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Increasing Nurses' Confidence in Leading Debriefings Postcode: A Quality Improvement Project

Jasmine Heraux
Florida International University, jhera004@fiu.edu

Increasing Nurses' Confidence in Leading Debriefings Postcode: A Quality Improvement Project

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By

Jasmine Heraux, AGPCNP-BC, APRN

Supervised by

Dr. Ellen L. Brown, EdD, MS, RN, FAAN

Dr C. Victoria Framil, DNP, APRN, ANP-BC, CNE

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Abstract

Background: Traumatic events, such as witnessing and/or performing cardiopulmonary resuscitation (CPR), can lead to mental distress. Debriefing is a procedure used following traumatic events (e.g., cardiac arrests) to facilitate conversation, reflection, and knowledge. The purpose of this quality improvement project was to establish nurses' confidence in leading debriefing sessions and to evaluate the effectiveness of a debriefing educational program.

Methods: A quasi-experimental design was used to evaluate a newly developed 30-minute video focused on debriefing procedures with intensive care unit (ICU) nurses at a large academic, urban hospital. The educational video included information about hospital debriefing procedures and the Employee Assistance Program. Two sources of information were used to evaluate the educational program: 1. A survey was used to collect participants' demographic data and assess participant perspectives of the importance of debriefing, nurses' confidence leading a debriefing session, and nurses' knowledge of the available hospital mental health resources. 2. Debriefing forms were reviewed 3 months prior to the educational program implementation and 1 month after.

Results: Forty of the eligible 120 ICU nurses participated in this study (a 33% response rate). Fifty-two percent (n = 21) of the participants were women, 50% (n = 20) were aged 25–34, and half (n = 20) had 5 years or less of nursing experience. Following the educational program, 55% (n = 22) of the participants felt confident in leading a debriefing session, and all believed debriefing was important. In the month following the educational program, two debriefing forms were completed for five code events (40% compliance). In the 3-month period before the educational program, 0 debriefing forms were submitted for 26 code events.

Conclusion: The findings were promising and indicated most participants felt confident in leading a debriefing session post training. Continued staff support and reminders to conduct debriefings postcode would be beneficial, and training for all healthcare professionals should also be considered.

Keywords: burnout, debriefing, postcode stress, compassion fatigue

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Introduction

Witnessing a traumatic event can lead to psychological trauma, stress, anxiety, and other mental health conditions, including post-traumatic stress disorder (PTSD) (Spencer et al., 2019). The recent sudden cardiac arrest of Buffalo Bills football player Damar Hamlin traumatized many bystanders. Many people, including players, reported being unable to continue the game after witnessing Hamlin collapse and receive emergency medical attention (Gold & Stol, 2023). In a hospital setting, traumatic events such as cardiopulmonary resuscitation (CPR) are witnessed and performed by nurses and other healthcare providers who implement life-saving measures in treating critically ill patients. Unfortunately, the efforts made by these healthcare professionals are not always successful. In fact, according to Ramenofsky and Weissman (2019), only 17% of patients who receive CPR survive to be discharged.

The emotional impact these events may have is not consistently recognized or addressed (Koželj et al., 2022). Critical care nurses are the most exposed to these events, as their patients are severely ill. The psychological well-being of these nurses can be significantly affected after having to perform CPR on a critically ill patient (Koželj et al., 2022). The trauma and stress of these situations can lead to burnout, which ultimately leads to nurses leaving bedside nursing or leaving the profession altogether (Spencer et al., 2019). Burnout, as defined by the World Health Organization's International Classification of Diseases, is work-related exhaustion, decreased professional effectiveness, and increased mental distance (Schmidt, 2020). Due to the increased stress of nursing, burnout has become a growing phenomenon (Schmidt, 2020).

Nurses are trained in basic life support (BLS) and advanced life support (ALS), a set of life-saving measures used to treat patients in a medical emergency. Cardiopulmonary resuscitation is part of the BLS and ALS algorithms whereby trained professionals provide circulatory and respiratory support to patients during a cardiac emergency. Performing these emergency procedures can expose nurses to high amounts of anxiety or postcode stress (Koželj et al., 2022). Critical care nurses are more likely to be involved in medical emergencies involving the initiation of CPR (Koželj et al., 2022). Situations in which patients have a cardiac arrest leading to the implementation of CPR can be traumatizing to those involved (Schmidt & Haglund, 2017). The psychological strain brought on by these events can produce poor outcomes for nurses' mental health, such as compassion fatigue, and can cause nurses to leave this line of work (Schuster & Dwyer, 2020). Compassion fatigue can be defined as a tense feeling of stress or emotion experienced by those caring for others in distress or experiencing trauma (Schmidt & Haglund, 2017).

A potential solution to decreasing postcode stress is the use of debriefing. Debriefing is a tactic used to facilitate discussion, knowledge, reflection, education, and performance improvement (Spencer et al., 2019). A component of debriefing is clarifying any misconceptions and knowledge gaps (Edwards et al., 2021). There is significant emotional stress involved in resuscitations and their outcomes. According to Koželj et al. (2022), approximately 55% of critical care nurses experience burnout. Debriefing after these events can provide some emotional release for the staff involved (Spencer et al., 2019) by providing an outlet for them to voice their thoughts and feelings.

