

Implementing an Educational Program to Combat Nursing Staff Burnout at Alliance for
Wellness Medical Group Mental Health Facility

Olajumoke Bell

Touro University, Nevada

DNP Project

Project Instructor: Dr. Julie Astrella, DNP, RN, CNE

Project Mentor: Dr. Rose Onyekwe DNP, MSN Ed., PMHNP, APRN- BC

May 21, 2024

Table of Contents

Abstract.....	4
Problem Identification	6
Project Question.....	9
Search Methods.....	9
Review of Study Methods.....	10
Review Synthesis	10
<i>Burnout and its Causes/Factors</i>	11
<i>Educational Program as an Intervention</i>	12
<i>Impact of Meditation and Mindfulness</i>	13
Literature Review.....	14
Impact of the Problem	14
<i>Evidence Gaps and Controversies</i>	16
Project Aims.....	16
Objectives	16
Implementation Framework.....	17
Application of Major Framework Tenets	18
<i>Stage I: Plan</i>	18
<i>Stage II: Do</i>	19
<i>Stage III: Study</i>	20
<i>Stage IV: Act</i>	21
Project Setting, Population of Interest, and Stakeholders	22
Introduction.....	22
Project Population.....	22
Direct Population	22
<i>Inclusion Criteria</i>	22
<i>Exclusion Criteria</i>	22
Indirect Population	23
<i>Inclusion Criteria</i>	23
<i>Exclusion Criteria</i>	23
Project Setting.....	24
Stakeholders.....	24
Permissions	25

Intervention	25
Planning Project Team	26
Resources	27
Timeline	27
Tools	28
Results.....	29
The Copenhagen Burnout Inventory.....	29
Participant Engagement in the Mindfulness in Motion Program.....	31
Participant Satisfaction with the Mindfulness in Motion Program.....	32
Timeline	33
Summary	33
Interpretation.....	34
Limitations	35
Conclusion	36
References.....	38
Appendix A.....	43
Appendix B	44
Appendix C	45
Appendix D.....	46
Appendix E	47
Appendix F.....	49
Appendix G.....	53

Abstract

Problem: The purpose of this DNP quality improvement (QI) project was to implement the Mindfulness in Motion (MIM) program for nurses to reduce burnout among nurse practitioners (NPs) at the Alliance for Wellness Medical Group Mental Health Facility.

Background: When working at a mental health facility, the emotional letdowns of dealing with lower recovery and the stigma associated with mental health can lead to increased rates of burnout. Nursing burnout adversely affects nurse practitioners' well-being, patient care quality, productivity, and increases staff turnover rates.

Methods: The quality improvement project used the Plan-do-study-act (PDSA) cycle as a guide. Eighteen NPs participated in the program. The Copenhagen Burnout Inventory (CBI) was used to measure the participant's burnout pre- and post-intervention. Weekly attendance was measured, and the participant's satisfaction with the program was evaluated using a Satisfaction Questionnaire.

Intervention: The Mindfulness in Motion wellness program sessions were delivered weekly, for five weeks. The program included a PowerPoint presentation and meditation activities.

Results: The wellness program significantly reduced the overall burnout levels ($p = 0.033$), personal burnout ($p = 0.0012$), work burnout ($p = 0.02$), and patient burnout ($p = 0.005$). The program's engagement rate ranged between 88.9% in week 4 and 100% in weeks 1, 2, and 5. The participants were highly satisfied with the program ($M = 4.57 \pm 0.06$, 91.4%).

Conclusion: The Mindfulness in Motion program reduced burnout levels in the NPs. The project also had a high engagement and satisfaction rate. Therefore, the MIM program should be adopted in the facility and be implemented continuously. The MIM program should also be customized and replicated in the organization to enhance workers' well-being, improve patient

care, and enhance staff retention. Further research should be conducted to examine the program's impact on staff burnout and retention with long-term use.

Keywords: Meditation, burnout, mindfulness, wellness program.

