IMPLEMENTATION OF AN EVIDENCE-BASED PROTOCOL TO IMPROVE SYMPTOMS OF BURNOUT

by

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ABSTRACT

Background: Burnout is a preventable behavioral response to increasing institutional workload and expectations, where staff feel unsupported and inconsequential. Symptomatology includes heightened oversight, exhaustion, and bitterness, causing attrition and ultimately perpetuating this condition within the workplace. In recognizing the risk of burnout in its employees, a Montana-based mental health center received a grant to implement preemptive, evidence-based measures to mitigate burnout.

Methods: Initial baseline measures were drawn from the Maslach Burnout Inventory to provide insight into the severity of the problem. Following inventory completion, employees were offered interventions to mitigate the effect of burnout.

Interventions: Employees were offered Relias educational videos for information regarding burnout and suggestions for management. Mindfulness techniques were offered along with cognitive behavioral therapy to promote self-care and symptom remission.

Results and Conclusions: The findings from the baseline Maslach Inventory provide detail into the current conditions of the organization.

Key words: Burnout, Maslach Burnout Inventory, Mindfulness Techniques, Attrition

CHAPTER ONE

BACKGROUND OF BURNOUT

Introduction

Burnout is sustained exposure to work stressors that promote debilitating fatigue, emotional dissociation or depersonalization, and feelings of inadequacy (Friganović et al., 2019). These symptoms include depression and anxiety, and manifest as headaches, irritability, insomnia, and absenteeism (Lopez-Lopez, 2019). Prolonged exposure causes feelings of helplessness, hopelessness, misanthropy, substance misuse, and suicidality (Friganović et al., 2019).

Healthcare workers are tasked with increased workloads and patient panels with compounded complexity. These contributing components cause the symptoms listed above for workers, subjecting them to adverse conditions making burnout inevitable (Friganović et al., 2019).

The suffering parties are two-fold; the clinician and, by proxy, the patient—as staff reduction compromises safety and potentially promotes negligence. Burnout is a condition that decreases satisfaction, impacts mental health, and causes considerable concern nationwide, as the healthcare industry cannot sustain the substantial decrease in staff or the cost to replace them (Via et al., 2022).

Impact of Burnout

Burnout numbers have been steadily growing since 2000. The National Alliance on Mental Illness (NAMI) noted in the 2015 legislation that a gross lack of funding for mental health and substance use compounded by rising concerns for underserved populations yields potential issues for increased risk of burnout. Burnout at that point was prevalent among mental health providers and nurses. Burnout was brought to national attention in 2019, when it was deemed an occupational phenomenon by The World Health Organization (WHO). Additionally, the National Institute on Drug Abuse (NIDA) (2020) acknowledged increased demand for substance and mental health services exacerbating an already over-taxed system (Via et al., 2022).

Reasons for Burnout

Mental health clinician burnout has exploded since the COVID-19 pandemic. Before this time, numbers indicated that anywhere between 25% and 67% of mental health professionals would suffer from varying degrees of burnout symptomologies (Ensari, 2021; Luther et al., 2017). Of that number, 16.3% of graduate-level practitioners were projected to leave the field entirely (Shah, 2021). Unfortunately, these numbers continue to grow and are at an all-time high, according to the Substance Abuse and Mental Health Services (SAMHSA, 2022). Pappa et al., (2021) suggest 65% of workers feel an increase in burnout symptomology.

Not attending to the health and welfare of mental health practitioners is a barrier to addressing underserved and vulnerable populations. Roth et al. (2021) suggest that nursing burnout is directly related to increased demand, reduced clinician numbers, and insufficient care

coordination, compounded by a personal lack of control and decreased organizational support. In addition, a high workload related to more patients with increased complexity results in negative impacts on health outcomes and decreased patient satisfaction potentiating a risk for medical errors (Roth et al., 2021).

Increased workload and staff shortages directly correlate to working overtime. Longer hours, along with a lack of resources, exacerbates stress, exhaustion, and feelings of burnout. As of 2017, no regulations capped or inhibited overtime (Vie et al., 2022). According to Luther et al. (2017), it is unknown if overtime directly correlates to poor patient outcomes. However, overtime is indicative of increased work-related dissatisfaction and inevitable burnout. The perpetual cycle of staff shortages, compounded by poor leadership, intensified by increased workload, yields an unsafe culture. This minimizes patient-nurse alliance and perpetuates feelings of inadequacy, depersonalization, and exhaustion (Roth et al., 2021; Muir et al., 2022).

Inadequate numbers give rise to a culture of unsafe practice (Muir et al., 2021). The resulting absenteeism and inevitable attrition are costly, increasing replacement training and further increasing workload. This is not sustainable for healthcare institutions. Nursing shortages are directly related to adverse health outcomes and compromise patient safety and quality of care, but also potential morbidity or mortality as it arises from reduced patient time (Muir et al., 2021).

There are many components of the financial ramifications of burnout: attrition and turnover, decreased patient revenue, and reduced productivity. The research indicates that hospital stakeholders who invest in burnout-prevention programs will see financial gain when turnover is reduced to 20% and $70,000 or less is spent on attrition costs (Muir et al., 2022). It costs approximately $40,000 to $100,000 to replace and train a new nurse (Muir, 2022; Luther et

al., 2017). In addition to seeing a financial gain, retention rates will increase from 2.9 years to 3.5 years. Burnout-prevention programs address providers, which are an integral component of the healthcare industry (Wolters Kluwer, 2022).

The Solution

While burnout often occurs in response to a malfunctioning work environment, it is preventable (Ensari, 2021). With healthcare workers as the backbone of the industry, implementing evidence-based approaches to reduce burnout is paramount (Adlakha, 2019). Burnout is not a diagnostic disorder; rather, it is a gross lack of intrapersonal and organizational understanding in identifying causes and subsequent symptomology. According to SAMHSA (2022), combination therapies best promote change in provider behavior. Similarly, holistically addressing each clinician may best benefit sustained change.

The research of Adlakha (2019) suggests that education is the foundation of the solution. Bringing attention to the symptoms fuels awareness and may perpetuate motivation for change. Research has proven that individualized, clinician-specific, multifactorial interventions are most effective (Adlakha, 2019). Recognizing precipitating events and scheduling is already difficult, and making additional required tasks is inappropriate. Therefore, the implementation of this project must be self-regulated and independent, allowing freedom of choice and time for intervention application.

Interventions that include stress navigation coupled with resiliency modalities are proven and evidence-based (Bailey et al., 2021). Assessing readiness to change, physical and environmental factors, and providing acceptable and helpful pathways for symptomatology are critical for mitigation. These resources can be coupled with additional therapies, including yoga,

deep breathing, and mindfulness, and are especially helpful when used with co-occurring self-care techniques. Combination and adjunct cognitive behavioral therapy alter maladaptive coping mechanisms and are also industry standards for substantive behavior modification (Bailey et al., 2021).

Work environment and organizational constructs perpetuate the problem; so, addressing current policies and procedures will aid in aligning appropriate strategies. However, approaching this phenomenon with a bifactorial schema, combining individual and organizational change, provides a more substantive and sustained change than one independent of the other (Muir, 2022).

