomes

The DNP project impacted healthcare outcomes by providing needed change at the research site after debriefing implementation of the Post Code Pause. Stress management through debriefing provided an increase in overall satisfaction of the ED team. The research site likely experienced decreased staff turnover and decreased the amount of money utilized for advertising positions, training, and orientation of new staff (Tuckey & Scott, 2014). The nurses were provided a stress management debriefing tool that created an increase in overall team satisfaction (Tuckey & Scott, 2014). When the nurses' stressors were decreased, higher job satisfaction and better patient care were possible results. Increased nursing satisfaction in turn likely improved patient satisfaction

scores. Thus, by debriefing nursing staff, healthcare could have decreased staffing turnover costs and increased patient satisfaction scores.

Healthcare Delivery

The PCP was a new tool for direct patient care nurses and the administration of evidence-based-debriefing. Incorporation of the debriefing for the healthcare organization provided an opportunity for the ED nurses to take time after the debriefing for themselves before continuing with their assignment. This innovative care model provided improvements in patient care by caring for the RNs.

Healthcare Policy

The nursing staff and administration collaboration impacted healthcare policy at a departmental level. When accepted by the local facility, this DNP project has the potential to be presented at the hospital-wide level. The implementation of a stress management debriefing tool by nursing and administration at various organizational levels would have the ability to change organizational policies and would comply with the recommendations suggested by the Department of Labor, Occupational Safety & Health Administration guidelines (United States Department of Labor [OSHA], 2015).

Summary

In conclusion, it would be advisable for all areas of the nursing community that dealt with CPR to be aware of the PCP debriefing tool. The selected hospital did not have a debriefing tool or process in place at the time of the project implementation. Knowing that the debriefing tools were available for implementation decreased stress and provided emotional support to the nurses. Many first responders, such as lifeguards, have a

debriefing available to them on site after a tragic event or death. Law enforcement, firefighters, and first responders had debriefings with a brotherhood of support, which allowed them to verbalize their grief after a tragic event or death (CIT, 2015). The implementation of the PCP tool in healthcare provided nurses with a process that increased stress management. The retention of staff through the supportive PCP debriefing tools was considered best practice (Twibell et al., 2012). The ED specialty nurse had the second highest turnover rate, 21.7%, in an acute care facility (Nursing Solutions, Inc. [NSI], 2015). The cost of staff turnover was between \$36,900.00 and \$57,500.00 per nurse with an annual cost nationally of over \$4 million to \$7.6 million (NSI, 2015). The tools provided through stress management would retain staff, lower staff turnover, retain experienced staff, keep continuous work hours with less sick calls, and promote teamwork (Letvak, 2014). The retention of nursing staff could decrease the nursing shortage projected to last until 2025 (United States Department of Health and Human Services-Health and Resource Service Administration [HSRA], 2015).

Chapter 2

Review of Literature

The literature review was conducted using relevant work published in academic peer-reviewed journals, by government agencies and professional organizations, and in dissertations. This review covered the literature related to Critical Incident Stress Management (Mitchell, 1983) by presenting definitions, published opinions of healthcare professionals, research describing the environment of the emergency department, stress mechanisms, conflict theory, evidence-based practice, and gaps in research. The concept of the proposal of PCP debriefing tool implementation was examined globally, then specifically, as it related to research theory, concepts, and findings appropriate for stress management for emergency department nurses. The review utilized the Cumulative Index of Nursing and Allied Health (CINAHL) as a portal through the Nova Southeastern University online library and Google Scholar. This review helped formulate the hypotheses, identified variables and data collection technique, and defined the experimental design of the study. It also established the significance of the proposed study in the context of the research that preceded it. The search criteria included the following: (a) study areas of protocols, debriefings, critical incident stress managements, and post code pauses; (b) population area of emergency department nurses/emergency service personnel; (c) peer-reviewed journal articles within 5 years and (d) English language only. The exclusion criteria included editorials, blogs, and publications older than 2010 unless defined by American Psychological Association (APA) style format as classic pieces of literature.

Benefits of Debriefing

The community hospital that participated in the DNP project PCP did not have a debriefing policy/protocol or tool. Therefore, in this literature review, it was necessary to review the guidelines from relevant or appropriate professional organizations and government agencies. The American Association of Nurse Anesthetists (AANA) defined critical incident as an overwhelming event that was out of the norm for the professional or the daily activities. The AANA defined the second victim as the healthcare professional involved in a patient incident, which was an unexpected or traumatic outcome. The AANA CISM guidelines stated that for excellence in practice, the health professional needed emotional wellbeing. The belief was that emotional wellbeing was achieved through support, dialogue, education, and facility policies for PCP. Coping skills and communication skills for debriefing were vital in healthcare organizations to provide emotional support to healthcare staff through facility policies.

Pack (2014) addressed the program of Mitchell and Everly's (1997) model for debriefing for social workers. Pack stated that the Mitchell CISM model was evidence-based and considered effective for use in multiple professional areas. Mitchell's model for CISM was criticized for re-traumatizing professionals by having them recall details of the critical event. The study group included a majority of middle-aged females located in New Zealand employed as social workers who traveled to multiple areas. The data collected from the 13 participating social workers found that the Mitchell model of peer influence was preferred. The study group felt that peer debriefs made them feel comfortable and were valuable tools for learning and networking. The social worker

participants preferred CISM debriefing face to face within a timely fashion, preferably 48 hours status post critical incident (Pack, 2014).

Mitchell (1983) initiated psychological debriefing over 30 years ago as a technique to minimize the effects of post-traumatic events. A randomized control trial for critical incident stress debriefing was conducted for emergency responders after a single work-related event in Australia. Tuckey and Scott (2014) used the group debriefing Mitchell model for their research. The participants were Australian volunteer fire service personnel. Nineteen brigades initially participated, but three withdrew, leaving 90% (n = 110) that completed the study. At the time of the sampling, there were 67 firefighters (91% male) who were on the county fire service for an average of 13 years. Interventions conducted by peer-trained professionals using the Mitchell model for CISM debriefing occurred within three days of the critical events. A one-way ANOVA was performed showing that there was not a significant difference pre- and post-critical incident for post-traumatic stress, psychological distress, quality of life, and alcohol usage (Tuckey & Scott, 2014). The CISM 1-month post-critical incident debriefing showed that there was significantly less use of alcohol consumption and higher scores for quality of life (Tuckey & Scott, 2014). Tuckey and Scott (2014) provided statistical information that the Mitchell model (1983) was advantageous for implementation by emergency personnel/emergency department nurses.

