CRITICAL INCIDENT STRESS DEBRIEFING: AN INTEGRATED REVIEW

Integrated Review

Submitted to the

Faculty of Liberty University

In partial fulfillment of

the requirements for the Degree

of Doctor of Nursing Practice

By

Mary M. Smith

Liberty University

Lynchburg, VA

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Integrated Review Chair Approval:

Tonia R. Kennedy, Ed.D, MSN, RN-BC, CCRN-K. March 2022

ABSTRACT

Healthcare providers, especially those working in emergency and intensive care settings, are frequently exposed to traumatic experiences. These experiences affect their emotional, physical, psychological, or spiritual well-being. This integrated review analyzed the effectiveness of Critical Incident Stress Debriefing (CISD) as an intervention for emergency healthcare providers secondary to exposure of traumatic events in their clinical practice. Fifteen (15) articles and journals using the PRISMA model searching for evidence supporting the application of CISD in managing the effects of traumatic experiences by emergency healthcare providers were reviewed. The research showed that emergency healthcare workers mitigate stress in multiple ways. The non-mandatory and formalized CISD process is open to the staff involved and facilitated by trained professionals It is designed to offer an open, non-judgmental setting, where those involved may express their feelings with the goal to avoid internalization of the feelings and stress surrounding the incident, while reinforcng that the individual is not alone in experiencing this stress and emotions. Working in emergency medicine increases the likelihood of exposure to frequent critical incidents, which may lead to Post Traumatic Stress Disorder(s) (PTSD). This integrated review supports the use of CISD for helping healthcare providers working in emergency medicine cope with the challenge of being exposed to trauma and the related effects.

Keywords: traumatic experiences, critical incidents, debriefing, psychological, emergency

Dedication

This integrated review is dedicated to all the healthcare providers who have suffered with mental health problems due to their dedication to help others. My deepest gratitude and appreciation.

Acknowledgments

I would like to give a special thank you to the love of my life, my husband, Randy Smith. Thank you for being my rock and always supporting me in everything I do. Words could never describe how thankful and blessed I am to have you as my partner. This accomplishment would have never happened without you. I would like to thank my children, Randi, Tara, Christopher, and Adam for all the encouragement and pushing me to be strong and go forward.

Thank you to my preceptor and mentor, Patrick Reilly. I would not have been able to complete this integrated review without your guidance and knowledge. For that, I am eternally grateful.

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List of Abbreviations

Critical Incident Stress Debriefing (CISD)

Critical Incident Stress Management (CISM)

Institutional Review Board (IRB)

Post-Traumatic Stress Disorder (PTSD)

SECTION ONE: FORMULATING THE REVIEW QUESTION

Introduction

Healthcare providers in the emergency medicine setting are frequently exposed to critical, unexpected, and emergent incidents. These exposures can leave them vulnerable to loss of compassion, physical and mental fatigue, along with psychological and moral distress (Hammerle et al., 2017). Critical incident stress debriefing can mitigate and offer relief from the stressors arising from these incidents (Clark et al., 2019; Elhart et al., 2019).

Moral distress within the health care environment is a common phenomenon and is partly attributed to workload, compromised practice standards, as well as fatigue (Hammerle et al., 2017). The high stress encounters with life as well as death, the traumatic events or critical incidents may be harmful to the mental and physical health of the healthcare providers and can occasionally lead to compassion fatigue (Hammerle et al., 2017). Critical incidents produce stress, which may result in long-term pathologies, including Post-Traumatic Stress Disorder (PTSD), generalized anxiety, and depression. A debriefing intervention or program is an effective method for quickly mitigating stress after the occurrence of critical incidents among emergency providers (Hammerle et al., 2017). In 2019 a study was conducted of 270 nurses working in critical care settings employed across four major hospitals. The study measured levels of compassion, fatigue, burnout, and satisfaction. The results of the study showed that 84.4% of nurses had very low compassion and high burnout rates secondary to stress syndrome. According to the study, female nurses had more compassion than their male colleagues (Al Barmawi et al., 2019). Therefore, this integrated review analyzed the literature for effectiveness of Critical Incident Stress Debriefing (CISD) as an intervention for emergency healthcare providers secondary to exposure of traumatic events in their clinical practice.

Defining Concepts and Variables

CISD is a form of intervention counseling utilized after a person or a group has experienced the traumatic event to provide support and eliminate or reduce the possible stress reactions (Harrison & Wu, 2017). Incidents that merit the application of CISD include, but are not limited to, sudden deaths, accidents, serious injuries, serious safety threats, and self-identified distressing situations. The emotional responses associated with traumatic events include anxiety, fear, denial, anger, shock, moodiness, sorrow, and sadness. CISD is vital to managing any traumatic experience in individuals, as it promotes resiliency, and is most effective when implemented as soon as possible after the event to improve its effectiveness. Variables, in these cases, include factors such as pre-crisis preparation, components of the CISD program, community support programs, and appropriate follow-up (Gamble et al., 2020).

The Rationale for Conducting the Review

This integrated review searched and analyzed the literature to determine if there are interventions for emergency healthcare providers subjected to frequent traumatic events when caring for patients. CISD is a vital strategy to help healthcare providers mitigate the stress response. Furthermore, this integrated review demonstrated the benefits of providing CISD education to the healthcare providers in response to the experiences of aforementioned incidents (Gamble et al., 2020).