Problem Statement

Debriefing after traumatic emergency situations can be difficult, as there are time constraints and/or the staff does not feel adequately trained to conduct a debriefing session (Edwards et al., 2021). The lack of a debriefing session can lead to unresolved stress in nurses, which can build and grow into burnout and compassion fatigue (Schmidt & Haglund, 2017). Both burnout and compassion fatigue are major reasons why nurses quit. Although some studies have shown the benefits of debriefing, there is scant research on its link to reducing nurses' psychological stress and anxiety (Koželj et al., 2022).

When a medical emergency does transpire, there is not always a debriefing meeting afterward (Malik et al., 2020). The nurses and staff who respond to a cardiac or respiratory arrest often return to whatever task they were doing right after the emergency resolves. In contrast, after witnessing Damar Hamlin's resuscitation, players and those involved were able to discuss their thoughts and emotions after the event and were given the time to process what had occurred (Gold & Stol, 2023). According to research conducted by Malik et al. (2020), of 193 hospitals surveyed about their debriefing practices, only 27 (14%) performed debriefing frequently. In general, there appears to be little debriefing after an arrest in a hospital setting. Therefore, this is the focus of the current Doctor of Nursing Practice (DNP) project.

Worldwide, nurses struggle with job-related stress and trauma, which can lead to their leaving the profession (Friganović et al., 2019). Currently, there is a nursing shortage in America, and the U.S. Bureau of Labor Statistics estimates the need for approximately 11

million more nurses to prevent a further shortage (Schmidt, 2020). As the recent COVID-19 pandemic highlighted, nurses are an essential part of the healthcare system. Without nurses, the healthcare system would not be able to work efficiently or effectively. A 2022 study found that from 2020–2021, the number of registered nurses decreased by more than 100,000, many of whom were employed in hospitals and were under the age of 35 (AACN, 2022). "The Institute of Medicine in its landmark report on The Future of Nursing called for increasing the number of baccalaureate-prepared nurses in the workforce to at least 80% to enhance patient safety" (AACN, 2022, p. 2). The nursing shortage is complicated by a shortage of nursing school faculty, current nurses reaching retirement age, insufficient staffing ratios, and the rising stress of nurses impacting job satisfaction (AACN, 2022). Training nurses in proper debriefing techniques could be beneficial in nursing retention and supporting nurses' emotional health and well-being.

Summary of Literature

The literature reviewed focused on the prevalence of nurses' work-related PTSD, postcode stress, compassion fatigue, burnout, and use of debriefing strategies. Several types of studies were reviewed, including quality improvement (QI) projects, descriptive studies, and qualitative studies examining clinician experiences, such as postcode stress, compassion fatigue, burnout, and PTSD.

Prevalence

The incidence of burnout, stress, compassion fatigue, and PTSD has increased over recent years (Schmidt, 2020). A survey by the American Nurses Association reported that

approximately 62% of nurses have symptoms of burnout (Schmidt, 2020). Burnout is the state of physical, mental, and emotional exhaustion related to a stressful work environment.

Critical or intensive care nurses specialize in caring for patients who are severely ill and are more likely to be involved in a medical emergency requiring CPR than other nurses (McMeekin et al., 2017). Cardiopulmonary resuscitation and other traumatic medical emergencies can produce high levels of stress, which can lead to signs and symptoms of burnout, compassion fatigue, and even PTSD (Friganović et al., 2019). Multiple studies have found critical/intensive care nurses and emergency department nurses are at higher risk of burnout and postcode stress (Koželj et al., 2022; McMeekin et al., 2017; Schuster et al., 2020; Friganović et al., 2019). These nurses care for patients who are severely ill and at high risk of medical emergencies necessitating the initiation of CPR. Cardiopulmonary resuscitation is a high-stress situation for medical staff that does not always have the desired outcome and can be traumatic even if the outcome is positive. McMeekin et al. (2017) specifically studied the coping behaviors and postcode stress of nurses related to unsuccessful CPR and found that staff members who were able to debrief had less postcode stress.

Postcode Stress in Nurses

Postcode stress is the stress experienced after a resuscitation attempt. This stress can be expressed in different ways, such as through anxiety and other PTSD symptoms. Cardiopulmonary resuscitation is a traumatic event that can take a mental toll on those involved. Studies suggest that poor coping behaviors and external factors such as relationships, personal issues, and the work environment can lead to an increased risk of stress and PTSD symptoms

(Koželj et al., 2022; McMeekin et al., 2017; Schuster et al., 2020; and Friganović et al., 2019). This can ultimately lead to burnout and compassion fatigue. Several studies (Koželj et al., 2022; McMeekin et al., 2017; Schuster et al., 2020; Friganović et al., 2019) have reported that the work-related trauma nurses encounter is a growing issue worldwide.

Friganović et al. (2019) conducted a systematic review focused on the prevalence of burnout in nurses related to work-related trauma in Saudi Arabia, Brazil, Thailand, Turkey, China, Iran, Croatia, Serbia, France, Slovenia, Singapore, Italy, and Spain. This study discussed the many factors that influenced the incidence of burnout, including patient outcomes (i.e., unsuccessful CPR attempts). Nurses' high levels of emotional exhaustion have been found to influence the quality of care, job satisfaction, and intentions to leave the job (Friganović et al., 2019). According to a study by Friganović et al. (2019), staff members felt well-supported when strategies such as debriefings after traumatic events occurred. Debriefing after a traumatic event in a critical care setting can help reduce the incidence of burnout.