Implementing an Educational Program to Combat Nursing Staff Burnout at Alliance for Wellness Medical Group Mental Health Facility

Problem Identification

The American Nursing Association [ANA] (n.d.) defines nursing burnout as a state of physical, mental, and emotional exhaustion due to work-related stressors, a large patient ratio, long hours, decision-making pressures, changing shift schedules, and the strain of providing compassionate care. The Alliance for Wellness Medical Group refers to burnout as physical, emotional, and psychological exhaustion resulting from the demanding nature of their work and chronic stress (Dall'Ora et al., 2020). An informal interview with the nurse practitioners (NPs) showed that they face challenges when dealing with complex patient care cases, which are emotionally distressing. Furthermore, the Alliance for Wellness Medical Group classifies burnout as encompassing a high patient load, limited resources, and demanding personal obligations such as family and continuous education (De Hert, 2020). This has significantly affected the nurse practitioner's well-being and the quality of care provided due to increased patient identification errors and incorrect documentation, and increased NP turnover (Ryu & Shim, 2021).

The National Academy of Medicine, in conjunction with 200 organizations, has recently developed a national plan to reverse healthcare burnout. One of the critical goals is for health organizations to invest in measurement, assessment, strategies, and research (National Academy of Medicine [NAM], 2023). The plan, endorsed by organizations like American Association of Nurse Anesthesiologists (AANA), American Association of Colleges of Nursing (AACN), American Nurses Association (ANA), and American Association of Critical-Care Nurses (AACCN), has ignited a conversation in the urgent need to address burnout. Since October 2022,

there has been an emphasis on patient safety management activities (PMSA) of shift nurses in the interest of patient safety at the Alliance for Wellness Medical Group. PMSA are activities that prevent all types of errors and accidents that can occur in the health delivery process, regardless of actual patient harm.

The administrator reported that they observed that though there was a safety culture and nurse practitioners were active in patient safety management activities, there were still more errors. The rate of taking off days and sick leave also significantly increased, with nurse practitioners citing taking the time to 'breathe' as they feel overwhelmed. It was also observed that most NPs complained of unrealistic work performance, which stretched them thin, and the long shifts with more patients altered their sleep and resting schedules. Moreover, attending to patients left them emotionally strained, hence the high rates of burnout. The facility has had a high NP turnover since the year began. Through the human resource, the management conducted a feedback survey on NPs who quit their job with the aim of enhancing the organization. Burnout was identified as a major contributing factor to the higher turnover. Therefore, it was concluded that burnout adversely affected nurse practitioners' well-being, performance and productivity, patient safety and quality of care, a nurses' organizational commitment, and patient satisfaction (Jun et al., 2021).

Despite the high prevalence of burnout, it has also been observed that currently, at the Alliance for Wellness Medical Group, there has not been mindfulness training or schedules to include meditation or yoga for the last three years. Mindfulness training and schedules is an effective way for organizations to offer resources that promote self-care through providing personal interventions for burnout (Heeter et al., 2021). Educational workshops on burnout are also not held, nor are quiet relaxation rooms available. Without these workshops, nurses will

have insufficient knowledge of the resources they can utilize at a personal level and in the workplace (Akyurek et al., 2022). Moreover, since nurses spend at least one-third of their day at work, the workplace is an optimal setting to create a healthy culture. This is because workplace health promotion programs have been successful, especially when addressing physical and mental health interventions (Muir et al., 2022).

Patient care is one of the most rewarding aspects of nursing, as you make connections with patients and feel the satisfaction of helping them get better. However, when working in critical, end-of-life care or mental health institutions such as the Alliance for Wellness Medical Group, the emotional letdowns of dealing with lower recovery and higher mortality rates can lead to compassion fatigue and increased rates of burnout. The problems at the site can be grouped as follows: high-stress work environment from exhaustion caused by unrealistic expectations; long hours causing a lack of sleep or disturbed sleep leading to nursing burnout; and emotional strain from patient care.

The current project will aim to implement an educational program to provide nurses with resources to combat burnout, thus improving their mental health and subsequent patient outcomes. Nursing burnout is a public and progressive health issue that affects 1 in 3 nurses in the United States (Muir et al., 2022). Therefore, nurses need to be educated on personal measures to combat burnout, which can be achieved through training. This can be achieved through training to identify burnout, ways to address the same through meditation, and providing rooms for quiet relaxation.

Nursing burnout, resulting from work-related stressors and demanding responsibilities, adversely affects nurse practitioners' well-being, patient care quality, and turnover rates (Jun et al., 2021). Despite the high prevalence of nursing burnout, the lack of adequate resources such as

mindfulness training, educational workshops, and supportive spaces contribute to the persistence of burnout at the Alliance for Wellness Medical Group (Muir et al., 2022).