Purpose and/or Review Question

Does the literature support the use of CISD to mitigate mental health stress in healthcare providers?

Formulate Inclusion and Exclusion Criteria

The inclusion criteria used to select the reviewed resources were based on their relevance to CISD, currency, and purpose. There were sections of research that focused on addressing critical incident stress debriefing from the causes of stress and trauma to healthcare providers. The selected sources are articles that were published within the last five years. Any source that was published from 2015 and earlier were not included in the review.

Conceptual Framework

The chosen framework was The Dimensions of Strategic Change by Richard Whipp and Andrew Pettigrew. This model provided guidance and support for translating the findings of this integrated review. This model postulates that there are three dimensions of change: the content of change, the context of change, and the process of change. There are incessant interactions between these change dimensions; however, the dimensions of change are interdependent (White et al., 2019). For example, process and context define the change content. Successful change occurs due to the interaction amongst the processor of the change, the organizational context of change, and change content (White et al., 2019).

The content of change focuses on the goals, purposes, and objectives of the strategy. It examines organizational parameters before and after an incident in an organization's life (White et al., 2019). The change process is primarily concerned with the comprehension of the actual change as it unfolds, which includes the manager's roles as the agent of change. The change process is concerned with the occurrence of the change in content. Change context is the environment that surrounds an organization. This is a playing field from wherein change forces emanate and wherein accomplishment of change occurs (White et al., 2019).

This framework helps understand the organizational change complexities even for ordinary and smaller change levels. It allows successful strategic change management through proper assessment of the environment, leading change, linking operational and strategic change, use of adequate human resources, and coherence (White et al., 2019). The framework adds the essential dimensions that include the content, context, and process of change, along with emphasis to the change strategies that exist, which can assist to accelerate the pace for an effective as well as sustainable change (White et al., 2019).

The attributes or components of the framework chosen viewed as the framework's limitations are the need to have overall coherence, insecurity among the staff, and internal and external environmental forces. Staff tends to get worried regarding their performance when there is a new change (White et al., 2019).

The Dimensions of Strategic Change model supports this integrated review on the efficacy of educating health care professionals surrounding CISD, with the goal of improving their well-being. The model aided with setting clear goals, purposes, and objectives of the change strategy. The model also helped implement the change strategy (White et al., 2019). The model ensured proper assessment of the environment by helping to continuously monitor the external and internal environment of the organization through the open learning systems. Finally, the model ensured that human resources were appropriately and sufficiently utilized as liabilities and assets (White et al., 2019).

SECTION TWO: COMPREHENSIVE AND SYSTEMATIC SEARCH

Search Organization and Reporting Strategies

The search and review of literature relied on several online databases, including PubMed, Biomed, Cochrane Library, and CINAHL. The search generated several articles that addressed

the topic of the effects of providing CISD education to healthcare providers. The inclusion and exclusion criteria involved selecting the articles published within the last five years, that is, between 2017 and 2022. The writer only selected the articles that provided an explanation on the application of critical incident stress debriefing education to healthcare providers. A summary of the evidence is attached in Appendix A. All journals and articles that did not contain the required information were rejected.

Prisma Model

The PRISMA framework helps in conducting research. Different types of databases were used in conducting the review. Eligibility, inclusion, screening, and identification were performed and most of the articles that were duplicates or those that did not cover the topic of interest were eliminated. *n*=1, 985 records were identified through database search and other; *n*=6 additional records identified through other sources. *n*=1795 records were removed because they were duplicates. *n*=795 records were screened and excluded from the analysis. Around 35 full text articles assessed for eligibility, where n=42 full text articles were excluded. Out of the *n*=42 articles assessed for eligibility *n*=35 was out of scope, *n*=3 had insufficient detail, and *n*=3 had a limited rigor. The studies included for qualitative synthesis were *n*=15.

Terminology

There were different terminologies used to carry out the search for literature and evidence. The terms that were defined in the process included “critical incident”, “emergency health care provider”, “resilience”, “compassion fatigue”, “traumatic event”. psychological debriefing”, “debrief”, “critical care healthcare professionals”, and “post-traumatic stress disorders”. A critical incident refers to any event or situation that has a potential risk of causing

serious physical or mental harm. Emergency health care providers are healthcare professionals or providers who are involved in delivering emergency medical care to patients with serious conditions. Resilience is the capacity to recover very fast from situations of difficulty. Compassion fatigue refers to the physical, psychological, and emotional effects of helping other people, especially in situations of trauma or stress. A traumatic event is an incident that results in emotional, physical, psychological, or spiritual harm. To debrief is to question someone on a given experience or incident. Critical care healthcare professionals are the healthcare providers who work in intensive care units (ICUs). PTSD is a pathological mental condition(s) caused by threatening events either through experiencing or through observing.

SECTION THREE: MANAGING THE COLLECTED DATA

Data Collection

The writer applied the qualitative data collection method because the meta-analysis of the literature review involved collecting mainly qualitative data. The intention of the researcher was to gather the information that could help answer the research questions. According to Paradis et al. (2016), coherence or alignments in all aspects of the research project is vital. The applied data collection methods are textual or content analysis. The technique is applied when researching changes, effects of interventions, or strategies (Paradis et al., 2016). The method of textual analysis is applied in making valid and replicable inferences through interpreting the reference material. The review of articles took one month, and the researcher organized the collected data into formats that were simple and easy to interpret. All the data collected focused on the critical stress debriefing effects on the healthcare providers.