Positive Effects of Debriefing

Debriefing is a tool that is often used in the military to reflect, discuss, examine, facilitate knowledge and learning, and improve team and system performance after an incident (Edwards et al., 2021). The use of debriefs has been shown to be helpful in decreasing stress and allowing those affected by or involved in traumatic incidents to decompress (Malik et al., 2020). Although there are great benefits to using debriefs, many hospitals do not have debriefing protocols in place. As debriefing may not be a standard protocol in most hospitals, few healthcare workers are given the opportunity to debrief or feel comfortable leading a debrief (Malik et al., 2020).

Debriefing provides healthcare workers the opportunity to reflect, guide, and educate and to initiate individual, team, and system improvements (Edwards et al., 2021). Overall, there is a positive impact following debriefing. It has been shown that staff who debrief have less postcode stress and that debriefing promotes healthier coping behaviors in individuals (Spencer et al., 2019; McMeekin et al., 2017; Przednowek et al., 2021; Schmidt & Haglund, 2017).

In conclusion, studies have revealed an increase in work-related stress, fatigue, and burnout in healthcare providers, including nurses. Critical care nurses serve a severely ill population and have a higher risk of experiencing mental/emotional exhaustion after traumatic work-related situations, such as performing or witnessing CPR (McMeekin et al., 2017). The review of literature revealed that positive coping strategies, such as debriefing, can help reduce the symptoms of compassion fatigue, burnout, and postcode stress. With debriefing, nurses and other healthcare providers are able to decompress, reflect, and analyze the stressful situation experienced. The studies by McMeekin et al. (2017), Spencer et al. (2019), Friganović et al. (2019), and Przednowek et al. (2021) highlight the need for hospital support for staff coping strategies and the need for more research on this topic to enhance quality care and promote critical care nurses' emotional health and well-being.

Purpose

The purpose of this DNP QI project was to evaluate the effectiveness of a nurse debriefing training program focusing on educating ICU nurses about the importance of debriefing after code events (including the completion of debriefing forms) and of increasing nurses' knowledge about the Employee Assistance Program (EAP) and the mental health

resources provided by the hospital. Details about the educational program are provided in the Methodology section.

Definition of Terms

The following terms are important and specific to this project:

- **Burnout:** the state of physical, mental, and emotional exhaustion brought on by a demanding/stressful job environment (Schmidt, 2020).
- **Postcode stress:** psychological stress that follows a resuscitation attempt. This stress can lead to flashbacks of the trauma, distress associated with reminders of the trauma, and other PTSD symptoms (McMeekin et al., 2017).
- **Compassion fatigue:** a tense sense of stress or emotion experienced by those who care for others who are in distress or who have experienced trauma (Schmidt & Haglund, 2017).
- **Debriefings:** conversations after a situation or event that can be used to improve knowledge, reflection, learning, and outcomes (Edwards et al., 2021).

Theoretical Framework/Conceptual Underpinning

In 1977, Dr. Albert Bandura presented his self-efficacy theory (SET), according to which behavioral change influences outcomes and success (Bandura, 1977). This middle-range theory states that high self-efficacy is associated with the ability to master tasks, whereas low self-efficacy is associated with a lack of success and a lack of confidence in one's abilities (Bandura, 1977). This project focused on increasing nurses' confidence in leading debriefing sessions to effectively incorporate postcode debriefs. According to Bandura's theory, when a person has

mastery over tasks, they are more likely to be successful in completing them due to their higher self-efficacy (Bandura, 1977). The subsequent paragraphs will further discuss this theory, its clinical fit, and how it will be used to interpret the findings of this study.

Self-efficacy is the ability to succeed in certain situations, whereas self-esteem is one's perceived belief in one's value and worth (Bandura, 1977). According to Bandura, there are factors that affect self-efficacy and factors that make up one's self-efficacy. Factors that affect self-efficacy include experience, modeling, social persuasion, and physiological factors. Factors that make up one's self-efficacy are behavior, environmental, and cognitive factors (Bandura, 1977). According to Bandura, SET is also a good indicator of a person's ability to learn new behaviors, and high self-efficacy indicates a person's ability to change their behavior and perform tasks successfully (APA, n.d.).

Bandura's general self-efficacy scale (GSES) rates a person's degree of confidence from 0 to 100, ranging from "cannot do at all" to "highly certain can do" (Bandura et al., 2005). This scale allows participants to grade themselves, and the results indicate how well the participants understood the new task. For this study, debriefing training was implemented to help facilitate and increase debriefing practices at a large tertiary hospital. Nurses were educated on the importance of debriefing and its benefits for mental health, such as decreasing postcode stress and trauma. Using a scale building on Bandura's self-efficacy concept, a post-training survey was administered to assess nurses' perceived confidence in conducting debriefing procedures.

Methodology

The DNP project utilized a quasi-experimental design to evaluate the implementation of a newly developed educational program. The intervention focused on educating and training critical care nurses in a large tertiary hospital about the importance of debriefing procedures postcode, completing debriefing forms, and the available EAP services. Data collected to evaluate the intervention included a post-educational participant survey and a comparison of the number of debriefing forms received by nursing supervisors 12 weeks prior to the educational program and 4 weeks after the educational program. The study protocol was approved by Florida International University's Institutional Review Board (IRB) and the hospital's IRB (see Appendices F and G).

Setting and Participants

The setting for this DNP QI project was a local large tertiary hospital in Miami-Dade County, Florida. This hospital serves a predominantly Latino or Hispanic population in the county, where approximately 20% of residents live below the federal poverty line. The hospital has a total of 560 beds with a variety of units and services, such as orthopedics, oncology, telemetry, medical–surgical, critical care, and outpatient clinics. Nurses working in the medical, surgical, neurosurgical, and cardiovascular critical/intensive care units were eligible to participate in this study. Between the units, there are a combined total of 46 beds and 120 registered nurses.

