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BALANCING PROVIDER STRESS AND RESILIENCE IN THE TIME OF COVID

UNIVERSITY OF SAN DIEGO
Hahn School of Nursing and Health Science
Beyster Institute of Nursing

DOCTOR OF NURSING PRACTICE PORTFOLIO

by

Zachary Love

A portfolio presented to the

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Manuscript: Balancing Provider Stress and Resilience in the Time of COVID

Zachary Love

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Abstract

Purpose: The purpose of this evidence-based practice project is to improve secondary traumatic stress (STS), compassion satisfaction, and burnout amongst providers—physicians, residents, and nurse practitioners—within the acute psychiatry units of the La Jolla Veterans Health Administration (VHA) through a one-time educational training session.

Background: Mental health providers at the VHA acute psychiatry units experience one of the highest risks for the development of STS, CF, and burnout amongst all professions due to a number of individual and institutional factors. STS is characterized by secondhand traumatization with symptoms similar to that of Post-Traumatic Stress Disorder—difficulty sleeping, mood changes, upsetting images appearing in one’s mind, etc.—from repeated vicarious exposures via direct patient. CF results in a mental and/or physical detachment and a reduced ability to remain empathetic following repeated or prolonged interactions demanding high amounts of empathetic engagement. Both STS and CF significantly contribute to the development of burnout syndrome, which exacts a physical and psychological toll on the individual, is associated with poorer patient outcomes, and is costly to an organization.

Methods: The intervention consists of a one-time educational class delivered to mental health providers designed to increase resilience against STS, CF, and burnout. The Professional Quality of Life (ProQOL), a 30-item Likert scale questionnaire with subscales for compassion satisfaction, burnout, and CF, was administered pre- and 30-day post-intervention. Results were gathered and entered into Intellectus Statistics online

computer software for analysis, and a *t*-test was conducted between each pre- and post-intervention ProQOL sub-scale.

Results: Prior to the intervention, the group (n=13) had mean scores of compassion satisfaction that fell within the moderate levels, burnout scores within the upper end of low levels, and STS scores within low levels. Results from post-test scores (n=10) indicate very mild improvements in STS scores with no statistically significant changes in any sub-scale.

Implications: This project underscores the importance of holistic health and the benefits of self-care and is congruent with past studies showing STS, CF, and burnout are challenging problems to address. Though this intervention failed to produce significant changes to ProQOL scores amongst the VA's acute psychiatric provider population, burnout remains a pervasive issue, and further individual and/or institutional interventions are warranted.

Balancing Provider Stress and Resilience in the Time of COVID

Clinical Problem

Secondary traumatic stress (STS), compassion fatigue (CF), and burnout are three different but inter-related conditions possessing a constellation of symptoms affecting many healthcare providers; however, due to the often-intense nature of interactions with the patients receiving their care, mental health providers are particularly prone to developing these symptoms (Brady et al., 2012). There is growing concern that mental health providers at the Veterans Health Administration (VHA)—the largest integrated mental health care system in the United States—are at higher risk of burnout, and the evidence-based treatment strategies for post-traumatic stress disorder (PTSD) often include persistent focus on a patient’s traumatic material which results in VHA workers experiencing frequent, sustained, vicarious trauma. (Garcia et al., 2015). While studies have shown burnout to be widespread throughout the mental health field, a 2016 survey by Garcia et al. found that 77% of VHA mental health providers considered emotional exhaustion, a key characteristic of burnout, to have impacted their quality of care.

STS is characterized by vicarious traumatization with symptoms similar to that of PTSD—difficulty sleeping, mood changes, upsetting images appearing in one’s mind, avoiding reminders of the event, etc.—from repeated secondhand exposures via direct patient care, while CF results in a mental and/or physical detachment and a reduced ability to remain empathetic following repeated or prolonged interactions demanding high amounts of empathetic engagement—both significantly contribute to the development of burnout syndrome (Wood et al., 2017). Stamm (2010) further elaborates:

“People can experience negative effects of secondary exposure without developing a psychological disorder such as PTSD. Compassion Fatigue is not a diagnosis. It is possible that Compassion Fatigue is a descriptive term and that a person struggling with Compassion Fatigue also has a psychological disorder. For example, people who suffer with burnout may also have a diagnosable level of depression. Similarly, people may have a diagnosable level of PTSD or some other mental, emotional or physical disorder that is likely linked to their experience of compassion fatigue.”

As opposed to STS’s typically acute onset and relation to one particular event, burnout syndrome—now recognized as a classifiable illness by the World Health Organization (World Health Organization, 2015)—has a gradual onset, culminating in a potentially chronic condition typically characterized by three key components: emotional exhaustion, depersonalization/cynicism, and reduced personal accomplishment/efficacy (Dreisen et al., 2018). When compared to other specialties, mental health workers face an increased risk of developing burnout due to unique challenges aiding in its development including stigma of the profession, demanding therapeutic interactions, actual or threatened violence from patients, and patient suicide (Eliacin et al., 2018).

Factors contributing to the development of burnout syndrome have been identified across three domains: personal, job, and organizational characteristics (Eliacin et al., 2018). Of the organizational characteristics, a review of the literature suggests high acuity, poor staff-to-patient ratios, heavy workloads, and low employee retention rates affect both burnout and quality of care while frequent clinical supervision, a sense of fair treatment, acknowledgment for doing well, and perceived autonomy are identified as

protective factors (Humphries et al., 2014). A systematic review of determinants found those working in inpatient settings reported a lower sense of autonomy compared to community and specialist teams, who felt more autonomous with a greater sense of personal accomplishment (O'Connor et al., 2018). The same review also found a consistent correlation between rising age and increased risk of depersonalization but also increased feelings of personal accomplishment; furthermore, job instability and staffing shortages were associated with increased burnout rates (O'Connor et al., 2018). One study found that although hearing clients discuss traumatic content bothered over half of providers, it was patient characteristics such as difficult personality disorders and malingering that were more associated with burnout (Garcia et al., 2016). Another important cause of burnout is moral injury. Defined as “the damage done to one's conscience or moral compass when that person perpetrates, witnesses, or fails to prevent acts that transgress one's moral beliefs, values, or ethical codes of conduct” (Houtrow, 2020), moral injury has worsened during the coronavirus disease 2019 (COVID-19) due to limited resources and a considerable elevation in the mental health toll. In light of this, healthcare workers have faced being forced to alter treatment decisions due to circumstances beyond their control—whether it be a global pandemic or perceived institutional constraints (Houtrow, 2020). Furthermore, a meta-analytic study showed younger age to be a significant factor in emotional exhaustion and depersonalization in nurses, though no significant association was found between age and reduced personal accomplishment; additionally, marriage was found to be a protective factor for emotional exhaustion, and unmarried male nurses were shown to be most vulnerable in this regard (Gómez-Urquiza et al., 2017).

