

University of San Diego

Digital USD

Doctor of Nursing Practice Final Manuscripts

Theses and Dissertations

Spring 5-22-2021

Introducing Trauma-and Resiliency-Informed Care in a Residential Treatment Setting

Connie Quach

University of San Diego, cquach@sandiego.edu

Follow this and additional works at: <https://digital.sandiego.edu/dnp>



Part of the [Nursing Commons](#)

Digital USD Citation

Quach, Connie, "Introducing Trauma-and Resiliency-Informed Care in a Residential Treatment Setting" (2021). *Doctor of Nursing Practice Final Manuscripts*. 178.

<https://digital.sandiego.edu/dnp/178>

This Doctor of Nursing Practice Final Manuscript is brought to you for free and open access by the Theses and Dissertations at Digital USD. It has been accepted for inclusion in Doctor of Nursing Practice Final Manuscripts by an authorized administrator of Digital USD. For more information, please contact digital@sandiego.edu.

INTRODUCING TRAUMA- AND RESILIENCY-INFORMED CARE IN A RESIDENTIAL
TREATMENT SETTING

UNIVERSITY OF SAN DIEGO
Hahn School of Nursing and Health Science
DOCTOR OF NURSING PRACTICE

DOCTOR OF NURSING PRACTICE PORTFOLIO

by

Connie Quach

A portfolio presented to the
FACULTY OF THE HAHN SCHOOL OF NURSING AND HEALTH SCIENCE
UNIVERSITY OF SAN DIEGO

In partial fulfillment of the
requirements for the degree

DOCTOR OF NURSING PRACTICE

May 2021

Abstract

Background. The link between trauma exposure and problematic substance use is well established. 75% of individuals in substance use treatment report histories of abuse and trauma. Early traumatic experiences or repetitive trauma exposure disrupts a person's ability to self-regulate which may demonstrate as disruptive behavior or present as physiological symptoms.

Purpose. The purpose of this project was to introduce and increase awareness of trauma and resiliency informed definitions, techniques, and provide resources for staff in a residential treatment setting. **Evidence-based Intervention and Methods.** Participating nurses and resident assistants received two one-hour presentations about trauma, resiliency, and its associated interventions. The primary interventions reviewed were de-escalation techniques and Community Resiliency Model (CRM) skills developed by Trauma Resource Institute.

Results/Evaluation. Data was collected immediately before and after the presentation as well as six-weeks later. In both data sets, participating nurses noted an increase in their confidence level. Sixty percent reported utilization of de-escalation techniques and CRM skills. A lack of appropriate clinical scenario was cited most frequently as the reason for not utilizing the presented techniques.

Key words: trauma, adverse childhood experiences, resiliency, substance use, de-escalation, community resiliency model

Review of Literature

Searches of Medline, Cochrane Library, Google Scholar, CINAHL, and PubMed databases were conducted for this literature review. The search terms ‘trauma’, ‘adverse childhood experiences,’ ‘resiliency’, ‘substance use’, ‘de-escalation’, ‘trauma informed care’, ‘substance use treatment’, and ‘community resiliency model’ were combined using “or” or “and”. There were no limits in terms of date of publication however systematic reviews and meta-analyses published within the past decade took predominance. The inclusion criteria consisted of articles that were published in English. It included qualitative data, systematic reviews, meta-analyses, thematic syntheses, and randomized control studies. This left a total of 11 journal articles for a more detailed analysis.

Trauma Defined

Trauma can be defined in many ways, but most significantly, it is an individual’s perception of an event as life threatening to oneself or others. An event that results in trauma for one person may not be experienced by another individual as traumatic. Furthermore, trauma does not have to be experienced firsthand (Miller-Karas, 2014). The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) defines trauma as one in which you are exposed to one or more event(s) that involves death or threatened death, actual or threatened serious injury, or threatened sexual violation. In addition, these events were experienced in one or more of the following ways: directly experiencing the event, witnessing the event as it occurred to someone else, or vicariously learning about an event (American Psychological Association [APA], 2013).