The hospital's policy includes the completion of a postcode emergency response debriefing form (ERDF), which is available to all employees on the hospital's intranet. The ERDF (see Appendix E) is very similar to the rapid code debrief used by Przednowek et al.

(2021). The form is two pages long and includes three sections. The first section includes the patient's medical record number, location, team leader, recorder, and type of event. The second section consists of four questions to be asked during the debriefing process to facilitate conversation about what went well during the code or what can be improved. The third section is for any additional notes and provider recommendations discussed during the debriefing session. The ERDF is to be sent to the nursing supervisor so the information can be gathered and used for QI purposes. Prior to implementation of this QI program, there had been no debriefing training or education. Three months prior to training, no EDRFs had been submitted.

Intervention

The primary goal of the educational program was to establish nurses' knowledge and confidence in completing the facility debriefing tool postcode. Participants watched a 30-minute educational video developed by the DNP student (JH) and pre-approved by the facility for this DNP project. The video detailed important facts about debriefing, where the EDRF can be found, how to properly fill out the form, and where to send the completed form. Additionally, information on hospital resources available through the EAP were provided.

Procedures

To identify participants, a "hello" email was sent to all ICU nurses (see Appendix B). A follow-up email was sent by administrative staff with additional study information and available dates and times for training sessions (see Appendix C). Training sessions were held for both day and shift nurses in one of the ICU break rooms. Sessions were held for 3 weeks, until all nurses

who wanted to participate in the training were able to attend. Participants completed the 13-question post-debriefing training survey immediately after the training session. Additionally, the number of debriefing forms was obtained from nursing supervisors for the 1-month period following the educational program and was compared to the number of debriefing forms completed 3 months before implementation of the program.

Measures

The four-part survey included demographics and self-reported practice, knowledge, and confidence in conducting debriefings (see Appendix D). The demographic items included gender, age range, years of experience, and the highest level of education obtained. The self-reported practice items included participant perspectives on the importance of debriefing, nurses' confidence in leading a debriefing session, and nurses' knowledge of the availability of mental health resources at the hospital. Questions 8–13 were answered on a scale using a 5-point Likert scale for example ranging from "not at all familiar" to "extremely familiar".

Data Management and Analysis

Florida International University's Qualtrics software was used to administer the survey and analyze the data. Qualtrics is web-based software that assists users in data collection and analysis for quantitative research. The data collected from the surveys was stored and managed on a password-protected laptop. Descriptive statistics were used to summarize participant demographics and to assess participants' knowledge and confidence following the debriefing training session. To determine if the training had an impact on the number of ERDFs sent to the

nursing supervisor, the number of forms was compared 3 months before the training program and 1 month after.

Results

Of the 120 eligible ICU nurses, 40 participated in the study (a participation rate of 33%). Twenty-one (52.5%) women and 19 (47.5%) men completed the survey. Most of the participants (52.5%, n = 21) were aged 25–34. Approximately one third (32.5%, n = 13,) of the participants were aged 35–44. Of the participants, 87% (n = 35) had a Bachelor of Science in Nursing degree, 5% (n = 2) had an Associate of Science in Nursing degree, and 7.5% (n = 3) had a master's degree or other higher education. In addition, 50% (n = 20) of the participants had 5 years or less of nursing experience, 35% (n = 14) had 6–10 years of experience, and 15% (n = 6) had 11 or more years of experience.

Even though most of the nurses had witnessed or participated in many codes in the past. few had completed debriefing procedures. Most nurses (56%, n = 22) reported they had completed debriefing procedures only 1–5 times in their entire nursing career, 10% (n = 4) reported they had completed debriefing 6–10 times, 15% (n = 6) reported debriefing more than 10 times, and 20% (n = 8) reported they never participated in a debrief following a code. Half of the nurses (n = 20) reported witnessing or participating in approximately 10–30 codes, 20% (n = 8) reported witnessing or participating in 31–50 codes, and 30% (n = 12) reported witnessing or participating in more than 50 codes.

Regarding barriers, the survey results revealed that 30% (n =12) of the participants believed time constraints are the most significant barrier to debriefing (see Appendix H, Figure 1). Twenty-five percent (n = 10) of the participants felt that patient care, including workload,

(i.e., high patient acuity) is another major factor. The remaining 45% of participants (n = 18) believed that staff members may not be aware of the debriefing policy or may not be accepting of debriefing practices due to having to make changes to their routine practice, and others felt like there were no barriers to debriefing. Of the participants, 35% (n = 14) were either not sure or did not know how to debrief after a code, whereas 65% (n = 26) felt that they probably knew or knew how to debrief.

Following the educational program, 57% (n = 23) of participants either felt somewhat or extremely comfortable leading a debriefing session, whereas 42% (n = 17) were still unsure or either somewhat or extremely uncomfortable leading a debrief (see Appendix H, Figure 2). Overall, only 50% (n = 20) of the participants believed that debriefing is "very important," but all (n = 40) believed debriefing is important (see Appendix H, Figure 3).