Workflow and technical issues are major contributors to frustration and increased stress. Healthcare staff working at reduced rates lack ground-level and agency management support. Streamlining communication and providing safety nets have become increasingly valuable. Ensuring health and welfare are not mismanaged and handled punitively builds camaraderie while enhancing trust in the system. Expanded programs, such as access to childcare and salary incentives (Muir, 2022), improve staff retention. Similarly, alterations in time-off parameters are increasingly employee-centered and provide more robust programs to alleviate stress (Bekelepi & Martin, 2022).

Change in work culture may be the most integral component to longstanding success. It is essential to create an environment of tolerance while promoting health and wellbeing and reducing negativity. A system that offers care through a top-down approach fosters institution-wide compassion while building stakeholder buy-in, cultivating a systemic shift in workforce dynamic and expectations. Lastly, policymakers and stakeholders must work collaboratively to produce substantive change, ensuring communication and longstanding effects. Micro and macro

systems must continually be measured to ensure change is actualized and short- and long-term goals are reached, and that organizational growth is not inhibited for the foreseeable future (Bekelepi & Martin, 2022).

CHAPTER TWO

INTERVENTION

Background

Burnout is a preventable behavioral response to increasing institutional workload and expectations where staff feel unsupported and inconsequential. Symptomology includes heightened oversight, exhaustion, and bitterness, causing attrition and ultimately perpetuating this condition within the workplace (Muir et al., 2022; Adlakha, 2019).

Problem Statement

With the onset of technology, specifically the increasing utilization of Electronic Health Records (EHR), burnout-related conditions grew to affect nearly 50% of clinicians (Shanafelt & Noseworthy, 2017). Technology enhanced medical practice, reduced paperwork, and streamlined patient interactions has inevitably escalated staff obligations with increased patient numbers (Shanafelt & Noseworthy, 2017). Concurrently, the Affordable Care Act flooded healthcare with newly insured individuals seeking care. As a result, the institution weakened further and became further debilitated by the stressors of COVID-19. Therefore, the already vulnerable and fledgling staff, bombarded by escalated demands and expectations to serve, deteriorated under a more complex patient panel (Shanafelt & Noseworthy, 2017). If left unaddressed, the medical system is unsustainable. The loss of clinicians related to burnout will cost institutions $300 billion dollars nationwide (Adlakha, 2019). These projections have revealed a steady incline of data suggesting that no anticipated rebound is expected for the immediate future.

Specific Aims

This statewide quality improvement project aims to emphasize current burnout concerns for the employees at a Montanan mental health organization. The project will implement the Donabedian model to structure educational components, calling attention to the symptomology and educating the facility of its effects. This will bring awareness to staff about the ramifications of burnout and allow for immediate introspection (ACT, 2022). The incorporation of a multimodal mobile app provides independent mindfulness approaches to individuals and can be implemented when needed.

The next component of the project will encourage staff members to utilize cognitive behavioral therapy (CBT), if self-indicated. Finally and ideally, this project will minimize company attrition by promoting health and wellbeing and changing institutional culture—where staff feels supported and safe.

Rationale

Organization is a statewide mental health and crisis facility offering outpatient and inpatient services. The company provides care for nearly 15,000 patients annually and employs roughly 500 staff members comprised of clinicians, nurses, and support services.

The organization aligns with similar national statistics and has comparable attrition rates due to burnout. Staff are the critical assets to patient wellbeing and the overall organization’s health. SAMHSA has recognized the company’s crisis and provided grant funding specifically for staff burnout. Investing in modalities to offset burnout will not only slow the effects of

attrition, but will simultaneously instill staff confidence that the institution is supportive and committed to an organizational cultural shift in employee care (SAMHSA, 2022).

The organization's employees work both in-person and through telehealth, where 15 clinicians are remote and support staff are typically onsite. This quality improvement project (QIP) will serve both populations of workers.

The burnout QIP team consists of the vice president, the director of human resources, the crisis prevention manager, and this doctoral student. Burnout has not previously been addressed in this organization; however, based on leadership buy-in and support from SAMHSA, the team expects measurable positive change and anticipates reduced employee attrition.

The QIP will utilize the Donabedian framework, specifically highlighting structure, process, and outcomes. The components of structure include patients, staff (clinicians/providers, nurses, support services), the QIP team, and the environment of care (in-person and remote) at the organization. The process, or workflow, varies by job requirements. Clinicians see roughly 12 patients daily, allotting 30 minutes for pre-existing patients and 60 minutes for new clients. The current process is wholly focused on patient care from the start of shift to the end. Breaks are unscheduled and only taken during patient cancelations or no-shows, making the shift fast-paced and demanding.

Changing the process of care is unrealistic at this juncture. One tool for implementation to prevent burnout is to provide employees with initial education to draw awareness to the condition, and offer a self-assessment to identify potential symptomology. Next, providing feasible mindfulness interventions to be utilized flexibly will be beneficial. Deep breathing, yoga, or meditation techniques in-between patient appointments or at the end of the day, will offer helpful and appropriate evidence-based and proven stress management techniques (Almén,

2021). Lastly, access to gold-standard psychotherapy for behavioral modification or Cognitive Behavioral Therapy (CBT) will provide increased support, if desired . This model will showcase each strategy and seamlessly highlight action mechanisms and potential outcomes. In conjunction with appropriate measures, it will provide insight into impact (ACT, 2021).

Maslach Burnout Inventory (MBI) is a sensitive tool and industry standard to measure the prodromal signs of burnout. This tool will be utilized twice, initially to delineate a baseline for individual staff members and then, after implementation, to measure the intervention's effectiveness and symptom remission (Williamson et al., 2018). Although not within this particular improvement parameter, an increased rate of retention would be the absolute success indicator for the organization.

Intervention and Implementation

Mitigating burnout starts with bringing individual awareness to the condition. For this project, inexpensive modalities like education, mindfulness, and meditation can be incorporated organically into daily routines. Implementation will limit the severity of burnout and invariably precipitate systemic change from the bottom up (SAMHSA, 2022; Shanafelt & Noseworthy, 2017). The intent is to provide initial education through an online educational platform, offer independent mindfulness interventions through an app, and extend additional CBT if indicated. These modalities will contribute to a robust strategy to help manage and effectively reduce the symptoms of burnout.

Education is the primary step in bringing awareness to the issue and the corresponding symptomology. This project component will allow the individual to self-address any perceived effects of this condition (Adlakha, 2019; Aryankhesal, 2019). Launching a Relias learning tool

informing staff of burnout symptoms and causation will supply the initial online component. This educational platform is already used company-wide for all staff members and is recognized for its ease of use. Information garnered from this step will provide insight into the problem and allow for staff introspection, analyzing the possibility for prodromal indications.

Ideally, all staff should participate in mindfulness techniques regardless whether they are currently suffering from symptoms of burnout or not. The intent is to utilize interventions as a method to prevent or minimize associated features. Applying the newly learned material from Relias, the staff will be directed to the wellness app supplied by the company's health insurance platform. This tool integrates interventions appropriate to individual needs. Specifically, these modalities supply mindfulness techniques that are evidence-based and proven to help mitigate stress levels and promote self-care (Aryankhesal, 2019). Such management tools include yoga, deep breathing, and meditation. In addition, these methods can be utilized when appropriate, minimizing time restraints and work-related stressors.

