



Combating Post Traumatic Stress Disorder with Stress First Aid for ICU Nurses

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Abstract

PURPOSE: The goal of this quality improvement project is to identify if providing Stress First Aid (SFA) interventions to ICU Nurses would reduce stress levels and improve overall well-being.

Design: This QI Project implemented in ICU Nurses, incorporates the SFA framework training to identify and recognize stress injuries, administer SFA at the individual level, and us SFA as a common method of peer support.

Methodology: The PTSD survey for DSM-5 (PCL-5) will be used to determine the levels of stress, quantify and monitor symptoms over time. The PCL-5 is a 20-item self-report measure that assesses the 20 DSM-5 symptoms of PTSD. The anonymous surveys will be taken prior to intervention, and at 1- and 3-months post intervention.

A 5- point Likert scale ranging from 0-4 for each question was used and then summed to provide a total severity score (range – 0-80). A cut-point score of 29 or higher suggests high level of stress injury and evidence-based treatments for PTSD may be beneficial.

Sample Population included 20 ICU Nurses (n=20)

The intervention will consist of a PowerPoint presentation of high yield SFA training, delivered via the internet through email. The SFA training manual and resources are supplied by the National Center for PTSD U.S. Department of Veterans Affairs. Permission to use these materials has been approved by the U.S. Department of Veterans Affairs office.

Conclusion: The participants of this QI project preliminary DSM-5 survey (prior to SFA training) had mean score of 29, representing a cut point score suggesting high level of stress injury. These scores represent preliminary results with projected completion of project surveys December 2023.

Problem Statement

Nurses have significant exposure to many stressors in the workplace such as traumatic code experiences, patient death, long hours, unsafe nurse-patient ratios, and high acuity intensive care units. Many times, the nurse is not provided sufficient training on how to correctly identify and work through these stressful events (Mirzaei et al., 2022). This in turn could lead an ICU nurse down a dark path of harboring depression, experiencing PTSD, and suicidal ideation without being equipped with the necessary toolkit to healthily navigate the stressors of a high acuity ICU (Mealer et al., 2009). PICOT: Does providing SFA training in a 60-minute voice over PowerPoint help ICU nurses decrease stress levels in the acute phase and help mitigate risk for PTSD, burnout and functional difficulties.

Introduction & Background

Stress injuries are severe and persistent distress or loss of ability to function caused by damage to the brain, mind, and spirit after being exposed to overwhelming stressors.

Since the beginning of the coronavirus disease of 2019 (COVID-19) pandemic, health care workers have been barraged with challenges and changes. Nurses work in a culture that often dismisses the need for mental well-being, patient loss debriefings and strategies to help deal with the unique challenges of the health care profession. The stress of working through the COVID-19 pandemic has made it even more evident that this group suffers from rates of post-traumatic stress disorder (PTSD) and burnout higher than the general public (Sanchez et al., 2019)

SFA provides education on what actions to take for themselves or coworkers who are experiencing significant distress and/or impairment in function caused by stress. The SFA framework is a civilian adaptation of the Combat and Operational Stress First Aid Field Operations manual used by the military. It is a framework of practical actions that can help reduce the likelihood that the stress reactions will develop into more severe or long-term problems. SFA actions are designed to detect early warning signs of stress reactions regardless of their cause and offers an immediate action to high stress situations as well as strategies for ongoing support (Watson & Westphal, 2020).

Theoretical Model

Stress Continuum Model

	Ready (Green)	Reacting (Yellow)	Injured (Orange)	Ill (Red)
DEFINITION	- Optimal functioning - Adaptive growth - Wellness	- Mild and transient distress or impairment - Always goes away - Low risk	- More severe and persistent distress or impairment - Leaves an emotional/ mental "scar" - Higher risk	- Persistent and disabling distress or loss of function - Unhealed stress injuries - Clinical mental disorders
FEATURES	- At one's best - Well trained and prepared - In control - Physically, mentally, and spiritually "fit" - Mission-focused - Motivated - Calm and steady - Having fun - Behaving ethically/ legally	- Feeling irritable, anxious, or down - Loss of motivation - Loss of focus - Difficulty sleeping - Muscle tension, heightened heart rate, breathing, or other physical changes - Not having fun	- Loss of control - No longer feeling like normal self - Stronger emotions like panic, rage, depression - Excessive guilt, shame, or blame - Loss of memory or ability to think rationally - Being unable to enjoy previously pleasurable activities. - Increased or uncontrollable physiological reactions	- Reactions persist or worsen over time - Severe distress or social or occupational impairment - Hopelessness
CAUSES		Any stressor/trigger	- Life threat - Loss - Inner conflict/turmoil - Excessive wear and tear	- Depression - Anxiety - Substance Use Disorders - PTSD



Four Sources of Stress Injury

Wear and Tear	Life Threat	Loss	Inner Conflict
A fatigue injury Due to the accumulation of stress from all sources over time without sufficient rest and recovery.	A traumatic injury Due to the experience of or exposure to intense injury, horrific or gruesome experiences, or death.	A grief injury Due to the loss of people, things or parts of oneself.	A moral injury Due to behaviors or the witnessing of behaviors that violate moral values. Omission Commission Bearing Witness

Review of Literature

PTSD, burnout, and moral distress are becoming increasingly evident among healthcare workers at large. One main reason for the negative experiences is because of the stress injuries of working through the COVID-19 pandemic (Carmassi et al., 2020)

Secondary traumatic stress, or vicarious stress, can be attributed to a portion of the negative psychological impact. Other factors that came into play with the pandemic include the disruption of prior social support systems due to isolation, the threat to health and providing care, making difficult decisions without adequate support, and lack of personal protective equipment (Maugen et al., 2022).