When asked if debriefing after codes would be beneficial to nurses' mental health, 35% (n = 14) of the participants responded "definitely yes", 52% (n = 21) responded "probably yes", and the remaining 12.5% (n = 5) responded that debriefing may or may not make a difference or probably would not make a difference. Responses regarding nurses' familiarity with the hospital's EAP and who to contact for access to mental health services varied. Forty-two percent (n =17) of the participants felt extremely knowledgeable about the EAP after training, 52% (n = 21) felt slightly to moderately knowledgeable about the EAP, and 5% (n = 2) felt they were not knowledgeable about the EAP. Approximately, 47% (n = 19) of participants believed they knew who to contact for mental health services. However, 52% (n = 21) of participants were not sure or did not know who to contact after the training program.

During the 3 months prior to the implementation of the debriefing training program, there were 26 arrests in the ICU, and no debriefing forms were sent to or collected by the nursing office. One month after implementation, there were a total of five codes in the ICU, and two debriefing forms were submitted. Therefore, post implementation there was a 40% compliance rate.

Discussion

The primary finding of this QI project was an increase in the number of ERDFs completed by nurses following the educational program. There were five arrests (i.e., code events) in the ICU during the 1-month period following the educational training. ERDFs were completed in two of the five cases. However, in the 3 months prior to the educational training, no ERDFs were completed, although there were on average eight codes per month. These findings are promising, but future training (i.e., training all staff involved in code events), monitoring, and support are indicated.

The nursing survey results revealed only half of the participants felt comfortable in leading debriefings following a code after attending the education program. These findings indicate additional education and organizational support should be considered to strengthen nurses' knowledge and confidence. According to Bandura (1977), there is a higher chance of achieving the desired behavior change if a person has high self-efficacy. Self-efficacy can be increased through more experience, social modeling, and environmental factors. For example, if more nurses completed debriefing procedures, "modeling", "social persuasion", or "imitation of actions" would likely occur, thus increasing others' self-efficacy (Bandura, 1977).

One concern is that almost half of the nurse participants identified potential barriers to debriefing procedures following the educational program. One identified barrier was that staff members remained concerned about the need to change their routine practices, which indicates a need for more education to strengthen nurses' understanding of the importance of debriefing. Specifically, staff should be made aware how debriefing can help decrease work-related stress. Another consideration is implementing debriefing training for all healthcare providers, especially those specialties that are part of the code team (physicians, respiratory therapists, etc.).

Following the educational program, most participants were not sure or did not know who to contact about the EAP after training. This means that additional information regarding mental health resources and the EAP should be made more readily available. These important resources provide support for the emotional and mental health needs of employees. As reported in Friganović et al. (2019), employees are more satisfied with their job when provided with support by their institution. Nurse managers and hospital administration should consider identifying strategies for providing information about the EAP and mental health resources and should encourage those employees who may be struggling with emotional exhaustion to reach out for services.

Overall, these results revealed that almost all participants believed debriefing procedures are important and that debriefing can have a positive impact on nurses' mental health. This is consistent with the results of several studies (Spencer et al., 2019; Przednowek et al., 2021; Edwards et al., 2021) demonstrating that debriefing allowed nurses to better process traumatic events and that the debriefing process was a positive experience that left staff feeling supported and that increased their job satisfaction. Nurses will benefit from effective communication and

coping strategies, such as debriefing, to help with the stress of traumatic events, such as medical emergencies that require CPR.

Implications

Although this project focused on nurses, all members of code teams should be able to lead and be comfortable with debriefing. These teams can include nurses, doctors, nurse practitioners, physician associates, respiratory therapists, and pharmacists. Debriefing can have a positive impact on healthcare delivery and the emotional health and well-being of medical professionals. Implementing debriefing procedures has been shown to increase job satisfaction, which can decrease the risk of stress and burnout (Friganović et al., 2019). Burnout, stress, and compassion fatigue are also experienced by physicians and other healthcare workers (Schmidt, 2020). Because nurses are not the only medical professionals who can suffer postcode stress and burnout, debriefing practices should be implemented and encouraged for all staff involved in code events.

Debriefing has been shown to decrease the psychological effects of performing CPR and to increase staff teamwork and communication skills, and it may improve patient outcomes (Friganović et al., 2019). However, there is still a need for more research on implementing debriefing procedures, on how to decrease staff stress related to traumatic events in critical care units, and on the outcomes of conducting routine debriefing procedures (McMeekin et al., 2017). At this hospital, the findings of this DNP project can be used as a starting point for an ongoing hospital QI initiative. Ongoing support is needed to ensure and encourage debriefing procedures.

Nurses' continued practice and performance of debriefing after codes will increase the confidence of other nurses and staff in leading debriefing procedures (Bandura, 1977).

Limitations

There are several limitations to consider when interpreting the study findings. First, the follow-up period after the training was only 1 month. A longer period is needed to fully evaluate the impact of the educational program. Second, only one of three eligible nurses participated in this project, leaving most of the ICU nurses not trained or formally educated on debriefing practices or policy. Last, this program only focused on nurses; therefore, future programs should include other healthcare providers participating in codes at the hospital. Intensive care nurses were selected for this initial QI initiative, as these nurses have increased exposure to critically ill patients at high risk of a medical emergency requiring CPR.

Conclusion

In conclusion, the goal of this project was to implement debriefing training for all the ICU nurses working at a large tertiary hospital. Stress and trauma associated with arrest events can lead to high levels of burnout, compassion fatigue, and even PTSD. Implementing strategies (i.e., debriefing) to help reduce and/or address the mental and emotional exhaustion nurses often experience after a traumatic event has been shown to produce positive effects on the overall emotional health and well-being of staff and may lead to improved patient outcomes.