The organization provides CBT for all staff as part of its health benefits package. CBT is the current gold standard in supplying psychosocial strategies to address maladaptive behaviors in mental health conditions (Almén, 2021). Through email, staff members will be reminded that these services exist and are suggested when combating burnout. The interventions provided in this treatment can further develop navigation techniques for symptom management and enhance the recovery response. In addition, CBT combined or paired with mindfulness is a proven adjunct intervention to work-related fatigue and emotional stress (Almén, 2021).

The primary contextual barrier that might limit this project's success would be staff engagement. One concern about using the technological app is the potential for malfunction, which may cause reduced buy-in and increased frustration. Furthermore, staff participation is

invariably time sensitive, and some members will minimize participation based on restraints from work or home. Lastly, like all medical staff, therapists are in short supply; increasing wait time and reducing availability will impede their insular work demands, which may perpetuate additional concerns.

Evaluation

The research derived from Williamson et al. (2018) denotes that MBI is a questionnaire to identify burnout's constituent effects. This online evaluation is sensitive enough to correctly extrapolate the nuances of work satisfaction and general work-life balance to assess work fatigue. It also identifies diminished sense of self and general sense of accomplishment, otherwise known as depersonalization and mental exhaustion, contributing to staff burnout (Williamson et al., 2018). MBI is streamlined in the application but also anonymous in nature, making it accessible, easy to use, and an accurate test. It is therefore an ideal choice for this project.

This instrument will be used twice over the entirety of the project; initially as a preliminary assessment to identify the baseline level of burnout. The baseline MBI questionnaire will be released before the end of the year. The MBI will be utilized again roughly 60 days after the education and intervention components have been implemented to determine the QIP success. The questionnaire will be disseminated regardless of clinician engagement with the interventions. The intent is that data collected from this secondary measure will offer insight into the success of this project for use by both this student and the company's stakeholders.

Table 1. SMART Goal #1

Smart Goal # 1 Establish MBI and Posttest measure MBI		
● 75% of all staff members will complete the pretest MBI questionnaire before intervention roll out and 65% will complete the post intervention MBI.		
Data collected: Staff Responses: to MBI's 22 questions	Method of Collection:	Data Analysis:
12/16/22	Self submitted to Mind Garden	Supplied by Mind Garden
3/10/22	Self submitted to Mind Garden	Supplied by Mind Garden

Table 2. SMART Goal #2

Smart Goal # 2 Relias Portal		
75% of all the organization's staff will complete the Relias training Course and 100% of the course attendees will pass the test portion. ● Relias is a robust learning portal currently offered through the organization. This product will provide educational insight into burnout and its symptoms. This service is optional and online to allow users to work at their own pace and within the comforts of their schedule. This service is trackable with a backend to monitor for elected engagement. There are quizzes to ensure retention and bolster education.		
Data collection: Relias completed Before or on 1/13/23	Method of Collection: Test Data HR Staff to provide Relias report	Data Analysis: Completion Data Percentage of staff who completed training

Table 3. SMART Goal #3

Smart Goal #3 BCBS-Mindfulness Application		
60% of all users will utilize the BCBS Mindfulness Application, and 45% will implement into practice. ● Using a mobile app that offers mindfulness, meditation, and deep breathing self-interventions that can be used according to time availability and preference. ● There will be an anonymous survey monkey that staff can respond with simply identifying if staff accessed the BCBS- Wellness app.		
Data Collected: staff-self-report of utilization	Method of Collection:	Data Analysis: number of those who used vs. total number of staff (percentage)
3/10/2023	Survey Monkey	This student to compile a percentage of completed surveys

Table 4. SMART Goal #4

Smart Goal #4 CBT
25% of all the organization's employees will utilize CBT interventions for burnout features. ● Providing all staff additional support through CBT if they feel the service would provide benefit. This program is part of the benefits package and is available for all the organization's staff members insured under BCBS. ● This is and will remain completely anonymous and not shared for the purpose of the project.

Table 5. SMART Goal #5

Smart Goal # 5 The Organization's Culture Shift		
Yearly staff unscheduled sick leave will be reduced by 25% and attrition levels will drop by 15% ● To assess for intervention success and reduced levels of burnout symptoms. ● To ensure that interventions are promoting happier, healthier, more resilient staff. ● Improved work environment ● Safer, more engaged, and better-managed clients ● Lowered attrition rates among providers, nurses and auxiliary staff ● Increased staff workplace satisfaction		
Data Collected: HR report on Unscheduled sick and attrition rates	Method of Collection:	Data Analysis:
12/2023	The Organization's HR Dept	The Organization's HR Dept
12/2023	The Organization's HR Dept	The Organization's HR Dept

CHAPTER THREE

IMPLEMENTATION

Clinical Problem

Burnout is sustained exposure to work stressors that promote debilitating fatigue, emotional dissociation or depersonalization, and feelings of inadequacy (Friganović et al., 2019). These symptoms include depression and anxiety, and manifest as headaches, irritability, insomnia, and absenteeism (Lopez-Lopez, 2019). In addition, prolonged exposure can cause helplessness, hopelessness, misanthropy, substance misuse, and suicidality (Friganović et al., 2019).

Healthcare workers, tasked with increasing workloads and patient panels who experience compounding complexity of symptoms. These contributing components result in burnout-related symptoms, subjecting healthcare workers to adverse conditions and making burnout inevitable (Friganović et al., 2019).

The suffering parties are two-fold—the clinician and, by proxy, the patient—as staff either become less effective or leave the profession altogether. This staff reduction compromises safety and potentially promotes negligence. Burnout is an avoidable condition that decreases satisfaction, impacts mental health, and causes considerable concern nationwide. The healthcare industry cannot sustain the substantial decrease in staff or the cost to replace them (Via et al., 2022).

Burnout numbers have been steadily growing since 2000. The National Alliance on Mental Illness (NAMI) noted in 2015 legislation that a gross lack of funding for mental health

and substance use, compounded by rising concerns for underserved populations, placed healthcare professionals at increased risk of burnout. Burnout, at that point, was prevalent among mental health providers and nurses. Burnout was brought to national attention in 2019 when it was deemed an occupational phenomenon by The World Health Organization (WHO). Currently, the National Institute on Drug Abuse (NIDA) (2020) acknowledges that increased demand for substance and mental health services exacerbates an already over-taxed system (Via et al., 2022).

Mental health clinician burnout has exploded since the COVID-19 pandemic. Before this time, numbers indicated that anywhere between 25 and 67% of mental health professionals would suffer from varying degrees of burnout symptomologies (Ensari, 2021; Luther et al., 2017). Of that number, 16.3% carrying graduate-level practitioner degrees were projected to leave the field entirely (Shah, 2021). Unfortunately, these numbers continue to grow and are at an all-time high, according to Substance Abuse and Mental Health Services (SAMHSA, 2022). Pappa et al. (2021) suggest that 65% of workers feel an increase in burnout symptomatology.

