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Burnout Program for Forensic Nurses Working in the Emergency Room during COVID-19
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Abstract

Forensic nurses are prone to vicarious trauma, burnout, and occupational imbalance, especially during the COVID-19 pandemic and silent pandemic of domestic violence. This quasi-experimental case study assesses burnout awareness and implications of burnout before and following a four-part educational program. This study revealed forensic nurses experienced moderate-to-severe burnout levels in all three categories of the Copenhagen Burnout Inventory (CBI). Additionally, the burnout program allowed the forensic nurses to become more self-aware and more knowledgeable on how to deal with trauma, the burnout cycle, and how to change the routine to become occupationally balanced. This study shows that burnout programs are essential for forensic nurses to increase well-being, reduce turnover, and increase patient care.

Literature Review

Research shows burnout is common in sexual assault nurse examiners (SANE) and other medical professions; however, there is limited research on how to decrease burnout within the medical field. With the rise in coronavirus disease (COVID-19), burnout in the medical field is at an all-time high. Medical professionals are under extreme pressure and care for patients with COVID-19 (Chor et al., 2020). An increase in vicarious trauma and burnout have crept in on the lives of frontline healthcare workers due to the decrease in staff, increase in domestic violence cases, and increase in anxiety over contracting COVID and spreading it to family members (Chor et al., 2020; Jahan et al., 2021; Orru et al., 2021). SANE nurses are experiencing high burnout and vicarious trauma due to anxiety of COVID-19 and an increase in domestic and

sexual violence cases (Peternelj-Taylor, 2020). Therefore, SANE nurses are at greater risk for decreased quality of life and chronic health issues due to increased anxiety and burnout.

This study aimed to create burnout and trauma-informed care program to support SANEs and new hires, which will increase the quality of life and job sustainability within the forensic nursing team. Additionally, determining the need for occupational therapy services to prevent and treat mental health and wellness for emergency room staff. The program will be an educational series of informative coping strategies and techniques to use in and out of the workplace to increase mental and physical well-being. Frontline workers are in dire need of a solution to decrease burnout and vicarious stress during a pandemic, political discord, and an increase in high-stress job demands.

Burnout Statistics/Background

The definition for burnout is a psychological syndrome that leaves one emotionally exhausted, decreased personal accomplishment, and depolarization (Maslach, 1982). The COVID-19 pandemic has created a hectic environment within the health care system worldwide due to quick changes to health care policies, uncontrollable external factors, and implementation of terminology to compare COVID-19 as a medical war (Restauri & Sheridan, 2020). The pandemic has increased stressors in the health care system and frontline workers, which has increased burnout in response to workplace stress (Restauri & Sheridan, 2020). Around the world, people were asked to change their daily routines, roles, and habits to "flatten the curve," participate in social distancing and wear a mask to help overwhelmed health care workers. However, in the United States, there was discord for following COVID-19 protocols due to health behavior becoming politicized, such as social distancing and wearing masks (Rothgerber

et al., 2020). Therefore, adding increased stress in workplaces between following new COVID-19 policies and working with co-workers with differing views. Restauri and Sheridan, 2020, found burnout and PTSD contribute to external stress and have overlapping consequences and drivers. The overwhelming amount of external stress and burnout is demonstrated in the healthcare industry, especially the ICU and emergency department (ED) healthcare workers who are in direct contact and caring for COVID-19 patients.

Before COVID-19, emergency healthcare workers experienced the highest level of burnout within the medical profession at 76.1% (Lin et al., 2019). Healthcare workers that work in ED during COVID-19 now demonstrate a moderate-to-severe personal burnout compared to other departments at 90.4% (Chor et al., 2020). Frontline healthcare nurses experience the highest prevalence of burnout during the COVID pandemic (Chor et al., 2020). One department in the ED, which could be at a greater risk for burnout, is the SANE team. SANE nurses are not only dealing with the COVID-19 pandemic, but they are also dealing with the silent pandemic called domestic violence due to long periods of quarantine.

Forensic Nursing

Forensic nursing is defined as specialized training to treat sexual and domestic abused patients, collect evidence, collaborate with law enforcement, and testify in court (Girardin, 2005). SANEs work with the health and legal needs of patients who experienced trauma such as sexual abuse or trafficked, gunshot wounds, vehicle accidents, etc. (Berishaj et al., 2020). Tasks forensic nurses perform include gathering the narrative from the victim, collecting evidence such as blood, saliva, a swab of the vaginal area, hair, skin under fingernails, clothes, any object injected into the patient (bullet, knife, etc.), and documentation (Ledray, 1995). In a study by

Shana Maier (2011), SANEs discussed that the most challenging part of their job included: vicarious trauma, emotional demands of their career, burnout, and increased anxiety. SANEs can be affected by their job through vicarious trauma by being exposed to traumatic narratives. More than 51% of SANEs experienced vicarious trauma from treating rape victims (Shana Maier, 2011). In an interview study of five different forensic data researchers, it was discovered that after reading the data and narratives from trauma victims, the data collectors started to experience emotional distress and vicarious trauma. The symptoms of the data collectors included: sleep disorders, fear of injuries, anger, and dreams (Alexander et al., 1989). Therefore, SANEs may experience reduced well-being, increased absences from work, poor quality of care to patients due to burnout, vicarious stress, and compassion fatigue (Newman et al., 2020).

Additionally, SANEs are more likely to experience burnout/compassion fatigue if they are young, personally dealt with past trauma, have little experience in the field, work long shifts, or have a heavy workload (Dickinson & Wright 2008). Before COVID-19, the nurses licensing map (2020) found around 41% of SANEs experienced burnout in 2019. All together, SANEs are exposed to the most trauma in the ED, whether physically witnessing the trauma with the patients, reading the narratives in charts, or listening to the patient's story to document for legal use.

