



THE IMPACT OF ORGANIZATIONAL SUPPORT ON SECONDARY TRAUMATIC STRESS AND EVALUATION OF A CISM PEER SUPPORT PROGRAM

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Abstract: Background: Clinician well-being and resiliency has gained recent national attention as a priority for improving patient care. Without adequate coping strategies and organizational support following distressing workplace events, healthcare clinicians experience higher rates of secondary traumatic stress (STS), which can lead to compassion fatigue (CF) and burnout (BO). Furthermore, organizations can face higher turnover rates and absenteeism, lower workplace morale and patient satisfaction, and even medical errors related to STS, CF and BO. Aim: The aim of this quality improvement project was to gain an understanding of the role that organizational support has on Secondary Traumatic Stress after traumatic workplace events, and to evaluate employees' perceptions of a currently existing Critical Incident Stress Management peer support program at a Pediatric Level I Trauma Hospital. Methods: An employee perception of support survey was administered along with the Secondary Traumatic Stress Scale (STSS) to all nurses at a level one pediatric hospital. Additionally, the CISM post-intervention survey was administered electronically to participants of CISM interventions over a one-year period to obtain feedback regarding their experience with the peer support program. Conclusions: Findings demonstrated that organizational support following traumatic workplace events was statistically associated with lower Secondary Traumatic Stress Scores, and the majority of staff reported positive benefits of participating in the Critical Incident Stress Management peer support program following a traumatic event.

Keywords: Critical Incident Stress Management (CISM), Secondary Traumatic Stress, Resiliency, Peer Support, Compassion Fatigue, Organizational Support

Introduction

The Impact of Organizational Support on Secondary Traumatic Stress and Evaluation of a CISM Peer Support Program

An unavoidable and unfortunate consequence of working in healthcare, and specifically in pediatric

healthcare, is the potential exposure to high stress patient-related events that can cause emotional distress (dos Santos et al., 2014). These events may include, but are not limited to, adverse events, "near misses", medical errors, patient deaths, unexpected outcomes, care of abuse victims, ethical dilemmas, and difficult or violent interactions (Dukhanin et al., 2018). These types of incidents are referred as *critical incidents*

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within the Critical Incident Stress Management (CISM) peer support program, and they are associated with many negative consequences for the clinician and the organization (Muller-Leonhardt et al., 2014). Peer support programs, such as CISM, are intended to support clinicians after critical incidents, and help mitigate these negative consequences (Muller-Leonhardt et al., 2014). Overall, the purpose of this project was to gain a better understanding of the impact that organizational support has on mitigating secondary traumatic stress following a critical incident and evaluate the clinicians' experience in utilizing the project site's CISM peer support program.

Background

Health care workers who are exposed to high stress situations and experience personal traumatization are often referred to as second victims and may experience higher levels of secondary traumatic stress (STS), compassion fatigue (CF), and burnout (BO) (Beck et al., 2017; Berger et al., 2015; Quillivan et al., 2016). Berger et al. (2015) found that over a quarter of the pediatric nurses they sampled, reported low compassion satisfaction (CS), high BO, and high STS. CS is referred to as the positive feelings that one has in relation to their ability to help others in their professional life. Individuals with high levels of CS tend to experience well-being and resiliency in their work. On the other hand, CF is associated with the negative aspects of one's professional helping role (Stamm, 2010). One such negative aspect of the helping profession is exposure to critical incidents. STS is characterized by the stress responses that clinicians experience following critical incident exposure, and theoretically may contribute to CF (Bride et al., 2004; Stamm, 2019). Ultimately, CF can also lead to BO, which is a condition often associated with feelings of hopelessness and inability to perform job duties effectively (Stamm, 2019). Nurses who work with pediatric patients are at an increased risk for experiencing psychological trauma related to patient care events (Beck et al., 2017; Berger et al., 2015; dos Santos et al., 2014). The vulnerable and innocent nature of children, and routine exposure to child trauma as well as parental trauma, puts pediatric nurses at an increased risk for experiencing STS, and subsequently developing CF (Berger et al., 2015).

Organizational Impact of Second Victim Trauma

The organizational impact of a second victim experience is extensive. According to Quillivan et al. (2016) "if not abated or treated, a second victim experience can harm the emotional and physical health of the health care provider and subsequently compromise patient safety" (p. 377). Furthermore, STS, BO and CS are linked to lower patient

satisfaction scores, absenteeism, low workplace morale, and higher turnover rates (Hinderer et al., 2014; Hunsaker et al., 2015). It is estimated that the cost of nurse turnover in the United States is \$300,000 for every one percent increase in turnover (Moran et al., 2017). This significant financial burden only further compounds the negative consequences associated with second victim trauma.

