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Debriefing Emergency Department Nurses During the COVID-19 Pandemic

by

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A project submitted to the faculty of
Gardner-Webb University Hunt School of Nursing
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Abstract

This study examined the consequences of increased stress experienced by emergency department nurses related to the COVID-19 pandemic. The goal was to acknowledge that this particular population of nurses already experience high levels of stress and that being on the frontlines of healthcare during a pandemic exacerbates the issue. Nursing leaders within the emergency department must acknowledge and monitor the nurses' stress. Findings suggest that debriefing led by qualified individuals is a powerful intervention to combat the negative effects of stress.

Keywords: emergency nurse, emergency department stress, appraisal, coping, pandemic, COVID-19

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CHAPTER I

Introduction

During a pandemic, such as the novel *coronavirus* also known as COVID-19, emergency department nurses come in contact with many infected patients. The purpose of this project was to acknowledge emergency department nurses' stress related to COVID-19 and to potentially implement interventions to assist in their coping. Stress can be defined in a variety of ways. Lazarus and Folkman (1984) define stress as "...the relationship between the person and the environment, which takes into account characteristics of the person on the one hand, and the nature of the environmental event on the other" (p. 21). Numerous studies conclude that nursing can be a highly stressful occupation. Nurses are considered as a high-risk group regarding work stress because of high workload, involvement with death, uncertainty, and responsibility (Dachalson et al., 2017). However, researchers specify that emergency department nurses, in particular, tend to experience an even higher level of stress. Despite the frequency of stressful events, emergency department staff do not become immune to the stress they cause and are often ill prepared and under supported to cope with them (Ahwal & Arora, 2015).

Emergency department nurses are on the frontlines of healthcare because they are often the first to encounter patients that come into facilities. COVID-19 is a highly contagious disease; hospital-related transmission of the virus is still a very large threat to health-care workers, and nurses are at the front lines of care and are thus more susceptible to infection (Huang et al., 2020). This fact contributes to emergency department nurses experiencing high levels of stress during a pandemic. Emergency room nurses seem to be exposed to a broader variety of stressors as well as more severe stressors than their

colleagues from other nursing departments (Adriaenssens et al., 2013). Due to the uncertain infectious nature of this disease, being an emergency department nurse on the frontlines leaves many nurses feeling fearful and anxious. The emergency department exposes nurses to a variety of stressors that are highly demanding both physically and emotionally (Ahwal & Arora, 2015). It is imperative that there are interventions in place to address emergency department nurses' stress as it relates to the COVID- 19 pandemic.

Significance

Work stress is a recognized hazard for those working in the emergency department. Nursing staff may become distressed through a variety of exposures (Healy & Tyrrell, 2013). Therefore, determining and implementing effective coping strategies for emergency department nurses during the COVID-19 pandemic is significant. The risk of COVID-19 infection may cause significant psychological stress for medical staff (Huang et al., 2020). The fear of contracting COVID-19 and the uncertainty of the welfare of humanity contribute to the stress of working on the frontlines during the pandemic.

Infectious and communicable diseases are not new. The current generation of emergency nurses has adapted to human immunodeficiency virus, severe acute respiratory syndrome, avian flu, annual influenza, Ebola virus, and other microorganisms. More humans spread germs at faster rates. We have entered an era in which risks are higher and everyone has more to lose. The opportunity for reflection is one we cannot afford to ignore. (Delaney & Reed, 2015, p. 138)

For emergency department nurses to continue to provide quality care, their psychological state and emotions should be valued. Although emergency department

nurses have always been on the frontlines, the stress level is exacerbated by the extensiveness of the COVID pandemic. Leaders in healthcare must address staff's psychological stress and establish strategies to combat its effects. According to a cross-sectional study among nurses working in the emergency departments of 19 hospitals in the Netherlands, 40% of the emergency nurses in the current sample scored above the cut-off for high emotional exhaustion and 16% reported (sub)clinical levels of PTSD symptoms (Wijn & Doef, 2020). It is clear that emergency department nurses' stress can be detrimental. Nurse leaders must address this issue during the COVID-19 pandemic to prevent some of the effects. Acknowledging that all nurses are sharing this human experience together, maintaining awareness and helping staff to keep aware of stress, understanding and empowering nurses to have control over something, allowing recovery time from stress, and implementing a plan (Goodyear, 2020). There is a need of acknowledging emergency department stress during the COVID-19 pandemic and addressing the importance of implementing interventions.

Problem Statement

There is a need for interventions to address emergency department nurses' stress as it relates to the COVID- 19 pandemic. Because studies have shown that emergency department nurses experience high levels of stress, they need more attention and implementation of solutions during a time of crisis.

Purpose

The purpose of this research was to examine how working on the frontlines as an emergency department nurse during the COVID-19 pandemic contributes to increased stress. Studies show that emergency department nurses experience high levels of stress. Unfortunately, the added stress from the COVID-19 pandemic on emergency department nurses is inevitable. The goal of the project was to offer solutions that nurse leaders can implement in order to encourage healthy coping mechanisms.

Theoretical or Conceptual Framework

Lazarus and Folkman (1984) developed the Process Model of Stress Coping. The effects of stress can cause negative physical and psychological effects. Lazarus and Folkman (1984) defined coping as "...constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (p. 141). Coping attempts are employed either with the intention of managing the problem that is causing the distress, termed problem-focused coping, or they are aimed at the regulation of the emotions with a stressor, termed emotion focused coping (Lazarus & Folkman, 1984). Problem-focused strategies include using negotiation, learning new skills, asking for social support, seeking information, and suppressing the number of activities and planning. Emotion-focused coping strategies include, relaxing, religion, avoiding the stressful situation, releasing emotions, and acknowledging personal success. Strategies are not inherently good or bad. A strategy that is effective in one situation can be ineffective in another and vice versa (Lazarus & Folkman, 1984). Figure 1 provides an illustration of the stress, appraisal, and coping model.