Information Sources

The information collected was obtained from many professional sources. There was the extensive application of the qualitative method in the meta-analysis. All sources had appropriate and valid information and explanations on the main topic. The use of online databases to obtain the information sources exposed the researcher to several journals and articles that could not have been received through the manual or physical search at the Liberty University library. Additionally, most of the sources of information were accessed as accessible sources. Whittemore and Knafl's (2005) book on the modified evidence-based practice initiatives was employed as the standard for understanding the integrated review methodology process.

Eligibility Criteria

The determination of eligibility of the sources of information was based on selected articles that included an explanation of the effects of CISD on healthcare providers. Those excluded from the data analysis process were articles that either did not provide a detailed explanation or research on the main topic. In addition, the articles that had unclear titles and did not relate to the research topic were not added to the analysis. Once the eligibility criteria of the articles had been met, the article reviews began. This review followed the integrated review process as detailed by Toronto and Remington (2020).

SECTION FOUR: QUALITY APPRAISAL

Appraising quality in research is the process of carefully and systematically evaluating research to determine its validity, relevance, and value (Majid & Vanstone, 2018). Quality appraisal was conducted to assess the relevance, value, and validity of sources. The specific

appraisal tool used by the researcher in the integrative review was Melnyk's Levels of Evidence (2011) (Appendix B).

Sources of Bias

The exhibited bias in the study included information and selection bias. The information bias was present in the type of articles selected to provide information in the research. Information bias is the distortion in the measure of association due to the absence of measurements that leads to exposure and can originate from poor data collection techniques (Alexander et al., 2015). The research applied selection bias in the research process by only selecting those sources that focused on CISD and no other related topics such as trauma. The selection bias led to the researcher using sources with a small sample size, which minimizes the accuracy of generalizations and findings (Devilly et al., 2017).

Internal Validity

The level of bias used in the research affects the internal validity of the integrative review. Internal validity refers to the degrees of confidence whereby the causal relationship being investigated is not affected by variables or other factors (Devilly et al., 2016). Some of the factors that threaten the internal validity of sources are instrumentation, selection bias, attrition, social interaction, maturation, testing, and history. The importance of internal validity is that it increases the chances of observed results to be highly accurate in representing the truth in the population errors (Mertz, 2019). The validity of the information contained in this integrative review includes the data itself and selection bias. However, the researcher applied the critique framework using Melnyk's Level of Evidence table to appraise the evidence and thus reduce the risks related to the identified discrimination (Conrad et al., 2018).

Reporting Guidelines

The PRISMA 2020 statement has a checklist of items that explains the reporting recommendation that aids the research review (Page et al., 2021). This integrated review is fully based on the PRISMA guideline regarding the principle that ensures effective reporting of information in the sources. The number of sources used in the process is relatively large, thus the PRISMA guideline enabled the researcher to have a complete review process (Figure 1).

SECTION FIVE: DATA ANALYSIS AND SYNTHESIS

Analysis

The multiple reviewed articles revealed that critical stress debriefing is vital in helping healthcare providers manage traumatic experiences. Clark et al. (2019) elegantly defined the major theme of the CISD process, which is working in the emergency department increases the exposure to frequent critical incidents, which may lead to PTSD (Elhart et al., 2019; Cantu & Thomas, 2020). Research supports that critical incident stress debriefing increases nurses' resilience, decreases attrition, and reduces levels of burnout (Davis, 2020; Appleton et al., 2018). Canale et al. (2018) indicated that structured real-time critical incident debriefings have positive impacts on compassion satisfaction and burnout, as well as secondary traumatic stress among emergency medical staff. Cantu and Thomas' (2020) study on baseline well-being, perceptions of critical incidents, and openness to debriefing in community hospital emergency department clinical staff before COVID-19 suggested that essential debriefings of the incident are helpful to the well-being of clinical personnel.

Descriptive Results

Elhart et al. (2019) discussed the psychological debriefing of hospital emergency personnel. A review of critical incident stress debriefing showed that psychological debriefing facilitates normal recovery of hospital emergency personnel from psychological and physical burden of exposure to the critical incident. Davis (2020) drew on participants from both the pre-hospital, hospital, and non-medical individuals. Exposure to a high level of trauma in their practice of caring for patients with critical wounds and conditions is common for frontline healthcare providers, especially those who work in the emergency department, the intensive care unit nurses, and trauma nurses (Davis, 2020). Appleton et al. (2018) only relied on nursing professionals, but they were drawn from multiple departments and were not exclusively emergency department associates. Moral distress and burnout are concerns that have existed in healthcare practice for several years (Appleton et al., 2018). This integrative review demonstrates that the moral distress derived from the professional field and CISD not only decreases the burnout of nursing staff but increases resiliency and attrition among staff. Critical incidences such as acts of violence, death of a patient, or medication error have the potential of causing emergency providers to become stressed (Canale et al., 2018). Canale et al. (2018) relied on emergency department staff only and demonstrated that real-time CISD had a positive impact on compassion satisfaction and showed a decrease in secondary traumatic stress among the participants.