Not attending to the health and welfare of mental health practitioners is a barrier to addressing underserved and vulnerable populations. These patients are typically more complex, with illnesses that require more meticulous and attentive care. More patients, greater demand, and higher acuity fuel hurried processes. As a result, nuances are overlooked, precipitating negative impacts on health outcomes, decreased patient satisfaction, and risk for medical errors (Roth et al., 2021).

The perpetual cycle of staff shortages, intensified by increased workload, compounded by poor leadership, yields an unsafe culture. This minimizes the patient-nurse alliance and perpetuates feelings of inadequacy, depersonalization, and exhaustion (Roth et al., 2021; Muir et

al., 2022). The resulting absenteeism and inevitable attrition are costly, increasing replacement training and, again, workload. Nursing shortages are directly related to adverse health outcomes and compromise patient safety and quality of care, as well as potential morbidity or mortality arising from reduced patient time (Fendel et al., 2021).

In addition to poor patient outcomes, there are many components of the financial ramifications of burnout: attrition and turnover, decreased patient revenue, and reduced productivity. The research indicates that hospital stakeholders who invest in burnout-prevention programs will see financial gain when turnover is reduced to 20% and $70,000 or less is spent on attrition costs (Muir et al., 2022). It costs approximately $40,000 to $100,000 to replace and train a new nurse (Muir et al., 2022; Luther et al., 2017). In addition to seeing a financial gain, burnout prevention programs can increase retention rates from 3 to nearly 5 years. Burnout-prevention programs address providers who are integral to the healthcare industry.

The Montana mental health organization that hosted this quality improvement project aligns with similar national burnout statistics and has comparable workloads, patient complexity, and attrition rates. Over-extended staff with unmanageable expectations give rise to burnout (SAMHSA, 2022). Understanding the eminent need and recognizing the necessity to act, the clinic's leadership sought help and ideas to navigate this issue. SAMHSA acknowledges the devastating effects burnout is creating. To mitigate this crisis, SAMHSA has allocated grant funding to this clinic and others like it across the country. Leadership and this newly acquired funding can mitigate burnout by pulling from evidence-based solutions and instilling confidence that the institution is supportive and committed to an organizational cultural shift (SAMHSA, 2022).

Review of the Literature

The predominant issue of burnout relates to a gross lack of understanding in identifying causes and symptoms. It can be considered a syndrome, but not a diagnostic illness (Fendel et al.,2021). Education is the foundation of the syndrome solution. Bringing attention to burnout symptoms fuels awareness and may perpetuate motivation for change. This type of understanding can be both individually directed and organizationally structured. Introducing awareness at an independent level through a measurement tool can be helpful and aid in future management (Patel et al., 2021).

The healthcare system is invariably high-stress. Staff are working long hours with patients that vary in complexity and need; organizational expectations are high and demanding. Finding interventions that are easily inserted into this fast-paced scenario is integral for effectiveness (Salvado et al., 2021). Management techniques, including stress navigation and resiliency modalities, are proven and evidence-based. A meta-analysis from Fendel et al. (2021) suggests that mindfulness and mindfulness-based interventions are proven benefits for independently directed navigation of symptoms (Patel et al., 2021). Mindfulness-based interventions is purposeful awareness, where individuals can redirect their thinking to the current moment. Its intent is acceptance with the goal of emotional balance (Salvado et al., 2021). Promoting self-awareness can lessen feelings of depersonalization and emotional exhaustion and help staff regain purpose and personal achievement. Empirical research reinforces the benefit of mindfulness techniques for burnout symptom resolution (Salvado et al., 2021).

MBIs are multidimensional as they vary in length and composition. Interestingly, research suggests that benefit is found in merely ten minutes when accessed five days a week (Salvado et al., 2021). This short period makes implementation convenient and applicable. Furthermore, Mindfulness is favorable when delivered as guided or independent, in person or electronically (Fendel et al., 2021). This expansive and varied access supports personal interests, need, and ability, strengthening prolonged engagement. Mindfulness-based interventions techniques have also grown in popularity recently as modalities for burnout and practical tools to manage stress, depression, and chronic pain. This fact has made mindfulness more accessible and varied in delivery format (Fendel et al., (2021).

Research has proven that individualized mindfulness care plans are more effective when interventions are applied at liberty, utilizing services and techniques that are appropriate for each individual. Additionally, recognizing the precipitating events like full schedules is delicate and adding tasks is ineffective and inappropriate furthering the need to act self-sufficiently and at a unique pace (Adlaka, 2019)

SAMHSA's (2022) research shows that combination therapies promote change and behavior. Additionally, holistically addressing each clinician may benefit sustained change. These mindfulness techniques can be coupled with additional therapies, including yoga and deep breathing, and are beneficial when used with co-occurring somatic self-care techniques. Lastly, combination and adjunct cognitive behavior therapy alter maladaptive coping mechanisms and are industry standards for substantive behavior modification (Patel et al., 2019).

Conceptual Framework

The QI project utilized the Donabedian framework, specifically highlighting structure, process, and outcomes. The structural components are the current working conditions at the clinic. There is variance in job requirements. Specifically looking at the practitioner for scheduling details, the clinic sees roughly 12 patients daily, 30 minutes for pre-existing patients and 60 minutes for new clients. Providers' days are fully focused on patient care with breaks limited to no-shows.

The shift is fast-paced and demanding. Changing the patient process is unrealistic now. However, to prevent burnout, initially, the employee requires education to draw awareness to burnout and offer self-assistance for potential symptoms. Providing feasible mindfulness interventions can be utilized flexibly and will benefit the employee. Practicing deep breathing, yoga, or meditation techniques between patients' care or at the end of the day will offer helpful and appropriate evidence-based and proven stress management techniques (Almén, 2021). Additionally, access to corresponding Cognitive Behavioral Therapy (CBT) will provide increased support, if desired, which is the gold standard of psychotherapy for behavioral modification (Almén, 2021). This model will showcase each strategy and seamlessly highlight action mechanisms and potential outcomes providing insight into the impact of the interventions (Towey-Swift et al., 2021).

The MBI is a sensitive tool to measure the effects of burnout mitigation. This tool will be utilized once, initially, to delineate a baseline for individual staff member's current condition (Williamson et al., 2018). Although not within this particular improvement parameter, an increased retention rate would be the absolute success indicator for this clinic.

Aims

This statewide quality improvement project aims to first assess this mental health clinic's current burnout concerns. Disseminating the MBI will call attention to need, both individually and organizationally, providing a baseline for future measurement. It will also bring forth awareness about the impact of burnout and allow for independent reflection (Towey-Swift et al., 2022). Offering employees burnout education will help to identify symptomology and suggest appropriate mitigation techniques. One such technique, mindfulness, will be offered via a multimodal mobile app, providing an evidence-based mindfulness approach to use when needed and convenient. Finally, employees will be encouraged to use CBT, another evidence-based approach, if indicated. However, CBT is suggested, but not assessed, as its application is personal and should remain anonymous. Ideally, this project will minimize company attrition by promoting health and wellbeing and changing institutional culture—where staff feels supported and safe.

Methods

This organization is a statewide mental health and crisis facility offering outpatient and inpatient services. It provides care for nearly 15,000 patients annually and employs roughly 500 staff members of clinicians, nurses, and support staff.