Figure 1

Illustration of the Process Model of Stress Coping



Definition of Terms

- **Stress.** Lazarus and Folkman (1984) define psychological stress as “...a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being” (p. 19). Stress is an inevitable aspect of life and what made the difference in human functioning was how people cope with it.
- **Appraisal.** An appraisal can be, “...individual and group differences in the degree and kind of reaction...” (Lazarus & Folkman, 1984, p. 22).
- **Coping.** Coping is defined as “...constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (p. 141).
- **Emergency Department.** The department of a hospital responsible for the provision of medical and surgical care to patients arriving at the hospital in need of immediate care (Shiel, 2018).

- **Emergency Department Nurse.** Emergency nursing is defined as care of individuals of all ages with perceived or actual physical or emotional alterations of health that are undiagnosed or that require further interventions (Howard et al., 2010).
- **Pandemic.** A pandemic is best described as a disease process consisting of the following elements: wide geographic extension, transmission that can be traced from place to place, high attack rates and explosiveness, minimum population immunity, novelty (or newness), infectiousness, contagiousness, and severity (Morens et al., 2009).

The purpose of this research was to examine how working on the frontlines as an emergency department nurse during the COVID-19 pandemic contributes to increased stress. The goal of the project was to offer solutions that nurse leaders can implement in order to encourage healthy coping mechanisms.

CHAPTER II

Literature Review

A literature review was conducted by searching several search engines and databases including the Gardner-Webb Library, Wiley Online Library, Google Scholar, NCBI, and ProQuest. Keywords and phrases explored included: stress, nursing stress, emergency department nursing stress, nursing during a pandemic, nursing during an epidemic, coping with nursing stress, and interventions for nursing stress.

Emergency Department Nurses and Infectious Diseases

Emergency department nurses are highly affected by infectious diseases. Because they are often the first department to encounter patients presenting with infections, there should be plans in place for infectious disease management. A study was done with a sample of 12 emergency nurses from five emergency departments in Hong Kong to explore the difficulties and strategies regarding guideline implementation among emergency nurses. A qualitative descriptive design was used. Semi-structured, face to face individual interviews were conducted between November 2013 to May 2014. Guideline implementation includes getting work done, adapting to accelerated infection control measures, comparing care standards and resolving competing clinical judgements across collaborating departments. It is important to customize guidelines to the needs of frontline nurses. Maintaining cross-department consensus on guidelines interpretation is also indicated as an important component for effective guideline implementation (Lam et al., 2016). Studies showed that emergency department care should incorporate workflow modifications to enhance disease surveillance and infection control. There should be plans implemented for new as well as known infectious diseases. The study

acknowledges the severe acute respiratory syndrome outbreak in 2003, the H1N1 influenza pandemic in 2009, and the Ebola virus epidemic in 2014. Factors affecting implementation of guidelines are practice environment, availability of resources, and leadership responsiveness. Participants in the study identified that time constrains interfered with their engagement with guidelines such as hand hygiene and PPE use. A strength of the study was that it offers insight into the guideline-practice gaps in emergency care settings. A limitation of the study was the small sample size. The findings concluded that there must be emphasis on the competent management of infectious disease outbreaks because it is critical to understand the existing situations regarding guideline implementation in the management of emerging infectious diseases (Lam et al., 2016).

Keeling (2010) details the experience nurses had during that time in dealing with a pandemic. Initially, the influenza virus was not well understood. At the time there were no antibiotics or antiviral medications to use as treatments. Because World War I (WWI) was occurring during the same time period, there were limited resources and a severe nursing shortage. Counterbalancing these problems, excellent nursing leadership, advanced preparation, the infrastructure supplied by the National Organization for Public Nurses (NOPHN) and the Red Cross Town and Country Nurses, as well as a widespread spirit of volunteerism, enhanced the profession's ability to respond (Keeling, 2010). National nursing organizations, such as the Committee on Nursing of the Council of National Defense, planned for emergencies by surveying nursing resources in the nation, planning for recruitment of educated young women into nursing, increased hospital training school facilities, and publicity for the nursing profession. During this epidemic,

many nurses were becoming ill. They implemented training on hygiene and mandated the usage of masks. The article concludes with the statement that recycled solutions from the past may prove beneficial today (Keeling, 2010). During the COVID-19 pandemic, researchers must use the experiences of the past to help create the best plan.

A study was done in central Israel to develop strategies for disaster planning and staffing in health care settings during a flu pandemic. The study explores the possibility of utilizing nursing students to report to duty during a pandemic. The study was a cross-sectional quantitative correlational design. The sample was 200 nursing students from three academic schools working towards a bachelors or 2-year degrees. The students were given questionnaires that were collected from January to March of 2013. The questionnaire was to determine the student self-efficacy. The research findings showed that the willingness of the sample to report for duty during an outbreak of avian flu was moderate. Approximately one-half intended to report for duty during an avian flu pandemic in the future (Natan et al., 2015). A limitation of the study was that the sample included nursing students in various stages of their nursing education. A strength of the study was that the results give an estimate of nursing students who would likely be motivated to work during a pandemic. The students also stated that they would be more likely to work during a pandemic if there were financial incentives, protective equipment, and convenient transportation to work. These findings might assist in developing strategies in advance for efficient management of health care personnel during an avian flu pandemic, with the aim of ensuring optimal nursing care and an efficient functioning of the entire health care system (Natan et al., 2015). Disaster planning during the COVID-19 pandemic is important as well because of the uncertain effects it will have on

the availability and staffing of nurses. Extreme measures such as requesting the help of nursing students could be a possible strategy.