Nurses develop moral distress when they behave unprofessionally, which violates the authenticity and integrity of their practice. Emergency providers develop emotional solid reactions in caring for patients who have critical incidences, which may affect their cognition, behaviors, emotions, and physical health (Cantu & Thomas, 2020). The participants of the

critical incidence in the emergency room study consisted of nurses, physician assistants, physicians, and emergency department technicians from the emergency department located at a single site. This was a voluntary participation study. Findings indicated that the participants were receptive to the CISD process and felt it was useful to their well-being as clinical practitioners. Debriefings can offer relief to healthcare providers from the stress caused from critical incidences; therefore, applying an available CISD program is a crucial way to help the emergency providers receive debriefing (Winton et al., 2019).

Synthesis

CISD is a vital tool for helping the nurses working in emergency medicine cope with the challenge of exposure to trauma and its related effects (Clark et al., 2019; Elhart et al., 2019; Cantu & Thomas, 2020). CISD offers an open, non-judgmental setting, where those involved may express their feelings with the goal to avoid internalization of the feelings and stress surrounding the incident, while reinforcing that the individual is not alone in experiencing the stress and accompanying emotions. While healthcare providers may develop trauma because of the traumatic incidence they experience, timely discussion-based stress interventions exist and can improve peer support and enable them to have good health and the ability to practice better (Cantu & Thomas, 2020). Scientists and researchers have recommended debriefing as the best method of alleviating the stress caused by work-related issues (Cutler et al., 2016). Psychological debriefing has shown varied results in terms of its efficacy in minimizing PTSD. All researchers agreed that healthcare providers, especially those who work in emergency medicine, are exposed to critical incidences such as the death of patients and require regular essential incident stress debriefing therapy to help alleviate conditions of post-traumatic stress disorder and enable them to have good physical, cognitive, emotional, and psychological health.

Ethical Considerations

The student submitted this integrated review to the Liberty University Institutional Review Board (IRB). The IRB responded with an email stating the project was exempt. The student archived the email from the IRB (Appendix D). A Biomedical and Health Science Research class was completed through Citi Training (Appendix C).

SECTION SIX: DISCUSSION

The literature review explains the importance of applying incident stress debriefing in promoting the health of healthcare providers, especially those who work in emergency medicine. The main reason for the application of critical incident stress debriefing is to reduce the effects of a critical incident. However, there are other ways that healthcare workers can destress themselves. Any debriefing process requires positive feedback and critique to enable an enhanced care delivery process (Clark et al., 2019). Critical incident stress debriefing can reduce the nursing staff attrition after some time and thus is recommended for the administrators that seek to minimize their operations cost of recruiting and hiring healthcare staff in cases where there are high levels of turnover (Davis, 2020).

Research shows that critical incident stress debriefing carried out after experiencing critical incidences in the workplace is a cost-effective approach to minimizing the effects of negative psychological impacts such as compassion fatigue, PTSD, burnout, and secondary stress disorder. The most common cause of a traumatic incident to healthcare providers is witnessing the death of their patients, which always induces so degree of psychological stress. Debriefing of healthcare providers after a patient's death is effective in improving psychological outcomes by reducing the chances of developing stress (Harder et al., 2020). All the reviewed

articles indicated that CISD is effective in addressing the frequent stress and trauma experienced by healthcare providers.

Implications for Practice/ Future Work

The implication of the findings of this integrated review is that all healthcare providers require CISD to help them manage stress and post-traumatic stress disorders that affect their practice. Without remediating the effects of the critical incidences such as acts of violence, death of a patient, or medication error experienced by healthcare workers, then the traumatic events are likely to have affected cognitive, emotional, physical, and psychological health (Campfield et al., 2021). Healthcare leaders should introduce critical incident stress debriefing sessions to the clinical healthcare orders to enable them to achieve better health with greatly reduced work-related stress and PTSD.

Dissemination

The benefits of CISD to healthcare providers should be shared or disseminated to the healthcare organization leaders and healthcare professionals (Hawker et al., 2018). While there is a large body of literatures on the importance of CISD, it is important to share the knowledge gained by conducting this integrated review. This integrated review can be disseminated in the form of an article, which can be shared through online research databases.

Conclusion

Critical Incident Stress Debriefing (CISD) is the core component of Critical Stress Debriefing Management (CISM). The terms are not interchangeable and are often confused with each other. This integrated review focused on CISD. Participation as a CISD facilitator is universal, voluntary, and mostly uncompensated. The literature reviewed demonstrated and

supported a positive experience for the majority of CISD participants. Participation in the CISD process may or not be required by different agencies. This indicates there is no consent to the process, but rather a requirement. Additionally, there is no standard process for those deciding to participate in CISD, indicating that although consent is given, it is not necessarily informed consent because there may not be a formal process in place. Future studies might consider this. If the CISD process is required, a prequestionnaire asking whether this is something that the participant wants to be involved in and a follow-up as to the perceived outcome would help stratify the outcomes with consideration to the preconceived notion. If the CISD process is optional, then the same questionnaire could serve as a baseline, with a truly informed consent instruction, and the same follow-up with the participants, and those declining after the informed consent explaining why they declined to participate. In all incidents that merit CISD, the offer to participate is critical and the outcomes offer a positive benefit to many of the participants.