Peer Support Programs

A growing number of organizations are implementing peer support programs in an effort to care for their clinicians and combat the negative effects of critical incidents. One such peer support program model is Critical Incident Stress Management (CISM). CISM is a comprehensive peer support program intended to support "employees in the recovery from critical incident stress reactions, and ultimately enhance the resiliency of the organization" (Muller-Leonhardt et al., 2014). More specifically, CISM provides a proven model and safe environment, with trained facilitators, in which employee peers can process their reactions to a critical incident in the workplace and offer support to one another. It is recommended that healthcare organizations, specifically those specializing in pediatrics, implement and promote utilization of a formal organizational peer support program available to all staff following critical incidents (Quillivan et al., 2014). At the site of this project, a CISM peer support team is available by request to any staff member following a critical incident, with the goal of demonstrating organizational commitment to supporting clinicians and promoting group cohesion amongst team members. In one study, staff reported positive experiences in utilizing a CISM peer support program following critical incidents, including: greater openness, support, and understanding (Muller-Leonhardt et al., 2014). Additionally, group cohesion was shown in another study to moderate the effects of STS, significantly reducing rates of CF and BO, and increasing CS (Li et al., 2014).

Conceptual and Theoretical Framework

The theoretical model of Compassion Satisfaction & Compassion Fatigue was utilized to guide and inform this project (Stamm, 2010). In this model, it is depicted that trauma in the workplace may contribute to CF, which can ultimately lead to exhaustion, frustration, anger, and eventually professional burnout. Additionally, the work environment, client environment, and personal environment can all contribute to either the development of CS or CF (Stamm, 2010). While the theory does not explicitly define these three components, the work environment might include variables such as supportive colleagues, organizational supports, shift lengths, and nurse-to-

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patient ratios. The client environment might include the acuity of the patient and the circumstances of their hospitalization. The personal environment involves how one personally processes or copes with their helping role, and whether or not they become traumatized by work. These three components are interconnected (Stamm, 2010). In relation to this model, CISM offers a method to modify the work environment, in order to support the personal environment. By doing so, the goal is to reduce compassion fatigue and conversely promote worker satisfaction.

Aim

The aim of this Quality Improvement study was to investigate the impact that perceived organizational support has on clinician's secondary traumatic stress scores at a pediatric level 1 trauma center located in Grand Rapids, MI. Additionally, the study team aimed to evaluate clinicians' experience of utilizing the project site's CISM peer support program which serves to provide organizational support at the project site following critical incidents.

Methods

The setting for this project took place within a Pediatric Level 1 Trauma Hospital, with approximately 1,000 total staff members. The pediatric hospital setting was selected for this project because evidence suggests that employees working in pediatrics are especially vulnerable to secondary traumatic stress (Beck et al., 2017; Berger et al., 2015; Dukhanin et al., 2018). In order to evaluate of the impact of organizational support on STS following a distressing workplace event, a brief *Perceptions of Support* (Appendix A) survey was developed asking clinician's to report if they had experienced a distressing workplace event in the past six months, if they had received support from anyone in the organization following the event, and if they found that support helpful in their coping. This brief survey was created by the project team, based off of similar survey questions used by Scott (2015) to evaluate associations between second victim support and safety culture perceptions. For those who indicated they had experienced a distressing workplace event, the initial brief survey was then followed up with the Secondary Traumatic Stress Scale (STSS) (Bride et al., 2004). The STSS is a 17-item Likert-type that assesses secondary traumatic stress symptoms in clinicians related to their work. Respondents are asked to rate how often they have experienced each symptom, which corresponds to the *Diagnostic and Statistical Manual of Mental Disorders* (Fourth Edition) (DSM-IV) 17 PTSD symptoms (Beck et al., 2017). The STSS has demonstrated reliability, (Bride et al., 2004). and

has repeatedly demonstrated internal consistency (Beck et al., 2017). This STSS was administered along with the *Perceptions of Support* survey between February 12, 2019 and March 5, 2019. The average Secondary Traumatic Stress Scale scores were statistically analyzed, comparing registered nurses who reported that they *did* receive support from someone within the organization following a traumatic event occurring in the previous six months, versus registered nurses who reported that they *did not* receive support from anyone in the organization following a traumatic event occurring in the previous six months. A two independent samples T-Test was run to see if the mean secondary traumatic stress score differed depending on whether or not the respondent reported they received support from someone within the project site organization. Differences were considered statistically significant at a $p \leq .05$.