Lateef (2004) discusses the safety aspects and universal precautions undertaken in emergency departments in Singapore during a pandemic. The precautions included the changes to the triage system, working hours, admission policies, as well as the fluctuations in the patient load. Emergency departments, being the primary portal of entry into the hospitals, had to come up with rapid strategic changes and modifications to accommodate and manage the public health problem effectively (Lateef, 2004). These changes were implemented at six public general hospitals. Improvement of personal protective equipment and cleaning were also implemented. Hospitals developed a task force immediately after the declaration of the outbreak. Staff also had to be monitored for any symptoms of infection. Hospitals and emergency departments must be prepared to handle unanticipated health and medical crisis by implementation of infection control measures (Lateef, 2004). During the COVID-19 pandemic, emergency department nurses must be prepared to implement strategies similar to the ones mentioned in order to prevent the spread of infectious diseases.

A study was done in Canada between March and May 2004 to investigate the relationship between nurses' psychosocial variables, working conditions, and coping methods in response to SARS. The sample consisted of 333 nurses. The nurses completed a questionnaire. A correlational analysis was done to determine the relationships between working conditions and burnout and stress. The findings showed that emotional exhaustion was significantly and positively correlated to avoidance behavior, contact with SARS patients, and time spent in quarantine. Organizational support, trust in

equipment, and infection control management decreased emotional exhaustion. By teaching nurses new working strategies, healthcare organizations can increase the likelihood of optimal crisis management and have the additional benefit of improving the lives of their employees, as well as the level of care they provide on a day-to-day basis (Marjanovic et al., 2007). During the COVID-19 pandemic, emergency departments must have strategies for optimal crisis management in order to avoid nurse burnout and stress.

Emergency Department Nurses Coping with Stress

A study was performed in Seoul and Gyeonggi-do in South Korea to examine stress coping styles as it relates to work stress and the psychological well-being in clinical nurses. Problem-focused coping and emotion-focused coping were the different stress coping styles identified. Nurses were given a cross sectional survey in which self-report questionnaires were used. Data was collected from February to March of 2016. The sample population was 399 nurses from two hospitals. The nurses were divided into two groups based on having three years or less experience or having over three years of experiences. Their work stress was measured using The Work Stress Scale. The Work Stress Scale is a Likert scale that consists of which consists of overload of work, role conflict as a professional nurse, lack of professional knowledge and technical skills, interpersonal problems, interpersonal conflict with doctors, work conflict with doctors, psychological burden of clinical limitations, improper treatment, dissatisfaction with supervisor, inappropriate compensation, dissatisfaction with subordinates, inappropriate physical environment of wards, nonoccupational responsibilities, unfamiliar situations, and night shift work. In both groups, emotional-focused coping was most effective. Work stress was significantly related to the psychological well-being of the nurses with three

years or less experience. However, work stress was not significantly related to the psychological well-being of the nurses with greater than three years of experience. Problem focused coping and emotional focused were both effective for these group. Stress coping styles had different mediating effects on work stress and psychological well-being, depending on nurses' career experience. It suggests the necessity for developing different stress intervention plans and programs according to nurses' career experience (Jang et al., 2019). The findings showed that in order to adequately address problems emergency department nurses may face during the COVID-19 pandemic, implementing different approaches and coping mechanisms may be necessary based on various factors such as years of experience.

A study was performed in the United Kingdom to examine perceptions of occupational stress in emergency department nurses and measure the impact of interventions to address them. Questionnaires were administered in 2014, 2015, and 2017 in order to specifically examine perceptions of occupational stress over time and the impact of interventions to address them. The statistical analyses were conducted using multivariate regression, t-tests, and Mann-Whitney U tests. The survey asked about some demographical information such as age, gender, job role, years working in the department, and part time status. The surveys revealed a prevalence of burnout, emotional exhaustion, depersonalization, and low personal accomplishment. The study suggests that organizational interventions, supported by robust research data and consistent departmental leadership can positively influence perceptions of organizational stress in emergency department nurses (Basu et al., 2020). These findings were then communicated to the nurse manager with the purpose of developing interventions to

mitigate stress. After comparing results of job satisfaction over the years of the study, there was significant improvement. One of the limitations was that the staff who left the department were not given exit interviews. Because most similar studies were cross sections, the fact that this study was longitudinal is a strength. Work stress is a recognized hazard for those working in the emergency department (Basu et al., 2020). Therefore, emergency department nurse managers should work with their staff to develop and implement interventions to assist with the increased occupational stress related to COVID-19.

A cross-sectional study was done on burnout levels amongst ER nurses in Italy from three public hospitals. The study assessed the influence of sociodemographic variables on burnout, the role of dispositional mindfulness, emotional regulation difficulties, and empathy in explaining burnout levels. The purpose of the study was to verify the role of dispositional mindfulness in emergency room nurse burnout. The research design was cross-sectional. Self-report questionnaires were used that were valid and reliable. There were two hypotheses. The first was that burnout is related to the extreme emotional domain of empathy causing health care providers to become emotionally over-involved with their patients. The second was that burnout is related to a lower level of empathy due to a reduction in emotion regulation, which causes a gap between felt and expressed emotions (Salvarani et al., 2019). The Maslach Burnout Inventory was used to determine nurses' level of burnout. The study concluded that emergency room nurses with more mindfulness, emotion regulation, and empathy skills are more able to manage work-related stress. These findings were consistent with the theoretical framework of the compassion fatigue theory. Administrators should provide

ER nurses with the opportunities to participate in tailored psycho-educational programs. During the COVID-19 pandemic, leadership in emergency departments should be intentional about providing psychological educational programs for their nurses in order to prevent burnout.