Adverse Childhood Experiences Study

A joint study completed by Kaiser Permanente in San Diego and Centers for Disease Control (CDC) highlighted how trauma affects people physically and behaviorally. Researchers

identified the following types of trauma: sexual, physical, and emotional abuse; physical and emotional neglect; and five types of family dysfunction including household member treating the person violently, alcohol or drug abuse, imprisonment, mental illness, or parental separation or divorce. Sixty-four percent of those surveyed had experienced one or more categories of adverse childhood events (Felitti et al., 1998). Researchers found a strong link between adverse childhood experiences and adult onset of chronic illness. Those with ACE scores of four or more had significantly higher rates of chronic medical comorbidities, substance use, mental health disorders, and suicide attempts (Felitti et al., 1998). This supports the belief that trauma affects individuals in a biological way.

Trauma and Substance Use

There is a well-established link between trauma and substance abuse. Numerous studies and strong evidence suggest interpersonal childhood trauma is linked to an increased vulnerability for developing substance use disorder (SUD) (Enoch, 2011; Lotzin et al., 2016; Pilowsky et al., 2009; Schwandt et al., 2013). This may be influenced by the permanent changes that early life stressors do to the brain's stress circuitry (Enoch, 2011).

General population surveys have documented that approximately 75% of individuals with an SUD have experienced trauma at some point in their lives (Mills, Teeson, Ross, & Peters, 2006). Rates are even higher among clinical samples of individuals seeking treatment for a SUD. In such clinical samples, a history of trauma exposure is almost universal with up to 95% of clients reporting exposure (Farrugia et al., 2011). A large proportion of individuals with SUD experience their first trauma in childhood (Farrugia et al., 2011). Substance use programs help clients learn to regulate their emotions without the use of substances or other unsafe behavior (SAMSHA, 2014). Data on trauma in relation to substance use disorders within the clinical

setting was measured through pre-admission assessments, initial psychiatric evaluations, and quarterly Vista surveys. Out of the 42 residents admitted from 12/8/2020 to 2/2/2021, 32 or 76% experienced trauma based off their initial psychiatric evaluations. According to the Vista Survey, roughly 90% of residents answered “yes” for having encountered trauma.

Trauma and Associated Behaviors

Affect dysregulation, defined as the impaired ability to regulate and/or tolerate negative emotional states, has been associated with interpersonal trauma and post-traumatic stress. Affect regulation difficulties also play a role in many other psychiatric conditions, including anxiety disorders and mood disorders, specifically major depression in youth and bipolar disorder throughout the life span (Dvir et al., 2014). Exposure to traumatic events and interpersonal trauma in childhood is associated with a wide range of psychosocial, developmental, and medical impairments in children, adolescents and adults, with emotional dysregulation being a core feature that may help to account for this heightened risk (Dvir et al., 2014).

Someone who experiences trauma may perceive the world as not safe thus impacting their lives on a daily basis. Repetitive trauma exposure disrupts a person’s ability to self-regulate leading to heightened stress sensitivity and vulnerability to self-medicate through substance use (Garland et al., 2013). Some trauma survivors have difficulty regulating emotions such as anger, anxiety, sadness, and shame (van der Kolk et al., 1993). In individuals who are older and functioning well prior to the trauma, such emotional dysregulation is usually short lived and represents an immediate reaction to the trauma, rather than an ongoing pattern. Self-medication or substance abuse is one of the methods that traumatized people use in an attempt to regain emotional control, although ultimately it causes even further emotional dysregulation. Other efforts toward emotional regulation can include engagement in high-risk or self-injurious

behaviors, disordered eating, compulsive behaviors such as gambling or overworking, and repression or denial of emotions; however, not all behaviors associated with self-regulation are considered negative (van der Kolk et al., 1993).

Proposed Evidence-based Interventions

Need for Trauma- and Resiliency-informed Systems

The need to address trauma is increasingly viewed as an important component of effective behavioral health service delivery. According to the Substance Abuse and Mental Health Services Administration (SAMHSA), it is evident that addressing trauma requires a multi-pronged, multi-agency, public health approach inclusive of public education and awareness, prevention and early identification, and effective trauma-specific assessment and treatment (2014).

Research has shown that comorbidity of PTSD and substance use disorder is highly prevalent, making trauma-informed care (TIC) at substance abuse treatment facilities an important aspect of treatment. A review of responses from over 10,000 substance use treatment facilities found the majority of programs (66.6%) reported using trauma-related counseling with clients. Facilities using moderate or high levels of trauma counseling were much more likely to provide clients with a wide range of additional services related to their treatment, including a range of counseling techniques and group programs (Capezza & Najavits, 2012).