SANEs are not only dealing with the COVID-19 pandemic, but they are dealing with the silent pandemic due to the increased cases of domestic violence. With the rise of COVID-19 and regulations to social distance and quarantine, there has been a rise in increased psychological and physical diagnosis, loneliness, and economic vulnerability (Bradbury-Jones & Isham, 2020). For many people, home is not considered a safe place, especially for children and women. Due to

quarantine, there was a significant escalation in domestic violence cases. Many cases went unreported due to limited access (via phone, little contact with other people, or inaccessibility with the police (Bojaruniec, 2020). The Women's Right Center in Poland, which helps advocate for victims of domestic violence, reported a 50% increase in reports to the helpline (Bojaruniec, 2020). Now that lockdown demands are decreasing, domestic violence, sexual assault, and child abuse cases are emerging due to more accessibility to resources (Bojaruniec, 2020). After the first five weeks of lockdown in India, an increase of 92% reported domestic violence cases by India's National Commission for Women (Vora et al., 2020). In a study by, Piquero et al., 2020, the researchers found evidence of a spike of domestic violence cases in the first two weeks of stay at home order in Dallas, Texas. Hospitals are now implementing the role of forensic nurses due to the increase in violence within society (Sekula, 2005). SANEs take on both the pandemic of COVID-19 disease and the silent pandemic of increased domestic violence cases due to the increase of mental illnesses. SANEs have an increased domestic violence caseload leading to more burnout and turnover.

Burnout and Coping Programs

There is a shortage of SANEs, and the profession cannot afford to lose any qualified nurses to burnout (Karakachian & Colbert, A, 2019). In 2022, it is predicted that there will be a need for 1.1 million nurses in the United States due to 500,000 experienced nurses retiring (American Nurse Association, 2018). Researchers analyzed the Stress Management and Resiliency Training (SMART) program in a quasi-experimental study through blended learning. The SMART program, through blended learning, demonstrated improvements in reliance, stress, anxiety, burnout, and mindfulness within eight weeks (Magtibay et al., 2017). Since nurses work

three to four 12-hour shifts, blended learning would be essential to an educational series to allow all nurses to participate. In a systematic review, six areas of potential burnout and solutions for oncology nurses were found: workload, control, reward, community, fairness, and values. Health care facilities that implement burnout programs and encourage self-care will have reduced burnout, decrease turnover, increase patient care and procedures, and increased retention (Barbara Henry, 2014).

Similarly, a 2019 systematic review analyzed interventions to prevent burnout in nurses and physicians. The authors found that interventions to reduce burnout included: communication skills, teamwork, psychological interventions (yoga and mindfulness), and group participation (Aryankhesal et al., 2019). The authors pointed out that it is essential to consider the individual for burnout interventions (Aryankhesal et al., 2019). Individuals experience and recover from burnout differently than one another. It is crucial to explore individuals' internal and external factors of stress-related stressors to their careers. Burnout programs can help educate nurses about burnout factors and develop self-awareness to stressors to overcome vicarious trauma and burnout.

Forensic Occupational Therapy

Occupational therapy is a profession that is designed on the client-centered approach. The impact of trauma on occupational performance can be detrimental. Occupational therapy's emerging role in trauma-informed care can help understand the detectable and invisible factors impeding participation in daily life activities and overall quality of life (Lynch et al., 2020). Forensic occupational therapists are defined as therapists that work with individuals in the criminal justice system with occupational performance problems (Hitch et al., 2016). Like

forensic nurses, forensic occupational therapists can help improve the quality of life of sexual abuse, domestic violence, or any trauma victims and help with the recovery process of participating in ADLs that may be occupationally deprived due to triggering events. Forensic occupational therapists also analyze roles, habits, and routines that may prevent occupational balance (Ozkan et al., 2018). Occupational therapy interventions can target basic living skills, self-care, creative arts, stress management skills, adaptive coping skills, and vocational skills (Ozkan et al., 2018). Occupational therapy can be applied in medical facilities to educate employees on burnout, reduce stress, and increase occupational balance. Hospital facilities and physicians should take proactive steps to help with the effects of burnout with the acute stressors of COVID-19 (Restauro & Sheridan, 2020). Therefore, occupational therapists could be utilized in the emergency department setting to alleviate vicarious trauma, burnout and help with overall occupational balance.

The purpose of this study is to create an educational series on burnout, vicarious trauma, and occupational balance for SANEs working in the ED through an occupational therapy perspective. The goal is for forensic nurses to increase the self-awareness of stressors and occupational imbalance to improve quality of life and create a healthier work environment. Model of Human Occupation (MOHO) is the theory that will be used for this study. The main focus of the MOHO is to use a holistic approach to analyze the mind/body connection and how motivation (internal) and performance of occupations (external) are intersected (Cole & Tofano, 2008). Hence, the researcher used the MOHO model to examine what motivates the nurses to continue their work and the effects of their job on their current occupations and performance patterns. For this study, the researcher set up the environment that met the needs of SANEs to

continue their career while moving through the complete burnout cycle. The last part of the educational series consisted of a video interview with SANEs to reflect on their experiences during the COVID-19 pandemic and the silent pandemic.