Emergency department nurses were exposed to critical events routinely, such as major injuries, pediatric deaths, unexpected outcomes, and unexpected deaths. Due to the frequency of the traumatic events, an emergency department nurse's critical incident

exposure was 82-100% (Adriaenssens, De Gucht, & Maes, 2012). Inclusive of high exposure to critical incidences, the ED nurse went from one traumatic incident to the next with no down time. Even though the psychological responses to traumatic incidents were normal reactions, it was important to develop stress management skills for the ED nurse. There were two basic types of coping skills: problem-solving or emotional-focused coping. These coping skills were classified as either active or avoidant, but more recently, they were combined into avoidant emotional and task-orientated coping, also called avoidance coping (Adriaenssens et al., 2012). Over an extended period of time, the avoidance-coping strategy sometimes led to PTSD (Adriaenssens et al., 2012). Adriaenssens et al. (2012) conducted a cross-sectional study in the emergency department of 15 Belgian hospitals. Questionnaires were distributed to nurses who had worked in the ED at least 6 months. The nurses had 2 months to fill out the questionnaires; 248 were completed and returned for 80.5% participation. The research results showed that 87% of the ED nurses had one or more traumatic events within a 6-month period, 28.7% had clinical scores for fatigue, and 8.5% had clinical levels for PTSD (Adriaenssens et al., 2012). Coping skills in the ED nurse were imperative due to the frequent exposure to on-the-job critical events. Adriaenssens et al. (2012), whose research was conducted in multiple EDs, proved the need for stress management in emergency department nurses.

ED staff were exposed to CPR on a regular basis. The European Resuscitation Council Guidelines suggested caution when staff was witnessing critical incidents (Copeland & Liska, 2016). The ED staff was possibly affected by the CPR deaths by “feelings of guilt, inadequacy, failure,” which decreased staff retention (Copeland &

Liska, 2016, p. 58). This continued exposure to CPR in the ED was rarely addressed within the department. CISM addressed this continued exposure for emergency personnel; however, it was not practical to activate a CISM team for every critical event. The other end of the spectrum for debriefing was operational debriefing, which did not provide the immediate, on-site need for the ED staff. The PCP tool enhanced teamwork and improved future performance (Copeland & Liska, 2016). The PCP project developed in an ED for debriefing staff after CPR. The ED had 147 daily census and an average of 6.6 CPRs per month. The unit-based council members facilitated the PCP. The outcome of the PCP was the improved work process, opportunity for the staff to pay homage to the patient, and staff better prepared to return to work (Copeland & Liska, 2016).

McMeekin, Hickman, Douglas, and Kelley (2017) referred to staff repeatedly responding to CPR as post code stress (PCS). The PCS had a psychological effect on the nurses' health. The study was conducted over a 4-week period. The participants were from an adult intensive care unit with at least 2 years of experience and who had participated in CPR on a patient whose death was expected within a year. Of the 490 critical care nurses accessed, the result was that more than 68% of the participants answered the survey. The nurses represented 47 states with a sample mean score for PCS of 52.4% out of the 388 nurses. The study number portrayed a high level of PCS. The critical care nurses who participated in hospital PCP debriefing showed lower PCS levels than those who did not have PCP debriefing. Offering PCP debriefing reduced stress and increased staff retention (McMeekin, Hickman, Douglas, & Kelley, 2017).

At the time of the study by Christodoulou-Fella, Middleton, Papathanassoglou, and Karanikola (2017), nurses were the largest group of health care professionals within the healthcare system. Healthcare employees were exposed to work-related stress, which involved psychosocial risks such as poor health status, decreased quality of life, and decreased quality of care. Christodoulou-Fella et al. (2017) stated that professional burnout could increase secondary traumatic stress syndrome symptoms due to work-related stress. Secondary traumatic stress syndrome (STSS) had a direct correlation between continuous trauma-related stresses and caused emotional issues for the nurses. The study's aim was to incorporate counseling for mental health in nursing. The *t*-test and one-way ANOVA were used for the qualitative data of 206 mental health nurses in Europe. The research found that the mean age of the nurses was 35.3 years with 11.6 years of experience; 43.7% of those surveyed were male, and 56.3% were female (Christodoulou-Fella et al., 2017). The study found emotional exhaustion to be $M = 4.8$ and $SD = 2.7$, which was a moderate degree of emotional exhaustion. However, one in four nurses said they were thinking of leaving their job (Christodoulou-Fella et al., 2017). The study's lack of quantitative data between moral distress and STSS provided the gap in literature. The findings reported a gap between the data that the nurses reported as 25% job dissatisfaction and the reported 25.7% moderate to high levels of mental distress symptoms (Christodoulou-Fella et al., 2017). Christodoulou-Fella et al. (2017) found the need for emotional support improved staff turnover and sick leave, although more research was needed.

Mitchell Model Benefits

The concept of a debriefing model after a critical event was not new. There were several models over the past few decades: the Red Cross model (1992), the National Organization for Victim Assistance model (Young, 1994), and the Mitchell model (1983) (Healy & Tyrrell, 2013). The Mitchell model (1983) was specifically developed by a paramedic for emergency department staff. A descriptive survey for ED doctors and nurses was given to 150 participants in three EDs in Ireland. The 103 participants who completed survey data showed that debriefing had several purposes after a critical event: to provide emotional or psychological support, to help staff review clinical practice, and to create team spirit (Healy & Tyrrell, 2013). The conclusion of the survey was that the ED staff felt that debriefing was important. At the time of the survey, the facilities did not have existing guidelines or policies in place for debriefing after a critical event. Healy and Tyrrell (2013) concluded that support to ED nurses with debriefing would be beneficial to staff and the facility.

Intensive Care Unit (ICU) nurses were participants in a study on critical events and the need for support (Boer, Van Rikxoort, Bakker, & Smit, 2013). The participants were from a teaching hospital in The Netherlands with an annual admission of about 600. The research had face-to-face interviews for data collection. The study's interviews lasted a half hour with six questions aimed at critical events and the nurses' reaction. The 12 participants were divided by gender, age, and experience. The outcome of the survey suggested that peer support helped overcome stress, and a compassionate listener was listed as second most important (Boer et al., 2013). The debriefing of ED nurses using

the Mitchell model provided peer support and a trained listener, both of which Boer et al. (2013) suggested in their research.

The website for the International Critical Incident Stress Management Foundation (ICISMF), founded by Mitchell in the 1990s, was an excellent source of information on debriefing (Crisis Intervention International, 2015). The international website provided a background to debriefing; definitions used in critical incident debriefing; a breakdown of the seven phases of debriefing; and contact information for international, national, state, and local CISM teams. The ICISMF also provided information on training and class schedules. The most vital information provided by ICISMF for this DNP project was a debriefing tool that was available for any healthcare facility to develop for their own use or implementation (CIT, 2015).

Summary

Of the critical events, most were unavoidable in healthcare and specifically in the ED. As ED nurses continued to work in an environment where critical events took place on a frequent basis, work stress continued to be present (Adriaenssens et al., 2012). The direct patient care nurses had an emotional need for debriefing (Boer et al., 2013). The Mitchell model (1983) provided peer support through a debriefing tool and provided the listening ear of a professional colleague (Healy & Tyrrell, 2013). The need for facilities to implement a stress management tool was apparent from the emergency department staff (Tuckey & Scott, 2014). The CISM teams were limited because of the impracticality of holding a debriefing for every critical event in the ED. The limitation of operational debriefing after CPR was the design itself. Operational debriefing was

designed to evaluate the process of the situation according to the hospital CPR protocols. However, the research data showed that trauma team members, consisting of 58 physicians, nurses, mid-level practitioners, technicians, and pharmacists, found that emotional support debriefings were needed (Copeland & Liska, 2016). Therefore, the benefit of the PCP debriefing tool developed by Copeland and Liska (2016) provided quality, timeliness, and support for the ED staff.