Staff Satisfaction

A study assessed the association between implementing trauma-informed care and staff satisfaction in which they found an increase in satisfaction following the implementation of TIC. The most notable differences were in staff satisfaction with their ability to execute the agency's executives, their relationship with management, and their connection to the workplace. A core

component of all prevailing TIC models is the creation of safe and trusting atmospheres to avoid the re-traumatization of both staff and consumers of service (Hales et al., 2017). Organizational interventions that train staff about trauma-informed practice appear to improve staff knowledge, attitudes, and behaviors for some period of time however it is unclear the extent of which it translates into meaningful outcomes (Purtle, 2020).

De-escalation Techniques

There is evidence that de-escalation training can help staff to manage patient aggression. The process of de-escalation is about establishing rapport to gain the patient's trust, minimizing restriction to protect their self-esteem, appearing externally calm and self-aware in the face of aggressive behavior, and intuitively identifying creative and flexible interventions that will reduce the need for aggression. Through knowledge of the patient and clinical experience, the member of staff must be aware of the right time to intervene and the right time to apply constraints on patient behavior and set limits (Price & Baker, 2012). Key components presented to the participants consisted of staff skills, intervening, and autonomy confirming interventions which is further explained in Appendix F.

Community Resiliency Model Skills

Resilience is defined as the ability to identify and use individual and collective strengths to live fully in the present moment and to thrive while managing the tasks of daily living (Miller-Karas, 2014). The Community Resiliency Model (CRM) created by Trauma Resource Institute (TRI) was developed to provide a practical set of wellness skills to stabilize the nervous system. These skills are accessible and effective across borders, cultures, and belief systems.

The model focuses on the body's innate ability to expand the sensations associated with resilience in order to override the survival-based responses to threat and fear (TRI, 2019). More

specifically, the model helps individuals learn to distinguish between sensations of well-being and those of distress. CRM recognizes trauma as a biological reaction resulting from extraordinary life experiences. A broader goal is to help create trauma and resiliency focused communities that share a common understanding of the impact of trauma, chronic stress on the nervous system, and how resiliency can be restored. A large-scale study found that when individuals learned the wellness skills of CRM, they experienced a reduction in symptoms of depression, hostility indicators, and body complaints (Citron, 2013). Strategies consist of tracking (reading sensations), resourcing, help now strategies, grounding, gesturing, and shift and stay, which are detailed in Appendix F.

Theoretical Framework

The Iowa Model of EBP developed by Marita G. Titler, PhD, RN, FAAN, Director of Nursing Research, Quality and Outcomes Management at the University of Iowa was used to guide this project. The Iowa model carries a foundation of three critical decision points when completing an evidenced based project: 1) decide whether the problem is a sufficient priority for the organization that's exploring possible changes; 2) decide whether there is a sufficient research base; 3) decide whether change is appropriate for adoption in practice (Dontje, 2016).

Aim

As a result of this project, nurses and resident assistants at AToN Center will be more knowledgeable on trauma and resiliency informed care in adults who have experienced trauma by spring of 2021. The main goals are to 1) increase provider awareness of trauma and, 2) increase provider awareness of brief interventions and trauma resources available in a residential treatment center. Interventions will include six community resiliency skills and key components of de-escalation techniques. By better equipping those providing substance use disorder

treatment to navigate the effects of trauma, residents may function better in the therapeutic milieu, negative outcomes of trauma may be lessened, and staff satisfaction may increase.

Objectives

The primary objective of this evidence-based project is to introduce and increase awareness of trauma and resiliency related knowledge and interventions for staff working in a residential treatment setting. Upon recognizing the signs and symptoms of trauma, staff will better manage negative behaviors associated with trauma. Staff confidence level may also increase in response to the educational toolkit and resources provided. Integrating trauma and resiliency specific intervention programs is essential to the recovery process and delivering effective care.

Methods

Ethical Issues

This project received IRB approval from the university and organization in which the project was implemented. Data collected was only available to this writer and there were no ethical concerns.

Setting

The setting for this project took place at AToN Center, a residential treatment facility that allows for daily individualized treatment for those seeking respite from substance use and co-occurring mental health disorders. AToN Center is a licensed, certified, and accredited residential treatment facility providing residential and detox services in Encinitas, California. They are certified to offer incidental medical services, a service that provides medical oversight for residents in residential treatment and additional scrutiny for their licensing board. The facility is

staffed by trained psychologists, medical providers, registered nurses, and recovery personnel (AToN, 2021).