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Appendix A: Letter of Support

UHealth
UNIVERSITY OF MIAMI HEALTH SYSTEM

To whom it may concern:

Jasmine Heraux has been with the University of Miami Health system for the past four years. She currently works in the Medical Intensive Care Unit at the UHealth Tower and is a full-time employee as a Nurse Practitioner. Previously, Jasmine was a registered nurse in the Medical Intensive Care Unit under my supervision. Ms. Heraux is currently enrolled in a DNP program and has approached me in regards to performing her DNP project on improving the debriefing process of codes here at the University of Miami Health System. I highly support Ms. Heraux on this project and look forward to improving outcomes. If you have any questions, please do not hesitate to contact me at 609-287-7182.

Respectfully,

Brittany McClure MBA, BSN
Nurse Manager, SICU & MICU
UHealth Tower
E:Blm142@med.miami.edu
O: (305) 689-1726
C: (609) 287-7182

Appendix B: Email

Hello All,

For those of you who don't know me, my name is Jasmine Heraux, and I have worked in the medical ICU for a little over two years (night shift) as an RN here at the University of Miami Hospital. I recently graduated from Florida International University with my MSN, passed my boards, and began a new position as an APRN in the MICU, also on night shift. I am currently enrolled in FIU's DNP program. I have selected to complete my project here at UMH, and you are eligible to participate.

The title of the *DNP Increasing Nurses' Confidence in Leading Debriefing Sessions Postcode: A Quality Improvement Project.*

In the next few weeks you will receive an email from one of the ICU nurse managers with an informational letter containing more details about this project. A list of scheduled times will also be provided when I will be available for training sessions.

I'm excited to have this opportunity to teach and learn with you all. Thank you in advance for your cooperation and participation in my project. My hope is to improve nursing outcomes and make advancements at UMH overall.

I look forward to working with you all.

Best regards,

Jasmine Heraux, APRN
Jhera004@fiu.edu
FIU FLORIDA INTERNATIONAL UNIVERSITY

Appendix C: Informational Letter

INFORMATIONAL LETTER

Increasing Nurses' Confidence in Leading Debriefing Sessions Postcode: A Quality Improvement Project

Hello, my name is Jasmine Heraux. You have been chosen at random to be in a research study about training critical care nurses how to debrief after medical emergencies, like code blues. The purpose of this study is to increase the number of debriefs done at the University of Miami Hospital and raise awareness of mental health services available to staff. If you decide to be in this study, you will be one of potentially 115 critical care nurses in this research study. Participation in this study will take no more than 40 minutes of your time. If you agree to be in the study, I will ask you to do the following things:

1. Watch an educational video about debriefing, learn about what debriefing tool to use, and what mental health resources are available to the staff.

2. Complete a short 13-question survey after the video.

3. Debrief after every code blue and send completed forms to the nursing supervisor.

There are no foreseeable risks in this study. The potential benefits to you for participating are learning the ability to lead a debrief after code blues and understanding the emotional support available if needed. It is expected that this study will benefit society by providing healthcare workers with better coping strategies that can lower postcode stress, which improves patient care.

There is no cost or payment to you. If you have questions while taking part, please stop me and ask.

You will remain anonymous.

If you have questions for one of the researchers conducting this study, you may contact Jasmine Heraux at (954) 257- 4389.

If you would like to talk with someone about your rights of being a subject in this research study or about ethical issues with this research study, you may contact the FIU Office of Research Integrity by phone at 305-348-2494 or by email at ori@fiu.edu.

Your participation in this research is voluntary, and you will not be penalized or lose benefits if you refuse to participate or decide to stop. You may keep a copy of this form for your records.

Appendix D: Debriefing Survey

Post Debriefing Training Survey

1. Gender
    a. Male
    b. Female
    c. Non-binary/ Third Gender
    d. Prefer not to say
2. Age
    a. 18-24
    b. 25-34
    c. 35-44
    d. 45-54
    e. 55-64
    f. 65+
3. Years of Experience
    a. 0-5 years
    b. 6-10 years
    c. 11-20 years
    d. 21 + years
4. What is your highest level of education
    a. Associate of Science in Nursing
    b. Bachelor of Science in Nursing

c. Master of Science in Nursing or Higher

5. Approximately how many code blues have you participated in or witnessed?

a. 10-30

b. 31-50

c. More than 50

6. How many times have you debriefed after a code?

a. 0

b. 1-5

c. 6-10

d. More than 10

7. What barriers do you think prevent debriefing after a code?

a. [Fill in the bank]