Several studies showed that emergency department nurses can routinely experience post-traumatic stress disorder (PTSD) because of the high stress work environment. A cross-sectional study was done with 248 emergency department nurses from 15 Flemish hospitals. The objectives of the study were to examine the frequency of exposure to and the nature of the traumatic events in emergency department nurses, the percentage of nurses that report symptoms of PTSD, anxiety, depression, somatic complaints and fatigue at a sub-clinical level, and the contribution of traumatic events, coping and social support to PTSD symptoms, psychological distress, somatic complaints, fatigue and sleep. Data was collected using a self-administered structured survey from December 2007 until March 2008. Each nurse was asked questions related to the frequency of exposure to traumatic events, their coping strategies, and whether they had social support. A limitation of the study was that due to the cross-sectional design of the study, one cannot draw conclusions regarding causal relationships. A strength of the study was that the findings can be used to implement preventative measures. This study showed that emergency nurses are risk for post-traumatic stress reaction due to repetitive exposure to work related traumatic incidents. This not only affects the emergency nurse personally, but also the environment they work in and likely impacts on the quality of care provision and the job satisfaction of nurses (Adriaenssens et al., 2012). During the COVID-19 pandemic, emergency department nurses are at even higher risk of work

stress. All of these predictors need attention and most of them can be influenced by managerial initiatives, group cohesion-enhancing interventions and supportive leadership (Adriaenssens et al., 2013).

A cross-sectional descriptive study was done to determine and rank workplace stressors. Three hundred emergency department nurses in Western Australia were asked to complete a questionnaire about stress-evoking issues in the workplace. The purpose of the study was to determine whether demographic characteristics affect these perceptions of stress and to discuss current debriefing practices in emergency departments after stress-evoking incidents. The top five stressor of emergency department nurses that were identified included violence against staff, workload, mass casualty incident, death or sexual abuse of a child, and high acuity patients. After any of these identified stress evoking incidents, 60% reported that debriefing is not routinely offered. Nurses stated that debriefing after stress-evoking incidents in the workplace should be mandatory not optional and should be considered by professionals with specific debriefing and counseling skills (Ross-Adjie et al., 2007). Debriefing with emergency department nurses during the COVID-19 pandemic could be helpful in managing their stress related to their fear of possible exposure to the virus.

Nurse turnover in emergency departments is an issue due to stressful work-related events and unpredictable work conditions. A longitudinal study was done in 15 emergency departments in Belgian hospitals. Data was collected through self-administered structured surveys from December 2007 to March 2008 and from April 2009 to July 2009. The purpose of the study was to determine to what extent do changes over time in job characteristics and organizational factors predict distress outcomes.

Variables examined included: job satisfaction, turnover intention, work engagement, emotional exhaustion, and psychosomatic distress. The high turnover rate in ER nurses found in this study should cause concern for hospital management, because of the loss of human capital and the growing nursing shortage worldwide (Adriaenssens et al., 2013). Findings from the study suggested the importance of a good fit between the employees and their work environment in terms of job demands, job control, and social support. A strength of the study was that there were a broad variety of potential stressors measured. A limitation was that the study only has one follow up. It would be beneficial to see the results over a longer period. Nurse managers should be aware of the causes and consequences of occupational stress in emergency room nurses in order to enable preventative interventions (Adriaenssens et al., 2013). Turnover rates of emergency department nurses should be a concern during the COVID-19 pandemic. Because emergency department nurses are needed to be on the frontlines, preventative measures should be in place in order to retain them.

A study was done in Finland in order to provide new research evidence on the emergency department staff's efforts to cope with work-related fear. Three research questions asked were what are the staff's needs and expectations of support for coping with work-related fear, what are the current coping methods which the staff use to cope with situations that cause fear, and what model describes the coping of the emergency staff? The research design was a cross-sectional study conducted from October 2009 to March 2010. Most of the respondents to the survey would have wanted more support, professional help, preventative action and more resources for the emergency department (Mikkola et al., 2019). Lazarus and Folkman proposed classification into two main

categories: problem-focused and emotion-focused coping methods. According to this study, the most commonly used coping methods were problem-focused coping and social support. Those who had more experience in health care used problem-focused coping more. Some respondents needed emotion-focused coping methods which included religion, behavioral detachment, and self-blame. Religion was used to cope with the SARS epidemic (Mikkola et al., 2019). A limitation of this study was that the model was theoretical and has not been tested in practice. A strength of the study was that the results could improve and create conditions conducive to the availability of coping methods. Many emergency department nurses have experienced fear related to COVID-19. Identifying the fears and the support needed in order to cope would be highly beneficial.