Planning the Intervention

The first step was to identify a team of stakeholders to review the current status and needs assessment that pertained with behavioral health care delivery at the residential treatment center. The program director served as the main point person who relayed project information to the quality counsel of the organization. Other stakeholders include the University of San Diego and respective staff who were present for the module presentations which consisted of registered nurses, licensed vocational nurses, and resident assistants.

This writer participated in the ‘Community Resiliency Model’ Skills Training, a two-part webinar series designed to orient and teach a set of biologically based wellness skills. The discussion panel oriented the audience to key concepts and skills in addition to sharing their personal experiences. The PDF document consisted of the PowerPoint slides and a activity booklet. A PowerPoint presentation was then developed and modified to adopt CRM skills and key de-escalation components as proposed interventions. Following the development of the module, the program director reviewed the content and proposed delivery of the information.

Implementation Phase and Timeline

The evidence-based model utilized for the project was the Community Resiliency Model by the Trauma Resource Institute and de-escalation training. This model was adopted to train and inform staff on definitions of trauma and resiliency, recognizing the symptoms and behaviors that can result from trauma, and interventions of CRM skills and basic de-escalation techniques. The trainings were adapted to meet the needs of the facility and was delivered in two one-hour in-service trainings. Significant milestones of project progression include:

Table 1*EBP Project Timeline*

Task	Involved Parties	Date of Completion
Project proposal meeting	Program director (PD)/clinical mentor	Sept 2020
Approval from quality counsel	Key stakeholders	Nov 2020
IRB approval from clinical site	PD, quality counsel	Nov 2020
Letter of endorsement	Project chair	Nov 2020
IRB approval from USD	Principal investigator (PI)	Nov 2020
Approval of project materials	PI, PD	Jan 2021
In-service training #1	PI, PD, staff nurses and resident assistants	Feb 2021
In-service training #2	PI, PD, staff nurses and resident assistants	Feb 2021
Six-week follow up	PI, PD, staff nurses and resident assistants	Mar 2021
Analyze data	PI	Mar 2021
Stakeholder presentation	PD, quality counsel	Apr 2021
Submit manuscript	PI, project chair	Apr 2021

Methods of Evaluation*Questionnaires*

Baseline data was collected from the participating staff before the presentation. The questionnaire administered pre-training gauged comfort level working with adults who have experienced trauma, previous training on trauma, and level of confidence in trauma and resiliency related definitions. The survey provided post training assessed the effectiveness of training and determined if confidence levels shifted, as well as likeliness of using the proposed interventions. Six weeks following the training, a final questionnaire was sent in order to evaluate whether the interventions and resources were used or not. All questionnaires were created at no cost through Google Forms and sent via organization email.

Cost Benefit Analysis

Only minor costs were associated with the project. The majority was spent on the Community Resiliency Training (\$25). Printing materials came at no cost. Staff were required to complete the in-service training during work hours; therefore, no budget allocation was needed to supplement for extra time. This writer designed the module presentation to keep costs minimal. Data collection was retrieved through Google Forms, a free internet platform where custom forms for surveys and questionnaires can be easily created. No outside funding was utilized.

The exact cost benefit analysis of implementing this project is challenging and obscure. A systematic review and meta-analysis looked at ACEs outcome data in Europe and USA. Total annual costs from ACEs tallied to be \$581 billion in Europe (2.67 percent GDP) and \$748 billion in North America (3.6 percent GDP) (Bellis et al., 2019). In Europe, these 77 percent of the cost came from two or more ACEs, and 82 percent in North America (Bellis et al., 2019). Significant cost savings may result in health care expenditures should project initiatives mitigate the negative impact of ACEs.

Results

Qualitative Data

The six-week follow up questionnaire consisted of a section for additional comments. Of the staff who completed the survey, 13% provided qualitative comments. One response was a positive comment in regard to the training, and the other stated a summary sheet of the techniques would have been helpful for future reference. This participant in particular made up the training at a later date, therefore was not aware of the brief handout.

Post Intervention

Data was collected at three points: prior to the presentation, post training, and six weeks following the training. Immediately post intervention, 100% of the participants agreed or strongly agreed that they were confident in their definition of trauma and 92% were confident in their definition of trauma and resiliency-based care. Twenty-seven of twenty-eight staff members agreed or strongly agreed that they felt confident in their ability to articulate how trauma affects those with substance use disorders. One hundred percent of staff agreed or strongly agreed that they were confident in their ability in working with adults who have experienced trauma. Ninety-six percent of staff members agreed or strongly agreed that they were likely to utilize de-escalation techniques and community resiliency skills to address trauma related behaviors. Lastly, 93% of the participants stated they would likely continue to use the resources mentioned in order to make the clinical milieu more trauma and resiliency informed.