Chapter 3

Methods

The critical incident stress management model by Mitchell (1997) provided four different types of intervention: (a) Rest Information Transition Services (RITS), (b) Crisis Management Briefing (CMB), (c) Defusing, and (d) Critical Incident Stress Debriefing (CIT, 2015). Each intervention addressed six different areas within the specific debriefing: type, activity, target, timing, duration, and trigger (CIT, 2015). RITS were for a large multiple-unit response event and were targeted at staff only, took place directly after shift, and lasted for 10 to 20 minutes in length (CIT, 2015). CMB was an informational session for a large group that provided a time for questions by the participants; it took place before, during, or after the event and lasted approximately 20 to 30 minutes in length (CIT, 2015). Defusing was a close-knit group, and it took place up to 8 hours after the event for 20 to 45 minutes in length (CIT, 2015). CISD was a close-knit group that participated by interactive questions and answers between the facilitator and the participants; it took place within 24 to 72 hours post event and lasted approximately 1 to 3 hours in length (CIT, 2015). The debriefing used for the project was the Mitchell Model intervention because it provided a good fit for emergency department (ED) nurses and other professionals due to the six components of Mitchell's (1997) debriefing. The debriefing intervention addressed a close-knit group that was impacted by a critical incident, such as a pediatric death.

Critical events or cardiopulmonary resuscitation created stress in the workplace and within the ED team. Statistical data from the Bureau of Labor Statistics showed that

60% of all non-fatal violent acts in the workplace between 2003 and 2007 occurred in the healthcare industry. Of those 60%, nearly 75% were acts by a patient in a health care facility (Jacobowitz, 2013). These were high statistics that were substantiated by the American Nurses Association (2012), which stated that eight nurses were fatally injured at work from 2003-2009. The Emergency Nurses Association (2011) also provided statistics that workplace violence was high; one out of 10 ED nurses experienced violence in a 7-day period.

As advanced practice nurses, it was important for us to provide education, leadership, and alternatives to the job-related stress in the ED. Hospital and state governments worked together to make health care facilities safer for staff. Due to the need for stress relief in the workplace, the use of a debriefing tool in the ED provided support for the nurses on-site after the event. Hospitals implemented PCP debriefing to help enhance teamwork and relieve stress (Copeland & Liska, 2016). Copeland and Liska's (2016) debriefing process was the standardized seven-question tool (Appendix C) for this capstone project PCP. The PCP debriefing focused on direct patient care ED nurses. The evidence-based surveys were used to evaluate the PCP debriefing tool and present the project to the UPC for pilot implementation and consideration.

Project Design

The problem was that ED direct patient care nurses witnessed critical events daily; debriefing alleviated this stress. However, the selected hospital did not have a debriefing tool or process in place at the time of the study. The purpose of this DNP project was (a) to implement a Post Code Pause debriefing tool in conjunction with the

hospital's Unit Practice Council (UPC) members and the emergency department nursing staff for use after adult and pediatric cardiopulmonary resuscitation, (b) to evaluate the pre- and post-implementation PCP surveys, and (c) to present the findings to administration stakeholders for consideration as a debriefing tool.

A descriptive methodology with quasi-experimental approach was used for the design. The first step in the PCP project was a question-and-answer period by the co-investigator (CI) before the consent was signed. A standard consent form for Social Behavior was provided by the CI and explained prior to the participants' signing of the form (Appendix A) or participating in the research project. After the consent form was voluntarily signed, a demographic survey with a pre-implementation survey (Appendix B) by Copeland and Liska (2016) was distributed to the direct patient care nurses in the ED. The starting point for the PCP debriefing was the introduction of a 30-minute PowerPoint presentation to the direct patient care nurses and UPC members in the ED by the CI. The participating nurses were also UPC members who were part of a valuable governance committee that approved or denied any project within their department. The UPC helped implement projects, distributed information, and interacted with the CI. After the CI acted as the facilitator, additional PCP training was provided by the CI for the RNs prior to implementation of the Post Code Pause debriefing tool questions (Appendix C) and the PCP debriefing evaluation (Appendix D). During the PCP implementation phase, a PCP debriefing evaluation was filled out by the facilitator and the CI to collect data after the adult or pediatric CPR debriefing with ED nurses (Appendix D). After completion of the 6-week implementation phase, a post-PCP survey

by Copeland and Liska (2016) was filled out by the ED nurses who participated in the PCP debriefing (Appendix E). Consents, questionnaires, and survey data were collected by the CI, stored on a jump drive, and placed in a locked file box on site in the Nurse Research office with CI accessibility only. The sum of all statistical data was compiled and evaluated by the CI with SPSS version 2015. The compiled data showed a moderate statistical improvement between the pre- and post-PCP implementation surveys taken by the direct patient care nurses in the ED. The data compiled by the CI was presented to the UPC and administrative stakeholders in a PowerPoint presentation utilizing a paired *t*-test using SPSS version 15. An effect of the data collection provided the statistical information for the implementation of the PCP debriefing in the ED. The independent variables were direct patient care nurses. The dependent variables were the ED, the PCP, and the debriefing.

Participants

The ED nursing staff and UPC members were those participating in the data collection. The total number of professionals consisted of 114 nursing staff members who worked in the ED. However, the estimated amount participating in the PCP adult and pediatric CPR was 30-55 direct patient care nurses.

Inclusion Criteria

The project included ED direct patient care nurses. The project was applied to those nurses who participated in adult and pediatric CPR.

Exclusion Criteria

The project excluded physicians, laboratory technicians, secretaries, maintenance workers, housekeeping, and security, as well as the ED nursing staff who did not participate in direct patient care or CPR.

Setting

The project setting was an ED in an acute care facility. The not-for-profit facility had a multi-bed, pediatric and adult emergency department. The ED consisted of two separate units: adult and pediatrics. The ED saw over 200,000 patients per year, which made it one of the busiest EDs in the state of Florida.

Ethical Considerations

Ethical issues arose when a subordinate population became part of the research. The co-investigator was the DNP student to whom the population group reported. According to the U. S. Department of Health & Human Services (1981/2014), ethics problems were related to human subject research. The capstone project was concerned with the following ethical issues:

1. The population that worked in the emergency department may have felt obligated or mandated to participate.
2. The participating nursing population may have had a minimal emotional risk.

The ethical issues were reviewed by Nova Southeastern University protocols for capstone projects, International Review Board, and healthcare privacy protocols. The Unit Practice Counsel members helped provide the necessary ethical practice to alleviate any participants' feeling of obligation. The Health Insurance Portability and Accountability

Act (HIPPA, 1996) provided the coverage of privacy laws or ethical issues for the participating nurses. If any unforeseen emotional issues arose for the nurses participating in the PCP debriefing, the following option was available for possible intervention. The hospital's chaplain was on call and the Employee Assistance Program (EAP) was available 24/7 by phone and was provided to all participating nurses after each debriefing. The EAP program was called LifeWorks, the second largest EAP program in the United States. This program offered counseling by appointment, phone calls, telecommunications, via an application that was available for the employees' use on their personal cell phones if requested.