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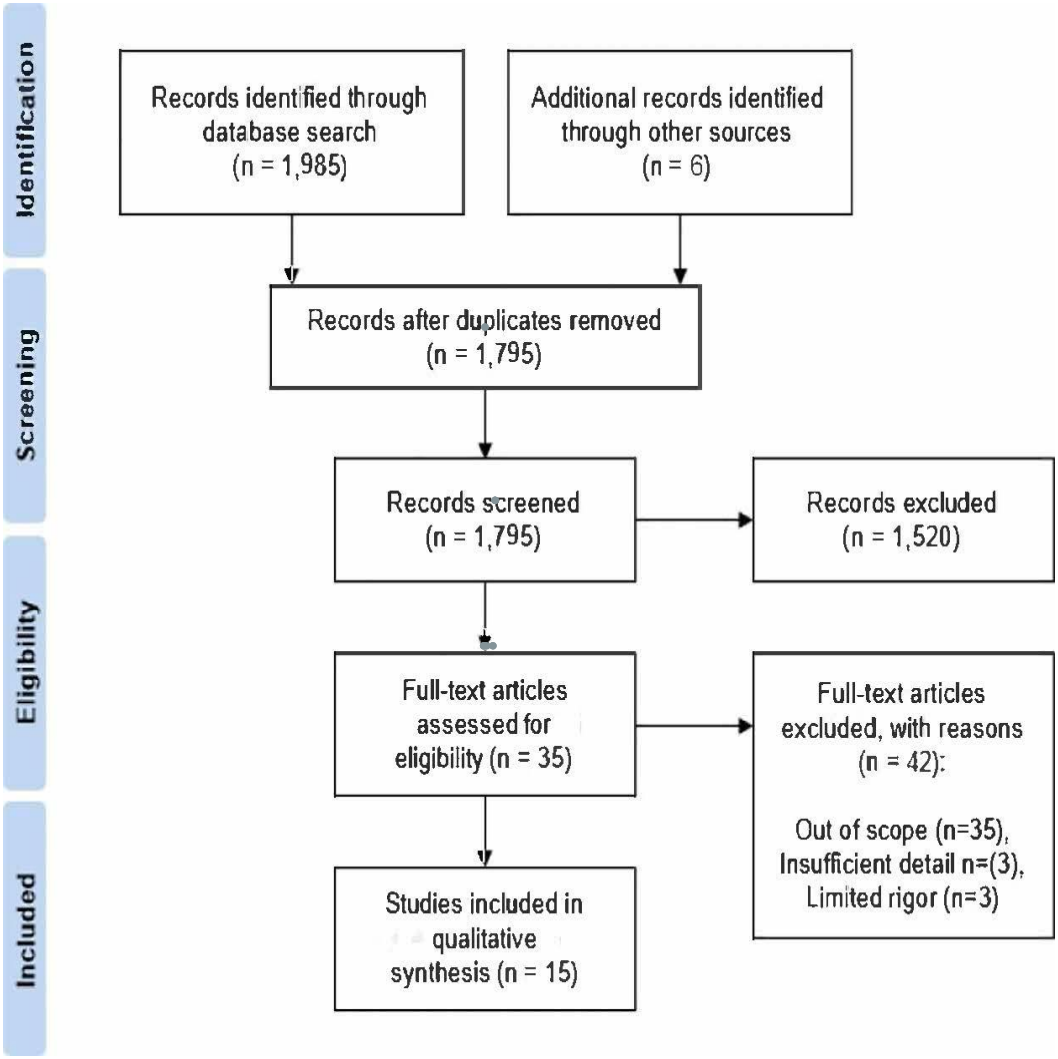
Figures

Figure 1

PRISMA Flow Diagram



Appendix A

Evidence Table

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Example, A. (2015) Title, etc. per Current APA	To identify the need for technology to prevent falls	A convenience sample of 44 nurses in an acute care hospital	A non-experimental, descriptive survey	Findings indicate that fall rates decreased by 2% with the introduction of technology care setting	Level 6: descriptive design	Conducted in only one setting, small sample size	Does provide some good foundational information even though the level is a 6.
Article 1 Al Barmawi, M. A., Subih, M., Salameh, O., Sayyah Yousef Sayyah, N., Shoqirat, N., & Abdel-AzeezEid Abu Jebbeh, R. (2019). Coping strategies as moderating factors to compassion fatigue among critical care nurses. *Brain and behavior*, *9*(4), e01264. https://doi.org/10.1002/brb3.1264	To understand how to use coping strategies among critical care nurses	A convenience sample of 62 critical care nurses in the critical care unit	Qualitative descriptive study	The results of the study showed that 84.4% of nurses had very low compassi	Level 3 level of evidence	This study was limited to 62 critical care nurses	Yes, the study offers adequate and vital information that can be utilized appropriately to support the

				on and high burnout rates secondary to stress syndrome			proposed practice change
Article 2 Appleton, K. P., Nelson, S., & Wedlund, S. (2018). Distress debriefings after critical incidents: a pilot project. *AACN advanced critical care*, *29*(2), 213-220. https://doi.org/10.4037/aacnacc2018799	The impacts of distress debriefings on secondary traumatic stress development and compassion fatigue amongst emergency or trauma and critical care nurses after their exposure to critical incidents in the place of work.	A convenience sample of 57 Paediatric Intensive Care Unit (*PICU*) nurses working in the unnamed freestanding hospital for children.	A qualitative, descriptive study. Thematic analysis was used in the study.	The findings of the research indicate that distress debriefings mitigate burnout effects and impact of moral distress, reduces secondary traumatic stress development, and decrease fatigue amongst emergency nurses along with critical care	Level 6	The research was a pilot project. A small sample was utilized in the research. The results of the study are not necessarily reproducible.	The study offers essential information that can be used to support the change.