Methods

Study Design

This quasi-experimental case study involved developing a burnout educational program for SANEs working in the emergency department during the COVID-19 pandemic and silent pandemic due to increased domestic violence cases. The Institutional Review of the Board of the University of Indianapolis accepted the study, and the program did not require formal informed consent. However, forensic nurses were provided electronic documentation describing the educational program, notifying that participation was voluntary, and asking for participation. Pre and post-surveys were used to assess the knowledge of burnout topics and the effectiveness of the burnout program. Additionally, the Copenhagen Burnout Inventory was completed before the start of the educational series and after to assess burnout recovery and the effectiveness of the program.

Participants

This study was conducted at a Pediatric Children's Hospital in Indianapolis, Indiana, in an Emergency Department working with the SANE program called, The Center of Hope. The Center of Hope houses the forensic nursing department in the emergency room that works with both the adult and pediatric sides of the emergency rooms. The Center of Hope is open for 24 hours for seven days a week. Participants consisted of 10 full-time and part-time working SANEs employed at The Center of Hope. The eligibility criteria for this educational program

study included being an employee of The Center of Hope at Peyton's Manning Children's Hospital. Participants were excluded if they were employed as PRN.

Screening and Evaluation

The first three weeks consisted of observing forensic nurses and the participants completing the initial CBI and BRS. The participants demonstrated their skills by working with patients of all traumas brought into pediatric and adult emergency rooms. Within the first three weeks, the researcher observed the trauma and possible symptoms of burnout by the participants. A written needs assessment created on Google Forms was sent via email by the SANE manager to SANE employees. A visualization of the written needs assessment survey is presented in Table 1.

Educational Program Series Procedure

A 4-week educational burnout program titled "Overcoming Burnout and Living an Occupational Balanced Life" was implemented with six forensic nurses. Before starting the burnout program series, the participants took the Copenhagen Burnout Inventory and Brief Reliance Scale using Google Forms. The program focused on completing the burnout cycle, occupational balance and self-care, and strategies to develop resiliency. The educational program series consisted of three PowerPoint videos on VoiceThread and could be viewed at any time. The three PowerPoint VoiceThread sessions consisted of intro, pre-survey, session content, therapeutic activity, and post-survey. The last week of the program series consisted of a therapeutic group activity. The therapeutic activity included reflection questions of the year 2020 and was recorded on video. Participants were provided the interview questions through email to allow for reflection before recording. As part of the educational series, participants watched an

edited video of all responses compiled into one video at a meeting. Following the group session and meeting, the participants retook CBI and BRS assessments via Google Forms.

Measurements

Pre and Post Surveys. The pre and post surveys asked three and six questions regarding knowledge and confidence on the pertaining topic in the burnout program series. The questions used a 3-point Likert Scale, 1=not knowledgeable to 3=very knowledgeable and administered using Google Forms. The two additional questions were added to the post-survey to give feedback to the presenter. The pre and post-surveys were completed before and after watching the educational series for that week.

Copenhagen Burnout Inventory (CBI). The CBI is used to measure burnout and contains three subdivisions: personal burnout, work-related burnout, and client-related burnout (Kristensen et al., 2005). Each sub-division has a 5-point scale: "*always, often, sometimes, seldom, never.*" Examples of questions include "*How often do you feel worn out?*" and "*Is your work emotionally exhausting?*" The inventory was reliable and high values of Cronbach Alpha in each scale (Sestili et al., 2018).

Brief Resilience Scale (BRS). The BRS is used to determine resilience in a participant's life (Smith et al., 2008). Six statements asked the participants using a 5-point Likert Scale: "strongly disagree, disagree, neutral, agree, strongly agree." Examples of statements include "*I tend to bounce back quickly after hard times.*" and "*It does not take me long to recover from a stressful event.*". A higher score indicates a higher level of resilience, which can help increase recovery from burnout. The BRS tool has demonstrated high reliability when assessing factors from bouncing back from stress (Smith et al., 2008).

Data Analysis

Microsoft Excel for Mac was used for statistical analysis. The median scores from the pre and post-surveys were used to analyze the educational knowledge and effectiveness of the pilot burnout program. Scores CBI and BRS were analyzed on Google Forms and Microsoft Excel.

Results

Participants

At the beginning of the educational program, eight forensic nurses participated in the initial surveys. As time went on, a decrease in participation occurred from pre to post-surveys. Due to scheduling conflicts and work schedules, two part-time nurses did not complete the program, and two full-time nurses did not complete the post-survey. During the educational series, the average participation of pre and post-surveys were 5% of full-time forensic nurses.

CBI

Of the forensic nurses that completed the CBI (N=8), the average initial scores of client-related burnouts were identified at a low to moderate level of burnout (37.5). At the same time, work (53.57) and personal (41.67) burnout identified at an average of moderate to a high level of burnout. After the burnout educational series, forensic nurses retook the CBI survey (N=4). All areas on the CBI: personal (62.5), work-related (57.14), and client (45.83) increased in scores. The data was calculated by finding the average of each category. See Table.1, Table. 2, and Table. 3 for initial and final results of CBI surveys.

BRS

The forensic nurses (N=8) average initial scores on the BRS recognized at a 4/5, meaning the average forensic nurse entails a normal resilience level (Smith et al., 2013). After the

educational series scores, BRS recognized at a 3.5/5, meaning the average final forensic nurse (N=4) entails normal resilience (Smith et al., 2013). See Table. 4 for the initial and final results of BRS surveys.

Pre/Post-Educational Series Surveys

Participants completed pre-and post-surveys for each of the three educational series to determine how knowledgeable one was to the material. Of the eight forensic nurses, five forensic nurses completed both pre and post-surveys to all three educational series. Data were analyzed by comparing the average scores of the pre-presentation responses to the post-presentation responses. Refer to Table. 5, Table. 6, and Table. 7, for pre-and post-survey responses. Overall, forensic nurses demonstrated increased knowledge in the somewhat to very knowledgeable categories indicating increased confidence and expertise on topics presented on trauma, burnout, and occupational balance.