Considerable evidence shows burnout accounts for a damaging toll on both the physiological and psychological well-being of an individual, the functioning of their healthcare team, and is associated with decreased productivity, absenteeism, and compromised quality of care to the patients (O'Connor et al., 2018). The effects of repeated vicarious traumatization and the development of burnout syndrome, when combined with those factors detailed above, lend itself to undermining a mental health provider's sense of purpose and compassion, and have been shown to create higher rates of substance use, depression, and suicidality (Tsai et al., 2020). Unfortunately, physicians and nurses have a higher suicide rate than the general population, and although these deaths' relation to burnout may be unknown, recent research indicates the rates of depression in nurses and physicians to range from an alarming 25% to 43% (Melnyk, 2020).

The physiological response to stress is well documented and entails increased brain arousal initiated by neurotransmitters, catecholamines, and hormones such as cortisol which enact a sequence of bodily changes, preparing the body for its adaptive 'fight or flight' response (Winwood et al., 2006). When this adaptive stress response, which is designed for only intermittent use, is continually activated, the enduring presence of stress hormones creates the potential for a myriad of negative downstream effects including headaches, muscle tension, anger, impaired memory, decreased attention, anxiety, depression, reduced immune system efficiency, obesity, stroke and several other cardiometabolic effects (Winwood et al., 2006). A study examining burnout profiles amongst all VHA employees revealed a range of psychological and physical health problems reported by those with higher levels of burnout (Schult et al., 2018). The

result of physical and psychological changes on the body may also lead to inter-personal conflicts and maladaptive coping mechanisms such as drug or alcohol use, which has a high concomitance with burnout syndrome (Mealer, 2016).

In addition to the drastic personal toll of burnout, this syndrome also has dire consequences for the institution in which that individual works. Regardless of the reason or method of leaving the profession, lost revenue per physician who leaves a practice is estimated to range from \$500,000 to \$1,000,000 (Melnik, 2020), coupled with the \$160,000 to \$1,000,000 cost of replacing the physician—dependent upon specialty and experience—and these estimates do not include intangible losses such as team disruption and patient inconvenience (Stehman, 2020). Although data on the specific cost of burnout to the VHA is unknown, nationally, research estimates approximately \$4.6 billion in costs related to physician turnover and decreased clinical hours each year within the United States (Han et al., 2019). The loss of a single provider from the profession is assessed to impact approximately 2,300 patients (Han et al., 2019), and with a shortage of mental health providers and a notable increase in psychiatric utilization during the COVID-19 pandemic (Bowman et al., 2021), every provider lost is of substantial consequence. STS, CF, and burnout not only have implications for the provider and employer but also can impact the client by degrading the therapeutic alliance, affecting communication, and increasing the likelihood of medical errors which may result in low consumer satisfaction and poorer patient outcomes including higher rates of hospitalization (Tsai et al., 2020). In summary, STS, CF, and burnout may enact significantly negative effects in the provider, the institution, and the patient; furthermore,

those working in the acute psychiatry units within the VHA are subject to a higher risk of developing these negative effects.

Purpose

The purpose of this evidence-based practice (EBP) project is to improve STS, compassion satisfaction, and burnout amongst providers in the acute psychiatry units within the La Jolla VHA through a one-time educational training session as measured by the Professional Quality of Life (ProQOL) scale administered before and one month following the training. The acute psychiatry units consist of the psychiatric emergency clinic and inpatient units, and are staffed by physicians, residents, and nurse practitioners for whom the class will be administered. The resiliency training given to providers entailed descriptions of CF, STS, burnout, their effects and factors, and methods to improve resiliency including the introduction of breathing exercises, Metta/compassion meditation, and the Provider Resilience Mobile Application (PRMA).

Literature Review

To identify the evidence-based solutions for improving resiliency and mitigating STS, CF, and burnout, a review of the literature was conducted utilizing the electronic databases of CINAHL and PubMed. Key search terms included combinations of the following: *interventions, effects, management, cause, cost, resilience, secondary traumatic stress, vicarious trauma, compassion fatigue, burnout, mental health, interventions, psych*, providers, mindfulness, Veterans Affairs, VA.*

Due to the increasingly high prevalence of burnout, the National Academy of Medicine (NAM) launched an Action Collaborative on Clinician Well-being and Resilience in 2017, entailing several evidence-based recommendations for organizations:

“1. Create positive work environments 2. Create positive learning environments 3. Reduce administrative burden 4. Enable technology solutions 5. Provide support to clinicians and learners, and 6. Invest in research on clinical professional well-being” (Melnik, 2020). Typical individually based interventions seek to either increase mindfulness or to reduce negative arousal that characterizes stress in general through the use of relaxation techniques, promotion of a healthy lifestyle (diet and exercise), and cognitive behavioral techniques (Villani et al., 2013). Interestingly, a recent study found an inverse relationship between levels of resiliency and burnout and higher levels of resilience amongst all physicians when compared to the general working public; however, burnout rates remained substantial even among the most resilient physicians (West, et al., 2020). These findings are congruent with a 2017 systematic review and meta-analysis by Panagioti which found individual interventions for physician burnout to only produce small benefits but may be further enhanced by institutional-directed approaches.

A meta-analysis of burnout research from the last 35 years found that although the average effect of all interventions were relatively small, person-centered interventions are shown to be more effective than organization-centered interventions at reducing emotional exhaustion while organizational interventions such as clinical supervision, support groups, job restructuring, and team communication building had no significant effect on burnout (Dreison et al., 2018). Among organizational interventions, job training and education were found more effective than other subtypes at reducing overall burnout and feelings of personal accomplishment, though neither had significant effect on emotional exhaustion (Dreison et al., 2018).

A systematic review analyzing interventions on reducing burnout in physicians and nurses found workplace appreciation to produce a profound effect in increasing performance and decreasing depression and burnout, while team-based and coping interventions had no significant effect on healthcare worker burnout (Aryankhesal et al., 2019). Additionally, internet-based interventions were shown to improve mental health and reduce symptoms of depression, and interventions such as yoga, meditation, and mindfulness increased self-care and reduced emotional exhaustion (Aryankhesal et al., 2019).

The findings from the systematic review and meta analyses above suggest different modalities of interventions may be uniquely suited to address different burnout characteristics—emotional exhaustion, cynicism, or reduced personal accomplishment; however, according to a systematic review and meta-analysis conducted by West et al. (2016), the evidence remains unclear as to which interventions most improve resilience, though the most commonly studied methods involved mindfulness, stress management, and small group discussions, whose results show promise as effective measures in reducing burnout scores.