From 2011 to 2012, a study was conducted in Scotland to determine the effects of nursing tasks on distress and job performance in real time. One hundred nurses participated in the study. Levels of distress were determined by completing self-reports of mood, having their heart rate and activity monitored over two shifts, and providing perceptions of the determinants of stress. The research question was do real time measures of stress, mood, and their determinants relate to general measures of job satisfaction, perceived stress, work-specific cognitive failures? A weakness of the study was that participating in the test itself may add some stress due to the demands of the study's protocol. However, the results of the study can suggest possible changes to reduce nurse distress, improve patient care, and develop improved methods of investigating work-related stress, retention, and patient care (Farquharson et al., 2013). The study determined what tasks triggered stress responses. This information is important in pinpointing areas that need interventions for stress reduction. Because nursing during a

pandemic creates an even higher stress environment, it would be helpful to be aware of nursing tasks that add to that stress.

A study was done in Thailand to explore occupational stress of nurses in the emergency department. Occupational stress is defined as a harmful force that pushes a person beyond their psychological or physical wellbeing and occurs when the requirements of a job do not match the worker's resources, capabilities, and needs (Yuwanich et al., 2016). The research design was a qualitative approach. Twenty-one emergency department nurses participated in semi-structured interviews from April through May 2012. Many participants noted the heavy workload and the unpredictable nature of the emergency department to be main sources of occupational stress. The three themes identified were perceived stress, consequences of stress, and stress management. Stress management programs should focus on reducing job demands, increasing job control, and improving social support at the workplace (Yuwanich et al., 2016). During the COVID-19 pandemic, quality patient care was crucial. Therefore, it would be beneficial to have stress management programs implemented for the frontline staff working in the emergency department.

Emergency department nurses and doctors can experience negative effects of stress. A study was conducted in Ireland to examine nurses' and doctors' attitudes to and experience of workplace stress in three emergency departments. A descriptive survey design was used. A questionnaire was administered to 150 emergency department nurses and doctors. Of all the respondents, 97% indicated they experienced stress in the ED where they worked, which suggests that emergency care is stressful (Healy & Tyrrell, 2011). The findings revealed that most emergency department nurses and doctors felt that

they receive little to no assistance from employers in dealing with stress. Managers must establish a supportive culture that values staff and demonstrates a recognition of and concern for the effects of stress (Healy & Tyrrell, 2011). Because emergency department staff are more vulnerable to the negative effects of stress during the COVID-19 pandemic, managers should be intentional about acknowledging and addressing their needs in order to assist with managing their stress.

A study was done in Greece to determine anxiety levels and related symptoms in emergency nursing personnel. The sample was 213 nurses in emergency departments from 11 adult general hospitals. The Hamilton Anxiety Scale and the Maslach Burnout Inventory were used for quantitative assessments. Self-report questionnaires were used. Sleep disturbances, anxiety, and depressed moods were found to be manifestations of the stress and anxiety related to working in the emergency department. There was a positive correlation between emotional exhaustion and anxiety level. The findings suggested the need for policy measures such as the opportunity for less stressful assignment for a short period of time, on a rotational basis, for overworked nursing staff (Stathopoulou et al., 2011). A limitation of the study was that the sample of nursing personnel included registered nurses and nursing assistants because various levels of responsibility can affect anxiety and burnout. The findings suggested that routine screening and referrals might be potential interventions to prevent deterioration of anxiety symptoms. Prolonged work stress not only has significant effects on individual nurses' quality of life, but it may also compromise the quality and the safety of delivered nursing care and results in diminished productivity (Stathopoulou et al., 2011). Stress and anxiety are higher for nursing

personnel who are working in the emergency department during the COVID-19 pandemic. There should be screenings to ensure the safety and health of the staff.

In West Scotland, a study was done to investigate the prevalence of secondary traumatic stress among emergency nurses. Secondary stress was defined as potential consequences of repeated exposure to regular occurrences of stressors. The study had two phases. Phase one was quantitative and phase two was qualitative. Quantitative data were collated via postal questionnaires in February 2013. A Likert-scale called the Traumatic Stress Scale was used. The qualitative data was collected from a focus group from a random sample of these emergency department nurses. The sample consisted of all emergency department nurses working in four participating hospitals. The study found that 75% of emergency nurses revealed at least one secondary traumatic stressful event in the past week. The use of formal management strategies for secondary traumatic stress, such as debriefing was identified in this study as a beneficial process (Morrison & Joy, 2016). Unfortunately, barriers such as time and experiences were found. During the COVID-19 pandemic, debriefing should be implemented to protect the mental health of nurses working in emergency departments.

A cross-sectional study was done with the emergency department nurses in Rondônia, Brazil. The study was conducted to determine the psychosocial factors of work related to harm caused in the physical domain of the quality of life of nursing professionals working in an emergency department. The sample was composed of 189 nurses and nursing technicians. Data was collected through self-applied questionnaires using The Job Stress Scale to measure stress levels. In this study, stress is defined as a complex psychological situation that directly impacts the physical, psychological and

social spheres of human life. Nursing in emergency departments is considered a high demand job. Therefore, it comes with the greatest potential of illness because it is characterized by the presence of high demands and combined with low levels of control over occupational activity (Kogien & Cedaro, 2014). The results of the study showed that social support is useful in considered important in the maintenance of health. Emergency department nurses working during the COVID-19 pandemic would benefit from consistent social support in order to maintain a good quality of life.

A study was conducted in the United States to determine the prevalence of compassion satisfaction, compassion fatigue, and burnout in emergency department nurses. A cross-sectional study was used, and self-administered surveys were administered. The surveys included a demographic questionnaire and the Professional Quality of Life Scale. One limitation of the study was that of 1,000 surveys mailed, only 284 were returned. However, results of the study can help find strategies that can improve their quality of life at work and prevent burnout and compassion fatigue. Long term results of both compassion fatigue and burnout include low morale in the workplace, absenteeism, nurse turnover, and apathy. Maslow's Theory of Hierarchy and Watson's Theory of Human Caring were the theoretical framework applied. Findings showed that a positive, supportive manager is more likely to have nurses who have high levels of compassion satisfaction as well as lower levels of burnout (Hunsaker et al., 2015). In order to assist nurses working in the emergency department during the COVID-19 pandemic, management needs to implement strategies to enhance compassion satisfaction.