Work environments are regulated by location and are both in-person and remote. Therefore, implementing this quality improvement project will be directed toward the entire staff.

The burnout quality-improvement team consists of the Vice President, the Director of Human Resources, the Crisis Prevention Manager, the Diversity Coordinator, and this Doctoral Student. This type of intervention has never been addressed previously. However, based on leadership buy-in and support from SAMHSA, could potentiate measurable positive change.

Interventions

Education is the primary step in bringing awareness to the issue and the corresponding symptomology so that an individual's condition may be addressed and rectified (Aldaka, 2019; Aryankhesal, 2019). Second, apps supplied by the company-wide health-insurance platform integrate interventions appropriate to individual needs. Specifically, these modalities supply mindfulness techniques that are evidence-based and proven to help mitigate stress levels and promote self-care (Aryankhesal, 2019). In addition, these methods can be utilized when convenient, minimizing time restraints and work-related stress. Third, the clinic provides CBT for its medical staff as part of its benefits package. CBT is the current gold standard in supplying psychosocial strategies to address maladaptive behaviors in mental health conditions (Almén, 2021). The interventions provided in this treatment can further develop navigation techniques for symptom management and enhance the recovery response. CBT paired with mindfulness is a proven adjunct intervention (Almén, 2021).

Baseline Assessment

The MBI is a questionnaire to identify burnout's constituent effects (Williamson et al., 2018). This evaluation is sensitive enough to correctly extrapolate the nuances of work satisfaction and general work-life balance to assess depersonalization, mental exhaustion, and

personal achievement contributing to staff burnout. MBI is streamlined in the application due to its accessibility, ease of use, and accurate testing. Therefore, it is an appropriate questionnaire choice for this project. It is an assessment tool, not a diagnostic tool, used to bring forth awareness of the symptomatology of burnout. MBI was used once over the entirety of this project to identify the baseline level of burnout before rollout as a preliminary assessment.

The raw data collected from the MBI were composed of three distinct categories. The first seven questions pertain to conditions that provoke anxiety or depression. This section concentrates on work fatigue, assessing for feelings of exhaustion when the employee is not at work. The second section speaks to depersonalization, where the questions focus on empathy, exploring altered or contorted perceptions of the employee and their environment (Prinz et al., 2012). Lastly, the remaining questions call attention to personal achievement. These sections examine the propensity for positive or negative self-thoughts whereby the individual sees his work and accomplishments as successes, stagnated, or self-proclaimed failures (Maslach et al., 1997).

The intent of the MBI ranking can be assessed based on the point value of each section. The questionnaire allows for the corresponding numeric value with the associated time frame as follows: never (0), a few times per year (1), once a month (2), a few times per month (3), once a week (4) a few times per week (5) and every day (6). These values are then totaled for each section. Critical values are then associated with low-, moderate-, and high-risk for burnout for each category and all three collectively (Maslach et al., 1997).

The data can then be assessed for independent risk, which is ideal for employees to reflect introspectively. In addition, this information can offer insight into the need for intervention as a prophylactic measure or healthful mitigation for symptomatology. Finally, the organization would assess the averages provided to analyze workplace severity and the need for change.

Ethical Considerations

This study was reviewed by Montana State University's IRB and deemed expedited given the anonymity of the survey.

Results

Fifty-two participants (10% of all staff) completed the MBI with no employees reporting being symptom free. Only 0.02% of workers averaged feelings of emotional exhaustion a few times per year, and 13% averaged no feelings of depersonalization. The total MBI scores showed 46% of the staff experiencing low levels of burnout, 39% moderate levels, and 15% high levels.

Scores on emotional exhaustion, depersonalization, and personal achievement subscales can be calculated two ways. The first is the average subscale score and the second is the total subscale score. Average subscale scores can be interpreted according to the Likert anchors where 1 = once per month, 3 = once a week, and 6 = every day.

Total subscale scores can be interpreted according to established cutoffs where emotional exhaustion and depersonalization totals <22 = low levels, >40 = moderate levels, and >40 = high levels in addition to the subscale scores of personal achievement where > 5 = low levels, >11 = moderate levels, and >12 = high levels of the phenomenon. Total scores for this organization

were emotional exhaustion: 27.67, depersonalization: 8.35, and personal achievement 37.67, placing it in the moderate parameters for burnout risk.

The mean score for all staff responding that they experience weekly moderate emotional exhaustion (M= 3.08, SD= 1.45, 32%), is higher than the depersonalization score (M= 1.67, SD= 0, 18%), but both are lower than that of personal achievement (M= 4.72, ST= 1.10, 50%). The standard deviations are also relatively low, indicating proximity to the mean's accuracy in all three categories.

Looking at the total scores (as opposed to average scores), the MBI revealed that staff were at a moderate level of symptomatology. Emotional exhaustion (M=27.76, SD= 13.09) and personal achievement factors (M=37.67, SD=7.52) were in the higher range of moderate, while depersonalization (M=8.35, SD 7.77) was on the lower end of moderate parameters. Organizational numbers for emotional exhaustion appear to be fairly spread out, implying a varied level of severity within the organization.

Within the depersonalization subscale, employees reported having a negative impact most frequently (M=4.90 or multiple times per week). Second most frequently (M=3.01 or weekly) were feelings of workplace frustration, which translates to weekly feelings of discouragement.

The most recurring achievement responses were regarding the ability to act empathetically (M=5.33 or several times per week), navigate patient problems (M=5.37 or several times per week), and provide a therapeutic environment where patients felt safe (M=5.19 or several times per week). The three most frequently occurring achievements, all ranking "every day," were related to promoting health, wellbeing, and service for the patient.

The questions with the top three highest scores (scores of >5 or at least a few times per week), were that they create a therapeutic and relaxed atmosphere for their patients, are empathetic to their patients, and deal with issues in a calm and considerate manner. The lowest pointed section (scores of <1 or a few times per year) was a general lack of care for their patients. The answers reflect a patient-centered, compassionate, and profoundly vested organization. Healthcare workers are present to serve the community's needs, compounding the increased need to develop vital services to help them.

Discussion

Centers for Disease Control and Prevention [CDC] (2022) suggest that, since COVID, 93% of mental health workers report feeling overworked. In addition, 22% expressed symptoms of depression, anxiety, and workplace fatigue, and 13% of physicians reported suicidal ideation. SAMHSA's (2022) national assessment of burnout suggests that 50% of mental health workers are experiencing symptoms at any given time.

The results from this study are consistent with national statistics, further substantiating the need for intervention. Montana is serving a growing need for mental health care. Workloads and expectations increase as the staff deals with more acutely ill and complex patient panels. Consequently, feelings of emotional exhaustion and physical fatigue are more common than not. Staff complained of high stress levels and increased anxiety about their work environment. The numbers suggest difficulty separating these stressors, which subsequently affect other areas of life. Work-life balance is reported as diminished and subsequently affecting mood. Data also showed that staff struggle to get to work and express feelings of absenteeism. These responses

are indicative of moderate levels of burnout symptomology and align with potential increased risk for organizational attrition.