Project Phases/Objectives

The DNP project was completed by multiple phases and four objectives.

Objective 1: Created a PowerPoint to describe the Post Code Pause (PCP) tool to the ED nursing staff and UPC members for future presentation.

Objective 2: The co-investigator (CI) and/or primary investigator (PI) implemented a PCP debriefing tool.

Objective 3: Two EB surveys, pre- and post-implementation, developed by Copeland and Liska (2016), were used for data collection. A compiling of the PCP evaluation statistics was used for additional data collection.

Objective 4: A PowerPoint consisting of findings from the data collection was presented to the UPC and administrative stakeholders with the intent for facility adaptation and sustainability of a PCP.

Timeline

The four objectives were broken down by individual timelines. The total timeline for all four objectives was 12 weeks. All cost was absorbed by the co-investigator.

1. Created a PowerPoint to describe the Post Code Pause debriefing process to the ED nursing staff and UPC members for future presentation. This task took approximately 2 weeks.
2. The co-investigator and/or primary investigator (PI) implemented a PCP debriefing tool. This process took two weeks and included the UPC.
3. Two EB surveys, pre- and post-implementation, were used for data collection. A compiling of the PCP evaluation statistics was used for additional data collection. The data collection took 6 weeks.
4. A PowerPoint consisting of findings from the data collection was presented to the UPC and administrative stakeholders with the intent for facility adaptation and sustainability of a PCP. This task took approximately two weeks, including UPC.

Table 2

Resources/Budget

Category	Item	Description	Quantity	Total
Materials	Paper	White copy paper	\$3.75 x 1	\$3.75
	Ink	Black/white cartridge	\$39.95 x 1	\$39.95
PowerPoint	Disk	Copy presentation	\$2.00 x 6	\$12.00
Participation	Food	Snack/donuts	\$8.00 x 6	\$64.00
Acknowledgement		Beverage/coffee	\$10.00 x 6	\$60.00
	Gift	Pen/stylist	\$4.00 x 10	\$40.00
Total Cost				\$219.70

Outcome Measures

The outcome measures were evaluated by the following objectives for the capstone project.

Objective 1: Created a PowerPoint to describe the Post Code Pause debriefing process for the UPC and ED staff for future presentation. The objective was measured by the completed presentation of the PowerPoint for the ED staff during a Unit Practice Council meeting. Meeting this objective took approximately 2-week period.

Objective 2: The co-investigator (CI) or primary investigator (PI) implemented a PCP debriefing tool. The objective was measured with two questionnaires. First, standardized questions from Copeland and Liska (2016) (Appendix C) were implemented by the co-investigator and/or the PI during a PCP debriefing. Second, the PCP evaluation

questionnaire from Copeland and Liska (2016) was filled out by the CI and/or the PI, after the debriefing tool was used in the ED. Meeting this objective took approximately two weeks.

Objective 3: Two EB pre- and post-surveys were used for data collection. The objective was measured by the statistical data collected pre- and post-implementation using the two linkable surveys in a paired *t*-test using SPSS version 2015. The surveys by Copeland and Liska (2016) were filled out by the ED nurses during pre- and post-implementation of the PCP debriefing (Appendix B & E). The PCP debriefing evaluation was filled out by the CI after the PCP debriefing used in the ED (Appendix D). All statistical data were compiled and evaluated by the CI using SPSS version 2015. Meeting this objective took approximately six weeks.

Objective 4: A PowerPoint consisting of findings from the data collection was presented to administrative stakeholders with the intent for facility adaptation and sustainability of a PCP. This objective was measured by the adaptation and presentation of compiled statistical data in the format of a PowerPoint presentation to the UPC and administrative stakeholders. Meeting this objective took approximately two weeks.

Summary

The proposed debriefing tool for the hospital was modeled by Mitchell's (1997) CISM debriefing. Mitchell's model had four types of intervention: RITS, CMB, Defusing, and CISD. Specifically, the PCP debriefing implementation after CPR was evaluated by data collection using two survey questionnaires developed by Copeland and Liska (2016). CISD was a peer-to-peer group interactive debriefing for the staff in the

ED environment who participated in CPR. The ethical considerations for the ED staff for this project were reviewed internally by the Institutional Review Board and externally by Nova Southeastern University capstone protocols and healthcare privacy protocols. The four objectives of the DNP projects provided detailed outcome measurements, had a 12-week timeline, and had a budget cost of \$219.70. The time involved for the project was 12 weeks, with the minimal budget cost absorbed by the co-investigator. The cost of the project was small in comparison to the possible emotional support the ED nurses experienced through the Post Code Pause debriefing stress management.

Chapter 4

Results and Discussion

This Doctorate of Nursing Practice (DNP) project was implemented to provide a Post Code Pause (PCP) debriefing tool in conjunction with the emergency department (ED) direct care nurses for use after pediatric and adult cardiopulmonary resuscitation (CPR). The problem addressed was the daily witnessing of critical events by direct patient care nurses. The critical events were the first witnessed death, an unexpected poor outcome, or the death of a child. The DNP project debriefing was a unique tool that provided support to ED nurses after an adult or pediatric CPR. The goal of debriefing was to support nurses and return them to their job duties with ease (Copeland & Liska, 2016). The group debriefing was a situation that provided calm, trained professionals an atmosphere of safety and non-judgmental communication and facilitated teamwork. The privacy among participants was imperative to allow them to freely communicate during the debriefing process. The participants' privacy was protected by the Florida Statute 401.30(4) (e) 90.503 (Raymond H. Alexander, M. D., Emergency Medical Transportation Act, 2009). The privacy component allowed for the participants to actively participate in the debriefing without the fear of retaliation by staff, peers, or administration.

Problem Statement

Witnessing death and critical events took an emotional toll on direct patient care emergency department nurses. However, the selected hospital did not have a debriefing process or tool in place at that time.

Purpose Statement

The purpose of this DNP project was to implement a Post Code Pause debriefing tool in conjunction with the emergency department direct care nurses for use after pediatric and adult cardiopulmonary resuscitation, evaluate the evidence-based (EB) surveys results, and present the findings to administration stakeholders for consideration as a debriefing tool.

Data Analysis

The PCP debriefing was initiated in the emergency department after receiving support from the Unit Practice Council and administration on June 13, 2018. Approval from Nova Southeastern University Institutional Review Board (IRB) and the facility's IRB was needed for the human subject research content. The DNP project objectives were met by completion of four phases. The four project phases were a PowerPoint presentation to the ED direct patient care nurses, implementation, data collection with analysis, and PowerPoint presentation of data to facility stakeholders. A descriptive methodology with quasi-experimental approach was used for the DNP project design. The DNP project surveyed the ED direct patient care nurses' pre- and post-implementation of the PCP debriefing over a 6-week period. The hard copy pre- and post-PCP-implementation surveys were evaluated and compiled by the CI using a five-point Likert scale. SPSS version 15 formats were used for the paired t-test, the low and high mean of the data comparisons, and for the debriefing data which had been entered. Of the 114 direct patient care RNs who worked in the ED, 35 nurses signed consents for a possible 30 percent participation in the project.