				nurses following their exposure to traumatic events in their workplace.			
Article 3 Campfield, K., & Hills, A. (2021). Effect of timing of critical incident stress debriefing (CISD) on posttraumatic symptoms. *Journal Of Traumatic Stress*, *14*(2), 327-340. https://doi.org/10.1023/a:1011117018705	Applying critical incident stress debriefing in traumatic incidences that were not healthcare workers.	*A convenience study of 77 civilian employees*	Descriptive study	77 people were assigned to immediate counselling (within 10 hours) or delayed counseling (48 post incident)	Level 2 level of evidence	Limited to 77 people	Yes, once again this study shows the importance of critical debriefing quickly to improve mental health.
Article 4 Cantu, L., & Thomas, L. (2020). Baseline well-being, perceptions of critical incidents, and openness to debriefing in community hospital emergency department clinical staff before COVID-19, a cross-sectional study. *BMC emergency medicine*, *20*(1), 1-8. https://doi.org/10.1186/s12873-020-00372-5	To examine the perceptions of community hospital emergency department staff regarding critical incidents and to assess openness	A randomized sample of 39 participants. The participants consisted of clinical personnel that included registered nurses and physician assistants, physicians,	A quantitative, cross-sectional study.	The findings of the research indicate that critical incident debriefings are useful to the well-being of clinical personnel. Besides, the	Level 2	Respondents' age was not collected in the demographic data. Small sample was gathered at the single site. This decreases the power to detect	The research findings are important, relevant, and comprehensive and can be utilized to support the practice change.

	to debriefing and measure baseline wellbeing.	resident physicians together with the emergency department technicians from the emergency department of St. Vincent.		findings indicate that there was a desire amongst the participants to discuss critical incidents with the team that demonstrates receptiveness to debriefings or post-event discussions.		differences in groups and reduces the capability to generalize the results. Also, the findings might have been influenced by nonresponse bias.	
Article 5 Clark, P. R., Polivka, B., Zwart, M., & Sanders, R. (2019). Pediatric emergency department staff preferences for a critical incident stress debriefing. *Journal of emergency nursing*, *45*(4), 403-410. https://doi.org/10.1016/j.jen.2018.11.009	To determine the preferences of pediatric emergency department staff regarding critical incident stress	A convenience sample of 19 participants, which consisted of the pediatric emergency nurses together with a nursing assistant.	A qualitative study that involved the utilization of an emerging, descriptive design. Focus groups were used in the	The findings indicate that the pediatric emergency department staff destress in several ways and the non-mandatory and	Level 6: Descriptive design.	The study involved the use of a small sample (n=19). Also, the research was carried out only in one healthcare setting.	The findings of the study would be utilized as evidence to support the proposed change. This is because the research provides

	debriefing.		collection of data from the participants.	formalized critical incident stress debriefing process that is open to the staff involved as well as facilitated by the emergency nurses can offer extra relief from the stress. The debriefing process may comprise positive feedback along with critiques to assist enhance the processes of the care and information regarding the mechanis			adequate, essential, and comprehensive information on the positive impact of debriefings on relieving stress caused by critical incidents.

				ms of injury and also needs to happen prior to the culminati on of the shift or within twelve hours to twenty-four hours of an incident or events. Besides, the staff can deal with individual feelings outside of the debriefing .			
Article 6 Conrad, E. K., & Morrison, R. D. (2018). MP31: Debriefing critical incidents in health care: a review of the evidence. *Canadian Journal of Emergency Medicine*, *20*(S1), S51-S52. DOI: https://doi.org/10.1017/cem.2018.185	To determine whether debriefing after critical incidents improves the outcomes of healthcare	A convenient sample of 16 articles.	A systematic review of articles.	The findings of the research indicate that healthcare providers view debriefing positively and	Level 5	A small sample (n=16) was utilized in the study. Thus, the findings of the research cannot be	The study offers adequate and vital information that can be utilized appropriately to support the proposed

	providers or patients.			debriefing is associated with improved mental health as regards the ability to effectively manage grief as well as reduced post-traumatic stress disorder symptoms, enhanced knowledge, and enhanced short-term patient survival.		generalized.	practice change.
Article 7 Cutler, A., Black, J., Sheth, S., & Pathy, S. (2016). Critical Incident Debriefing: Impact of a Teaching Module for OB/GYN Residents. *Obstetrics & Gynecology*, *128*, 43S-44S. DOI: 10.1097/01.AOG.0000502676.73912.bd	To determine the effectiveness of critical incident debriefing on healthcare	A randomized sample of 12 participants.	A pre and post-study design. Surveys were utilized to collect data.	The research findings indicate that critical incident debriefing is useful, alleviates	Level 3	The study involved the utilization of a small sample (n=12).	The research provides vital information which can be used to support the change.

	professionals.			work-linked stress, and increases comfort identifying. Also, the teaching module had significant and positive impacts on how the residents process as well as confronts the critical incidents.			
Article 8 Devilly, G., & Annab, R. (2016). A randomized controlled trial of group debriefing. *Journal Of Behavior Therapy and Experimental Psychiatry*, *39*(1), 42-56. https://doi.org/10.1016/j.jbtep.2006.09.003	To show the mental stress that paramedic and healthcare workers go through	A convenience sample of 64 people in EMS	A quantitative random controlled study	There were 2 groups that were split in two. One group debriefed and one group was not. The group that was debrief	Level 4 level of evidence	Small, limited group of 64	Yes, it shows that a larger group study should be pursued.