Responses to the depersonalization included feelings of callousness, personal hardening, and numbness. In addition, staff expressed working too hard at their job and experiencing reciprocating frustration. These answers propose infrastructure issues and may highlight staffing concerns. The questionnaire's answers also spoke to empathy, where the patient's feelings and concerns were recognized. Staff felt that care was delivered responsibly and respectfully with compassion. These results reflect conscientious efforts to ensure quality, patient-centered care and the integrity of those who work at the organization.

Lastly, addressing personal achievement. Not surprisingly, the scores indicated companionate staff who wish to provide therapeutic care while prioritizing their patient's needs. Although falling in the moderate risk category, it is a testimony to those working in mental health. Helping those with mental illness is a personal calling whereby the individual wants to help those in need. It is frequently thankless but profoundly impactful when patients get the help they deserve. For these reasons, the care remains patient-centered and the goal remains to help.

Limitations

The project's rollout was delayed by unforeseen challenges, restricting time for material dissemination and implementation of interventions. The staff were made aware of the available interventions (education, mindfulness, and CBT), but there was no time to encourage their use of the interventions nor evaluate their participation in the interventions.

In the planning stages, the goal was to administer an additional MBI survey to measure the effectiveness of the interventions. This questionnaire would have helped the organization

further promote and access mindfulness techniques. Although the expectations were not met, the improvements are set in motion, with the intent for execution after the deadline of this project. Additionally, there are plans to send out a questionnaire that would surmise participation and query further into the application for future practice, measuring the effectiveness of the interventions. There is tremendous support among leadership and the entity of the organization, evidenced by 43 surveys completed on the announcement's first day. At the time of data collection, there were 52 completed MBI questionnaires. Those numbers are expected to grow as leadership tours the satellite offices, encouraging mindfulness techniques and ancillary activities to promote health and wellbeing.

Recommendations

The team wants independent and organizational changes. Working in a team environment provided feedback, buy-in, and traction. Cultivation of traction gained during this project must continue as workloads and unexpected barriers will continue to cause delays for future interventions and measurements. This project requires time. To adequately see measurable change, whether personal or organizational, it requires engagement and long-term behavioral changes. Mindfulness is a proven and effective management tool, but the benefit is subjective. However, seeing this type of preliminary engagement would indicate there is a need. Additionally, staff must be ready to change and access the app and other mindfulness strategies to improve symptoms. Using measurement tools and surveys will promote engagement, assess implementation benefits, and validate interventions.

Conclusion

This project is the beginning of a larger, broad-based improvement project. Burnout is a persistent problem. The preliminary data collected indicate that the organization is similar to institutions nationwide. It can continue providing mindfulness interventions. Staff can continue monitoring and navigating their health and wellbeing independently while managing symptoms of burnout successfully, hopefully permanently. However, approaching this phenomenon in a bi-factorial approach, combining personal and organizational change, this method provides a more substantive and sustained change than one independent of the other. The company can ensure its employees' safety and health by reducing symptoms and begin to consider workloads and workplace stress. Addressing policies and procedures will aid in aligning appropriate strategies to maximize organizational health, which would require future research. Ideally, this is the future long-term goal, reducing attrition as it pertains to burnout by way of changing culture.

CHAPTER FOUR

REFLECTION

Essential Identification

The Doctor of Nursing Practice (DNP) Program provides an opportunity to broadly and specifically meet the nurse practitioner's *Core Competencies* and *Essentials*. Initially, these guidelines helped generate appropriate navigation, introducing ways to think critically through coursework. Later their application became more developed and tangible, focused on daily routine and independent practice while adding insight into the Quality Improvement Project (QIP).

Essential I: Scientific Underpinnings for Practice:

I learned about the pathophysiological relationship of the disease process and the underlying somatic manifestation of *why* and *how* the body reacts to illness. Highlighting one area of study, I recall the inflammatory cascade, a sequence of events that occur as a response mechanism to injury. At the time, it was perceived as merely physical. However, through classroom learning and furthered clinical experience, it became evident that inflammation may transcend physical illness to better explain mental health concerns. This concept could be applied when considering prescriptive interventions for clients who are experiencing high stress or anxiety (Thomas et al., 2017).

Design Health Care Delivery Systems Nursing 608 and Program Planning & Evaluation, Outcomes and Quality Improvement Nursing 611 courses identified nursing frameworks and

models of practice. Translational Research Nursing 615 course provided explanations and rationalizations for practical use. Later these concepts matured. To develop my model of care, I pulled strategies from the Anderson Model- the *Behavior Change Technique Taxonomy* and King's General Systems Framework (Anderson & Newman, 1973; Toney-Butler & Thayer, 2022). The experiences shaped my patient involvement and outlined the aspects of client care that best corresponded to my practice (Thomas et al., 2017).

Lastly, throughout my experience, I developed the ability to utilize concepts and translational research. I pulled from evidence-based and peer-reviewed studies to help me navigate patient care, which ensures safe practice. In addition, access to proven methods and treatment modalities has been helpful when working with high-acuity and complex patient panels as it offers clear guidelines for treatment.

Essential II Organizational and Systems Leadership for Quality Improvement and Systems Thinking:

This competency was introduced early on in our academic coursework. However, its relevance became more evident as I defined, researched, and instituted my QIP. The parameters of the QIP guided my research allowing me to have a discerning view of literature around my topic of interest (Thomas et al., 2017).

Implementing my QIP, I improved my knowledge and understanding of informatics. The Maslach Burnout Inventory Questionnaire disseminated throughout the organization was ethically sourced and approved by a national review committee satisfying requirements to test on human subjects. The outcome from the survey provided detailed information on burnout. This raw data resulted in information that could be categorized into three independent subsets of

burnout, specifically emotional exhaustion, depersonalization, and personal achievement. I processed this information so that it could be understood by the organization, regardless of discipline, and used to support the need for appropriate, cost-effective intervention. I hoped that it would create a change in the organization's health, both independent and companywide.

The Nursing 675: DNP Scholarly Project used peer-reviewed and evidence-based studies, specifically pulling from meta-analysis and randomized control studies. This information was pivotal as I designed my project and envisioned a rollout based on my findings. I was committed to identifying an organizational issue through a measurable questionnaire and providing realistic interventions to help the staff navigate this phenomenon. Using the Donabedian framework of structure, process, and outcome, I implemented a sensible framework for education and mindfulness that, if implemented by the staff, could reduce burnout symptoms, and promote an organizational culture change and a safer, happier workplace.

Essential III: Clinical Scholarship and Analytical Methods for Evidence-Based Practice

As I grew independently in the program, these analytical methods will continue to shape me and my investigational strategies. I worked alongside a leadership committee composed of the Vice President, Director of Human Resources, Director of Diversity, and the Director of Crisis to develop and implement a quality improvement project. The initial meeting between the leadership team and myself was to discuss the needs and focus on the organization. Passionate about burnout, I promoted buy-in and support at the same time, relaying the need for a company-wide shift. I proposed analytic measures of potential burnout by using an evidence-based sensitivity questionnaire. Disseminating this survey would bring about awareness and highlight both independent and organizational behaviors contributing to burnout and potentially

precipitating attrition. The intention of the QIP was to see positive measurable outcomes, that if accessed, may also cultivate organizational changes and cultural shifts (Thomas et al., 2017).