A meta-analysis examining mindfulness-based stress reduction (MBSR)—which typically includes methods such as controlled breathing, body scanning/progressive muscle relaxation, and meditation—found MBSR to be “moderately effective in reducing stress, depression, anxiety and distress and in ameliorating the quality of life of healthy individuals; however, more research is warranted to identify the most effective elements of MBSR” (Khoury et al., 2015). While this evaluation of studies was not specific to mental health providers, the authors noted that healthcare professionals were found to be

among the populations who benefited most from MBSR (Khoury et al., 2015). A systematic review examining the effect of MBSR-based interventions on empathy and emotional competencies specifically in healthcare providers found it enhanced one's ability to regulate emotion with improvements in stress, psychological health, and empathy (Lamonthe et al., 2016). One method of MBSR includes the practice of deep breathing, which has been shown to increase positive effects on both psychological and physiological stress through the reduced activation of the limbic and sympathetic nervous systems; and in turn, these improvements positively affect cortisol levels, anxiety, blood pressure, and other chronic diseases influenced by stress (Hopper et al., 2019).

Another mechanism in which MBSR cultivates beneficial effect is through the nurturing of self-compassion. Research shows:

“[...] there is a link between self-compassion and psychological well-being. For example, individuals that possess self-compassionate qualities and do not judge themselves too harshly are less likely to suffer with mental health issues, are more likely to cope with symptoms of stress, have greater emotional resilience, are less afraid of failure, employ effective coping strategies when distressed and are at less risk of compassion fatigue and burnout.” (Beauont et al., 2016).

Knowing the implications of improved self-compassion, researchers conducted a cross-sectional study of VHA mental health providers, and found self-compassion was associated with higher resilience to burnout in that target population (Atkinson et al., 2017). One method of increasing compassion is through Loving Kindness Meditation (LKM). Rooted in Buddhism and also referred to as compassion or Metta Meditation, LKM bolsters unconditional positive self-regard and has been shown to assist in

decreasing personal distress through regulating amygdala activity, increasing activation and connectivity in the prefrontal cortex which supports an increase in goal-directed behavior, affects a fundamental change in mental state, and facilitates a more positive and empathetic outlook (Williams-Orlando, 2021).

With smartphone ownership on the rise and ongoing research indicating mobile device software applications can assist preventing and treating behavioral health concerns, smartphone-based interventions are a readily available, convenient, and private platform (Wood et al., 2017). Self-help management facilitated through the use of mobile phone-based trainings has shown to play a key role in reducing anxiety in nurses (Villani et al., 2013), and a pilot study evaluating the effectiveness of the free PRMA designed by the National Center for Telehealth and Technology, which incorporates guided desk exercises, MBSR, and breathing exercises, showed promise in reducing burnout and compassion fatigue in mental health providers (Wood et al., 2017).

Description of EBP Project, Facilitators, and Barriers

Past studies have shown support groups and ongoing training interventions suffered from poor attendance due to ongoing staffing shortages common in acute psychiatry units, and ironically, the stress, burnout, and high turnover these organization-directed interventions were meant to address, played a part in undermining the intervention (Gilbody et al., 2006). That being said, however, after inquiring within the La Jolla VHA, it was ascertained there was neither follow-up nor ongoing training in regard to CF, STS, or burnout being conducted after the initial new hire onboarding process, and supported by the evidence above, a clear need exists for such an intervention. Considering the evidence, and with the resources and timeframe at hand, it

was deemed most appropriate to conduct a single educational class addressing the problem of CF, STS, and burnout scheduled during a regular administrative/continuing education period to lessen the risk of being perceived a burden. Although stress reduction techniques such as breathing exercises and progressive muscle relaxation are mentioned during the presentation, given the presumption most psychiatric providers already know—and likely teach their patients—these methods, more time was spent introducing LKM and the PRMA.

Barriers to the project included an initial difficulty finding information in regard to attaining VHA Institutional Review Board (IRB) approval and a general poor understanding on the distinction between EBP projects and research by the VHA staff involved in assisting the DNP student. Additional obstacles hindering the timely completion of the project encompassed difficulty communicating and coordinating with the two co-section chiefs in charge of the acute psychiatry units partially due to their numerous additional roles, responsibilities, and distractions including facilitating the opening of the new Emergency Psychiatric Unit at the La Jolla VHA. Furthermore, an outdoor luncheon following the virtual presentation was originally planned where individuals could fill out the ProQOL in person, however, a last-minute change of presentation date and time interfered with those plans, forcing the DNP student to hand out and collect the ProQOL forms individually—this change likely decreased the number of respondents. For the posttest conducted one month later, it was suggested an online version of the ProQOL created on SurveyMonkey may be a better alternative and more convenient for respondents. After an initial email to the resilience class attendees and two follow-up reminders, ten responses were recorded; down from 13 initially. Reasons

hypothesized for this loss to follow-up include not checking/seeing the emails, a preoccupation with patient care or other tasks, or a failure to remember.

Project Development and Timeline

Foremost, support was attained from the DNP student's faculty advisor, co-section chiefs, and other stakeholders at the La Jolla VHA acute psychiatry units.

Secondly, following a description of the EBP project and assurance of anonymity of ProQOL responses from the mental health providers, permission was granted by the labor representative on behalf of National Nurses United Veterans Affairs Division.

Subsequently, IRB approval was attained from both the La Jolla VHA and University of San Diego. The ProQOL was made available to members of the acute psychiatry units prior to the resilience training. In lieu of an in-person presentation, the resiliency training was conducted utilizing the Webex video conferencing platform in accordance with the La Jolla VHA's COVID-19 safety precautions, and a 30-minute PowerPoint presentation was given. Following 30 days from the presentation, a ProQOL posttest was made available to the employees via SurveyMonkey. After the data was analyzed utilizing Intellectus Statistics online computer software, results from the resiliency training on ProQOL scores was disseminated to clinical staff, stakeholders, and the union representative.

Model Framework

The John Hopkins Nursing Evidence-Based Practice (JHNEBP) Model was utilized to frame this EBP project, and its tools were referenced throughout the course of the project. Developed by a joint team of clinical nurses and nurse researchers at Johns Hopkins Hospital and School of Nursing, the JHNEBP Model "is a powerful problem-

solving approach to clinical decision-making and is accompanied by user-friendly tools to guide individual or group use” (Newhouse et al., 2007). The model utilizes an organized, well-formulated, three-step process to guide practice improvements referred to as the PET (Practice Question, Evidence, and Translation) process (Melnik & Fineout-Overholt, 2019). The JHNEBP model works well with this mental health-focused project because it acknowledges both internal and external influences on an individual and their practice; additionally, the model incorporates a humanistic approach by valuing others’ opinions, perspectives, and experiences which are invaluable in working with the psychiatric provider population.