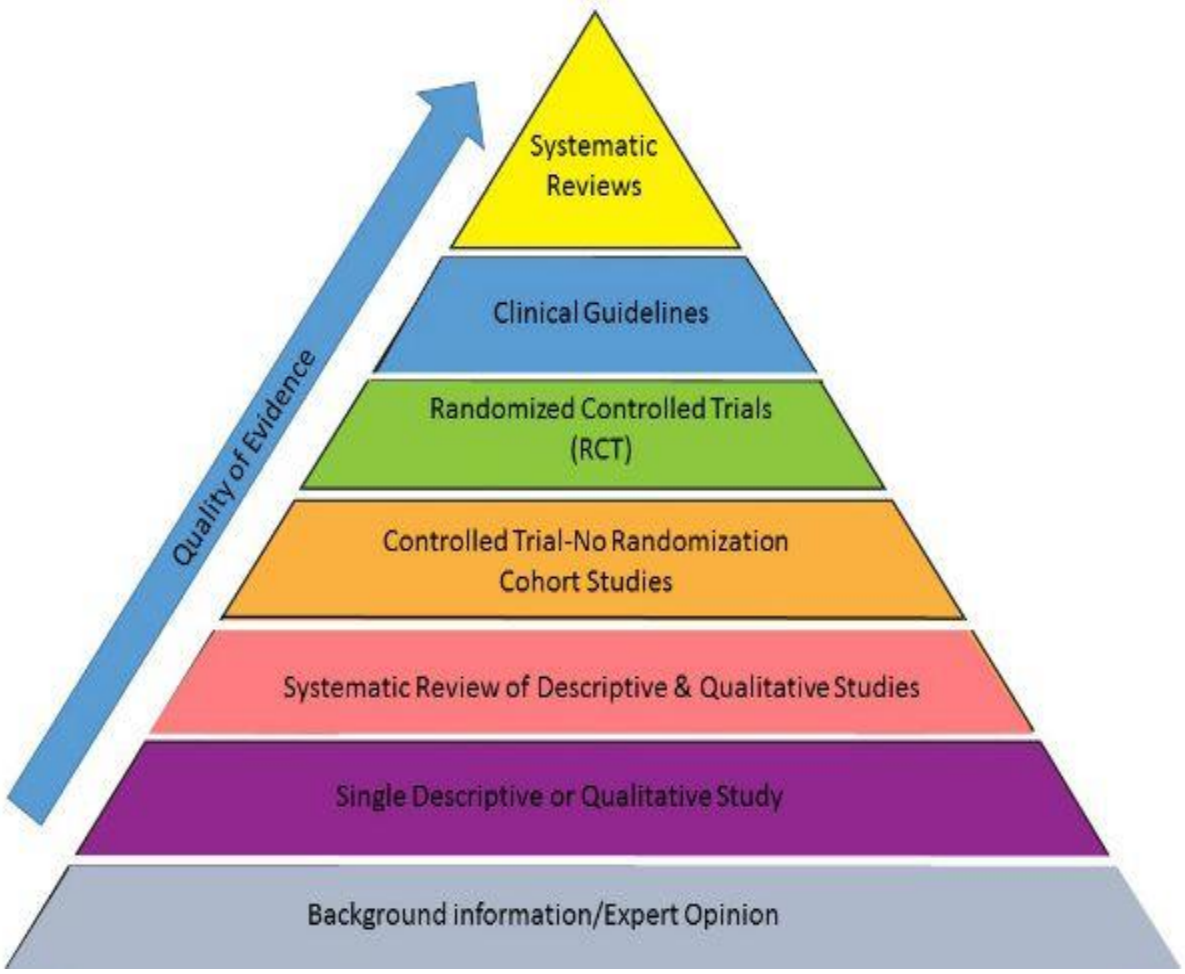
				showed stronger evidence of stable mental health			
Article 9 Devilly, G., & Varker, T. (2017). The effect of stressor severity on outcome following group debriefing. *Behaviour Research and Therapy*, *46*(1), 130-136. https://doi.org/10.1016/j.brat.2007.09.004	To decide if critical incident stress debriefing is beneficial in Primary care	A convenience study of 119 people in Primary care	A quantitative analogue study	Two videos shown to two groups. 67 received debriefing and 52 were the control. The group that was debriefed had better coping	Level 5 level of evidence	Limited group of 119	Yes, it shows that they are getting good results with debriefing compared to not debriefing.
Article 10 Elhart, M. A., Dotson, J., & Smart, D. (2019). Psychological debriefing of hospital emergency personnel: review of critical incident stress debriefing. *International Journal of Nursing Student Scholarship*, *6*. https://journalhosting.ucalgary.ca/index.php/ijnss/article/view/68395	To review the literature regarding critical incidents as well as the impacts of critical incident stress debriefing (CISD) on the hospital emergenc	A convenient sample of 10 publications, which were published between 2000 and 2016.	A qualitative study involving the utilization of thematic analysis. Review of literature using ten articles that were obtained	The findings of the research indicate that psychological debriefing facilitates normal recovery of hospital emergency personnel from	Level 5 level of evidence	A small sample (n=10) was utilized in the study. This hinders the generalization of the study findings.	The research provides vital information that would be utilized as appropriate evidence in supporting the practice change proposed.