Project Question

P: Nurse practitioners at Alliance for Wellness Medical Group

I: Implementation of an educational program

C: No intervention

O: Decrease in reported nursing burnout and adverse patient outcomes related to nursing burnout

T: Within a five-week timeframe

PICOT: Among nurse practitioners at Alliance for Wellness Medical Group (P), does implementing an educational program (I), compared to no intervention (C), lead to a decrease in reported nursing burnout and adverse patient outcomes related to nursing burnout (O) within a five-week timeframe (T)?

Search Methods

Evidence of combating nursing staff burnout was explored by conducting a literature review of Sage Pub, PubMed, and CINAHL to retrieve scholarly and peer-reviewed articles relating to the project's practice-focused question. The search terms used in the literature search were healthcare providers, education, burnout, knowledge, prevention, adults, interventions, and meditation. The phrases included healthcare providers *and* education *or* knowledge *and* burnout, *as well as* meditation *or* mindfulness *and* adults. Studies had to be from recognized journals and peer-reviewed, free full texts only published in English and conducted within the last five years. Duplicated titles and/or abstracts only were excluded. Studies that used qualitative methods and did not involve healthcare providers were also excluded. Out of the more than 1921 articles retrieved, nine articles were selected. The National Plan for Health Workforce Well-being,

released in October 2022, was also included as it provides guidelines on areas of priority in addressing burnout, thus creating a culture of a healthy workforce in health organizations (NAM, 2023).

Review of Study Methods

Upon reviewing the study methodologies, emerging themes aligned with combating burnout among nurses using educational interventions. The discussed literature included randomized controlled trials, meta-analysis of randomized controlled trials, narrative review of a randomized controlled trial, cohort study, cross-sectional study, interventional trials, and literature review of peer-reviewed research studies. These methods are relevant to the purpose of the studies performed and to this DNP project. The methods are reliable and valid as they all produce similar results in reducing healthcare provider burnout through mindfulness and meditation.

Review Synthesis

Burnout adversely affects the mental and physical health of a provider, which subsequently compromises the quality of care due to dissatisfaction, anxiety, and increased risk for patients. Current challenges in managing burnout have inspired research to identify factors promoting burnout and strategies that will change an organization's culture and empower caregivers with more coping and self-care skills and techniques to balance unbalanced lives (Pettus et al., 2022). In regard to these premises, published literature indicates that meditation and other mindfulness programs offer innovative solutions to reduce burnout and enhance job satisfaction in healthcare providers.

Burnout and its Causes/Factors

In examining the causes of burnout, Zhu et al. (2022) observed that the mental health workers who experienced burnout were a result of the nature of their jobs and not their demographics. Increased workload, changing work environment, inadequate resources, restrictions to control the spread of COVID-19, and a shift to teleworking increased the risk of (Menon et al., 2022). Dall'Ora (2020) conclude in their theoretical review that some of the predictors of burnout included value incongruence, high workload, low job control, poor social support, and low decision latitude. Other predictors included low nurse staffing, ≥ 12 -hour shifts, time pressure, low schedule flexibility, high psychological and work demands, role conflict, low autonomy, poor leadership support, negative nurse-doctor relationships, and job insecurity (Dall'Ora et al., 2020). Zhu et al. (2022) further state that with patients hospitalized and isolated, there was increased emotional tension and aggression, which put more pressure on providers. Consequently, with the fear of infections and their loved ones, extended workloads, and facing challenges in making ethically and emotionally challenging triaging, and resource allocation decisions, there was an increased burnout rate. Others felt they were not providing effective care as they should, which resulted in moral dilemmas that increased psychological and emotional burdens.

Since health providers work in a difficult setting, they normally experience many stressful situations that compromise their state of health, as Cocchiara et al. (2019) observed. As a result of the high demand to maximize productivity and performance, health providers often ignore the need to release the emotional and physical strain. Subsequently, it resulted in severe issues affecting their health. Moreover, high exposure to stress levels leads to severe anxiety conditions that can cause psycho-emotional disruption and, ultimately, burnout. Though Zhu et

al. (2022) indicate that demographics do not affect the burnout rate, Kelly et al. (2021) observed that younger female nurses were more vulnerable to burnout, especially when working during the day. Therefore, there is a need to create a healthy work environment and a self-care culture, as the nursing workforce is roughly 91% female and 60-80% of nursing students are below 30 years and normally receive training and preceptorship on the day shift (Kelly et al., 2021).