8. Do you know how to debrief after a code?

a. Definitely not

b. Probably not

c. Might or might not

d. Probably yes

e. Definitely yes

9. Do you feeling comfortable/confident leading a debrief?

a. Extremely uncomfortable

b. Somewhat uncomfortable

c. Neither comfortable or uncomfortable

d. Somewhat comfortable

e. Extremely comfortable

10. Do you believe that debriefing is important?

a. Not at all important

b. Slightly important

c. Moderately important

d. Very important

e. Extremely important

11. Do you think that debriefing after codes will be beneficial to nurses' mental health?

a. Definitely not

b. Probably not

c. Might or might not

d. Probably yes

e. Definitely yes

12. Are you familiar with the Employee Assistance Program?

a. Not knowledgeable at all

b. Slightly knowledgeable

c. Moderately knowledgeable

d. Very knowledgeable

e. Extremely knowledgeable

13. Do you know who to contact at UMH for mental health services?

    a. Definitely not

    b. Probably not

    c. Might or might not

    d. Probably yes

    e. Definitely yes

Appendix E: Emergency Response Debriefing Form

UNIVERSITY OF MIAMI HOSPITAL AND CLINICS

Emergency Response Debriefing Form

Fill out this section before debriefing

Patient MRN: _____ Date: _____ Time: _____

Patient Location: ☐ BASCOM PALMER EYE INSTITUTE ☐ SYLVESTER COMPREHENSIVE CANCER CENTER ☐ TOWER

Unit/Clinic/Satellite: _____ Room #: _____

Clinician Team Leader: _____ Recorder: _____

Event Type:
- ☐ Code Blue
- ☐ Rapid Response
- ☐ Airway Emergency
- ☐ Other

Debriefing Leader Role:
- ☐ RN
- ☐ MD
- ☐ SW
- ☐ Other

Fill out this section during debriefing

1. What is the cause of the emergency response? Please select all that apply:

- ☐ Cardiac Arrest
- ☐ Respiratory Distress/Arrest
- ☐ Hypotension
- ☐ Seizures
- ☐ Fever
- ☐ Other

Comment:

_____

_____

_____

2. What went well during the emergency response event? Please select all that apply:

- ☐ Teamwork
- ☐ Communication
- ☐ Leadership
- ☐ Clinical care
- ☐ Other

Comment:

_____

_____

_____

UNIVERSITY OF MIAMI HOSPITAL AND CLINICS

3. What could be improved? Please select all that apply:

- ☐ Teamwork
- ☐ Communication
- ☐ Leadership
- ☐ Clinical care
- ☐ Other

Comment:

_____

_____

_____

4. Were all resources including appropriate equipment available?

- ☐ Yes
- ☐ No

If "No", please list missing items:

_____

_____

_____

Additional Notes

Provider Recommendations:

_____

_____

_____

_____

Completed by: _____

NOT PART OF MEDICAL RECORDS. SEND TO NURSING SUPERVISOR

Appendix F: IRB Approval

FIU | FLORIDA INTERNATIONAL UNIVERSITY

Office of Research Integrity
Research Compliance, MARC 430

MEMORANDUM

To:	Dr. Ellen Brown
CC:	Jasmine Heraux
From:	Kourtney Wilson, MS, IRB Coordinator KMW
Date:	June 27, 2023
Protocol Title:	**"Increasing Nurses' Confidence in Leading Debriefing Sessions Postcode: A Quality Improvement Project"**

The Florida International University Office of Research Integrity has reviewed your research study for the use of human subjects and deemed it Exempt via the **Exempt Review** process.

IRB Protocol Exemption #: IRB-23-0340 **IRB Exemption Date:** 06/27/23
TOPAZ Reference #: 113206

As a requirement of IRB Exemption you are required to:

1) Submit an IRB Exempt Amendment Form for all proposed additions or changes in the procedures involving human subjects. All additions and changes must be reviewed and approved prior to implementation.
2) Promptly submit an IRB Exempt Event Report Form for every serious or unusual or unanticipated adverse event, problems with the rights or welfare of the human subjects, and/or deviations from the approved protocol.
3) Submit an IRB Exempt Project Completion Report Form when the study is finished or discontinued.

Special Conditions: N/A

For further information, you may visit the IRB website at http://research.fiu.edu/irb.

KMW

Appendix G: UM IRB

UNIVERSITY
OF MIAMI

University of Miami
Human Subject Research Office
Gables One Tower
1320 S. Dixie Highway, #650
Coral Gables, FL 33146

Ph.: 305-243-3195
Fax: 305-243-3328
www.hsro.med.miami.edu

APPROVAL

August 1, 2023

Murianne Coriolan
1400 NW 12th Ave
Miami, FL 33136-1003
+1 (305) 6895437
mxc2280@miami.edu

On 8/1/2023, the IRB reviewed the following submission:

Type of Review:	Initial Study
Title of Study:	Increasing Nurses' Confidence in Leading Debriefing Sessions Postcode: A Quality Improvement Project
Investigator:	Murianne Coriolan
IRB ID:	20230801
Documents Reviewed:	• Citi Training, Category: Other; • Post Debriefing Training Survey.docx, Category: Questionnaire/Survey/Interview/Diary; • SS FIU IRB Approval.png, Category: Other; • hrp-503f-protocol-surveys-questionnaires-focus-groups-observations.pdf, Category: IRB Protocol; • Participant Email(2).pdf, Category: Recruitment Materials; • UM IRB Verbal consent .pdf, Category: Consent Form;

The IRB determined this study meets the criteria for an exemption as described in Federal Regulation 45 CFR 46.104. This determination is effective on 8/1/2023.