A study was done amongst Chinese nurses working in the emergency department to explore occupational stress and coping strategies. In this study, occupational stress is defined as physical and physiological effects on a person and can be a mental physical or emotional strain involving work. A correlation, cross-sectional design was used. The sample included all emergency department nurses from five hospitals in Harbin China. They were given questionnaires about coping strategies. Positive coping strategies mentioned include learning skills or other activities to change themselves or seeking advice to relieve work stress. The results showed that the emergency department nurses identified workload and time distribution as their main stressors. Nurses who have less occupational stress are more likely to provide high quality care and adopt positive coping styles (Lu et al., 2015). During the COVID-19 pandemic, emergency department nurses need to develop positive coping strategies with the support of their nurse managers in order to combat the additional occupational stress.

CHAPTER III

Needs Assessment

Population and Setting

The setting in which this project will be implemented is in the emergency department of a level one trauma and certified stroke center in the south east region of the United States. The emergency department of this facility includes major care, intermediate care, women's center, behavioral health, fast track, chest pain unit, rapid treatment unit, and trauma unit. The population will be the emergency department nurses within the specified facility. The values of this particular setting are integrity, accountability, stewardship, collaboration, compassion, and respect. The goals and objectives of this project are consistent with these values. The implementation of this project will hopefully reduce stress and enhance coping in emergency department nurses during the COVID-19 pandemic. Therefore, this organization will support the execution of this project.

Sponsors and Stakeholders

The project leader will solicit the assistance of the emergency department nurse manager and experienced charge nurses. Nurse leaders in the emergency department will certainly see the benefit of this project due to the increased stress on nursing staff related to the COVID-19 pandemic. The research supports implementing debriefing sessions post stressful events that are led by nurse leaders who have been specifically trained in that area. Debriefing is one method that has been shown to decrease professional stress and improve concentration, morale, and work engagement (Healy & Tyrrell, 2013). Additional sponsors and stakeholders may include chaplains, the emergency preparedness

officer, and directors of the emergency department. Chaplains will be interested in the spiritual wellbeing of emergency department staff as well as patients. The emergency preparedness officer will work to decrease emergency nurses stress by keeping them informed on the latest information on the COVID-19 pandemic. Directors will oversee the positive outcomes of the project and then advocate for support and funding. The main stakeholders should be the patients who may potentially benefit from increased quality care as a result of emergency department nursing staff being equipped with coping strategies.

Desired and Expected Outcomes

With the implementation of this project, nurses will become equipped with healthy coping mechanisms and have an outlet for discussing their stress. Nurses will have the tools and resources to help decrease their fear and anxiety enhanced by increased stressful conditions related to the COVID-19 pandemic. The ultimate objective is to improve working conditions for emergency department nurses and patient outcomes.

These desired and expected outcomes can be measured through surveys, such as the perceived stress scale, administered to emergency nursing staff. Patient satisfaction surveys, such as Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), can be administered to patients concerning their care while they were in the emergency department. The results of these studies could be discussed between the nursing leaders and staff in order to gauge the effectiveness of the project.

SWOT Analysis

An analysis of strengths, weaknesses, opportunities, and threats is done to help plan project implementation. The internal factors include the strengths and the

weaknesses. Strengths identified in this facility are the employee assistance program and the hospital emergency response team (HERT). The employee assistance program provides services such as counseling to employees for a variety of problems that may affect their ability to perform their jobs. The emergency preparedness department formed the hospital emergency response team. Their responsibility is to be prepared to respond to any type of local emergency or regional disaster. Weaknesses identified in this facility include the nursing shortage and having limited resources or equipment. Shortages in supplies and personal protective equipment have also contributed to nursing stress. The nursing shortage is an immense issue beyond this facility. However, this problem has been exacerbated by the increasing number and acuity of patients during the COVID-19 pandemic. Limited resources and equipment have been one of the main contributing factors affecting the quality of care and patients' satisfaction.

External factors include the opportunities and threats. Opportunities identified are the need for consistent and transparent communication between hospital leaders and other staff. The communications can be through emails, the hospital website for employees, or daily huddles on each unit. Communication about the identified weakness can help lead to problem-solving conversations and solutions, which may improve situational awareness as well. Threats identified are the COVID-19 pandemic and the financial consequences related to it. The existence of the pandemic directly affects staffing, patient census, the ability to maintain adequate supplies, and the hospitals ability to generate consistent income. Those issues lead to furloughs, pay cuts, insufficient staffing, and many other negative concerns. Figure 2 provides a visual representation of the projected SWOT analysis.

Figure 2*SWOT Analysis*

Strengths	Weaknesses
<ul style="list-style-type: none"> • Employee Assistance Program • Emergency Preparedness Department 	<ul style="list-style-type: none"> • Nursing shortage • Limited resources and equipment
Opportunities	Threats
<ul style="list-style-type: none"> • Communication improvement • Situational awareness 	<ul style="list-style-type: none"> • COVID-19 pandemic • Financial consequences

Resources

The project leader will identify resources needed in achieving the previously stated desired outcomes. The project leader will need nurse leaders such as nurse managers, nurse educators, or charge nurses who are competent in leading debriefing sessions. There will be a need for curriculum development to ensure the designated nurse leaders are adequately trained in facilitating the debriefing. There will be a need for stress assessment tools that can be administered to emergency department nurses. These tools will give the debriefing leader an idea of the pertinent issues to address. After debriefing sessions have been implemented, there should be evaluations of its effectiveness. Therefore, there will be a need for surveys for the nurses who participate in the debriefing sessions as well as surveys for the patients cared for by these nurses. The effectiveness will be based on whether or not the desired outcomes are achieved.