Methods

The ProQOL is the most frequently utilized scale measuring the positive and negative outcomes of working with individuals who experienced stressful events and is comprised of a 30-item Likert scale questionnaire (see Appendix H) with subscales for compassion satisfaction, burnout, and CF with good reliability and validity (Stamm, 2010). Within the ProQOL, the sum of individual scores of 22 or less indicate low levels, scores between 23 and 41 indicate moderate levels, and scores greater than 42 indicate high levels of whichever subscale is being measured. Pretest and posttest scores were gathered, entered into Intellectus Statistics online computer software, and mean scores were compared between subscales utilizing a *t*-test.

Results

The compassion satisfaction subscale yielded mean scores of 39.23 pre-intervention (n=13) and 39.90 post-intervention (n=10) (see Figure 1). Pre-intervention mean compassion satisfaction scores fall into moderate levels with 5 individuals with

moderate levels and 8 individuals with high levels, and post-intervention scores also fall into moderate levels with 6 individuals with moderate levels and 4 individuals with high levels. In order to determine whether compassion satisfaction scores may have been created via a normal distribution, a Shapiro-Wilk test was conducted for pre- and post-intervention scores (Razali & Wah, 2011), and the results indicate a normal distribution cannot be dismissed as the underlying distribution for the pre-test results based on an alpha value of 0.05, $W = 0.89$, $p = .103$ and for post-test results based on an alpha value of 0.05, $W = 0.96$, $p = .755$. The Shapiro-Wilk test was not significant for pre- or post-intervention compassion satisfaction scores, showing normality assumption was met. To assess whether the variance of compassion satisfaction was uniform between pre- and post-intervention scores, a Levene test was conducted—the result was not significant based on an alpha value of 0.05, $F(1, 21) = 0.24$, $p = .628$, indicating the supposition that homogeneity of variance was met. A double-sided t -test concluded no significance between variables based on an alpha value of 0.05, $t(21) = -0.23$, $p = .821$, indicating no statistically significant difference between pre- and post-intervention compassion satisfaction scores. The results are displayed in Table 1.

Table 1

t-Test for Compassion Satisfaction Scale

Variable	Pre-intervention		Post-intervention		t	p	d
	M	SD	M	SD			
Compassion Satisfaction	39.23	7.62	39.90	5.95	-0.23	.821	0.10

Note. $N = 23$. Degrees of Freedom for the t -statistic = 21. d represents Cohen's d .

The burnout subscale yielded mean scores of 21.92 pre-intervention ($n=13$) and 21.90 post-intervention ($n=10$) (see Figure 1). Pre-intervention mean burnout scores fall

into the upper end of low levels with 8 individuals with low levels and 5 individuals with moderate levels, and post-intervention scores also fall into low levels with 5 individuals with low levels and 5 individuals with moderate levels. The burnout subscale yielded mean scores of 21.92 pre-intervention ($n=13$) and 21.90 post-intervention ($n=10$). In order to determine whether burnout scores may have been created via a normal distribution, a Shapiro-Wilk test was conducted for pre- and post-intervention scores (Razali & Wah, 2011), and the results indicate a normal distribution cannot be dismissed as the underlying distribution for the pre-test results based on an alpha value of 0.05, $W = 0.93$, $p = .387$ and for post-test results based on an alpha value of 0.05, $W = 0.96$, $p = .737$. The Shapiro-Wilk test was not significant for pre- or post-intervention compassion satisfaction scores, showing normality assumption was met. To assess whether the variance of compassion satisfaction was uniform between pre- and post-intervention scores, a Levene test was conducted, and the result was not significant based on an alpha value of 0.05, $F(1, 21) = 0.22$, $p = .642$; indicating the supposition that homogeneity of variance was met. A double-sided t -test concluded no significance between variables based on an alpha value of 0.05, $t(21) = 0.01$, $p = .992$, indicating no statistically significant difference between pre- and post-intervention compassion satisfaction scores.

The results are displayed in Table 2.

Table 2

t-Test for Burnout Scale

Variable	Pre-intervention		Post-intervention		t	p	d
	M	SD	M	SD			
Burnout Scale	21.92	5.54	21.90	5.86	0.01	.992	0.00

Note. $N = 23$. Degrees of Freedom for the t -statistic = 21. d represents Cohen's d .

The STS subscale yielded mean scores of 19.15 pre-intervention ($n=13$) and 18.10 post-intervention ($n=10$) (see Figure 1). Pre-intervention STS scores fall into low levels with 10 individuals with low levels and 3 individuals with moderate levels, and post-intervention scores also fall into low levels with all 10 individuals with low levels. The burnout subscale yielded mean scores of 21.92 pre-intervention ($n=13$) and 21.90 post-intervention ($n=10$). In order to determine whether burnout scores may have been created via a normal distribution, a Shapiro-Wilk test was conducted for pre- and post-intervention scores (Razali & Wah, 2011), and the results indicate a normal distribution cannot be dismissed as the underlying distribution for the pre-test results based on an alpha value of 0.05, $W = 0.91$, $p = .214$ and for post-test results based on an alpha value of 0.05, $W = 0.89$, $p = .190$. The Shapiro-Wilk test was not significant for pre- or post-intervention compassion satisfaction scores, showing normality assumption was met. To assess whether the variance of compassion satisfaction was uniform between pre- and post-intervention scores, a Levene test was conducted—the result was not significant based on an alpha value of 0.05, $F(1, 21) = 1.40$, $p = .250$, indicating the supposition that homogeneity of variance was met. A double-sided t -test concluded no significance between variables based on an alpha value of 0.05, $t(21) = 0.56$, $p = .583$, indicating no statistically significant difference between pre- and post-intervention compassion satisfaction scores. The results are displayed in Table 3.

Table 3*t-Test for Secondary Traumatic Stress Scale*

Variable	Pre-intervention		Post-intervention		<i>t</i>	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Secondary Traumatic Stress Scale	19.15	5.15	18.10	3.45	0.56	.583	0.24

Note. N = 23. Degrees of Freedom for the *t*-statistic = 21. *d* represents Cohen's *d*.

Figure 1*Pre and Post-Intervention ProQOL Scores*

Cost Benefit Analysis

As previously stated, the annual economic cost associated with burnout related to turnover and reduced clinical hours at an organizational level is approximately \$7600 per employed physician each year in the United States, totaling an attributed cost of \$4.6 billion nationally (Han et al., 2019)—it is unknown the direct attributable cost of burnout to the VHA alone. The resilience training utilized regularly designated staff continuing-education/administrative time and was conducted by an unpaid DNP student; thus, the

EBP project cost no money, making the monetary cost-benefit analysis difficult to calculate. Conversely, the non-monetary toll exacted by the longer-term physiological and psychological effects of STS, CF, and burnout to the individual provider is enormous, as are the incalculable costs to the patient related to the compromised provider-patient alliance, reduced consumer satisfaction, and poorer patient outcomes that directly result from those issues.