Six-Week Follow Up

Only fifty percent of the participating staff members completed the follow-up questionnaire six weeks after the presentation. Since then, 93% of the fifteen surveyed staff reported feeling more confident working with adults who have experienced trauma. Sixty percent reported utilizing de-escalation techniques. Of those who integrated de-escalation into practice, 88% maintained personal control and kept calm, 77.8% validated and respected concerns while promoting autonomy, 33.3% utilized shared problem solving, and 55.6% facilitated expression and encouraged the individual to express emotions. Of the 40% who did not use de-escalation techniques, 85.7% reported it was due to lack of appropriate clinical scenario. Sixty percent noted using community resiliency skills. Of those who integrated CRM skills into practice, 88.9% utilized grounding, 22.2% used resourcing and/or resiliency pauses, and 22.2%

maneuvered gesturing and spontaneous movements. Of the 40% who did not use CRM skills, 83.3% reported it was due to lack of appropriate clinical scenario, while 16.7% were unsure. One hundred percent of the participants reported looking at the provided resources. Six-week follow up results can be seen below in Figures 1-6.

Figure 1

Utilization of De-escalation Techniques

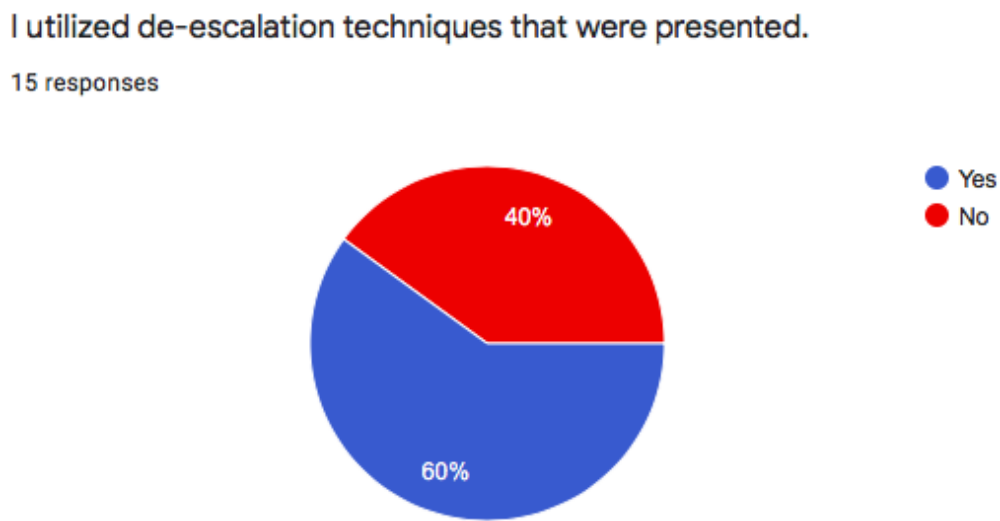


Figure 2

Type of De-escalation Skills Utilized

If you answered "Yes" above, select all that apply:

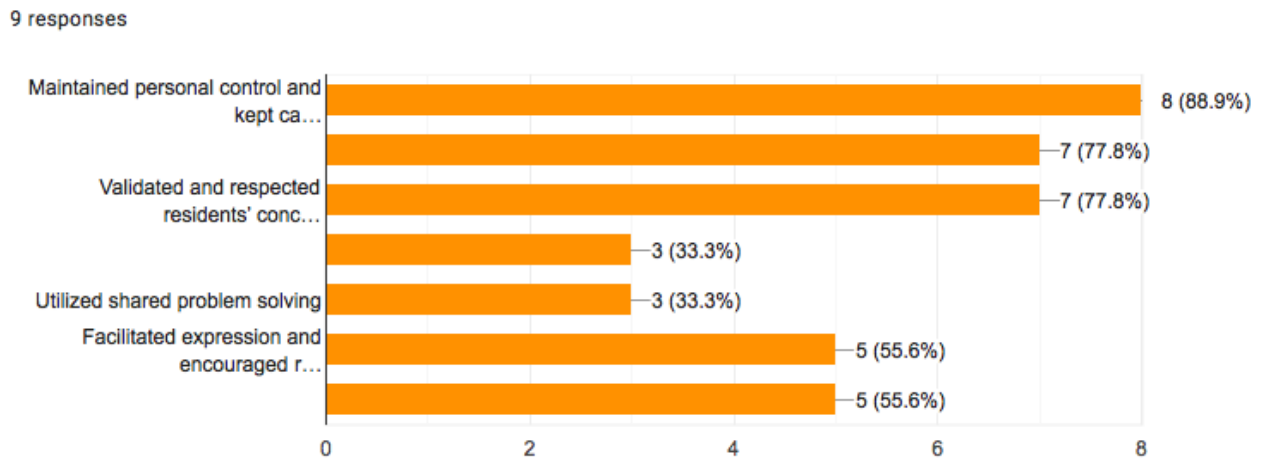


Figure 3

Indication for Lack of Utilization of De-escalation Techniques

If de-escalation techniques were not used, please select why:



7 responses

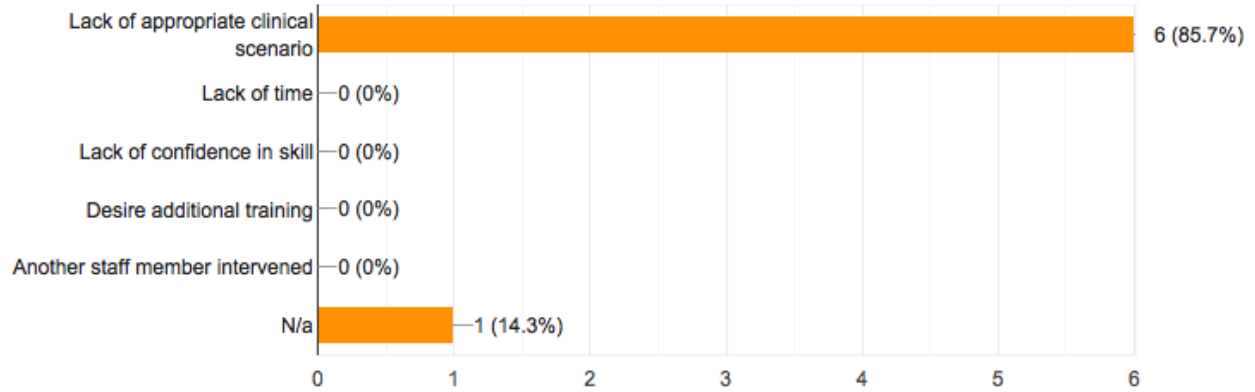


Figure 4

Utilization of Community Resiliency Skills

I utilized the community resiliency model skills.

15 responses

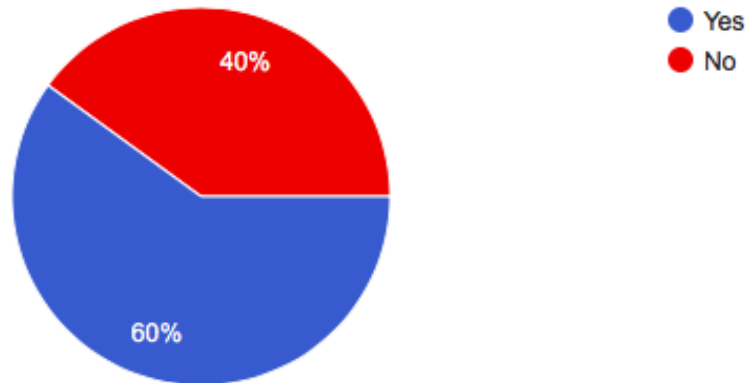


Figure 5

Type of Community Resiliency Skills Utilized

If you answered "Yes" above, select all that apply:



9 responses

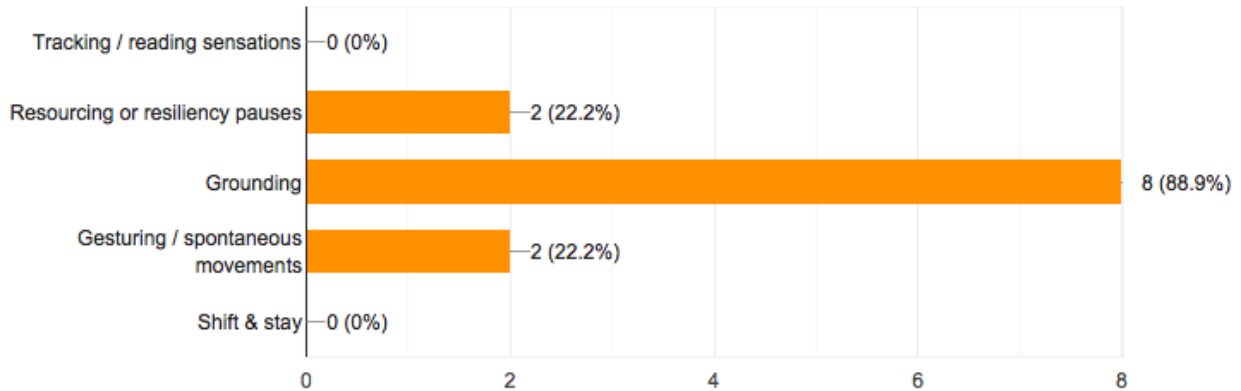
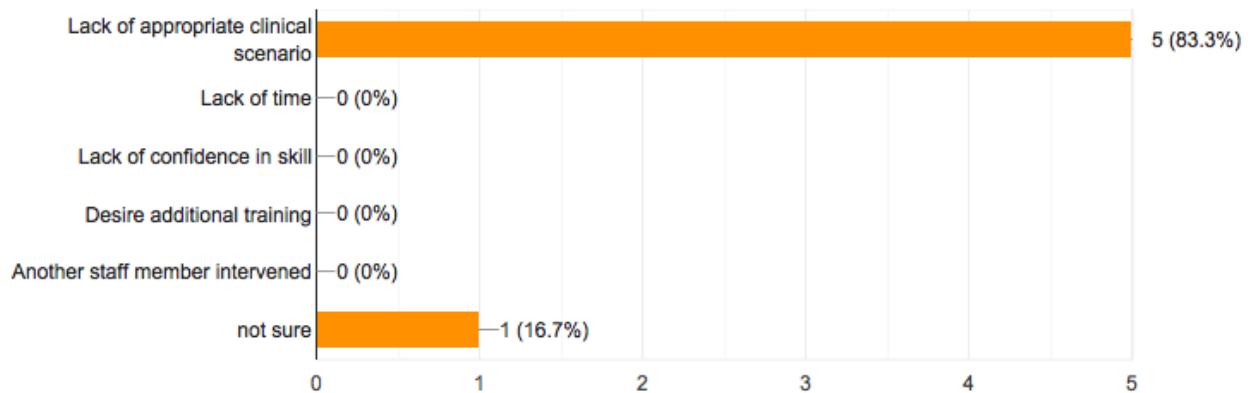


Figure 6

Indication for Lack of Utilization of CRM Skills

If community resiliency model skills were not used, please select why:

6 responses



Discussion

Limitations

One limitation was the inability to guarantee knowledge retention following the presentation. Translation into practice is also difficult depending on knowledge retention. A brief handout that included key points and main ideas was given to staff to reinforce the information

however this can also be addressed in the future by establishing a review of training material on a regular basis. Additionally, although 100% of staff participated in the collection of pre-presentation data and 90% post-presentation, only 50% responded six weeks post intervention. Efforts were made to encourage staff to be honest in their reporting however it was impossible to control the results. Furthermore, the small sample size reduced the likelihood of statistically significant results and likely increased the margin of error.

Implications for Practice

Policy initiatives and organizations should focus on mitigating the effects of trauma and adverse childhood experiences, as well as on upstream prevention strategies. Implementing a trauma and resiliency informed framework will assist staff to better understand symptoms and behaviors associated with trauma so one may appropriately de-escalate and work with patients to identify alternative strategies in a non-judgmental, non-shaming manner that seeks to build trust and rapport. Such frameworks may include continuing education, onboarding training, evaluation of staff and resident satisfaction surveys to assess if concepts translate into practice.

Conclusion

Despite the lack of statistically significant results, there were positive outcomes that resulted from this project. Results showed an increase in staff awareness and knowledge towards working with individuals who have experienced trauma. Confidence levels were sustained at the subsequent follow up period. Meaningful outcomes can be achieved in terms of improved health care delivery and implementing trauma and resiliency informed care within a residential treatment center.