Discussion

The purpose of this study was to examine the assessed burnout program outcomes between forensic nurses' burnout and resilience scores during the COVID-19 pandemic and forensic nurses' burnout and resilience scores after burnout educational series. The evidence revealed forensic nurse's initial work-related burnout scored at a moderate-severe level on the CBI. The scores show the nurses are vulnerable to client and personal burnout due to external stressors at work and home. Additionally, forensic nurses demonstrated a normal resilience score to combat trauma and burnout. Similar to a study conducted by Chor et al., 2020, which showed a burnout score of 49.2, researchers found that emergency room nurses experienced moderate-to-severe burnout using the CBI. The forensic nurses in this study had a mean initial personal

burnout score of 41.67, which is an average of moderate burnout. However, some forensic nurses indicated moderate-to-severe burnout scores.

They generalized Educational Series. Several studies examine possible burnout intervention programs to decrease burnout and increase the quality of life in healthcare workers. One unique strategy that occupational therapists use is the therapeutic use of self to improve emotional and physical well-being (Cole & McLean, 2003). Increasing self-awareness aids healthcare workers to emotionally connect with others and develop a healthier work environment (Perkins & Schmid, 2019). The overall point of occupational therapy is to improve and restore participation in meaningful life activities. This project is the first burnout educational series that used an occupational therapy perspective and included a therapeutic activity at the end of every educational series to apply education to current situations. The point of the therapeutic activity was to use self-awareness to educational topics such as burnout, trauma, and occupational balance to change habits or routines to decrease burnout.

The results from the three-part educational series demonstrated forensic nurses increased knowledge on all topics: burnout, trauma on the body, and occupational balance. The forensic nurses had advanced understanding of burnout and trauma on the body topics with pre scores that averaged somewhat knowledgeable to post scores that averaged very knowledgeable. On the other hand, forensic nurses' average pre-survey score for occupational balance was not knowledgeable to somewhat knowledgeable, while post-survey score reported somewhat knowledgeable. Therefore, forensic nurses still are unsure of maintaining occupational balance within their work and personal life. Therapeutic activities are essential because it helps increase self-awareness. Self-awareness has shown improvements in well-being, decreased stress, and

predictors to success in one's career (Romanelli et al., 2006; Slaski & Cartwright, 2003). With increased education on occupational balance, forensic nurses can create new and healthier routines on what they need to do and what they want to do to decrease burnout.

Final CBI and BRS Surveys. After the forensic nurses completed the three-part educational series and therapeutic video reflection, the nurses retook the CBI and BRS surveys to examine the effects of the burnout educational series. The forensic nurses' CBI scores in all three areas: personal, work-related, and client burnout, increased from initial scores. See Table. 5. There may be a couple of reasons why burnout scores increased after the educational series. One reason the score might have changed is through increased self-awareness. Self-awareness is a conscious awareness of knowing oneself and influencing one in different ways (Rasheed, 2015). With increased self-awareness, one can continuously understand one's own identity, roles, habits, behavior, traits, and motivations (Rasheed, 2015). Through the therapeutic self-awareness activities and increased knowledge on the educational series, forensic nurses may have increased self-awareness of how their body reacts to trauma and burnout. An alternative reason for increased scores for post-CBI surveys could be continued heavy work cases at work and external stressors outside of work. Lastly, participation (N= 8) from the initial CBI and BRS survey decreased to the final CBI and BRS survey (N=4) due to inconsistent PRN scheduling and time to complete surveys.

Limitations

This study was conducted at a single site, The Center of Hope. Therefore, findings may not be generalizable to other forensic nursing ED departments. The results of this study are relatively small due to overall participation from beginning to end (N=4). Thus, findings should

be lightly considered. Furthermore, there is not a control group for this study. Further research with increased participation and a control group is needed.

The educational series was conducted on VoiceThread to provide blended learning, and it gave access to all shift forensic nurses. However, almost all forensic nurses had a hard time navigating to different sites such as VoiceThread, Google Forms, and therapeutic activity. A more concise and organized platform to place all forms and PowerPoints on would help increase the number of participants and decrease confusion.

Implications for Forensic Nurses

Forensic nurses are still processing and dealing with the stressors of the COVID-19 pandemic and the increased cases of domestic violence and sexual assault. In this current study, forensic nurses experienced moderate-to-severe levels of burnout using the CBI, even though forensic nurses find their job rewarding. Additionally, almost all nurses stated that they would not tell anyone if they felt overworked, overwhelmed, or burnt out during the reflective video portion. Many of the forensic nurses also noted that the educational series was helpful, and they were able to process more of what they were going through in the last year.

The findings of this study show that forensic nurses are experiencing burnout, trauma, and occupational imbalance. This results in many forensic nurses having reduced well-being, an increase in mental illness, and an increase in the likelihood of career termination. Burnout programs are necessary to increase knowledge on trauma, burnout, and occupational balance, increase self-awareness and build community and connection within the forensic nursing department. Burnout programs should focus on an educational piece and a therapeutic activity to enhance the carry-over of knowledge. Other factors that can help reduce burnout are a time to

debrief severe cases and networking with local legal facilities to help find closure with cases. To complete a full cycle of burnout, one must fully experience the full emotions and require an action plan to cope with stressors (Nagoksi & Nagoski, 2020). Overall, rather than burnout programs educating on how to prevent burnout, burnout programs need to be explaining how to fully complete the burnout cycle to increase resilience and develop self-awareness of what type of coping strategy the individual needs. Burnout is not preventable. However, burnout can be decreased by creating and expanding an individual's occupational balance and finding the right coping strategies for that individual.