Educational Program as an Intervention

Tools and skills to mitigate stress and burnout among providers have been examined in the literature. The mantra-based AMI Meditation intervention, which includes a 5-day in-person training and practice, resulted in reduced burnout levels at 3- and 6-months post-intervention (Pettus et al., 2022). The intervention entailed a 20-minute mantra-based AMI meditation through a selected meditation CD at least once every day. Participants self-selected a mantra from a provided list at the beginning of the training and would practice it at any opportunity. The researchers observed that from baseline to 6 months, there was a 23.2% decrease in burnout scores, 19.9% reduced secondary traumatic stress scores, and 11.2% improvement in compassion satisfaction.

Yoga programs have been readapted to satisfy the needs of the work of work environment when they are structured in less time-consuming sessions held in the workplace, accompanied by meditation to be done personally at home (Cocchiara et al., 2019). One such program is the Mindfulness in Motion (MIM), which is a structured 8-week yoga program accompanied by 20 minutes of meditative awareness (Appendix B). Such a program can be administered at the workplace and involves an individual meditation practice. Cocchiara et al. (2019) observed that among nurses who took part in the 8-week program, there was an increased level of self-care than those who did not. In another 11-week mind-body course, there were

statistically significant improvements in self-regulation ($p=0.003$) and values in self-compassion ($p=0.04$). Other programs include but are not limited to Mindfulness-Based Stress Reduction, Workplace Health Promotion Program on stress, Arts in Medicine (AIM) Program, Cognitive Behavioral Stress Management (CBSM), and Based Stress Management (YBSM) have also been used to address burnout in health providers (Cocchiara et al., 2019).

Impact of Meditation and Mindfulness

Mindfulness and meditation-based interventions to reduce burnout have been observed to improve provider's well-being and enhance job performance (Shiri et al., 2023). These interventions were particularly observed to be effective when implemented at work through a combination of training, participatory ergonomics, and behavioral training. Providers recorded a reduction in emotional exhaustion and depersonalization, with an increase in personal accomplishment. Although workplace promotion programs can improve workers' physical and mental health, they often have low participation rates. Through clinical practice, evidence-based practice is considerably enhanced.

According to Yingling (2020), evidence from assessing evidence, internal evidence, and healthcare resource utilization contributes to clinical practice and enhances the quality of patient care. While there is low turnover in meditation and other mindfulness programs, administrators can also be reluctant to implement them due to cost, feasibility, and safety issues, among other reasons. However, Cocchiara et al. (2019) record that the cost of implementing a yoga session is significantly lower than the financial impact of burnout. This is because meditation and mindfulness programs like yoga reduce stress and burnout levels, thus increasing nursing retention, which is a cost-saving measure. Moreover, mindfulness interventions are safe and feasible to implement in the workplace (Heeter et al., 2021; Shiri et al., 2023). Muir et al. (2022)

concur with these findings. They analyzed the cost of nurse-attributed turnover using the Markov model structure. They observed that a hospital with a burnout reduction program had a reduced registered nurse turnover and nurses. It also spent less time on burnout than hospitals that did not address nurses' burnout. As a result, hospitals without burnout reduction initiatives spent roughly \$16,000 on a burnout-related turnover per nurse annually. On the other hand, when an organization can reduce burnout by 50%, they can save around \$5000 per nurse per year.

According to published literature, increasing the use of meditation and mindfulness helps healthcare workers achieve stable psycho-physical well-being (Cocchiara et al., 2019; Gabriel & Aguinis, 2022; Heeter et al., 2021; Pettus et al., 2023). Simple meditation exercises that do not need a specific environment can be performed in any workplace. Akyurek et al. (2022) also observed that programs such as the Workplace Health Promotion Program (WHPP) reduced burnout and physical stress. These findings are similar to the Mindfulness in Motion (MIM) program when delivered within the workplace and structured in ways that do not affect the professional routine (Cocciara et al., 2019). When researchers implemented the meditation-based protocol developed by the American Meditation Institute, the results showed that burnout decreased by 23.2%, secondary traumatic stress reduced by 19.9%, and compassion satisfaction improved by 11.2% (Pettus et al., 2022).