Discussion

The long-term physical and mental health sequelae caused by prolonged STS, CF, and burnout are significant throughout the medical community, however, providers within the VHA acute psychiatry units are faced with a greater risk than most other settings (Garcia et al., 2015). This EBP project sought to improve resilience against STS, CF, and burnout amongst VHA acute psychiatry providers through an educational class emphasizing the risk these providers face, explaining the impact of these conditions, and introducing evidence-based solutions including LKM and the PRMA. A ProQOL scale was administered before and 30 days following the training. Although there was a slight decrease noted in STS post-intervention scores (Figure 1), unfortunately these outcomes were not clinically significant and can conceivably be attributed by loss to follow-up, however, the project did demonstrate a noteworthy presence of moderate levels of compassion satisfaction and burnout consistent with characteristic prevalence noted during the literature review. This project underscores the importance of holistic health and the benefits of self-care and is congruent with past studies showing STS, CF, and burnout are challenging problems to address. Though psychiatric healthcare workers theoretically possess the individual or organizational tools necessary to increase

resilience, whether or not these providers effectively utilize these strategies to mitigate STS, CF, and burnout is largely unknown.

Limitations to this EBP project include small sample size, short duration of measure, and the inclusion of only select occupational roles within the group. A need for this training was agreed upon by the co-section chiefs of the VHA acute psychiatry units whose feedback indicated a subjective feeling of success after the training, however, it may be possible the intervention experienced poor attendance and a perception of burden upon the psychiatric providers' busy schedules due to the factors influencing STS, CF, or burnout, and these effects may have played a part in subverting the intervention as shown to be the case in past studies (Gilbody et al., 2006). The intervention recruited physicians, residents, and nurse practitioners for the educational training, however, clearly other roles such as social workers, therapists, and nurses experience the effects related to burnout, may have benefited from the training, and could have increased the sample size for a more accurate analysis of the intervention's effects.

Implications

The utilization of MBSR, LKM, and the PRMA have showed promise in improving ProQOL scores in past studies, and the results of this EBP project correspond with a systematic review and meta-analysis stating individual-tailored interventions for burnout produce only small benefits; however, these ProQOL outcomes may benefit further through the use of adjunct institutional-directed approaches (Panagioti et al., 2017) which demonstrates the need for the VHA to take measures at addressing the pervasive issues of CF, STS, and burnout within their ranks. Although this intervention failed to produce significant changes to ProQoL scores amongst the VA's acute

psychiatric provider population, burnout remains a pervasive issue, and further individual and/or institutional interventions are warranted.

References

- 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. *Journal of Medical Council of Islamic Republic of Iran*, 33(1), 1–8. <https://doi-org.sandiego.idm.oclc.org/10.34171/mjiri.33.77>
- Atkinson, D. M., Rodman, J. L., Thuras, P. D., Shiroma, P. R., & Lim, K. O. (2017). Examining burnout, depression, and self-compassion in Veterans Affairs mental health staff. *Journal of Alternative & Complementary Medicine*, 23(7), 551–557. <https://doi-org.sandiego.idm.oclc.org/10.1089/acm.2017.0087>
- Beaumont, E., Durkin, M., Hollins Martin, C. J., & Carson, J. (2016). Measuring relationships between self-compassion, compassion fatigue, burnout and well-being in student counsellors and student cognitive behavioural psychotherapists: a quantitative survey. *Counselling & Psychotherapy Research*, 16(1), 15–23. <https://doi-org.sandiego.idm.oclc.org/10.1002/capr.12054>
- Bowman, C., Branjerdporn, G., Turner, K., Kamara, M., Tyagi, N., Reyes, N. J. D., & Stapelberg, N. J. C. (2021). The impact of viral epidemics and pandemics on acute mental health service use: an integrative review. *Health Psychology Review*, 15(1), 1–33. <https://doi-org.sandiego.idm.oclc.org/10.1080/17437199.2021.1886864>
- Dreison, K. C., Luther, L., Bonfils, K. A., Sliter, M. T., McGrew, J. H., & Salyers, M. P. (2018). Job burnout in mental health providers: A meta-analysis of 35 years of

- intervention research. *Journal of Occupational Health Psychology*, 23(1), 18–30.
<https://doi-org.sandiego.idm.oclc.org/10.1037/ocp0000047>
- Eliacin, J., Flanagan, M., Monroe-DeVita, M., Wasmuth, S., Salyers, M. P., & Rollins, A. L. (2018). Social capital and burnout among mental healthcare providers. *Journal of Mental Health*, 27(5), 388–394. <https://doi-org.sandiego.idm.oclc.org/10.1080/09638237.2017.1417570>
- Garcia, H. A., McGeary, C. A., Finley, E. P., Ketchum, N. S., McGeary, D. D., & Peterson, A. L. (2015). Evidence-based treatments for PTSD and VHA provider burnout: The impact of cognitive processing and prolonged exposure therapies. *Traumatology*, 21(1), 7–13. <https://doi-org.sandiego.idm.oclc.org/10.1037/trm0000014>
- Garcia, H. A., McGeary, C. A., Finley, E. P., McGeary, D. D., Ketchum, N. S., & Peterson, A. L. (2016). The influence of trauma and patient characteristics on provider burnout in VA post-traumatic stress disorder specialty programmes. *Psychology & Psychotherapy: Theory, Research & Practice*, 89(1), 66–81. <https://doi-org.sandiego.idm.oclc.org/10.1111/papt.12057>
- Gilbody S, Cahill J, Barkham M, Richards D, Bee P, & Glanville J. (2006). Can we improve the morale of staff working in psychiatric units? A systematic review. *Journal of Mental Health*, 15(1), 7–17. <https://doi-org.sandiego.idm.oclc.org/10.1080/09638230500512482>
- Gómez-Urquiza, J. L., Vargas, C., De la Fuente, E. I., Fernández, C. R., & Cañadas, D. la F. G. A. (2017). Age as a risk factor for burnout syndrome in nursing