Implications for Occupational Therapy

Occupational therapy (OT) can play a huge role in helping healthcare facilities reduce burnout, work stress and increase overall wellness by creating wellness burnout programs and being the facilitator to the program. Since the COVID-19 pandemic, mental illness has become a public health crisis (Fitzpatrick et al., 2020). Nurses and frontline healthcare workers are burnout, depressed, and anxious due to the impact of the pandemic. OT can help fight nursing turnover, mental illness in the workspace, and overall well-being. Occupational therapists can transform and cultivate a healthy workspace by implementing wellness and burnout programs through an OT lens. Many nurses are educated on burnout and workspace stressors before starting a job. However, facilities do not continue education or help carry over knowledge of how to cope with trauma from work and balancing work, personal life, and client caseload. OTs can help fight nursing turnover and overall well-being in the healthcare field.

References

- Alexander, J. G., de Chesnay, M., Marshall, E., Campbell, A. R., Johnson, S., & Wright, R. (1989). Research note: Parallel reactions in rape victims and rape researchers. *Violence and Victims*, 4(1), 57-62. DOI:10.1891/0886-6708.4.1.57
- American Nurses Association. (2018). The nursing shortage. Retrieved from <http://www.nursingworld.org/>
- Ardebili, M. E., Naserbakht, M., Bernstein, C., Alazmani-Noodeh, F., Hakimi, H., & Ranjbar, H. (2020). Healthcare provider's experience of working during the COVID-19 pandemic: A qualitative study. *American journal of infection control*. <https://doi.org/10.1016/j.ajic.2020.10.001>
- Arslan, G., Yıldırım, M., Tanhan, A., Bulus, M., & Allen, K. A. (2020). Coronavirus stress, optimism-pessimism, psychological inflexibility, and psychological health: Psychometric properties of the Coronavirus Stress Measure. *International Journal of Mental Health and Addiction*, 1–17. <https://doi.org/10.1007/s11469-020-00337-6>
- Aryankhesal, A., Mohammadibakhsh, R., Hamidi, Y., Alidoost, S., Behzadifar, M., Sohrabi, R., & Farhadi, Z. (2019). Interventions on reducing burnout in physicians and nurses: A systematic review. *Medical journal of the Islamic Republic of Iran*, 33, 77. <https://doi.org/10.34171/mjiri.33.77>
- Berishaj, K., Boyland, C. M., Reinink, K., & Lynch, V. (2020). Forensic nurse hospitalist: the comprehensive role of the forensic nurse in a hospital setting. *Journal of Emergency Nursing*, 46(3), 286-293. <https://doi.org/10.1016/j.jen.2020.03.002>
- Bojaruniec, M. Domestic Violence During the COVID-19 Pandemic. Crisis as a Challenge for

- human rights, 183. <https://orcid.org/0000-0003-1562-1320>
- Bradbury-Jones, C., & Isham, L. (2020). The pandemic paradox: The consequences of COVID-19 on domestic violence. *J. Clin. Nursing*. <https://doi.org/10.1111/JOCN.15296>
- Chor, W. P. D., Ng, W. M., Cheng, L., Situ, W., Chong, J. W., Ng, L. Y. A., Mok, P. L., Yau, Y. W., & Lin, Z. (2020). Burnout amongst emergency healthcare workers during the COVID-19 pandemic: A multi-center study. *The American Journal of Emergency Medicine*, <https://doi.org/10.1016/j.ajem.2020.10.040>
- Cole, M. B., & Tufano, R. (2008). *Applied theories in occupational therapy: A practical approach*. Slack Incorporated.
- Cole, M., & McLean, V. (2003). Therapeutic relationships re-defined. *Occupational Therapy in Mental Health*, 19(2), 33-56. https://doi.org/10.1300/J004v19n02_03
- Dickinson, T., & Wright, K. M. (2008). Stress and burnout in forensic mental health nursing: a literature review. *British Journal of Nursing*, 17(2), 82-87.
- Figley, C. R. (2002). Compassion fatigue: psychotherapists' chronic lack of self-care. *Journal of Clinical Psychology*. 58, 1433–1441. DOI: 10.1002/jclp.10090
- Fitzpatrick, K. M., Harris, C., & Drawve, G. (2020). Fear of COVID-19 and the mental health consequences in America. *Psychological Trauma: Theory, Research, Practice, and Policy*, 12(S1), S17-S21. <http://dx.doi.org/10.1037/tra0000924>
- Girardin, B. W. (2005). The Sexual Assault Nurse Examiner: A win-win solution. *Topics in Emergency Medicine*, 27(2), 124–131.
- Henry, B. J. (2014). Nursing burnout interventions. *Clinical Journal of Oncology Nursing*, 18(2), 211–214. <https://doi.org/10.1188/14.CJON.211-214>