References

- American Psychiatric Association. (2017). *Diagnostic and statistical manual of mental disorders: Dsm-5*.
- Bellis, M. A., Hughes, K., Ford, K., Ramos Rodriguez, G., Sethi, D., & Passmore, J. (2019). Life course health consequences and associated annual costs of adverse childhood experiences across Europe and North America: a systematic review and meta-analysis. *The Lancet Public Health*, 4(10), E517–E528. [https://doi.org/10.1016/s2468-2667\(19\)30145-8](https://doi.org/10.1016/s2468-2667(19)30145-8)
- Carliner, H., Keyes, K. M., McLaughlin, K. A., Meyers, J. L., Dunn, E. C., & Martins, S. S. (2016). Childhood Trauma and Illicit Drug Use in Adolescence: A Population-Based National Comorbidity Survey Replication–Adolescent Supplement Study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 55(8), 701–708. <https://doi.org/10.1016/j.jaac.2016.05.010>
- Department of Behavioral Health San Bernardino County. (2013). *Community Resiliency Training Innovation Project*.
- Donate, K. (2008, January 23). *Evidence- Based Practice: Understanding the Process*. Medscape. https://www.medscape.com/viewarticle/567786_4.
- Dvir, Y., Ford, J. D., Hill, M., & Frazier, J. A. (2014). Childhood Maltreatment, Emotional Dysregulation, and Psychiatric Comorbidities. *Harvard Review of Psychiatry*, 22(3), 149–161. <https://doi.org/10.1097/hrp.0000000000000014>
- Farrugia, P. L., Mills, K. L., Barrett, E., Back, S. E., Teesson, M., Baker, A., ... Brady, K. T. (2011). Childhood trauma among individuals with co-morbid substance use and post-traumatic stress disorder. *Mental Health and Substance Use*, 4(4), 314–326. <https://doi.org/10.1080/17523281.2011.598462>

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., ...

Marks, J. S. (1998). REPRINT OF: Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, 56(6), 774–786.
<https://doi.org/10.1016/j.amepre.2019.04.001>

Leach, B., Gloinson, E., Sutherland, A., & Whitmore, M. (2019). Reviewing the Evidence Base for De-escalation Training: A Rapid Evidence Assessment. *RAND Corporation*, 29.
<https://doi.org/10.7249/rr3148>

Miller-Karas, E. (2015). *Building resilience to trauma: the trauma and community resiliency models*. Routledge, Taylor & Francis Group.

Mills, K. L., Teesson, M., Ross, J., & Peters, L. (2006). Trauma, PTSD, and Substance Use Disorders: Findings From the Australian National Survey of Mental Health and Well-Being. *American Journal of Psychiatry*, 163(4), 652–658.
<https://doi.org/10.1176/ajp.2006.163.4.652>

Moustafa, A. A., Parkes, D., Fitzgerald, L., Underhill, D., Garami, J., Levy-Gigi, E., ... Misiak, B. (2018). The relationship between childhood trauma, early-life stress, and alcohol and drug use, abuse, and addiction: An integrative review. *Current Psychology*, 40(2), 579–584. <https://doi.org/10.1007/s12144-018-9973-9>

Price, O., & Baker, J. (2012). Key components of de-escalation techniques: A thematic synthesis. *International Journal of Mental Health Nursing*, 21(4), 310–319.
<https://doi.org/10.1111/j.1447-0349.2011.00793.x>

Program Components. AToN Center. (2021). <https://www.atoncenter.com/program-components/>.

Roth, S., Newman, E., Pelcovitz, D., van der Kolk, B., & Mandel, F. S. (1997). Complex PTSD in victims exposed to sexual and physical abuse: Results from the DSM-IV field trial for posttraumatic stress disorder. *Journal of Traumatic Stress, 10*(4), 539–555.

<https://doi.org/10.1002/jts.2490100403>

SAMHSA's Concept of Trauma and Guidance for a Trauma ... (2014, July).

https://ncsacw.samhsa.gov/userfiles/files/SAMHSA_Trauma.pdf.

Schwandt, M. L., Heilig, M., Hommer, D. W., George, D. T., & Ramchandani, V. A. (2012).

Childhood Trauma Exposure and Alcohol Dependence Severity in Adulthood: Mediation by Emotional Abuse Severity and Neuroticism. *Alcoholism: Clinical and Experimental Research, 37*(6), 984–992. <https://doi.org/10.1111/acer.12053>

U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment. (2014). Understanding the Impact of Trauma. In *Trauma-informed care in behavioral health services* (Ser. 57). essay.