Essential IV: Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Health Care

This competency lends itself well to the clinical setting as technological navigation is integral to quality care. My clinical experiences were varied and diverse. Since Montana is predominantly rural, a considerable number of my patients were met through Telehealth technologies. Not meeting with patients face-to-face has some setbacks, as much of our communication is non-verbal. However, through practice and experience, I became competent in my online assessment, learning to focus on nuances and cues regardless of the patient setting. Such mastery will be a continuous process, but by Advanced Clinical IV, Nursing 634, I felt accomplished in this ability. I navigated several different EHR systems, including but not limited to EPIC, Practice Fusion, and myevolv. Within the systems, I charted, developed templates, gathered appropriate collateral materials, and communicated collaboratively. This experience allowed me to gain confidence in my use of electronic resources independently (Thomas et al., 2017).

Essential V: Health Care Policy for Advocacy in Health Care

The QIP allowed me to analyze national health priorities and recognize the need for universal burnout prevention strategies on a local level (Thomas et al., 2017). My research revealed policies like the Affordable Care Act that unintentionally fueled burnout as it increased medical access for those previously uninsured. On a smaller scale, I focused on a clinic in

Montana, understanding that symptomology would likely reflect that of national statistics (Thomas et al., 2017).

The project was financially realistic for the organization, as the only cost was data collection to ensure the participants' anonymity, a learned concept from Nursing 613: Financing and Budget in Health Care Systems. This charge was reasonable, but also funded by a government grant focusing on reducing burnout across the medical field. This grant supported the national concern for addressing mental health workers' vulnerability and furthering the urgency for interventions to reduce the effects of burnout and maintain professional sustainability.

This QIP intended to shape the workplace dynamic and alter organizational policy. The short-term goal was individual health promotion with access to resources to reduce the effects of burnout. The longer-term goal was a cultural shift where the company ensured a healthy environment for its workers.

Essential VII: Clinical Prevention and Population Health for Improving the Nation’s Health

In Nursing 614: Vulnerability and Health Care in Diverse Communities, I learned about expectations as they pertain to patient care. My interactions are always patient-centered, understanding that everyone is as varied by culture as they are by condition. Montana is largely rural, but its communities are diverse. Becoming aware of these differences and respecting beliefs ensures sensitivity and the elimination of bias. Specifically looking at my interactions with Native Americans, I was mindful of the historic trauma Indigenous people have endured and how it continues to impact them today. Understandably some interactions with this vulnerable population are met with hesitancy on the part of the patient. I work slowly to bolster

her therapeutic alliance while providing empowerment and autonomy for the patient. I know through experience that a patient who feels in control, respected, and a part of the solution will most likely continue to engage in treatment (Thomas et al., 2017).

Essential VIII: Advanced Nursing Practice

Drawing from the NONPF core competencies, I connected my personal practice model to the Independent Practice Competencies. The *model* enhances the therapeutic relationship, fostering trust and safety where a patient feels secure. Evident in my interactions as a student-provider, I meet the patient where they are at the time of care, assessing readiness and integrating motivational interviewing when necessary (Thomas et al., 2017).

I realize that technology and data are essential for providing up-to-date, evidence-based medication management and supportive adjunctive interventions. Therefore, I access resources and guidelines to support my decisions. Additionally, I cultivate relationships with peers and mentors. This personal support can help me navigate acute and complex patient symptoms to provide quality care. However, as I step into independent practice, these relationships will be more integral than ever (Thomas et al., 2017).

Patients are unique, with many attributing factors which impact mental health. I will continue to look at bio/psycho/social elements in my assessment, also realizing these aspects impact my prescription choices. Laboratory and other diagnostic and procedural testing will have benefits, and they will be resourced as needed and when indicated. I realize that some conditions require an interdisciplinary team who can collectively care for the patient. I know that remaining in my scope is most beneficial to the patient and will foster concurrent relationships with other team members to ensure best practice (Thomas et al., 2017).

Revisiting the therapeutic relationship, I understand that an alliance is beneficial to enact positive change. I know that a relationship is not born but nurtured over time. These partnerships vary in intensity, expectation, and need. I realize how to navigate partnerships, I am sensitive to the client's requirements, and able to create protective boundaries. Client-centered care, as mentioned earlier, is essential, but protectionary measures must be established so that I remain working in the field without the disruption of preventable burnout.

Essential VI: Interprofessional Collaboration for Improving Patient and Population Health Outcomes

Leadership roles are demonstrated in many capacities, sometimes outwardly apparent and others less visible. I worked as a director with the leadership team, during the Quality Improvement Project. I became aware that burnout had never been addressed previously at this facility, with no preliminary framework, interventions, or measurable outcomes for such a project. As a collaborative effort, the team and I strategically designed a plan to bring awareness to the phenomenon, incorporate mindfulness requirements, and promote organizational health and well-being. The expanded team frequently met to communicate project details, expectations, and roll-out plans. During these meetings, I engaged my team interprofessional team members organically, with supported research and incorporated humor to boost morale and make the opportunity enjoyable. I promoted buy-in by ensuring equal participation and a comfortable working dynamic, effectively demonstrating reciprocity. It was evident that the Project was cultivated from teamwork and mutual respect.

Reflecting on my strengths and future challenges, I understand that barriers arise that disrupt plans, rendering goals underachieved. This concept became very apparent when the

project launch was interrupted by significant organizational changes beyond control of the the QIP facilitator. Resilience and flexibility proved beneficial as I adapted my plans to best fit within the company parameters and needs at that time. Unfortunately, the project varied greatly from the intended objective, which was limiting and disappointing for the entire group of participants and leaders.

Reviewing the process, I speculate that communication could have been strengthened. The facility team was kept busy with their daily tasks and were not able to incorporate the mindfulness practices to the desired level. The main means of project rollout were via email, and group emails are helpful in perpetuating involvement and keeping the issue at the forefront. However, email lends itself to misinterpretation and sometimes oversight. Fine-tuning written correspondence may be more advantageous as a future means of communication and I perceive this to be an area of growth.

The learning experience was invaluable. I gained insight in my ability to be both a leader and a team member. I know that sometimes leading is taking control, while other times it is delegating authority to another. Relationships are pivotal and mutual respect and humor are foundational characteristics in group dynamics. This method will continue to be my strategy. Future leadership opportunities will be afforded as I gain more experience. I have proven to work respectfully and effectively with people and will seek out roles that facilitate change.

The core competencies defined and guided me in my didactic coursework, QIP, and clinical experience. Throughout the course I was offered the opportunity to thoroughly evaluate my interactions, whether that be directed towards my peers or by patient interaction. These Core Competencies ensured processing on multi-levels and afforded a controlled opportunity to explore the extent of my abilities to facilitate patient care and work diligently in hectic

environments. I will continue referencing them to help facilitate growth and direction in my future practice.

CUMULATIVE REFERENCES CITED

Adlakha. (2019). Burned Out: Workplace Policies and Practices Can Tackle Occupational Burnout. *AAOHN Journal*, *67*(10), 531–532. https://doi.org/10.1177/2165079919873352

Almén, N. (2021). A Cognitive Behavioral Model Proposing That Clinical Burnout May Maintain Itself. *International journal of environmental research and public health*, *18*(7), 3446. https://doi.org/10.3390/ijerph18073446

Andersen R, Newman JF. Societal and individual determinants of medical care utilization in the United States. Milbank Mem Fund Q. 1973;51:95-124.