- Hitch, D., Hii, Q. K., & Davey, I. (2016). Occupational therapy in forensic psychiatry: Recent developments in our understandings (2007–2013). *British journal of occupational therapy*, 79(4), 197-205. <https://doi.org/10.1177/0308022615591018>
- Jahan, I., Ullah, I., Griffiths, M. D., & Mamun, M. A. (2021). COVID-19 suicide and its causative factors among the healthcare professionals: Case study evidence from press reports. *Perspectives in psychiatric care*, 10.1111/ppc.12739. Advance online publication. <https://doi.org/10.1111/ppc.12739>
- Karakachian, A., & Colbert, A. (2019). Nurses' Moral Distress, Burnout, and Intentions to Leave: An Integrative Review. *Journal of forensic nursing*, 15(3), 133-142. DOI: 10.1097/JFN.0000000000000249
- Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & Stress*, 19(3), 192-207, DOI: [10.1080/02678370500297720](https://doi.org/10.1080/02678370500297720)
- Ledray, L. (1995). Sexual assault evidentiary exam and treatment protocol. *Journal of Emergency Nursing*, 21, 355–359.
- Lin, M., Battaglioli, N., Melamed, M., Mott, S. E., Chung, A. S., & Robinson, D. W. (2019). High Prevalence of Burnout Among US Emergency Medicine Residents: Results From the 2017 National Emergency Medicine Wellness Survey. *Annals of emergency medicine*, 74(5), 682–690. <https://doi.org/10.1016/j.annemergmed.2019.01.037>
- Lynch, A. K., Ashcraft, R., Mahler, K., Whiting, C. C., Schroeder, K., & Weber, M. (2020). Using a Public Health Model as a Foundation for Trauma-Informed Care for

- Occupational Therapists in School Settings. *Journal of Occupational Therapy, Schools, & Early Intervention*, 13(3), 219-235. <https://doi.org/10.1080/19411243.2020.1732263>
- Magtibay, D. L., Chesak, S. S., Coughlin, K., & Sood, A. (2017). Decreasing stress and burnout in nurses: efficacy of blended learning with stress management and resilience training program *J. Nurs. Adm.*, 47 (2017), pp. 391-395, 10.1097/nna.0000000000000501
- Maier, Shana. (2011). The emotional challenges faced by Sexual Assault Nurse Examiners: "ER nursing is stressful on a good day without rape victims." *Journal of Forensic Nursing*, 7(4), 161–172. DOI:10.1111/j.19393938.2011.01118.x
- Maslach, C. (1982). *Burnout: The cost of caring*. Englewood Cliffs, NJ: Prentice Hall
- Maslach, C., & Leiter, M. P. (2016). Burnout. In *Stress: Concepts, cognition, emotion, and behavior* (pp. 351-357). Academic Press. <https://doi.org/10.1016/B978-0-12-800951-2.00044-3>
- Nagoski, E., & Nagoski, A. (2020). *Burnout: the secret to unlocking the stress cycle*. Ballantine
- Newman, C., Jackson, J., Macleod, S., & Eason, M. (2020). A survey of stress and burnout in forensic mental health nursing. *Journal of forensic nursing*, 16(3), 161-168. DOI: 10.1097/JFN.0000000000000271
- Orrù, G., Marzetti, F., Conversano, C., Vagheggini, G., Miccoli, M., Ciacchini, R., ... & Gemignani, A. (2021). Secondary Traumatic Stress and Burnout in Healthcare Workers during COVID-19 Outbreak. *International Journal of Environmental Research and Public Health*, 18(1), 337. <https://doi.org/10.3390/ijerph18010337>
- Ozkan, E., Belhan, S., Yaran, M., & Zarif, M. (2018). Occupational therapy in forensic settings.

In Occupational Therapy-Therapeutic and Creative Use of Activity. IntechOpen. DOI: 10.5772/intechopen.79366

Perkins, N. A., & Schmid, A. A. (2019). Increasing Emotional Intelligence through Self-Reflection Journals: Implications for Occupational Therapy Students as Emerging Clinicians. *Journal of Occupational Therapy Education*, 3 (3). <https://doi.org/10.26681/jote.2019.030305>

Peternelj-Taylor C. (2020). Forensic Nursing in the Wake of COVID-19. *Journal of forensic nursing*, 16(2), 61–62. <https://doi.org/10.1097/JFN.0000000000000292>

Piquero, A.R., Riddell, J.R., Bishopp, S.A., *et al.* Staying Home, Staying Safe? A Short-Term Analysis of COVID-19 on Dallas Domestic Violence. *American Journal of Criminal Justice* 45, 601–635 (2020). <https://doi.org/10.1007/s12103-020-09531-7>

Rasheed, S. P. (2015). REVIEW PAPER. Self-Awareness as a Therapeutic Tool for Nurse/Client Relationship. *International Journal of Caring Sciences*, 8(1), 211–216.

Ray, S. L., Wong, C., White, D., & Heaslip, K. (2013). Compassion satisfaction, compassion fatigue, work-life conditions, and burnout among frontline mental health care professionals. *Traumatology*, 19(4), 255-267.DOI: 10.1177/1534765612471144

Restauri, N., & Sheridan, A. D. (2020). Burnout and posttraumatic stress disorder in the coronavirus disease 2019 (COVID-19) pandemic: intersection, impact, and interventions. *Journal of the American College of Radiology*, 17(7), 921-926. <https://doi.org/10.1016/j.jacr.2020.05.021>

Romanelli, F., Cain, J., & Smith, K. (2006). Emotional intelligence as a predictor of academic and/or professional success. *American Journal of Pharmaceutical Education*, 70(3), 1-10.