- professionals: A meta-analytic study. *Research in Nursing & Health*, 40(2), 99–110. <https://doi-org.sandiego.idm.oclc.org/10.1002/nur.21774>
- Han, S., Shanafelt, T. D., Sinsky, C. A., Awad, K. M., Dyrbye, L. N., Fiscus, L. C., Trockel, M., & Goh, J. (2019). Estimating the attributable cost of physician burnout in the United States. *Annals of Internal Medicine*, 170(11), 784–790. <https://doi-org.sandiego.idm.oclc.org/10.7326/M18-1422>
- Hopper, S. I., Murray, S. L., Ferrara, L. R., & Singleton, J. K. (2019). Effectiveness of diaphragmatic breathing for reducing physiological and psychological stress in adults: a quantitative systematic review. *JBIS Database of Systematic Reviews & Implementation Reports*, 17(9), 1855–1876. <https://doi-org.sandiego.idm.oclc.org/10.11124/JBISRIR-2017-003848>
- Houtrow, A. J. (2020). Addressing burnout: Symptom management versus treating the cause. *Journal of Pediatrics*, 224, 18–19. <https://doi-org.sandiego.idm.oclc.org/10.1016/j.jpeds.2020.04.068>
- Humphries, N., Morgan, K., Conry, M. C., McGowan, Y., Montgomery, A., & McGee, H. (2014). Quality of care and health professional burnout: narrative literature review. *International Journal of Health Care Quality Assurance* (09526862), 27(4), 293–307.
- Intellectus Statistics [Online computer software]. (2021). Intellectus Statistics. <https://analyze.intellectusstatistics.com/>
- Khoury, B., Sharma, M., Rush, S. E., & Fournier, C. (2015). Mindfulness-based stress reduction for healthy individuals: A meta-analysis. *Journal of Psychosomatic*

Research, 78(6), 519–528. <https://doi-org.sandiego.idm.oclc.org/10.1016/j.jpsychores.2015.03.009>

Lamothe, M., Rondeau, É., Malboeuf-Hurtubise, C., Duval, M., & Sultan, S. (2016).

Outcomes of MBSR or MBSR-based interventions in health care providers: A systematic review with a focus on empathy and emotional competencies. *Complementary Therapies in Medicine*, 24, 19–28. <https://doi-org.sandiego.idm.oclc.org/10.1016/j.ctim.2015.11.001>

Mealer, M. (2016). Burnout syndrome in the intensive care unit: Future directions for research. *Annals of the American Thoracic Society*, 13(7), 997–998. <https://doi-org.sandiego.idm.oclc.org/10.1513/AnnalsATS.201604-280ED>

Melnyk, B. M. (2020). Burnout, depression and suicide in nurses/clinicians and learners: An urgent call for action to enhance professional well-being and healthcare safety. *Worldviews on Evidence-Based Nursing*, 17(1), 2–5. <https://doi-org.sandiego.idm.oclc.org/10.1111/wvn.12416>

Melnyk, B.M. & Fineout-Overholt, E. (2019). *Evidence-based practice in nursing and healthcare: a guide to best practice*. (4th Edition). Philadelphia: Wolters Kluwer & Lippincott, Williams & Wilkins.

Newhouse, R. P., Dearholt, S. L., Poe, S. S., Pugh, L. C. & White, K. M. (2007) *Johns Hopkins Nursing Evidence-Based Practice Model and Guidelines*. Sigma Theta, Indianapolis, IN.

O'Connor, K., Neff, D. M., & Pitman, S. (2018). Burnout in mental health professionals: A systematic review and meta-analysis of prevalence and determinants. *European Psychiatry*, 58, 74-99. <https://doi.org/10.1016/j.eurpsy.2018.06.003> .

- Panagioti, M., Panagopoulou, E., Bower, P., Lewith, G., Kontopantelis, E., Chew-Graham, C., Dawson, S., van Marwijk, H., Geraghty, K., & Esmail, A. (2017). Controlled interventions to reduce burnout in physicians: A systematic review and meta-analysis. *JAMA Internal Medicine*, 177(2), 195-205. <https://doi:10.1001/jamainternmed.2016.7674>
- Razali, N. M., & Wah, Y. B. (2011). Power comparisons of Shapiro-Wilk, Kolmogorov-Smirnov, Lilliefors and Anderson-Darling tests. *Journal of Statistical Modeling and Analytics*, 2(1), 21-33.
- Schult, T. M., Mohr, D. C., & Osatuke, K. (2018). Examining burnout profiles in relation to health and well-being in the Veterans Health Administration employee population. *Stress & Health: Journal of the International Society for the Investigation of Stress*, 34(4), 490–499. <https://doi-org.sandiego.idm.oclc.org/10.1002/smi.2809>
- Stamm, B.H. (2010). The Concise ProQOL Manual, 2nd Ed. Pocatello, ID: ProQOL.org
- Stehman, C. R., Testo, Z., Gershaw, R. S., & Kellogg, A. R. (2019). Burnout, drop out, suicide: Physician loss in emergency medicine, Part I. *Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health*, 20(3), 485–494. <https://doi-org.sandiego.idm.oclc.org/10.5811/westjem.2019.4.40970>
- Tsai, J., Jones, N., Klee, A. *et al.* (2020). Job burnout among mental health staff at a Veterans Affairs psychosocial rehabilitation center. *Community Mental Health Journal*, 56, 294–297. <https://doi.org/10.1007/s10597-019-00487-5>

- Villani, D., Grassi, A., Cognetta, C., Toniolo, D., Cipresso, P., & Riva, G. (2013). Self-help stress management training through mobile phones: An experience with oncology nurses. *Psychological Services, 10*(3), 315–322. <https://doi-org.sandiego.idm.oclc.org/10.1037/a0026459>
- West, C. P., Dyrbye, L. N., Erwin, P. J., & Shanafelt, T. D. (2016). Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis. *Lancet, 388* North American Edition(10057), 2272–2281. [https://doi-org.sandiego.idm.oclc.org/10.1016/S0140-6736\(16\)31279-X](https://doi-org.sandiego.idm.oclc.org/10.1016/S0140-6736(16)31279-X)
- West, C. P., Dyrbye, L. N., Sinsky, C., Trockel, M., Tutty, M., Nedelec, L., Carlasare, L. E., & Shanafelt, T. D. (2020). Resilience and burnout among physicians and the general US working population. *JAMA Network Open, 3*(7), e209385. <https://doi-org.sandiego.idm.oclc.org/10.1001/jamanetworkopen.2020.9385>
- Williams-Orlando, C. (2021). Clinician wellness—self-care for staying healthy: Loving-kindness meditation for wounded moments. *Alternative & Complementary Therapies, 27*(1), 21–22. <https://doi-org.sandiego.idm.oclc.org/10.1089/act.2020.29308.cwo>
- Winwood, P. C., & Lushington, K. (2006). Disentangling the effects of psychological and physical work demands on sleep, recovery and maladaptive chronic stress outcomes within a large sample of Australian nurses. *Journal of Advanced Nursing (Wiley-Blackwell), 56*(6), 679–689. <https://doi-org.sandiego.idm.oclc.org/10.1111/j.1365-2648.2006.04055.x>