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

Bekelepi N., & Martin, P. (2022). Support interventions for nurses working in acute psychiatric units: A systematic review. *Health SA = SA Gesondheid*, *27*(5), 1811–1811. https://doi.org/10.4102/hsag.v27i0.1811

Center for Disease Control. (2022). Health worker mental health. Retrieved from https://www.cdc.gov/niosh/newsroom/feature/health-worker-mental-health.html

Cipolotti, R. (2021). Mental health and illness of medical students and newly graduated doctors during the pandemic of SARS-Cov-2/COVID-19. PLoS One, *16*(5), e0251525.

de Wijn, A. N., & van der Doef, M. P. (2022). A meta-analysis on the effectiveness of stress management interventions for nurses: Capturing 14 years of research. *International Journal of Stress Management*, *29*(2), 113–129. https://doi.org/10.1037/str0000169

Ensari, N. (2021). Pandemics and burnout in mental health professionals. *Industrial and Organizational Psychology*, *14*(1–2), 71–75. https://doi.org/10.1017/iop.2021.6

Fendel J. C., Bürkle, J. J., & Göritz, A. S. (2021). Mindfulness-based interventions to reduce burnout and stress in physicians: A systematic review and meta-analysis. Academic Medicine, *96*(5), 751–764, May 2021. doi: 10.1097/ACM.0000000000003936

Foster, A., Wood, E., & Clowes, M. (2021). Identifying the evidence base of interventions supporting mental health nurses to cope with stressful working environments: A scoping review. *Journal of nursing management*, *29*(6), 1639–1652. https://doi.org/10.1111/jonm.13312

Friganović, A., Selič, P., Ilić, B., & Sedić, B. (2019). Stress and burnout syndrome and their associations with coping and job satisfaction in critical care nurses: A literature review. Psychiatria Danubina, *31*(Suppl 1), 21–31.

Fukui, S., Rollins, A. L., & Salyers, M. P. (2020). Characteristics and Job Stressors Associated With Turnover and Turnover Intention Among Community Mental Health Providers. *Psychiatric Services (Washington, D.C.)*, *71*(3), 289–292. https://doi.org/10.1176/appi.ps.201900246

López-López, I. M., Gómez-Urquiza, J. L., Cañadas, G. R., De la Fuente, E. I., Albendín-García, L., & Cañadas-De la Fuente, G. A. (2019). Prevalence of burnout in mental health nurses and related factors: A systematic review and meta-analysis. *International journal of mental health nursing*, *28*(5), 1032–1041. https://doi.org/10.1111/inm.12606

Luther, L., Gearhart, T., Fukui, S., Morse, G., Rollins, A. L., & Salyers, M. P. (2017). Working overtime in community mental health: Associations with clinician burnout and perceived quality of care. *Psychiatric Rehabilitation Journal*, *40*(2), 252–259. https://doi.org/10.1037/prj0000234

Maslach, C., Jackson, S. E., & Leiter, M. P. (1997). Maslach Burnout Inventory: Third edition. In C. P. Zalaquett & R. J. Wood (Eds.), *Evaluating stress: A book of resources* (pp. 191–218). Scarecrow Education.

National Alliance on Mental Illness. (2015). State Mental Health Legislation 2015: Trends, themes and effective practices. http://www.nami.org/About-NAMI/Publications-Reports/Public-Policy-Reports/StateMental-Health-Legislation-2015/ NAMI-StateMentalHealthLegislation2015.pdf

National Health Service. Online library of quality, service improvement and redesign tools: A model for measuring quality care. https://improvement.nhs.uk/documents/2135/measuring-quality-care-model.pdf Accessed August 16, 2020.

Patel, R. S., Sekhri, S., Bhimanadham, N. N., Imran, S., & Hossain, S. (2019). A Review on Strategies to Manage Physician Burnout. *Cureus*, *11*(6), e4805. https://doi.org/10.7759/cureus.4805

Prinz, P., Hertrich, K., Hirschfelder, U., & de Zwaan, M. (2012). Burnout, depression and depersonalisation--psychological factors and coping strategies in dental and medical students. *GMS Zeitschrift fur medizinische Ausbildung*, *29*(1), Doc10. https://doi.org/10.3205/zma000780

Roth, C., Berger, S., Krug, K., Mahler, C., & Wensing, M. (2021). Internationally trained nurses and host nurses' perceptions of safety culture, work-life-balance, burnout, and job

demand during workplace integration: A cross-sectional study. *BMC nursing*, *20*(1), 77. https://doi.org/10.1186/s12912-021-00581-8

Rush, K. (2018). Paving the path to mindfulness: Implementation of a program to reduce stress and burnout in inpatient psychiatric nurses. https://doi.org/10.17615/xv8b-2766

Shah, M. K., Gandrakota, N., Cimiotti, J. P., Ghose, N., Moore, M., & Ali, M. K. (2021). Prevalence of and factors associated with nurse burnout in the US. *JAMA Network Open*. *4*(2). doi:10.1001/jamanetworkopen.2020.36469

Thomas, A., Crabtree, K.M., Delaney, K., Dumas M.A., Kleinpell, R. Marfell, J.,Nativio, D., Udlis, K., Wolf, A, (2017) NP core competencies content. https://ecat.montana.edu/d2l/le/content/739277/viewContent/7038589/View

Toney-Butler, T. J., & Thayer, J. M. (2022). Nursing Process. In *StatPearls*. StatPearls Publishing

Towey-Swift, K. D., Lauvrud, C., & Whittington, R. (2022). Acceptance and commitment therapy (ACT) for professional staff burnout: A systematic review and narrative synthesis of controlled trials. *Journal of mental health (Abingdon, England)*, 1–13. Advance online publication. https://doi.org/10.1080/09638237.2021.2022628

Via, K. D., Oliver, J. S., & Shannon, D. (2022). Implementing a Protocol to Address Risk for Burnout Among Mental Health Professionals. *Journal of the American Psychiatric Nurses Association*, *28*(4), 339–344. https://doi.org/10.1177/1078390320970640

Williamson, K., Lank, P. M., Cheema, N., Hartman, N., Lovell, E. O., & Emergency Medicine Education Research Alliance (EMERA). (2018). Comparing the Maslach Burnout Inventory to Other Well-Being Instruments in Emergency Medicine Residents. *Journal of graduate medical education*, *10*(5), 532–536. https://doi.org/10.4300/JGME-D-18-00155.1

Xie, C., Zeng, Y., Lv, Y., Li, X., Xiao, J., & Hu, X. (2020). Educational intervention versus mindfulness-based intervention for ICU nurses with occupational burnout: A parallel, controlled trial. *Complementary therapies in medicine*, *52*, 102485. https://doi.org/10.1016/j.ctim.2020.102485

Zhang, X. J., Song, Y., Jiang, T., Ding, N., & Shi, T. Y. (2020). Interventions to reduce burnout of physicians and nurses: An overview of systematic reviews and meta-analyses. *Medicine*, *99*(26), e20992. https://doi.org/10.1097/MD.0000000000020992