<https://doi.org/10.5688/aj700369>

Rothgerber, H., Wilson, T., Whaley, D., Rosenfeld, D. L., Humphrey, M., Moore, A. L., & Bihl, A. (2020, April 22). Politicizing the COVID-19 Pandemic: Ideological Differences in Adherence to Social Distancing. <https://doi.org/10.31234/osf.io/k23cv>

Sekula, L. K. (2005). The advanced practice forensic nurse in the emergency department. *Advanced Emergency Nursing Journal*, 27(1), 5-14

Sestili, C., Scalingi, S., Cianfanelli, S., Mannocci, A., Del Cimmuto, A., De Sio, S., ... & La Torre, G. (2018). Reliability and use of Copenhagen burnout inventory in an Italian sample

of university professors. *International journal of environmental research and public health*, 15(8), 1708. <https://doi.org/10.3390/ijerph15081708>

Simon, C. E., Pryce, J. G., Roff, L. L., & Klemmack, D. (2006). Secondary traumatic stress and oncology social work: Protecting compassion from fatigue and compromising the worker's worldview. *Journal of Psychosocial Oncology*, 23(4), 1-14. DOI: 10.1300/J077v23n04_01

Slaski, M., & Cartwright, S. (2003). Emotional intelligence training and its implications for stress, health and performance. *Stress and Health*, 19(4), 233-239. <https://doi.org/10.1002/smi.979>

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: assessing the ability to bounce back. *International journal of behavioral medicine*, 15(3), 194-200. DOI: 10.1080/10705500802222972

Smith, B.W., Epstein, E.E., Ortiz, J.A., Christopher, P.K., & Tooley, E.M. (2013). The

Foundations of Resilience: What are the critical resources for bouncing back from stress? In Prince-Embury, S. & Saklofske, D.H. (Eds.), Resilience in children, adolescents, and adults: Translating research into practice, The Springer Series on human exceptionality (pp. 167-187). New York, NY: Springer.

https://doi.org/10.1007/978-1-4614-4939-3_13

Talaei, N., Varahram, M., Jamaati, H., Salimi, A., & Attarchi, M. (2020). Stress and burnout in health care workers during COVID-19 pandemic: Validation of a questionnaire. *Journal of Public Health: From Theory to Practice*, 1–6.

<https://doi.org/10.1007/s10389-020-01313-z>

Vora, M., Malathesh, B. C., Das, S., & Chatterjee, S. S. (2020). COVID-19 and domestic violence against women. *Asian journal of psychiatry*, 53, 102227.

<https://doi.org/10.1016/j.ajp.2020.102227>

Appendix A.

Interview Questions
(Ardebili et al., 2020).

1. What did you experience during the COVID-19 pandemic"?
2. "What changes did you experience in your work or private life?"
3. "How did the pandemic change your life?",
4. "How did your feeling change over time?"
5. "What was the hardest part of work during a pandemic?"
6. "What changes in your mental status did you feel?"
7. "What do you think about the consequences of working in this pandemic?"

8. If you are close to being burnout, would you say it to someone, and what would be your first step?
9. How do you handle heavy cases you see here at The Center of Hope?
10. Discuss your journey through the pandemic and silent pandemic in one word.
11. What is one word you would describe forensic nurses?

Appendix B

Needs assessment survey questions and responses: Survey used to analyze Forensic Nurses' perspectives of Burnout, Compassion Fatigue, and overall Quality of Life.

1. **Have you worked at The Center of Hope for 5 or more years?**
Yes

No
2. **Are you currently in Grad School or planning to attend Grad School within the next year?**
Yes

No
3. **Have you experienced any sort of trauma in your past?**
Yes

No

4. Have you had COVID within the last year?

Yes

No

5. Is there a need for burnout, compassion fatigue, and coping skills programs for The Center of Hope?

Strongly Disagree (1)

Disagree (2)

Neutral (3)

Agree (4)

Strongly (5)

6. Do you think the Burnout, compassion fatigue, and coping skills program would be beneficial for new hires at the Center of Hope?

Strongly Disagree (1)

Disagree (2)

Neutral (3)

Agree (4)

Strongly (5)

7. Do you feel like you have become more hypervigilant or increased arousal off working hours?

Strongly Disagree (1)

Disagree (2)

Neutral (3)

Agree (4)

Strongly (5)

8. What interventions or educational programs would be the most beneficial for you to improve the overall quality of life and work-life balance?

Calming strategies

Therapeutic skills

Video Reflective Series

Grounding exercises

Evidence-Based Research/Stats in the field

The cycle of burnout-How to get out Series

Empathic without Remorse Series

Occupational Balance (overall quality of life w/ work series)

Other:

9. Do you think a pamphlet on Sexual Health and OT would be beneficial for future patients with sexual trauma?

Yes

No

10. What are barriers in the workplace that cause burnout or increased stress?

11. Any questions or comments for me?

Appendix C.

Link to Reflection Video: <https://www.youtube.com/watch?v=WCO77q3T88k&t=13s>

Table 1.

Personal Burnout Copenhagen Burnout Inventory

Questions	Always		Often		Sometimes		Seldom		Never	
	Pre %	Post%	Pre %	Post%	Pre %	Post%	Pre %	Post%	Pre %	Post%
How often do you feel tired?	12.5%	0%	50%	50%	37.5%	50%	0%	0%	0%	0%
How often are you physically exhausted?	0%	0%	37.5%	50%	50%	25%	12.5%	25%	0%	0%
How often are you emotionally exhausted?	0%	0%	25%	50%	50%	25%	25%	25%	0%	0%
How often do you think: "I can't take it anymore"?	0%	0%	12.5%	0%	12.5%	25%	37.5%	75%	37.5%	0%
How often do you feel worn out?	0%	0%	25%	50%	62.5%	25%	12.5%	25%	0%	0%
How often do you feel weak and susceptible to illness?	0%	0%	0%	0%	37.5%	75%	50%	25%	12.5%	0%

Pre-survey (N=8)

Post-Survey (N=4)

Table 2.