Approval for this quality improvement study was obtained from both the Ferris State University's institutional review board, as well as the project site's institutional review board. Both institutional review boards determined this study to be a quality improvement activity and agreed that it did not meet the definition for research on human subjects. All six hundred and eighty-nine registered nurses at the project site hospital were sent an email through the executive leadership office, inviting them to participate in this study, with a link to the electronic *Perceptions of Support* and *Secondary Traumatic Stress Scale* surveys. The survey link remained live for three weeks, and one reminder was sent midway through the survey timeframe. The participants completed the surveys electronically and anonymously through the organization's Survey Gizmo internal software. No identifying information was collected in order to protect the privacy of the registered nurses, and the email invitation indicated that completing the survey implied their consent to participate in the quality improvement study.

Additionally, in order to evaluate clinicians' experience in utilizing the CISM peer support program at the project site, an additional survey was administered to the participants of each CISM intervention that took place at the project site from January 2019 to January 2020. This survey consisted of anonymous ordinal (four Likert style questions and four yes/no questions) and qualitative data regarding the participant's experience of participating in a CISM intervention (Appendix B). This survey was created by the project team; therefore, validity and reliability of this survey have not been previously tested. The data obtained from this study was utilized to further analyze whether participants of a CISM intervention at the project site perceived benefits from their participation that are in-line with findings in the

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literature. Results from this survey are also being used to inform the CISM leadership team and CISM steering committee for continued improvement of the overall CISM program. This survey was also administered electronically and anonymously through the organization’s Survey Gizmo internal software and did not include any identifying information in order to protect the privacy of CISM participants.

In total, 278 out of approximately 690 registered nurses at the project site completed the *Perceptions of Support* and STSS surveys, for a response rate of 40.3% respectively. One hundred seventy-five registered nurses indicated on the survey that in the past six months they had experienced a distressing workplace event (62.9%). As reflected in Table 1, results from the statistical analysis of the *Perceptions of Support* survey and STSS, demonstrated statistically significant lower STS scores for the group who reported that they *did* receive support following their distressing event, compared to the group that reported that they *did not* receive support.

Results

Impact of Organizational Support on STS

Table 1. Comparison of STSS means of nurses with and without support following a distressing event

Did you receive support?	Method	N	Mean	Std Dev	Std Err	Minimum	Maximum
No		55	35.8909	14.0879	1.8996	17.0000	73.0000
	Method	Variances	DF	t Value	Pr > t		
	Pooled	Equal	173	2.79	0.0059		
Yes		120	30.6333	10.2571	0.9363	17.0000	55.0000
Diff (1-2)	Pooled		5.2576	11.5896	1.8872		
Diff (1-2)	Satterthwaite		5.2576		2.1178		

It should also be noted that of the nurses who reported receiving support, 97.5% (117 out of 120) selected “Yes”, the support they received was helpful in their coping with the event. Therefore, not only did organizational support statistically decrease frequency of STS symptoms after a distressing workplace event, as seen from lower mean STSS, but registered nurses also perceived the support as helping them to cope with the event. These results are in line with findings in the literature that organizational support is a protective factor in STS and CF, and also offers additional support for organizations to invest in peer support programs that provide a means for

organizational support to clinicians following distressing events.

Evaluation of the CISM Peer Support Program

In total, 405 multi-disciplinary clinicians received a *CISM Post-Intervention survey* invitation and survey link to their email a week after participating in a CISM peer support intervention between January 2019 and January 2020. In total, 137 respondents completed the electronic survey, for a 33.82% response rate. See figure 1 for a summary of the Likert-style question response data.