- Wood, A.E., Prins, A., Bush, N.E. et al. (2017). Reduction of burnout in mental health care providers using the provider resilience mobile application. *Community Mental Health J* 53, 452–459. <https://doi.org/10.1007/s10597-016-0076-5>
- World Health Organization. (2015). *ICD-10: International classification of diseases*. Geneva: World Health Organization

Professional Quality of Life Scale

*Compassion Satisfaction and Compassion Fatigue
(ProQOL) Version 5 (2009)*

1=Never	2=Rarely	3=Sometimes	4=Often	5=Very Often
1.	I am happy.			
2.	I am preoccupied with more than one person I [help].			
3.	I get satisfaction from being able to [help] people.			
4.	I feel connected to others.			
5.	I jump or am startled by unexpected sounds.			
6.	I feel invigorated after working with those I [help].			
	I create my personal life from my life as a [helper].			
	I am at work because I am losing sleep over traumatic experiences of			
	a person I [help].			
9.	I think that I might have been affected by the traumatic stress of those I [help].			
10.	I feel trapped by my job as a [helper].			
11.	Because of my [helping], I have felt "on edge" about various things.			
12.	I like my work as a [helper].			
13.	I feel depressed because of the traumatic experiences of the people I [help].			
14.	I feel as though I am experiencing the trauma of someone I have [helped].			
15.	I have beliefs that sustain me.			
16.	I am pleased with how I am able to keep up with [helping] techniques and protocols.			
17.	I am the person I always wanted to be.			
18.	My work makes me feel satisfied.			
19.	I feel worn out because of my work as a [helper].			
20.	I have happy thoughts and feelings about those I [help] and how I could help them.			
21.	I feel overwhelmed because my case [work] load seems endless.			
22.	I believe I can make a difference through my work.			
23.	I avoid certain activities or situations because they remind me of frightening experiences of the people I [help].			
24.	I am proud of what I can do to [help].			
25.	As a result of my [helping], I have intrusive, frightening thoughts.			
26.	I feel "bogged down" by the system.			
27.	I have thoughts that I am a "success" as a [helper].			
28.	I can't recall important parts of my work with trauma victims.			
29.	I am a very caring person.			
30.	I am happy that I chose to do this work.			

Appendix B**Resiliency Training Presentation**

**BALANCING PROVIDER STRESS AND
RESILIENCE IN THE TIME OF COVID**

Zachary Love, BSN, RN, NP Student

U.S. Department
of Veterans Affairs

1

OBJECTIVES

- 1. Learners will be able to differentiate between secondary traumatic stress, compassion fatigue, and burnout and explain how they relate.
- 2. Learners will be able to list the major signs and symptoms of burnout and identify personal experiences related to burnout syndrome
- 3. Learners will be able to describe resilience and identify risk and protective factors as well as personal strategies to increase resilience against secondary traumatic stress, compassion fatigue, and burnout.
- 4. Learners will become familiar with the Provider Resilience Mobile Application
- 5. Learners will identify mindfulness-based stress-reduction techniques shown to be effective
- 6. Learners will complete a Professional Quality of Life Scale (ProQOL): Compassion Satisfaction and Compassion Fatigue Version 5

2

COMPASSION SATISFACTION & COMPASSION FATIGUE

- Compassion satisfaction = the positive aspects of helping, “the good stuff”
- Compassion fatigue = the negative aspects of helping, “the bad stuff”
- Exposure to repeated interactions requiring high levels of empathic engagement with distressed clients (not necessarily trauma)
 - Increased difficulty maintaining empathy
 - Feeling detached
 - Mental, physical, emotional detachment
 - Affected by trauma and burnout

3

4

5

6

BURNOUT SYNDROME

- Associated with feelings of hopelessness and difficulties doing the job effectively
- Recognized as a classifiable illness by the World Health Organization
- May be associated with high workload or non-supportive work environment
- Gradual onset, a result of chronic workplace stress, may become chronic in some
- 3 key components
 - High levels of emotional exhaustion
 - High levels of cynicism, and/or detachment from the job
 - Low levels of personal accomplishment/sense of ineffectiveness

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EFFECTS OF BURNOUT

- Individual
 - Mild burnout scores: >3 x risk of having MDD
 - Severe burnout scores: 15 x more likely to have MDD
- Anxiety
- Sleep problems
- Impaired memory
- Maladaptive coping mechanisms (high correlation with alcohol use)
- Effects of chronic stress (GI, CV, metabolic, sexual, interpersonal)

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EFFECTS OF BURNOUT

• Patient

- Risk the loss of alliance/rapport
- Increased likelihood of errors
- Risk loss of provider
 - ~2,300 pt's impacted per loss
- Countertransference

• Organization

- Decreased productivity
- Absenteeism/presenteeism
- Cost of hiring/retraining
- At an organizational level, the annual economic cost associated with burnout related to turnover and reduced clinical hours is approximately \$7600 per employed physician each year
- Physician burnout costs between \$2.6 and \$6.3 billion annually.

9

FACTORS

- Inadequate support to mitigate the effects of chronic exposure to suffering
- Tension between medicine as a service and medicine as a business
- Loss of focus on real-time doctor-patient interactions as the foundational work of medical care
- Personal factors: underlying trauma/psychiatric dx, non work related stressors
- Toxic aspects of in medical culture
 - Rooted in the attributes of humanism—striving for excellence and the highest ethical and professional standards, contributing to something larger than oneself, and working tirelessly to serve others.
 - “Hidden curriculum” of medicine whose values can lead individuals to behave in ways that promote burnout, including perfectionism, self-criticism, denying vulnerability, delaying gratification which results in surviving instead of thriving, suffering in silence, and working in isolation

10

STATISTICS

- Feb 2021 CA COVID tracking poll: Half or more providers feel frustrated at their job (50%), overworked (57%), burned out (59%), and emotionally drained (68%).
- The VA's 2017 All Employment Survey indicated >50% of physicians working at the VA exhibited at least one symptom of burnout
- 40% reluctant to seek mental health treatment
- Risk factors include working in the VA, in mental health, and in the acute care environment, so this setting may be at one of the highest risks of burnout amongst all professions

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INDIVIDUAL VS. INSTITUTIONAL

- Despite higher resiliency scores than the general working population, health care providers still experience burnout at a surprising rate
- Institutional risk factors:
 - Inefficient workplace processes
 - Excessive workloads
 - Negative leadership behaviors
- Plays a part in moral injury – when we are unable to put the needs of the patient first
- It's not your fault