Results

The PCP debriefing was initiated in the emergency department after receiving support from the Unit Practice Council (UPC) and administration on June 13, 2018. Approval from Nova Southeastern University Institutional Review Board (IRB) and the facility's IRB was needed for the human subject research content. The DNP project objectives were met by completion of four phases. The four project phases were a PowerPoint presentation for the ED nurses, implementation, data collection with analysis, and PowerPoint presentation of data results to facility stakeholders.

Objective 1: Created a PowerPoint for future presentation to describe the Post Code Pause debriefing tool for the ED nursing staff and UPC members. This objective was met by the creation of the PCP debriefing process via a PowerPoint presentation. The ED nurses were also UPC members who were part of a valuable governance committee that approved or denied any project within their department. The UPC helped implement the project, distributed information, and collaborated with the CI.

Objective 2: The co-investigator and/or the primary investigator (PI) implemented a PCP debriefing tool. This objective was met after the consent forms were voluntarily signed by 35 participants. The demographic survey, in conjunction with a pre-implementation survey, was distributed to the direct patient care nurses in the ED. The implementation to the debriefing was a 30-minute PowerPoint presentation to the direct patient care nurses and UPC members in the emergency department by the co-investigator.

Objective 3: Two evidence-based surveys, pre- and post-implementation, were used for data collection. A compiling of the PCP debriefing evaluation forms was used for additional data collection. This objective was met by the compilation of the PCP statistics, which were entered into SPSS version 15 by the CI. After completion of the 6-week implementation phase, a post-PCP survey was filled out by the ED nurses who participated in PCP debriefing. Consents, questionnaires, and survey data were collected by the CI, stored on a jump drive, and placed in a locked file box on site in the nurse researcher's office with CI accessibility only. The compiled data showed a moderate statistical improvement between the pre- and post-PCP implementation surveys taken by the direct patient care nurses in the ED.

Objective 4: A PowerPoint of the findings was presented to administrative stakeholders with the intent for facility adaptation and sustainability of a PCP. This objective was met by a PowerPoint presentation to the Nurse Research Council (NRC) and the Unit Practice Council. The statistical data was presented to the NRC and administrative stakeholders in a PowerPoint presentation by the CI. The large percentage (100%) of ED nurses who believed the debriefing was worthwhile provided the statistical data to support the implementation of the PCP debriefing in the emergency department. The independent variables were the direct patient care nurses. The dependent variables were the emergency department, PCP, and the debriefing.

Findings of Project

The DNP project surveyed the ED direct patient care nurses' pre- and post-implementation of the PCP debriefing over a 6-week period with 35 consented nurses out

of 114 RNs. The 27 pre-surveys and 27 post-surveys completed used a five-point Likert scale. Of the 27 pre- and post-surveys, only five were linkable.

Demographics

The demographic findings in the 27 pre-implementation surveys completed by the ED RNs were as follows: in terms of gender, 37% ($n = 10$) were males as compared to 44% ($n = 12$) females, and 18% ($n = 5$) preferred not to answer. In terms of age, the majority of the participants 25% ($n = 7$) were 41-45, 18% ($n = 5$) were 26-30, 14% ($n = 4$) were 31-35, 11% ($n = 3$) were 36-40, 18% ($n = 5$) were 46-50, 3% ($n = 1$) were over 50, and 3% ($n = 1$) preferred not to answer. The ethnicities of the RNs, 29% ($n = 8$) were white, 29% ($n = 8$) were Hispanic, 14% ($n = 4$) were Black or African American, 14% ($n = 4$) were Asian, and 3% ($n = 1$) were Indian. In terms of experience, the majority of participants, 25% ($n = 7$) had 6-10 years, 14% ($n = 4$) had less than 1 year, 22% ($n = 6$) had 1-5 years, 14% ($n = 4$) had 11-15 years, 3% ($n = 1$) had 16-20 years, and 11% ($n = 3$) had over 21 years. The RNs who had participated in adult or pediatric CPR events prior to the PCP pre-implementation were 7% ($n = 2$) less than one event, 62% ($n = 17$) 1-5 events, 25% ($n = 7$) 6-10 events, 0% ($n = 0$) over 11 events. The RNs who participated in adult or pediatric CPR events during implementation of the PCP were 22% ($n = 6$) less than one event, 51% ($n = 14$) one to five events, 7% ($n = 2$) six to 10 events, and 0% ($n = 0$) over 11 events.

Table 3

Post Code Pause Debriefing Evaluation

Question	Yes	No	Not Sure
Was it a pediatric CPR?	0	0	0
Was the PCP debriefing tool used?	6	1	0
What was the number of direct patient care nurses present at the PCP debriefing?	4	N/A	0
Do you think nurses actively participated?	6	0	0
Do you think it was a positive tool for the nurses?	6	0	0
Do you think it was a positive experience for the nurses?	5	0	1

During the PCP implementation phase, a PCP debriefing evaluation (Table 3) was filled out by the CI in an effort to collect data after the pediatric or adult CPR debriefing with ED nurses. During the 6-week implementation phase, there were seven adult CPR events and no pediatric CPR events. Of the seven CPR events, six PCP debriefings took place after CPR with a utilization rate of 87% . Of the four nurses who actively participated in each CPR event, 100% agreed that debriefing was a positive tool after a critical event.