Literature Review

Impact of the Problem

In 1974, psychologist Herbert Freudenberger first used burnout in the clinical setting by describing it as "a state of mental and physical exhaustion caused by one's professional life," especially in human service workers (Freudenberger, 1974). Healthcare workers face challenges such as work overload, inadequate resources, teleworking, and changes in the work environment,

which have led to increased burnout (Cocchiara et al., 2019; Dall'Ora et al., 2020; Menon et al., 2022; Zhu et al., 2022). Consequently, since the boundaries between work and home are currently a problem, conflict exists associated with working longer hours. Others face moral dilemmas because they provide substandard care when they do not meet the set targets (Zhu et al., 2022). These moral dilemmas increase the emotional and psychological burden, thus increasing the risk and severity of burnout.

In examining the impact of burnout, De Hert (2020) observed that health providers faced job dissatisfaction, absenteeism, cynicism, and personnel turnover. These impacts at work were also reflected in personal lives as providers experienced feeling unhappy, anxious, depressed, isolated, indulged in substance abuse, and had more broken relationships, conflicts, and divorce. Furthermore, burnout was linked with substandard delivery of care, which led to lower patient satisfaction and reduced quality of care. Due to a lack of adequate sleep and rest, providers were not alert, eventually leading to medical errors with possible malpractice suits and litigations, subsequently increasing the caregiver's and hospitals' costs (De Hert, 2020). Kelly et al. (2021) also observed that burnout led to significant disruption to patient care due to a high nurse turnover. When a nurse left their position, this was associated with approximately \$11,000 to \$90,000 for every nurse, with up to \$8.5 million in associated costs such as patient deferment, unfilled vacancies, and orientations or training (Kelly et al., 2021). Therefore, burnout is an issue that affects the entire health system in the United States.

Burnout for nurse practitioners at the Alliance for Wellness Medical Group has significantly affected the nurse practitioner's well-being and the quality of care provided due to increased patient identification errors and incorrect documentation, and increased nurse practitioner's turnover. The rate of taking off days and sick leave also significantly increased,

with nurse practitioners citing taking the time to 'breathe' as they feel overwhelmed. The rate of nurse practitioner turnover has also significantly increased. Therefore, it was concluded that burnout has adversely affected nurse practitioners' well-being and performance, patient safety, and turnover (Cocchiara et al., 2019; Menon et al., 2022; Shiri et al., 2023).

Evidence Gaps and Controversies

However, mental health worker's needs to release emotional and physical stress are usually ignored, thus failing to seek adequate help for themselves. This is partly due to the belief that the experts should help themselves and the stigma associated with an expert struggling with mental health. Moreover, their daily work is demanding and has high expectations, thus easily ignoring personal care in the process. Since the Alliance for Wellness Medical Group Mental Health Facility does not conduct training on recognizing and combatting training, this DNP project will be relevant to encourage providers to seek help and practice self-care.

Project Aims

The purpose of this DNP quality improvement (QI) project is to implement an evidence-based wellness program known as Mindfulness in Motion (MiM) to reduce burnout among nurse practitioners at the Alliance for Wellness Medical Group Mental Health Facility.

Objectives

The following objectives will be met within the five-week timeframe of this QI project:

- I. Educate the nurse practitioners on burnout and ways to address it, including the Mindfulness in Motion (MIM) program.
- II. Implement the Mindfulness in Motion (MIM) program for nurse practitioners at the Alliance for Wellness Medical Group Mental Health Facility.

- III. Evaluate the participant's burnout levels through pre-and post-intervention using a self-reported questionnaire, the Copenhagen Burnout Inventory (English version), to achieve a 15% reduction in self-reported burnout levels.
- IV. Increase Mindfulness in Motion Program engagement to 90% by week five.
- V. Obtain a 90% satisfaction rating for the Mindfulness in Motion Program from program participants.

Implementation Framework

The Plan-do-study-act (PDSA) cycle will guide the implementation of the practice change. The PDSA method originates from Walter Shewhart and Edard Deming's articulation of the iterative process, which later became the four states of PDSA (Taylor et al., 2014). Shewhart and Deming aimed to use the scientific method to improve business processes. It offers a structure for testing for changes iteratively to improve system quality. McNicholas et al. (2019) state that the PDSA model is vital for improvement and offers a framework for developing, testing, and implementing changes that eventually lead to improvements. The model moderates the impulse to take immediate actions with adequate knowledge of careful study. Chen et al. (2021) observed that the PDSA cycle has widely been applied in healthcare due to its simplicity and practicality. In addition, the Institute for Healthcare Improvement has endorsed the cycle as flexible and can be used in almost any QI challenge (Chen et al., 2021). Further, since its introduction to healthcare in the 1990s, Knudsen et al. (2019) observed that many QI projects have been based on the PDSA method.