Norman et al., (2021) conducted a study on healthcare workers providing care in New York during COVID-19 and found that 87.8% of those surveyed had positive screen for COVID-19 related PTSD symptoms, burnout, and work and interpersonal difficulties.

A study conducted by Greenberg et al. (2021) found that during the COVID-19 pandemic, ICU staff had a nine-fold increase in PTSD than the general public, and two times more than recent combat veterans.

Stress injury impacts five essential needs. Sense of safety, Ability to calming, Social support, Sense of self and collective efficacy, Hope in the future (Hobfoll et al., 2021).

The Veterans Affairs National Center for PTSD (2022) has created a guide and program entitled “Stress for Aid for Health Care Workers.” The guide provides a comprehensive explanation of techniques that can help mitigate the burdens and long-term effects of chronic and traumatic stress placed on health care providers (Watson & Westphal, 2020).

SFA provides a common language to address stress, leading to supportive friendships, mentorship, and leadership actions. This in turn reduces the stigma surrounding stress by changing culture (Watson & Westphal, 2020).

Theoretical Model: Stress Continuum Model:
The central point of the stress continuum model is that stress responses lie along a spectrum of severity. Everyone will react when faced with severe enough or extended enough stress, and many factors can affect how they respond and how they recover. A person’s reactions can range relatively rapidly from Green to Yellow to Orange to Red zone, and back again (Watson & Westphal, 2020).

Results

The participants of this QI project preliminary DSM-5 survey (prior to SFA training) had a mean score of 29, with the high score being 61 and the low being 7. The median score was 28. These scores represent preliminary results with projected completion of project surveys December 2023. The question that showed highest stress levels in all participants was question 20 . ”In the past month, how much were you bothered by: Trouble falling asleep at night?”. 45% of participants reporting Quite a Bit to Extreme trouble. This project is on going and will survey participants at one and three month post SFA training.

References

Bertuzzi, V., Semonella, M., Bruno, D., Manna, C., Edbrook-Childs, J., Giusti, E. M., Castelnuevo, G., & Pietrabissa, G. (2021). Psychological support interventions for healthcare providers and informal caregivers during the covid-19 pandemic: A systematic review of the literature. *International Journal of Environmental Research and Public Health*, 18(13), 6939. <https://doi.org/10.3390/ijerph18136939>

Carmassi, C., Foghi, C., Dell’Oste, V., Cordone, A., Bertelloni, C. A., Bui, E., & Dell’Osso, L. (2020). PTSD symptoms in healthcare workers facing the three coronavirus outbreaks: What can we expect after the COVID-19 pandemic. *Psychiatry Research*, 292, Article 113312. <https://doi.org/10.1016/j.psychres.2020.113312>

Greenberg, N., Weston, D., Hall, C., Caulfield, T., Williamson, V., & Fong, K. (2021). Mental health of staff working in intensive care during Covid-19. *Occupational Medicine*, 71(2), 62–67. <https://doi.org/10.1093/occmed/kqaa220>

Hobfoll, S. E., Watson, P., Bell, C. C., Bryant, R. A., Brymer, M. J., Friedman, M. J., Friedman, M., Gersons, B. P. R., de Jong, J., Layne, C. M., Maguen, S., Neria, Y., Norwood, A. E., Pynoos, R. S., Reissman, D., Ruzek, J. I., Shalev, A. Y., Solomon, Z., Steinberg, A. M., & Ursano, R. J. (2021). Five essential elements of immediate and mid-term mass trauma intervention: Empirical evidence. *Psychiatry*, 84(4), 311–346. <https://doi.org/10.1080/00332747.2021.2005387>

Maguen, S., Griffin, B. J., Burkman, K., & Norman, S. B. (2021). Lessons from psychological first aid: Supporting healing of healthcare workers affected by Covid-19. *Psychiatry*, 84(4), 378–385. <https://doi.org/10.1080/00332747.2021.2005442>

Norman, S. B., Feingold, J. H., Kaye-Kauderer, H., Kaplan, C. A., Hurtado, A., Kachadourian, L., Feder, A., Murrough, J. W., Charney, D., Southwick, S. M., Ripp, J., Peccoralo, L., & Pietrzak, R. H. (2021). Moral distress in frontline healthcare workers in the initial epicenter of the COVID-19 pandemic in the United States: Relationship to PTSD symptoms, burnout, and psychosocial functioning. *Depression and Anxiety*, 38(10), 1007–1017. <https://doi.org/10.1002/da.23205>

Sanchez, M., Simon, A., & Ford, D. (2019). PTSD in Tx ICU nurses. *The Journal of Heart and Lung Transplantation*, 38(4), S93–S94. <https://doi.org/10.1016/j.healun.2019.01.217>

Watson, P., & Westphal, R. J. (2020). *Stress first aid for health care workers*. National Center for PTSD, U.S. Department of Veterans Affairs. https://www.ptsd.va.gov/professional/treat/type/stress_first_aid.asp

Weathers, F., Litz, B., Keane, T., Palmieri, P., Marx, B., & Schnurr, P. (2018). *The PTSD checklist for DSM-5 (PCL-5) – Standard*. <https://www.ptsd.va.gov/professional/assessment/adult-sr/ptsd-checklist.asp>