Team Members

In order to successfully implement a project, there must be a good team in place. The project leader will be the team leader. He or she must be knowledgeable about the issues related to stress levels of emergency department nurses during the COVID-19

pandemic. The team should consist of leaders in the emergency department. In order to get permission to implement the project, the team leader will need to collaborate with emergency department directors, managers, and charge nurses. Because the nurses leading the debriefing sessions will need training, there needs to be funds and resources for the classes. This means personnel in charge of budgeting for the department will also need to be a part of the team. Utilizing a nurse educator who is knowledgeable about stress level assessment tools and surveys for evaluations would be useful. There should also be staff nurses involved in the development of the project so that their input can be considered since they will be the ones participating and benefiting. Because it would be interesting to trend the effects of the debriefing over time, individuals in the quality department could track statistics. Each of the specified team members would have valuable contributions to the successful implementation of the project.

Cost-Benefit Analysis

A cost-benefit analysis was conducted to ensure that the outcomes of executing the project will be worth the costs. According to the research, debriefing after adverse outcomes using a structured model has been used in health care as a nonthreatening and relatively low-cost way to discuss unanticipated outcomes, identify opportunities for improvement, and heal as a group (Schmidt & Haglund, 2017). However, adequately training nurse leaders to conduct the debriefing sessions can be expensive. The Center for Medical Simulation (CMS) offers a debriefing assessment for simulation in healthcare webinar (DASH). The training is approximately 5 hours and tuition for the webinar is \$350 for the first registration from an institution and \$250 for subsequent registrants for the same session from the same institution (CMS, 2012).

On the other hand, research shows that symptoms of compassion fatigue related to stress can impact providers' functioning in their personal lives, which worsens the effects of compassion fatigue in the workplace (Berg et al., 2016). Unaddressed nursing stress can lead to burnout, high turn-over rates in staffing, and poor patient satisfaction scores. The patient experience of care as measured by the HCAHPS survey is currently used to determine hospital reimbursement (Levin et al., 2017). Therefore, if patients feel that they do not receive quality care as a result of nurses suffering from compassion fatigue, it can become costly to the hospital. Nurse turnover can increase costs because of reduced productivity and the need to recruit new nurses. The total cost of hiring a newly recruited nurse has been reported to be \$15,825, on average and the cost of reduced productivity is estimated to range from \$6,245 to \$15,102 (Wan et al., 2018).

CHAPTER IV

Project Design

Goals and Objectives

The project will acknowledge and address stress of emergency department nurses during the COVID-19 pandemic. The goal is to implement debriefing sessions as a strategy to reduce the negative effects associated with work-related stress. Leaders have the unique opportunity to intervene early and often to provide staff with strategies they need to find satisfaction in their work environment and in the nursing care they provide (Schmidt & Haglund, 2017). The desired outcome will be that the nurses working in the emergency department during the COVID-19 pandemic will have healthy coping skills and will be able to provide quality patient care. Debriefing will offer solace in dealing with these overwhelming situations and a safe place to communicate, restore order, and develop trust (Antai-Otong, 2001). The overall goals and objectives of this project are:

1. Educate emergency department nurses on the effects of high stress levels
2. Identify stressors among emergency department nurses during the COVID-19 pandemic
3. Monitor emergency department nurses' responses to increased stress levels
4. Train emergency department nurse leaders on debriefing strategies and techniques
5. Monitor emergency department nurses' responses to implementation of debriefing sessions

Plan and Material Development

To begin planning project development, the team leader will conduct the SWOT analysis with the team members. This will identify who the project will affect and what factors either hinder or help the implementation. With the support of the team, the project leader will have permission to begin the process of implementing the project in the emergency department of the facility.

Nurse leaders who will be facilitating the debriefing sessions will need to attend trainings. The person who conducts the session should have the professional skills to guide the established process that will help the staff members recover from their distress (Hanna & Romana, 2007, p. 39). The benefits of investing the funds into the trainings outweigh the costs and consequences of not doing so. Studies have shown that a barrier to regular emergency department clinical debriefing is a lack of trained facilitators (Rose & Cheng, 2018).

Next, the nurse leaders of the emergency department will begin identifying stressors of the nursing staff and how that stress affects them. This information can be gathered during huddle, or through surveys, such as the Perceived Stress Scale. “Staff’s mood can provide a clear indication about the type and level of distressed being experienced” (Hanna & Romana, 2007, p. 39). Nurse leaders will also assess how working during the COVID-19 pandemic affects their stress.

The team will need to determine the debriefing process. The Joint Commission recommends using debriefs to improve teamwork and communication (Healy & Tyrrell, 2013). The process chosen should be supported by evidence-based research. There are several debriefing processes that have proven to be effective in various emergency

departments. The INFO (immediate, not for personal assessment, fast facilitated feedback, and opportunity) was implemented in three emergency departments in Calgary, Alberta between March 2016 and September 2016. For this study, the charge nurses at those emergency departments facilitated the clinical debriefing program. Their charge nurses were chosen because they have the clinical knowledge, operational awareness, and an understanding of team roles and expertise within their departments (Rose & Cheng, 2018). Their charge nurses attended a 4-hour workshop for training on how to teach and a 2-hour training on INFO basics. They implemented the use of the INFO Debriefing Tool.