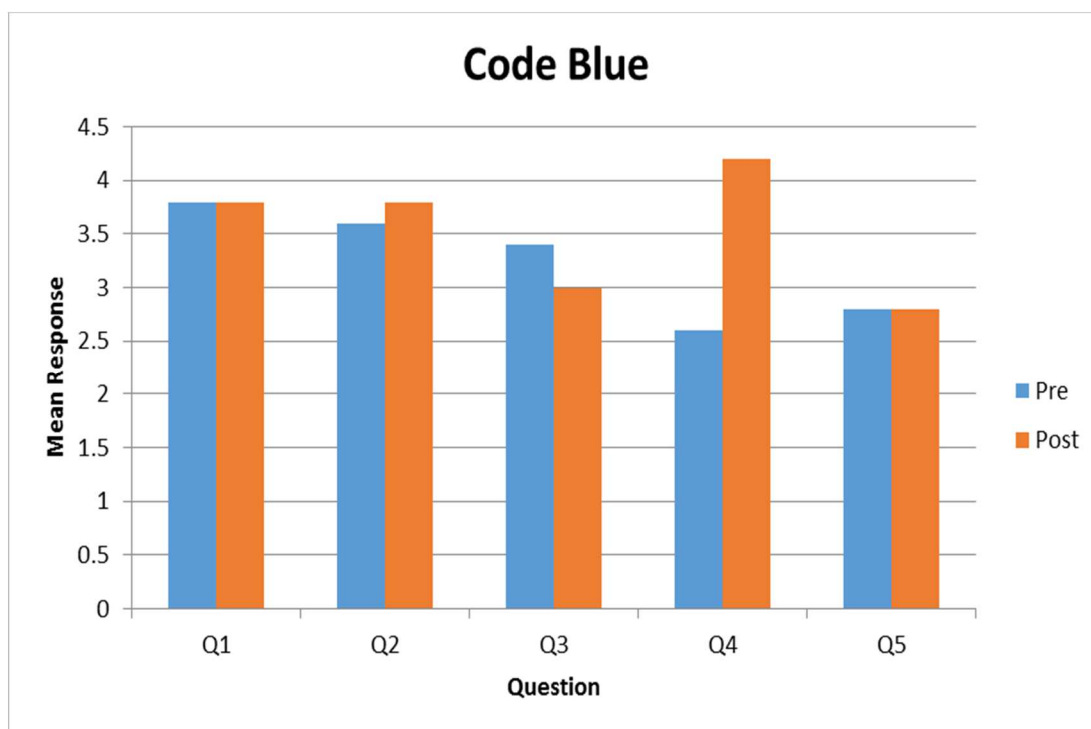


Figure 1. Pre and post-implementation post code pause linkable surveys.

The pre- and post-implementation PCP linkable surveys had the same five questions on each survey. The comparative bar graph in Figure 1 depicts blue for the pre-implementation PCP survey and orange for the post-implementation PCP survey. The paired *t*-test used $n = 5$, with each question having a different mean. Question 1, do you feel supported by peers in your role as a code blue responder? The comparative response for pre- and post-survey showed no difference with the mean 3.7. Question 2, do you feel supported by departmental leadership in your role as Code Blue responder? The comparative response was the post survey showed a 4% increase after using the PCP with 3.6 as the low mean and 3.8 as the high mean. Question 3, I have time to pay homage to the patient involved in a Code Blue. The comparative response was an 8% decrease after using the PCP with 3.4 as the high mean and 3.0 as the low mean.

Question 4, after responding to a Code Blue, do you feel pressure too quickly to return to your assignment or next task? The comparative response was increased by 32% after using the PCP with a 2.6 low mean and 4.2 as the high mean. Question 5, after a Code Blue, do you feel you are given enough time to regroup before returning to your assignment? The comparative response showed no difference with the mean 2.7. A 95% confidence interval around the low and high mean difference was used to compute the data.

According to the nursing staff, the PCP debriefing provided a valuable tool and a positive approach after CPR. The overall nursing group comments made after the PCP debriefing process concluded that debriefing would be most valuable when used in three specific instances. Those debriefings instances that the nurses found beneficial were (a) nurse's first witnessed code, (b) traumatic codes, and (c) all codes involving pediatric patients. According to Hirschinger et al. (2015), emergency department nurses dealt with the three highest critical events of healthcare staff. The ED nurses stated two of these critical events that would benefit from PCP debriefing: first witnessing a patient death and a pediatric death. Thus, all the nurses who contributed information fully agreed that the PCP debriefing after CPR was vital to their role and practice.

Expected/Unexpected Findings

The expected findings of the DNP project were that the debriefing would provide moderate support after adult or pediatric CPR. The RNs reported a 4% increase in support by leadership according to the linkable surveys in the DNP project. The unexpected findings were the comments to the CI by fire rescue and support staff in the

ED who stated ED nurses did not have debriefing at that time and they felt that debriefing for nurses was needed. The paramedics and emergency medical technicians also wanted to know why they were not involved in the debriefing process. Therefore, the preceding comments depicted the need for a debriefing tool for all staff involved in CPR events in the ED. The PCP debriefing evaluation showed a 100% increase in the need by the nurses for PCP debriefing.

Strengths/Limitations of the Project

The strengths of the DNP project were the pre- and post-evaluation of one group, which occurred in the natural setting, comparison, and analyses. The linkable surveys allowed for a broad array of statistical techniques and analyses. The DNP project site was an acute care facility that was observed to be a close-knit community. The ED nurses personally knew the patients and their families, making it especially challenging for the nurses. The debriefing process provided the support the direct patient care nurses needed and wanted, which was made evident by the results found in the PCP debriefing evaluation (Table 2).

One limitation of this project was the internal validity, which indicated that there were other possible reasons for the results obtained, such as: (a) the 8% decrease in time to pay homage to the patient; (b) patients who survived CPR had multiple clinical interventions that were time consuming to the ED nurses; and (c) acuity of the patients on that particular day. Furthermore, the PCP needed more facilitators to implement the project during multiple shifts in order to capture more participants. The small linkable

survey sample size and short implementation period were other limitations for the DNP project.

Implications

Successful completion of this project provided stress management support to the direct patient care nurses in the ED after a critical event. The implementation of the PCP debriefing tool occurred at the patient's bedside after the adult or pediatric CPR. The project statistically analyzed the linked data from two EB surveys by Copeland and Liska (2016). The nursing support the PCP debriefing provided was a key tool that nurses in emergency departments did not have previously. This DNP project provided support for healthcare nurses and complied with the educational requirements of the DNP Essentials II: Organizational and Systems Leadership for Quality Improvement and Systems Thinking (AACN, 2006). The implementation of the evidence-based-practice debriefing tool encompassed the areas of direct patient care nurses in the adult and pediatric ED units. Incorporating the debriefing tool provided the healthcare organization and participating ED RNs with emotional support through stress management.

Nursing Practice

The project impacted nursing practice by providing and implementing a debriefing tool that created a new avenue for support. The nurses who witnessed or were involved in critical incidents needed support to relieve the stressors that followed these events. The nurses' continued stress possibly led to multiple issues, including increased work-related injuries and increased workman compensation claims, increased drug usage and increased attempts to self-medicate, increased sick calls due to stress-related

illnesses, and eventually increased numbers of nurses' resignations at the facility or from the profession (Letvak, 2014). The linkable surveys showed that the PCP debriefing increased leadership support to the RNs by 4%.

Healthcare Outcomes

The DNP project impacted healthcare outcomes by providing needed change at the research site after possible debriefing implementation of the Post Code Pause. Stress management through debriefing provided an increase in overall satisfaction of the ED team. If the research site adopted this project, staff turnover could be decreased, as could the amount of money utilized for advertising positions, training, and orientation of new staff (Tuckey & Scott, 2014). Nurses who were provided the stress management debriefing tool helped create an increase in overall team satisfaction (Tuckey & Scott, 2014). Subsequently, when the nurses' stressors were decreased, higher job satisfaction resulted, which led to the possibility of better care to patients. Therefore, increased nursing satisfaction likely improved patient satisfaction scores.

Healthcare Delivery

The PCP debriefing was a new evidence-based debriefing tool for direct patient care nurses and the administration at the acute care facility. Incorporation of the debriefing for the healthcare organization provided an opportunity for the ED nurses to take time after the debriefing for themselves before continuing with their assignment.