When planning any improvements to a work process, it is vital to determine what one wants to achieve, how the improvement will be measured, and the exact idea that will be tested. Since one may not achieve the expected results, testing improvements on a small scale is more

effective before implementing them across the organization. Therefore, the current project aims to reduce the rate of burnout among nurse practitioners, which will be evaluated using the Copenhagen Burnout Inventory (Kristensen et al., 2005). The four stages of the PDSA cycle include the Plan, which entails the change that will be tested or implemented and Do, where one carries out the change (Chen et al., 2021). In the Study phase, one collects data before and after the change has been implemented and examines the impact of the change and feedback. For this project, the measurable outcome will be the level of burnout among NPs before and after implementing the Mindfulness in Motion program. The last phase, Act, involves planning the next change cycle while adjusting the plan according to the feedback received. Therefore, the PDSA model was perceived as the best fit for implementing the Mindfulness in Motion Program to reduce burnout among nurse practitioners (See Appendix A).

Application of Major Framework Tenets

The QI project aims to reduce the rate of burnout among nurse practitioners through an educational intervention (Mindfulness in Motion). The PDSA model has four major components: Plan, do, study, and act.

Stage I: Plan

Planning is the first step that requires sufficient time and resources to be allocated. Thorough and careful planning helps prevent wasting resources and affects the final success of the QI project. According to Chen et al. (2021), identifying and recruiting a team of members who are knowledgeable of the issue is a first step, as a multidisciplinary team brings diverse expertise and perspectives that are vital to effective change. Moreover, it will help break down the workflow while incorporating outside-the-box thinking for improvement ideas. First, stakeholders will be gathered, including the nurse manager, administrator, project manager,

finance and information technology managers or representatives, and a few nurses. The problem will be described to them, and a brainstorming session will follow on the current factors contributing to burnout. In identifying the problem and possible solutions, developing effective means to improve the situation will be possible. Next, the problems and goals shall be communicated, and ways to measure the accomplishment of goals as discussed in the objectives above.

The educational material shall then be prepared on ways to identify burnout, factors that cause burnout, and how to use different meditation and mindfulness at work to prevent and reduce burnout. The team will also discuss the resources needed for the project and how funding will be acquired. This will also include developing a budget with the help of the administrator and the finance manager. Training will also be scheduled based on participant's shifts and availability. The pre-survey and post-survey will also be selected and used to evaluate the levels of burnout before and after the intervention. A feedback survey for the Mindfulness in Motion Program will also be developed to evaluate the participant's satisfaction with the program. Each individual will also be assigned tasks and timelines to complete.

Stage II: Do

In this phase, the major tasks involve measuring baseline data, implementing the change, and observing while collecting follow-up data. Collecting baseline data before implementing any change is critical as it helps to confirm the need for the QI initiative and examine the effectiveness of the interventions by comparing the pre and post-implementation results (Chen et al., 2021). Before conducting the training, the pre-intervention survey will be conducted to identify the rate of burnout using the Copenhagen Burnout Inventory (CBI). Researchers from Denmark developed the CBI, which comprises 19 items (Kristensen et al., 2005). These are

distributed in three subscales that measure personal burnout, work-related burnout, and client-related burnout. As a result, it represents the level of physical and psychological exhaustion an individual experiences related to his or her work and life. The CBI has been translated and adapted in many countries globally and has been useful in analyzing burnout in human service workers. According to Kristensen et al. (2005), fatigue and exhaustion are the core of burnout, which form the background of the CBI. This aligns with the historical development of the concept of burnout. Training on meditation and mindfulness will then be conducted while collecting data on progress. That is the levels of burnout and nurse practitioners' engagement in the program after implementing the Mindfulness in Motion program. Lastly, a feedback survey for the program will also be conducted to determine participant satisfaction. Data analysis will then begin.