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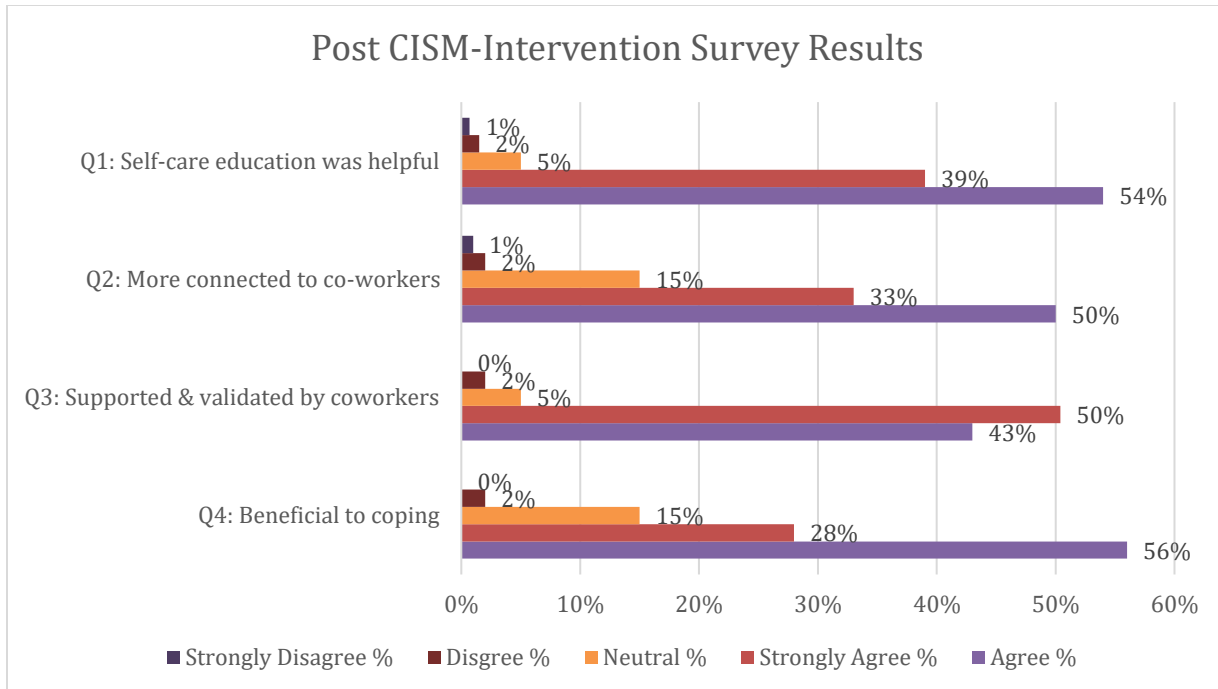


Figure 1. Summary of Post CISM-Intervention Survey Results

Overall, results from this survey demonstrated that the majority of participants of the CISM interventions reported positive benefits of participating in the intervention. 83.2% of respondents agreed or strongly agreed that the CISM intervention helped them feel more connected to their coworkers. 93.5% of respondents agreed or strongly agreed that they felt supported and validated by their coworkers in the intervention. 83.76% of respondents agreed or strongly agreed that the CISM intervention was beneficial to their ability to cope. Finally, 98.5% of respondents indicated that they would be willing to participate in a CISM intervention in the future based on the experience they had. This data aligns with the literature that peer support programs promote group cohesion, organizational support, and a decrease in symptoms related to the distressing event. Illustrative quotes included:

“It was nice to grieve with others that feel the same way. I felt like we all shared the same experiences and love for this little gal.”

“I felt that I was not alone in my response to this stressful event.”

“It was very helpful to realize others were feeling as I was. We were able to talk in a safe place.”

“I think it was good to be able to express my emotions with people who had also been through the same thing”.

“It helped me talk about the situation and solidify some thoughts I had from the experience.”

“Helped identify feelings I had not recognized.”

“I felt the session helped all of us get closer knowing that we were all going through somewhat of a similar thing.”

“There were really nice suggestions on self care and how to recognize signs of stress in ourselves.”

“MUCH more relaxed now and able to move on.”

Discussion

Limitations

This study had several notable limitations. First, the sample size for both surveys was relatively small. Additionally, the results of this project should only be interpreted in the context of this organization and the population of pediatric registered nurses.

Significance and Implications

In past studies, group cohesion among staff has been found to be a protective factor against compassion fatigue following traumatic events (Li et al., 2014). Organizational support following second victim events has also been shown to have positive impacts, such as increasing employee’s perception of safety culture (Scott, 2015). CISM peer support programs provide healthcare clinicians the opportunity to process traumatic workplace events in a structured

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and supportive environment and demonstrates the organization's commitment to support their clinicians. This project aligns with and adds value to the overall body of evidence that demonstrates the importance of organizational support after a distressing workplace event, and the benefits that peer support programs, such as CISM, offer in providing that support.