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RESILIENCY

- Resilience is the capacity to respond to stress in a healthy way such that goals are achieved at minimal psychological and physical cost
- Four main aspects of physician resilience:
 - Attitudes and perspectives
 - Balance and prioritization
 - Practice management style
 - Supportive relations
- A sense of calling as an intrinsic motivator associated with resilience
 - Those who endorse a sense of calling expressed greater life meaning and commitment to direct patient care
 - One needs to thrive and not merely survive. Intrinsic motivation focuses on the individual's internal views of their work and how an individual seeks enjoyment, stimulates their curiosity, and finds reward within the personal challenges that he/she encounters
- Focus on joy in work/compassion satisfaction
- Extrinsic factors, such as annual income not shown to be associated with enhanced meaning or commitment to patient care

13

WHAT TO DO ABOUT IT

- Meta analyses and systematic reviews show both individual-focuses and structural/organizational interventions to be effective, though no indication of which specific intervention is best
- Resilience training is only part of the solution
- The most evidence-based person-centered interventions aim at reducing burnout through teaching personal coping skills utilizing cognitive-behavioral principles (restructuring, rational emotive training) and Mindfulness-based stress-reduction techniques
 - Breathing exercises
 - Body scanning/progressive muscle relaxation
 - Meditation
- Goal: reduce physiological and psychological distress
- As a provider you are well aware that there are many different ways to address stress; the key is to learn which strategies work best for you, and to put them into practice in a consistent, disciplined way

14

LOVING KINDNESS/COMPASSION/METTA MEDITATION

- Research shows individuals that possess self-compassionate qualities are more likely to:
 - cope with symptoms of stress
 - have greater emotional resilience
 - employ effective coping strategies when distressed
 - less risk of compassion fatigue and burnout
- Often used as part of compassion-focused therapy evidence-based practice
- A growing number of studies have begun to demonstrate the clinical and social/interpersonal benefits of LKM
- Provider characteristics have significant impact on therapeutic alliance
- Empathy related to provider burnout and impairment
- Meditation is an established mean for promoting wellness and cultivating positive emotions while increasing self-compassion, empathy, and mood
- "May you be happy. May you be well. May you be safe. May you be peaceful and at ease."

15

THE PROFESSIONAL QUALITY OF LIFE SCALE (PROQOL)

- Most commonly used measure of the positive and negative effects of helping others who experience trauma
- 30-item Likert scale questionnaire
- Subscales for compassion satisfaction, burnout, and compassion fatigue

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THE PROVIDER RESILIENCE MOBILE APPLICATION

- Developed by psychologists at the National Center for Telehealth & Technology
- Created specifically for mental health professionals treating military/veterans
- A pilot study has shown the app to be effective at reducing Burnout and Compassion Fatigue amongst outpatient mental health providers
- Recommended by the VA in the PTSD Provider Toolkit

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FINAL TAKE-AWAYS

- Compassion fatigue, secondary traumatic stress, and burnout are real problems
- You're at risk
- Mindfulness-based stress reduction techniques have been shown to reduce sx
- The Provider Resilience Mobile App is a tool that may be useful
- Find what works for you

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PLEASE EMAIL ZLOVE@SANDIEGO.EDU
FOR ANY QUESTIONS

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REFERENCES

- * Arora, A., Nijmehdoust, S., Hupst, T., Alkhou, S., Boudreau, M., Scholz, R., & Pothol, Z. (2019). Interventions on reducing burnout in physicians and nurses: A systematic review. *Journal of Medical Ethics & Health Law*, 18(1), 1-6. <https://doi.org/10.1001/jme.2018.10>
- * Aklonis, D. M., Rodman, J. L., Thang, P. D., Shuman, P. R., & Lim, K. O. (2017). Examining Burnout, Depression, and Self-Compassion in Veterans Affairs Mental Health Staff. *Journal of Alternative & Complementary Medicine*, 23(7), 551-557. <https://doi.org/10.1089/acm.2016.0284>
- * Brady, A., O'Grady, N., Burgermeister, D., & Hansen, P. (2012). The Impact of Mindfulness Meditation in Promoting a Culture of Safety on an Acute Psychiatric Unit. *Perspectives in Psychiatric Care*, 48(1), 128-137. <https://doi.org/10.1080/08838189.2011.611111>
- * Carlson, K. C., Luthar, L., Burdette, R. A., & Spier, M. T. (2018). Job burnout in mental health providers: A meta-analysis of 35 years of intervention research. *Journal of Occupational Health Psychology*, 23(1), 1-13. <https://doi.org/10.1037/ocp0000148>
- * Elbert, J., Rangel, M., Monroe-DelVal, M., Williams, L., Salyers, M. P., & Rollins, A. L. (2018). Social capital and burnout among mental healthcare providers. *Journal of Mental Health*, 27(5), 388-394. <https://doi.org/10.1080/09638237.2017.1381288>
- * Epstein, R. M., & Kravitz, M. S. (2013). Physician resilience: what it means, why it matters, and how to promote it. *Academic medicine* : journal of the Association of American Medical Colleges, 88(3), 351-357. <https://doi.org/10.1093/acm/88.3.351>
- * Garcia, H. A., McGeary, C. A., Foley, E. P., Katchun, N. S., McGeary, D. D., & Peterson, A. L. (2015). Evidence-based treatments for PTSD and VA provider burnout: The impact of cognitive processing and prolonged exposure therapies. *Traumatology*, 21(1), 1-13. <https://doi.org/10.1891/1081-7735.21.1.1>
- * Garcia, H. A., McGeary, C. A., Foley, E. P., McGeary, D. D., Katchun, N. S., & Peterson, A. L. (2016). The influence of trauma and patient characteristics on provider burnout in VA post-traumatic stress disorder specialty programs. *Psychology & Psychotherapy: Research & Practice*, 69(1), 66-81. <https://doi.org/10.1111/ppsc.12057>
- * Tan, J., Jones, N., Han, A. et al. (2019). Job burnout among mental health staff at a veterans affairs psychosocial rehabilitation center. *Community Mental Health Journal*, 56, 294-297. <https://doi.org/10.1007/s10591-019-0954-4>
- * West, C. P., Dyrbye, L. N., Erwin, P. J., & Shanahan, T. D. (2016). Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis. *Lancet*, 388, North American Edition (10075), 372-381. [https://doi.org/10.1016/S0140-6736\(16\)00444-3](https://doi.org/10.1016/S0140-6736(16)00444-3)
- * West, C. P., Dyrbye, L. N., Sinsky, C., Trivette, M., Tu, M., Hudes, L., Carls, L. E., & Shanahan, T. D. (2019). Resilience and burnout among physicians and the general US working population. *JAMA Network Open*, 2(7), e190985. <https://doi.org/10.1001/jamanetworkopen.2019.0985>
- * Wood, A. E., Piro, A., Bush, N. E. et al. (2017). Reduction of burnout in mental health care providers using the provider resilience mobile application. *Community Mental Health*, 53, 462-469. <https://doi.org/10.1007/s10591-016-9269-3>