Stage III: Study

The effectiveness of an intervention is determined by comparing the test results with the set objectives. According to the measurable outcomes agreed upon before implementing the intervention, the before and after change data reflects on the effects of the change and what was learned. This is because evaluating the results identifies trends and patterns while learning what was effective and what was not (Chen et al., 2021). Data will be analyzed to determine patterns in burnout levels before and after the program. Data will also be compared with predictions to determine if the set goals were achieved. Participation in the program will also be examined. Trends and patterns will determine the effectiveness of the Mindfulness in Motion program in reducing and preventing burnout. Further, the findings from the feedback survey will determine if the program was implemented effectively, areas of improvement and adjustments, and lessons learned.

Stage IV: Act

At this level, the aim is to plan for the next cycle and determine if the change can be adopted, modified, or discarded. From the results studied in stage III, future actions will either be:

Adopted and Scaled-up: If the burnout rate is significantly reduced, engagement in the program is achieved, and positive feedback towards the program without any arising issues, the program will be expanded to a larger scale across the facility. Plans will also be developed to sustain the gains and adjustments made according to the feedback received using the PDSA cycle to promote continuous improvement.

Modify and Reset: If the Mindfulness in Motion program does not reduce and prevent burnout or causes new issues, then discrepancies will be studied to determine the root cause. Qualitative data, including discussions with stakeholders and participants, can help determine areas that should be adjusted and what could have caused the discrepancies. If the failures can be rectified, the plan will be modified and retested through a new PDSA cycle (Taylor et al., 2014).

Drop and Test a New Change: Chen et al. (2021) observed that it is common for a PDSA cycle in the improvement journey to fail. If the stakeholders believe that a different program would be more successful, then Mindfulness in Motion may be abandoned and a new cycle with a different program initiated.

Project Setting, Population of Interest, and Stakeholders

Introduction

To enhance healthcare, it is vital to work towards changing processes that make providing high-quality and reliable patient care easier. However, Williams and Finkelstein (2023) observed that before improving the process, it is critical to comprehend the need for planning and including the expertise of others. Quality improvement work is often achieved in the team; thus, engaging the right stakeholders for every initiative is necessary.

Project Population

Direct Population

The direct population for this quality improvement project will include 25 nurse practitioners at the Alliance for Wellness Medical Group. These NPs provide direct patient care, potentially experience work-related burnout, and have worked at the facility for at least six months.

Inclusion Criteria

The inclusion criteria will be all NPs at the Alliance for Wellness medical group who are employed as part-time and full-time providers and have agreed to participate in the study. They must also have worked at the facility for at least six months, hence familiar with its resources, functionality, and patients, thus potentially experiencing and recognizing work-related burnout in the organization. NPs directly involved in providing patient care will also be included, as they are more likely to experience work-related burnout.

Exclusion Criteria

The exclusion criteria will be for all nurse practitioners not interested in participating in the project. NPs who have been working at the facility for less than six months or joined the

practice after the beginning of the project will be excluded. Any individual who is not a nurse practitioner will also be excluded to ensure that the project focuses on NPs only. NPs on extended leave or any other form of prolonged absence from their regular duties at the Alliance for Wellness medical group will also be excluded as they will not be experiencing ongoing work-related conditions. Lastly, NPs involved in roles not directly related to patients, such as research, nurse education, and others in the facility, will also be excluded.

Indirect Population

The indirect population will be the Alliance for Wellness medical group patients. These are adult patients between 25 to 45 years, Hispanic or African American, with low income, and at least elementary education level. These patients are commonly diagnosed with depression, anxiety, substance use disorder, bipolar disorder, and schizophrenia. Many of these patients are homeless.

Inclusion Criteria

For this project, the inclusion criteria will be all new and old patients seen by the participating NPs at the project's site. They must also be adult patients between 25 and 65 years old, have acquired at least an elementary education level, their primary language is English, and have been receiving care at various Alliance for Wellness medical group locations in Panorama City, Los Angeles County, California.

Exclusion Criteria

The exclusion criteria will be any of the new patients who will receive care after the start of the project and the patients receiving care from NPs not taking part in the project.

Project Setting

The project setting is at the several locations for the Alliance for Wellness medical group in Panorama City, Los Angeles County, California. The organization is an established psychiatry group that has been offering services in a variety of healthcare settings. Apart from other providers and specialists, the organization has 25 nurse practitioners specializing in psychiatry and research and operating in various facilities across Los Angeles County. They provide specialized psychiatry care for children, adolescents, adults, and geriatric populations. At the Alliance for Wellness, the service ranges from inpatient psychiatry, emergency room psychiatry, outpatient psychiatry, skilled and residential care, and crisis stabilization unit.