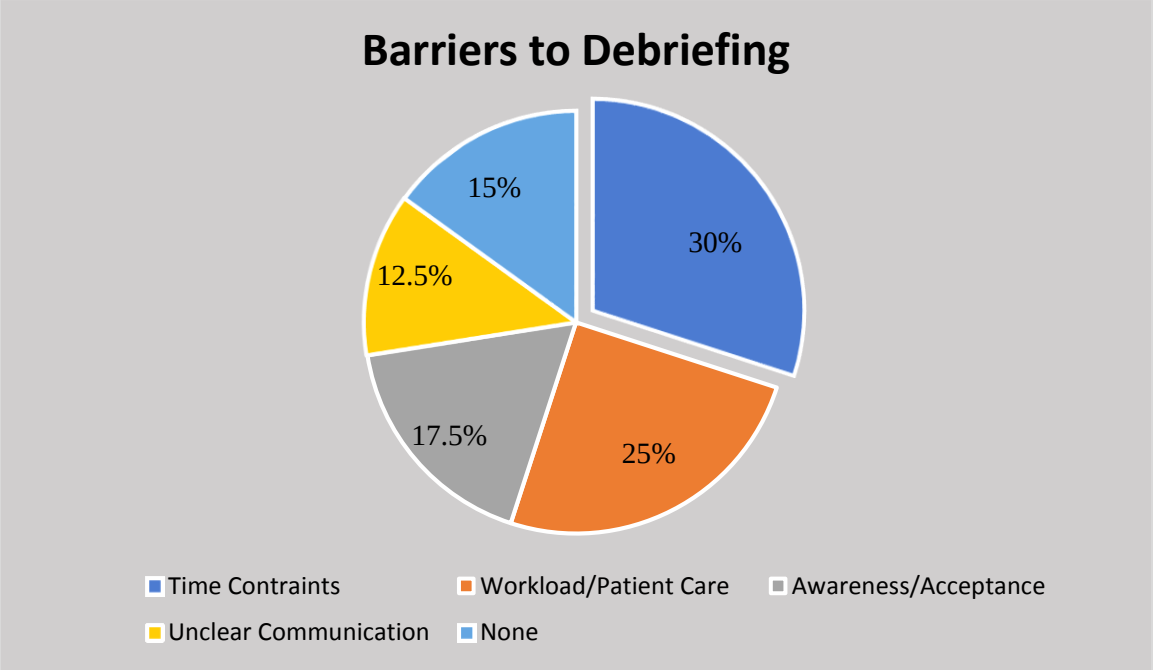
To document consent, use the consent documents that were approved and stamped by the IRB. Go to the Documents tab to download them.

NOTE: Translations of IRB approved study documents, including informed consent documents, into languages other than English must be submitted to HSRO for approval prior to use.

Appendix H: Figures and Graphs

Figure 1

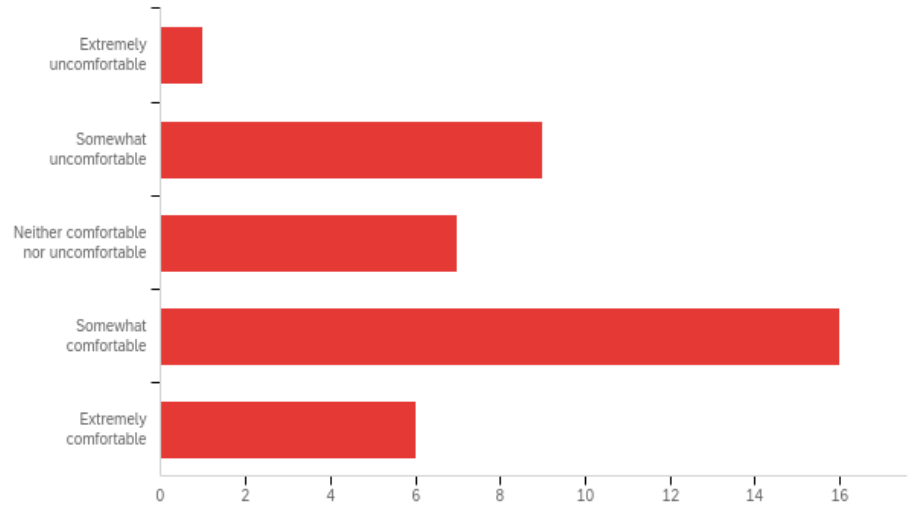
Nurses' Perceptions of Debriefing Barriers



Note. The above figure depicts the percentages of the 40 nurse participants' perceptions of the potential barriers to debriefing.

Figure 2

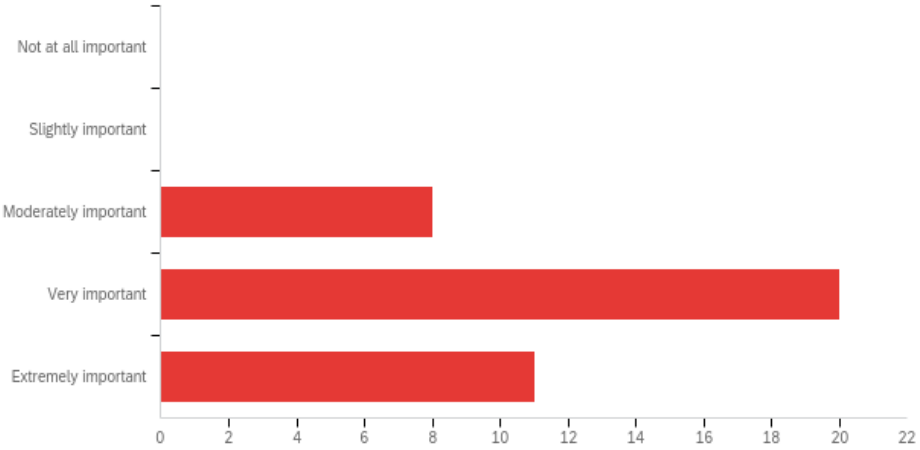
Nurses' Perceived Confidence About Leading Debriefs



Note. The above figure illustrates the post-training survey results on how comfortable participants feel leading debriefing sessions postcode.

Figure 3

Nurses' Perceptions of the Importance of Debriefing



Note. The above graph represents the post-training survey results regarding nurse participants' beliefs regarding the importance of debriefing following arrest events.