Healthcare Policy

Healthcare policy would be impacted at a departmental level by the collaboration between nursing staff and administration when the debriefing tool was used in the ED. If

accepted by the local facility, this DNP project has the potential to be presented at the hospital-wide level. The implementation of a stress management debriefing tool by nursing and administration at various organizational levels would have the ability to change organizational policies. Plus, debriefing complied with the recommendations suggested by the Department of Labor, Occupational Safety & Health Administration guidelines that stress the importance of decreased workplace injuries (United States Department of Labor [OSHA], 2015).

Future Research

The implementation of the DNP project PCP provided direct patient care nurses in the ED with the opportunity for debriefing after pediatric or adult CPR. Debriefing provided education on interventional stress management for direct patient care nurses who were often exposed to and/or affected by critical incidents (Copeland & Liska, 2016). Further research is needed at this time to provide the necessary data for debriefing implementation hospital wide. The need for long-term evaluation, increased participants in the linkable pre- and post- implementation surveys via computer, and an increase in trained debriefing facilitators is necessary for future researchers.

Conclusion

The facility where the DNP project was conducted did not have a policy or procedure for debriefing after a critical event for direct patient care nurses in the ED. It was the objective of the DNP project to implement a debriefing tool after pediatric or adult CPR. The usage of the PCP tool was focused on the area with the highest incident rate of CPR, the emergency department. The quasi-experimental design focused on one

group with a pre- and post-survey that was used to evaluate the benefits of the PCP debriefing. The study's quasi-experimental design was chosen due to human subjects' ethical issues, limitation of time to implement, and a small sample size. Informing the nursing community that stress management tools were available proved valid. It proved prudent for all staff, including paramedics, technicians, and dispatch in the ED, to participate in debriefing after a CPR event. The implementation of debriefing in the ED showed that the direct patient care nurses had a 4% increase in leadership support after the CPR event. Of the nurses who participated in the PCP debriefing, 100% agreed it was a positive tool to use after CPR, and 83% agreed debriefing was a positive experience. The retention of staff by providing self-care through critical incident stress debriefing was a clear illustration of best practice (Twibell et al., 2012). Providing the tools for stress relief and teamwork often lowered staff turnover, led to the retention of experienced staff, and resulted in more continuous work hours with fewer sick calls. If nursing staff could be retained through PCP debriefing, the tool would positively impact the nursing shortage projected through 2025 (United States Department of Health and Human Services-Health and Resource Service Administration [HSRA], 2015).

Appendix A

NSU IRB EXEMPTED
IRB#: 2018-224-Non-N SU-Univ



NOVA SOUTHEASTERN UNIVERSITY
Ron and Kathy Assaf College of Nursing

Who is doing this research study?

College: Nova Southeastern University (NSU), Nursing Department for Doctoral of Nursing Practice

Principal Investigator

Dr. Victor Ospina DNP, APRN, ACNP-BC, CCRN, (Mentor/DNP Project Chair)

Co-investigator: Lynn Hauck, RN, BSN, MPA (NSU DNP Program Student)

Location:

Funding: N/A Unfunded

What is this study about?

The purpose of this research study is to implement a post-code pause tool for Emergency Department (ED) direct patient care nurses and is aimed to explore a strategy to improve the ED nurses' post-code experience.

ED staff are exposed to cardiopulmonary resuscitation (CPR) on a regular basis.

The ED staff can be effected by the CPR deaths by "feelings of guilt, inadequacy, failure" which can decrease staff retention. This continued exposure to CPR in the ED is rarely addressed within the department. Crisis Intervention Stress Management (CISM) does address this continued exposure for emergency personnel, however it is not practical to activate a CISM team for every critical event. The other end of the spectrum for debriefing is the Post Code Pause (PCP) debriefing tool. This tool can provide the on-site and bedside PCP tool needed for the ED staff. The PCP tool can enhance teamwork and improve future performance. The PCP tool will be implemented in the ED for debriefing staff after CPR. The co-investigator or PI will facilitate the PCP debriefing tool. The outcome of the PCP is to emotionally support nurses, pay homage to the patient, and prepare staff to return to work.

Why are you asking me to be in this research study?

The goal of the DNP project is to recruit the direct patient care registered nurses in the ED that voluntarily participate in the PCP training for pediatric and adult codes.

What will I be doing if I agree to be in this research study?

If you agree to participate in this study:

1. You will sign an informed consent (approximately 5-15 minutes),
2. Complete a *Pre-Implementation Post-Code Survey* (approximately 3-5 minutes),
3. Be provided with a PowerPoint (PPT) overview of the post-code pause process (approximately 20-30 minutes)
4. Participate in post-code pauses after CPR events

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5. Complete a *Post-Implementation Post-Code Survey* (approximately three to five minutes).

Could I be removed from the study early by the research team? A participant is able to leave the study at any time without any penalty or consequences.

Are there possible risks and discomforts to me?

This research study involves minimal risk to you. To the best of our knowledge, the things you will be doing have no more risk of harm than you would have in everyday life. You may find some questions we ask you (or some things we ask you to do) to be upsetting or stressful. If so, we can provide you counselors to help you with these feelings. The hospital has an Employee Assistance Program (EAP) that provides counselors 24/7 by phone, appointment, telecommunications and a personal cell phone application (APP). EAP program LifeWorks phone number and the hospital Chaplin's phone number will be available for staff usage at the end of each PCP debriefing and provided by the coinvestigator or PI.

What happens if I do not want to be in this research study?

Participation is voluntary and participants have the right to leave this research study at any time. There is no penalty for withdrawing from the study. If you choose to stop participating in the study, any information collected about you **before** the date you leave the study will be saved in the research records for 36 months from the conclusion of the study, but you may request that it not be used.

What if there is new information learned during the study that may affect my decision to remain in the study?

If significant new information relating to the study becomes available, which may relate to whether you want to remain in this study, this information will be provided to you by the co-investigator or PI. You may be asked to sign a new Informed Consent Form, if the information is provided to you after you have joined the study.

Are there any benefits for taking part in this research study?

There are no direct benefits for participating in this study. Your participation however, may expand nursing best practice knowledge.

Will I be paid or be given compensation for being in the study?

There will be no incentive or financial reimbursement to the volunteers.

Will it cost me anything?

There are no costs for the participants in the study.

How will you keep my information private?

Information we learn about you in this research study will be handled in a confidential manner, within the limits of the law and will be limited to people who have a need to review this information. This data will be available to the researcher, the Institutional Review Board and other representatives of this institution, and any regulatory and granting agencies (if applicable). If we publish the results of the study in a scientific journal or book, we will not identify you. All confidential data will be securely locked and stored on site. Only the co-investigator or PI will have access to the locked data. All data will be kept for 36 months and destroyed after that time by shredder.

Whom can I contact if I have questions, concerns, comments, or complaints?