For example, analysis of the STSS scores demonstrated statistically lower mean STSS scores for registered nurses who reported that they *did* receive support from someone in the organization, versus those who reported that they *did not* receive support from someone in the organization. This indicates that clinicians with organizational support experience fewer stress response symptoms after a distressing event than those without support. Furthermore, the *Perceptions of Support* survey established that over 90% of nurses who reported receiving organizational support, indicated that the support was helpful in their coping with the distressing event. Finally, the post-CISM intervention surveys demonstrated that >80% of clinicians who attended a CISM intervention following a distressing workplace event reported that the intervention helped them feel more connected to their co-workers (group cohesion), helped them feel validated and supported (organizational support), and overall was beneficial to their ability to cope with the distressing event (resiliency).

A future consideration for research on the benefits of a CISM program, might be its impact on interdisciplinary teamwork. With 84.5% of respondents reporting that the CISM intervention helped them feel more connected to their coworkers, and 94.8% of respondents reporting that the CISM intervention helped them feel supported and validated by their coworkers, it can be assumed that CISM interventions promote stronger teams. CISM interventions are intended to be multi-disciplinary, with clinicians from all disciplines who are involved in the distressing event being invited and encouraged to attend. The team of CISM facilitators, trained to lead the interventions is also an interdisciplinary group. Rose (2011) indicates that interdependency, mutual respect, and trust are important components to fostering interdisciplinary teamwork. Furthermore, O'Reilly et al., (2017) recommend organizations build supporting structures that foster interdisciplinary teamwork. The structure of the interdisciplinary CISM team, and interdisciplinary CISM interventions provides an environment where interdependency, mutual respect, and trust can be fostered. Interdisciplinary communication and teamwork are essential components to patient safety and cost-effective care (O'Reilly et al., 2017), making this a potentially significant aspect of CISM and other peers support programs to consider and explore.

While more research is indicated, the literature suggests that employee resilience, group cohesion, organizational support, and lower rates of STSS are associated with decreases in turnover intent and absenteeism (Burlison et al., 2017), are protective factors against the development of CF and BO (Li et al., 2014), and are associated with a culture of safety (Quillivan et al., 2016; Scott, 2015). As CF and BO have also been linked to patient dissatisfaction (Hunsaker et al., 2014), as well as poor patient outcomes and medical errors (Quillivan et al., 2016), prevention of STSS, CF, and BO are of high significance. Therefore, this project offers encouraging and hopeful implications for nursing practice and healthcare.

Conclusion

This study aimed to assess the impact of organizational support on STS, and clinicians' experience of utilizing the CISM peer support program following critical incidents within a Midwest Pediatric Level 1 Trauma Hospital. Overall, registered nurses at the project site reported positive effects of receiving organizational support, and specifically in utilizing the organization's CISM peer support program following critical incidents. This study offers additional support for healthcare organizations to invest in peer support programs that provide a means for organizational support to clinicians following distressing events.

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Appendix A

Pre-Post Intervention Survey: Perception of Support

1. In the last 6 months, were you involved in any event in the workplace that caused you emotional or physical distress?
 - a. Yes
 - b. No

2. If yes, did you receive support from anyone in the organization following the event? If yes, indicate the type of support that you received (select all that apply).
 - a. Co-worker
 - b. Leadership (Manager or Supervisor)
 - c. Hospital Chaplain
 - d. Critical Incident Stress Management (CISM) intervention/debriefing
 - e. Encompass
 - f. Other
 - g. Comments:

3. Was this support helpful in your coping with this event?
 - a. Yes
 - b. No
 - c. Comments:

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Appendix B

CISM Post-Intervention Survey

1. If you desired, did you have an opportunity to share about your experience of the incident that occurred?
 - Yes
 - No
 - If no, why?

2. Did you feel heard and validated by the CISM facilitator?
 - 1-5 (1 not being heard, 5 was heard)
 - Comments

3. The information presented by the facilitators about emotional stress responses, support resources and self-care strategies was helpful.
 - 1-5 scale (1 being not helpful, 5 being extremely helpful)
 - Comments

4. Were the CISM facilitators effective in facilitating the group process?
 - Yes
 - No
 - If no, why?

5. The intervention helped me feel more connected to my coworkers.
 - 1-5 (1 completely disagree, 5 completely agree)
 - Comments

6. I felt supported and/validated by my coworkers.
 - 1-5 (1 completely disagree, 5 completely agree)
 - Comments

7. Did you find the CISM intervention beneficial to your ability to cope?
 - 1-5
 - Comments

8. Would you be willing to participate in a CISM in the future based on the experience you had in this CISM.
 - Yes
 - No
 - If no, why?

9. How could we improve the CISM process?