Work-Related Burnout Copenhagen Burnout

Questions	Always		Often		Sometimes		Seldom		Never	
	Pre %	Post%	Pre %	Post%	Pre %	Post%	Pre %	Post%	Pre %	Post%
Do you feel worn out at the end of the working day?	12.5%	25%	25%	50%	50%	25%	12.5%	0%	0%	0%
Are you exhausted in the morning at the thought of another day at work?	0%	0%	12.5%	25%	50%	50%	37.5%	25%	0%	0%
Do you feel that every working hour is tiring for you?	0%	0%	0%	0%	37.5%	50%	62.5%	50%	0%	0%
Do you have enough energy for family and friends during leisure time?	0%	0%	50%	50%	50%	50%	0%	0%	0%	0%
Is your work emotionally exhausting?	0%	0%	75%	0%	25%	100%	0%	0%	0%	0%
Does your work frustrate you?	0%	0%	37.5%	0%	62.5%	100%	0%	0%	0%	0%
Do you feel burnt out because of your work?	0%	0%	12.5%	0%	87.5%	75%	0%	25%	0%	0%

Pre-survey (N=8)

Post-Survey (N=4)

Table 3.

Client-Related Burnout

Questions	Always		Often		Sometimes		Seldom		Never	
	Pre %	Post%	Pre %	Post%	Pre %	Post%	Pre %	Post%	Pre %	Post%
Do you find it hard to work with clients?	0%	0%	0%	0%	12.5%	75%	87.5%	25%	0%	0%
Does it drain your energy to work with clients?	0%	0%	0%	0%	50%	75%	50%	25%	0%	0%
Do you find it frustrating to work with clients?	0%	0%	0%	0%	25%	50%	75%	50%	0%	0%
Do you feel that you give more than you get back when you work with clients?	0%	0%	12.5%	0%	62.5%	<u>100%</u>	0%	0%	25%	0%
Are you tired of working with clients?	0%	0%	0%	0%	12.5%	25%	50%	50%	37.5%	25%
Do you sometimes wonder how long you will be able to continue working with clients?	0%	0%	0%	0%	50%	50%	37.5%	50%	12.5%	0%

Pre-survey (N=8)

Post-Survey (N=4)

Table 4.

Brief Resilience Scale Pre- and Post- Survey

	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
Questions	Pre %	Post%	Pre %	Post%	Pre %	Post%	Pre %	Post%	Pre %	Post%
I tend to bounce back quickly after hard times.	0%	0%	12.5%	25%	12.5%	0%	50%	75%	0%	0%
I have a hard time making it through stressful events.	12.5%	0%	37.5%	50%	37.5%	50%	12.5%	0%	0%	0%
It does not take me long to recover from a stressful event.	0%	0%	25%	25%	25%	50%	50%	25%	0%	0%
It is hard for me to snap back when something bad happens.	0%	0%	62.5%	75%	25%	0%	0%	25%	12.5%	0%
I usually come through difficult times with little trouble.	0%	0%	25%	50%	25%	25%	50%	25%	0%	0%
I tend to take a long time to get <u>overset-backs</u> in my life.	0%	0%	62.5%	75%	12.5%	25%	25%	0%	0%	0%

Average resilience score= 4/5 meaning normal resilience initial (N=8)

Average resilience score= 3.5/5 meaning normal resilience End (N=4)

Table 5.

Session One Pre- and Post-Survey Results

Questions	Not Knowledgeable		Somewhat Knowledgeable		Very Knowledgeable	
	Pre %	Post%	Pre%	Post%	Pre%	Post%
How knowledgeable are you in the development of trauma in the brain?	11.1%	0%	88.9%	33.3%	0%	66.7%
How knowledgeable are you in forensic nursing stats on burnout and trauma?	22.2%	0%	77.8%	16.7%	0%	83.3%
How knowledgeable are you in the nervous system and trauma?	11.1%	0%	77.8%	33.3%	11.1%	66.7%
How knowledgeable are you in how the whole body is affected by trauma?	11.1%	0%	55.6%	16.7%	33.3%	83.3%
How knowledgeable are you in ACE score and how they affect our overall health?	33.3%	0%	22.2%	16.7%	44.4%	83.3%

Pre survey (N=8)

Post survey (N=5)

Table 6.

Session Two Pre- and Post-Survey Results

	Not Knowledgeable		Somewhat Knowledgeable		Very Knowledgeable	
Questions	Pre %	Post%	Pre %	Post%	Pre %	Post%
How knowledgeable are you in burnout?	0%	0%	100%	40%	0%	60%
How knowledgeable are you in forensic nursing stats on burnout and stats during pandemic?	28.6%	0%	71.4%	20%	0%	80%
How knowledgeable are you on stress versus stressors?	0%	0%	100%	20%	0%	80%
How knowledgeable are you in the burnout cycle?	57.1%	0%	42.9%	40%	0%	60%
How knowledgeable are you in ways to beat out the burnout cycle?	42.9%	0%	57.1%	20%	0%	80%

Pre survey (N=7)

Post survey (N= 5)

Table 7.

Session Three Pre- and Post- Survey Results

	Not Knowledgeable		Somewhat Knowledgeable		Very Knowledgeable	
Questions	Pre %	Post%	Pre %	Post%	Pre %	Post%
How knowledgeable are you in occupational balance?	60%	0%	40%	60%	0%	40%
How knowledgeable are you in occupational imbalance?	60%	0%	40%	60%	0%	40%
How knowledgeable are you in the Transtheoretical Model?	100%	0%	0%	60%	0%	40%
How knowledgeable are you in toxic positivity?	60%	0%	40%	40%	0%	60%
How knowledgeable are you reducing or eliminating toxic positivity?	80%	0%	20%	40%	0%	60%

Pre survey (N=5)

Post survey (N=5)