Critical Incident Stress Debriefing (CISD) is another debriefing process.

“Leadership initiative is needed to bring together staff members to acknowledge shared distress, to accept responses to that distress and affirm the group’s human suffering and help the group cope experiences” (Hanna & Romana, 2007, p. 39). This process consists of eight steps in its clearly defined counseling process. The steps included an introduction, fact gathering, reaction phase, symptom phase, stress response, suggestions, incident phase, and referral phase. The benefit of using the CISD is that the healthy coping skills of some members of the group can be shared with other members, giving an example of healthy ways of coping for those who might cope in less effective ways (Hanna & Romana, 2007).

Personal Reflective Debrief (PRD) is a method that takes the structure and goals of a debrief and adds personal reflection to deepen and reinforce social support and promote self-reflection among individuals while working in a group setting (Schmidt & Haglund, 2017). Tools used with this process to assess nurses’ stress levels include the Professional Quality of Life Scale, Holmes-Rahe Life and Stress Inventory, or the

Secondary Traumatic Stress Scale. Providing PRD for staff can contribute to improved morale, decreased turnover, and better patient care interactions (Berg et al., 2016).

The team needs to determine how often debriefing should take place. Although time constraints, unrelenting care demands, and lack of available, appropriately trained facilitators are barriers to a consistent clinical debriefing, it will be imperative that nurse leaders make debriefing a priority (Rose & Cheng, 2018). The INFO process should last about 10-15 minutes and should occur as soon as possible after the stressful event. The PRD process should occur within 24 hours of the stressful event. The CISD process should occur two to seven days after the stressful event. The goal is to intervene as early and as often as possible.

Timeline

It is imperative to begin debriefing sessions promptly because emergency department nurses' stress is such an urgent issue during the COVID-19 pandemic. However, the team will need adequate time to schedule the training sessions, research various debriefing processes, determine the budget, and actually implement the project. Therefore, the team should have three months to execute the project. The first month will be dedicated to ensuring all nurse leaders who will be conducting sessions have been adequately trained. The second month will be dedicated to researching evidence-based studies on debriefing. During this month, there will be weekly meetings to in order to discuss and determine which processes best suit the nurses' needs. The third month will be dedicated to finalizing the budget and facilitating the project's implementation. Evaluation of the project will be ongoing throughout the span of the pandemic.

Budget

According to the National League for Nursing [NLN] (2015), “facilities should budget annually for faculty development in theory-based debriefing” (p. 7). The emergency department nurse leaders who need to be trained to facilitate debriefings includes 4-day shift charge nurses, 4-night shift charge nurses, 5-day shift nursing supervisors, r-night shift nursing supervisors, and the nurse manager. The Center for Medical Simulation offers an online training called Debriefing Assessment for Simulation in Healthcare Webinars. The cost would be \$350 for the first registrant from an institution and \$250 for subsequent registrants for the same session from the same institution (CMS, 2012). The budget should include \$4,600 to cover the cost of the training. The Webinar is a 4-hour course. Each participant in the training will receive a payment of \$27 and hour. Therefore, an amount of \$1,944 should be included in the budget to compensate the nurses for taking the time to participate in the training. There are 100 nurses who work in the emergency department and each will receive a one-page handout educating them on what debriefing is and how it will benefit them. Printing costs ten cents per page. Therefore, \$10 will need to be included in the budget for printing. Table 1 provides a visual representation of the breakdown of the budget.

Table 1

Budget

	Budget
Cost of training	\$4,600.00
Cost to pay nurses	\$1,944.00
Cost of printing	\$10.00
Total cost	\$6,554.00

Evaluation Plan

Because the debriefing processes require early intervention after stressful events, emergency department nurses should quickly experience the benefits of the project. The success of the project will be determined by survey responses. Nurses will receive surveys after debriefing sessions in order to determine if they are helping overtime. Patients will also receive surveys to determine if there is a positive correlation between nurses receiving help for their stress levels and the quality of care patients receive.

Conclusion

Due to the already stressful environment of working in an emergency department, nurses must have interventions to reduce the effects of their stress. Emergency department nurses' well-being especially needs attention during the COVID-19 pandemic. Goodyear (2020) states the following:

In this time, more than ever, staff need managers to understand that this coronavirus experience has rocked our world. Not only is staff fearful and enduring equipment shortages and long work hours, they are experiencing overwhelming stress and worrying about what is occurring in their personal world. Nurse managers have a lot on their plates right now: disaster command center plans, daily briefings, and long hours dealing with patient flow and throughput, and stressful dealings with staffing plans, sometimes on an hourly basis. All this work is vital to the operations of units and the hospital. As vitally important is helping staff through this stressful time. (p. 1)

All healthcare workers can experience increased stress levels during the COVID-19 pandemic. However, research has proven that emergency department nurses experience higher levels of stress. During the pandemic, they are truly on the front lines

as they are primarily the first to come into contact with patients. Coping with the increased stress related to the COVID-19 pandemic will be vital for emergency department nurses. Because the effects of stress left unaddressed can be detrimental, the healthcare leaders must invest in providing solutions. Therefore, monitoring nurses' stressors and stress levels are incredibly important. Studies have shown the benefits of implementing debriefing sessions that are facilitated by competent nurse leaders. The emergency department is a great candidate for the implementation debriefing sessions. The overall goal is to improve nurses' ability to cope with stress and therefore continue to provide excellent patient care.

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