	y personnel, as well as to explore the effects of critical incident stress debriefing on Post-Traumatic Stress Disorder (PTSD) development in hospital emergency personnel.		from EBSCOhost and Cochrane Database for Systematic Reviews.	psychological and physical burden of exposure to the critical incident. However, there exist mixed findings concerning the effectiveness of psychological debriefing in decreasing PTSD among the hospital.			
Article 11 Gamble, J., Creedy, D., Webster, J., & Moyle, W. (2020). A review of the literature on debriefing or non-directive counselling to prevent postpartum emotional distress. *Midwifery*, *18*(1), 72-79. https://doi.org/10.1054/midw.2001.0287	To investigate experiences of pediatric intensive care staff of their participation in twenty-minute group time-outs.	A randomized sample of 50 staff members.	A qualitative study that involved the utilization of semi-structured interviews. interviews.	Indicates that the debriefing improves the wellbeing and understanding of pediatric intensive care staff critical incidents.	Level 6	The study involved the use of a small sample size. There was a potential social desirability bias in the study.	The research provides essential, relevant, and sufficient information that can be utilized to support the change.

Article 12 Hammerle, A., Devendorf, C., Murray, C., & McGhee, T. (2017). Critical incidents in the ED. *Nursing Management*, *48*(9), 9-11. DOI: 10.1097/01.NUMA.0000522180.69005.1e	Helping nurses understand what CISD is and how it works	A convenience study of 120	Thematic analysis was used to analysis interviews	The finding indicates that CISD in useful in the ER	Level of 4 evidence	Small group of 120	Yes, good information on moral distress and burnout.
Article 13 Harder, N., Lemoine, J., & Harwood, R. (2020). Psychological outcomes of debriefing healthcare providers who experience expected and unexpected patient death in clinical or simulation experiences: a scoping review. *Journal of clinical nursing, 29(3*-4), 330-346. https://doi.org/10.1111/jocn.15085	To look at the literature of the psychological outcomes of CISD	A convenience sample of 18 article reviews	A review that used the PRISMA model	Positive outcomes when using CISD after patient death	Level of evidence 3	18 article review	Yes, great example of how CISD is used.
Article 14 Harrison, R., & Wu, A. (2017). Critical incident stress debriefing after adverse patient safety events. *The American journal of managed care*, *23*(5), 310-312. https://europepmc.org/article/med/28738687	To examine if CISD is helps with traumatic events and high stressed events	A convenience study of 20 articles	A qualitative study which used several controlled studies	The study shows movement toward CISD and the benefits.	Level 3 level of evidence	Short articles pertaining to topic	Yes, there is good information on traumatic events.
Article 15 Winton, M., Cooper, S., & Latchford, G. (2020). Paediatric Intensive Care Staff Experiences of Debriefing Post Critical Incident; a Qualitative Study of the Leeds 'time Out'Method. DOI: https://doi.org/10.21203/rs.3.rs-67719/v1	To help Understand emotions and thoughts that are caused from their work.	A convenience sample of 32 people in primary care	A qualitative study which used several controlled studies	Study results showed an increase and improvement In mental health	Level 5 Descriptive design	Study utilized a small, controlled group.	Yes, the study provided good foundation of information

Appendix B

Melnyk's Level of Evidence



Research Guides: Nursing: Levels of Evidence. (2022). Retrieved 02 August 2021, from https://guides.lib.umich.edu/c.php?g=282802&p=1888246

Appendix C

Citi Training

Completion Date 26-Sep-2021
Expiration Date 25-Sep-2024
Record ID 45312833

This is to certify that:

Mary Smith

Has completed the following CITI Program course:

Not valid for renewal of certification through CME.

Biomedical Research - Basic/Refresher
(Curriculum Group)
Biomedical & Health Science Researchers
(Course Learner Group)
1 - Basic Course
(Stage)

Under requirements set by:

Liberty University

Collaborative Institutional Training Initiative

Verify at www.citiprogram.org/verify/?w1066f917-d146-4272-8e6b-cb74df2cf2df-45312833

Appendix D

IRB Approval

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

January 12, 2022

Mary Smith
Tonia Kennedy

Re: IRB Application - IRB-FY21-22-539 Integrated Review Critical Incident Stress Debriefing

Dear Mary Smith and Tonia Kennedy,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study does not classify as human subjects research. This means you may begin your project with the data safeguarding methods mentioned in your IRB application.

Decision: No Human Subjects Research

Explanation: Your study is not considered human subjects research for the following reason:

It will not involve the collection of identifiable, private information from or about living individuals (45 CFR 46.102).

Please note that this decision only applies to your current application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued non-human subjects research status. You may report these changes by completing a modification submission through your Cayuse IRB account.

Also, although you are welcome to use our recruitment and consent templates, you are not required to do so. If you choose to use our documents, please replace the word *research* with the word *project* throughout both documents.

If you have any questions about this determination or need assistance in determining whether possible modifications to your protocol would change your application's status, please email us at irb@liberty.edu.

Sincerely,

G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office