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If you have questions now, feel free to ask us. If you have more questions about the research, your research rights, or have a research-related injury, please contact: Lynn Hauck at 1-808-339-1374 who will be readily available during and after normal work hours

or Victor Ospina at victoro@baptisthealth.net

Research Participants Rights

For questions/concerns regarding your research rights, please contact:

Institutional Review Board

Nova Southeastern University

(954) 262-5369 / Toll Free: 1-866-499-0790

IRB@nova.edu

You may also visit the NSU IRB website at www.nova.edu/irb/information-for-researchparticipants

for further information regarding your rights as a research participant.

All space below was intentionally left blank.

Research Consent & Authorization Signature Section

Voluntary Participation - You are not required to participate in this study. In the event you do participate, you may leave this research study at any time. If you leave this research study before it is completed, there will be no penalty to you, and you will not lose any benefits to which you are entitled.

If you agree to participate in this research study, sign this section. You will be given a signed copy of this form to keep. You do not waive any of your legal rights by signing this form.

SIGN THIS FORM ONLY IF THE STATEMENTS LISTED BELOW ARE TRUE:

- You have read the above information.
Your questions have been answered to your satisfaction about the research

Adult Signature Section

I have voluntarily decided to take part in this research study.

Printed Name of Participant

Signature of Participant

Date

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Appendix B

Post Code Pause Pre-Implementation Nurse Survey

Adapted from Copeland and Liska, 2016.

Your responses are anonymous. However, we need the following information to link the forms that you complete for the training. Direct patient care nurses please fill out the form below and give one answer per question. This will be during a UPC meeting and after for the nurses unable to attend. Thank you for your participation.

- Day of the month you were born. First two letters of the high school you graduated.
1. What is your sex? Male Female Prefer not to answer
 2. What is your age? Prefer not to answer
 3. Which of the following best describes your race or ethnicity? Prefer not to answer
 - American Indian or Alaska Native
 - Native Hawaiian or other Pacific Islander
 - Black or African American
 - Other _____
 - White
 - Asian
 - Spanish, Hispanic or Latino
 4. Are you an RN or LPN
 5. Do you work in the Emergency Department? YES / NO
 6. How many years of experience do you have in the Emergency Department?
 - <1
 - 1-5
 - 6-10
 - 11-15
 - 16-20
 - 21 >
 7. How many codes have you participated in as a nurse within the past eight weeks?
 - <1
 - 1-5
 - 6-10
 - 11-15
 - 16-20
 - 21 >
 8. How many pediatric codes have you participated in as a nurse within the past eight weeks?
 - <1
 - 1-5
 - 6-10
 - 11-15
 - 16-20
 - 21 >

Please check one box per question.	5- Extremely supported	4- Very supported	3- Moderately supported	2- Not very supported	1- Not at all supported
Do you feel supported by peers in your role as a Code Blue responder?					
Do you feel supported by departmental leadership in your role as Code Blue responder?					
I have time to pay homage to the patient involved in a Code Blue					
After responding to a Code Blue, do you feel pressure too quickly to return to your assignment or next task?					
After a Code Blue, do you feel you are given enough time to regroup before returning to your assignment?					

Appendix C

Post Code Pause Debriefing

Adapted by Copeland and Liska, 2016

Directions: Facilitators please ask the seven questions bedside directly after the pediatric CPR to the direct patient care nurses involved in the CPR.

1. How are you feeling?
2. What have we done well as a team?
3. Are you satisfied with the availability of equipment?
4. Where can we grow and improve?
5. How did we support family?
6. How are we doing after the event?
7. What do you need to succeed to return to work?

Appendix D

Post Code Pause Evaluation

Adapted from Copeland and Liska, 2016 and modified by the Primary Investigator

Directions: Facilitators please fill out directly after the Post Code Pause Evaluation and place in the locked file box in the charge office.

Date (Month and day)		
Facilitator ID number		
Was it a pediatric CPR?		YES / No
Was the PCP debriefing tool used?		YES / NO
What was the number of direct patient care nurses present at the PCP debriefing?		
Do you think nurses actively participated?		YES / NO
Do you think it was a positive tool for the nurses?		YES / NO
Do you think it was a positive experience for the nurses?		YES / NO

Appendix E

Post Code Pause Post-Implementation Nurse Survey

Adapted from Copeland and Liska, 2016.

Directions: Direct patient care nurses in the ED complete the form after the implementation of the PCP during a UPC meeting and after for the nurses unable to attend. Thank you for participating.

Your responses are anonymous. However, we need the following information to link the forms that you complete for the training. Please circle, check, or fill in the one answer per questions.

Day of the month you were born. First two letters of the high school you graduated from.

Did you complete a pre- Post Code Pause Implementation Survey? YES / NO

How many codes did you participate in as a nurse during the past 6 weeks?

<1 0 1-5 0 6-10 0 11-15 0 16-20 0 21> 0

How many pediatric codes did you participate in as a nurse during the past 6 weeks?

<1 0 1-5 0 6-10 0 11-15 0 16-20 0 21> 0

Please check one box per question.	5- Extremely supported	4- Very supported	3- Moderately supported	2- Not very supported	1- Not at all supported
Do you feel supported by peers in your role as a Code Blue responder?					
Do you feel supported by departmental leadership in your role as Code Blue responder?					
I have time to pay homage to the patient involved in a Code Blue					
After responding to a Code Blue, do you feel pressure too quickly to return to your assignment or next task?					
After a Code Blue, do you feel you are given enough time to regroup before returning to your assignment?					

Appendix F

Letter from Copyright Clearance Center

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Title: Implementation of a Post-Code Pause: Extending Post-Event Debriefing to Include Silence
Author: Darcy Copeland and Heather Liska

Publication: Journal of Trauma Nursing
Publisher: Wolters Kluwer Health, Inc.

Date: Mar 1, 2016
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Appendix G

Letter of Institutional Commitment

**NOVA SOUTHEASTERN UNIVERSITY
HEALTH PROFESSIONS DIVISION
RON AND KATHY ASSAF COLLEGE OF NURSING**

To: Dr. Lamana, PhD, ARNP, WHNP-BC
Director PhD & DNP Programs
College of Nursing
Health Professions Division

I have read and approve the DNP project entitled, _____, by
_____ (name of the DNP student) and give consent for the study to
be conducted at or through _____ (name of institution).

Signature

Date

Title of person signing (representing the authority to give institutional permission)

The institution may add any other appropriate requirements, such as: so long as information regarding the study is shared with staff of the agency after the completion of the study, etc.

Appendix H

NOVA SOUTHEASTERN UNIVERSITY
HEALTH PROFESSIONS DIVISION
RON AND KATHY ASSAF COLLEGE OF NURSING
DOCTOR OF NURSING PRACTICE

DNP PROJECT COMMITTEE MEMBERSHIP FORM

We, the undersigned, agree to serve as members of the DNP Project Committee of:

Lynn A. Hauck who is developing a proposal for a project tentatively titled:

Emergency Department Nurses: Post Code Pause

(Agreement to be a member of the committee does not imply acceptance of the proposal.)

_____/_____/_____
 Signed, Chair, Project Committee Printed Name Date

_____/_____/_____
 Signed, 2nd Committee Member Printed Name Date

_____/_____/_____
 Signed, Program Director Printed Name Date

Appendix I

Front Matter Forms and Examples

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