Stakeholders

The primary stakeholders will be nurse practitioners employed full-time and part-time employees in the Alliance for Wellness medical group. They will be invited to attend the Mindfulness in Motion program for nurses, which the project lead will provide. The program will be essential in identifying signs and symptoms of work-related burnout and how to use meditation and mindfulness techniques to address burnout. NPs' feedback, engagement, and experiences will be useful in evaluating the program's effectiveness and determining areas for improvement. The organization's management team will also be stakeholders in the project. The management team is crucial as they disburse and monitor the use of resources, implementation techniques, and policies in the healthcare setting. Their support will be useful in conducting the project onsite while ensuring that it adheres to the organization's policies and resource allocation. The management and organization at large will benefit from the project as when burnout is reduced, there is improved quality of care, nurse retention, and employee quality of life.

Patients are among the critical stakeholders as they are the indirect beneficiaries of the project. Patients will indirectly benefit from NPs whose well-being and mental health are enhanced due to improved quality of care provided. Their experiences and health outcomes with providers who are cared for and in a better state of health, physically and mentally, will be reflected in improved patient care. This can be observed in improved patient satisfaction, reduced treatment errors, and reduced patient harm or even death (Williams & Finkelstein, 2023). The human resource management develops and implements employment policies, wellness and educational programs, and staff support. Their involvement will be useful in integrating the educational program schedule and mindfulness practices into the facility's timeline. It will ensure that nurse practitioners continue to practice mindfulness and meditation even after the project ends. Therefore, the project's success is associated with effective collaboration, support, and engagement of these stakeholders, with the goal of reducing work-related burnout among nurse practitioners, which will subsequently improve the quality of healthcare.

Permissions

The chief executive officer gave permission to implement the project at the organization. However, the affiliation agreement is not required.

Intervention

The intervention to satisfy the project's objectives is Mindfulness in Motion, which is a mindfulness-based program for nurses that is a vital resource in addressing work-related burnout, thus improving their health. Klatt et al. (2021) state that MIM is an evidence-based, workplace mindfulness-based intervention that has been proven effective in reducing perceived stress and burnout while enhancing work engagement and resilience. The intervention will raise awareness

about identifying burnout and methods and techniques to reduce it. The project lead will administer the intervention, which will include sharing the "How to Reduce Work-related Burnout" slide presentation (Appendix B).

All the participants will first be invited to join the upcoming wellness program. Then, the project lead will meet with participants and elaborate on the program's purpose. Then, the Copenhagen Burnout Inventory (CBI) will be administered before the first session to collect pre-data. Wellness program sessions will be delivered during the staff's break time as 1-hour weekly sessions for five weeks. Some weeks will include two 30-minute sessions, as the MIM program originally comprised eight weeks of activities. NP attendance will be recorded at the beginning and end of every session. A session engagement rate will be the number of participants participating in a complete session.

Planning Project Team

The planning project team will include the project lead, business operations manager, and office staff. The roles of the project lead include educating the participants about the "Mindfulness in Motion" toolkit and facilitating the activities for mindfulness. The project lead will also reach out to the participants who need help and provide support. They will also address issues and concerns regarding the intervention and administer and collect all electronic data in the project. The business operations manager will endorse the project, encourage the NPs to join the project and authorize the project lead to use the organization's equipment and office supplies. Finally, the office staff will help implement the program by emailing all NPs in the organization, including the Mindfulness in Motion program for nurses. They will also send short message service (SMS) to all participants, reminding them about the weekly sessions, and email all participants containing the program's toolkit.

Resources

The resources required for the quality improvement project are the Mindfulness in Motion program for nurses, a computer, and PowerPoint software. The MIM guide will assist the project lead in organizing the implementation, as the guide has all the necessary resources to promote participant's well-being through reduced burnout. The links to the implementation guide can be seen in Appendix B. The computer and PowerPoint software will be used for each session to educate the participants about the toolkit and the evidence-based activities to help reduce work-related burnout.

Timeline

The project will be implemented for five weeks. In week 1, the project lead will collaborate with the office staff and invite all interested NPs to join the upcoming wellness program. The project lead will also meet with the participants to provide an overview of the wellness program and administer the Copenhagen Burnout Inventory before the intervention. The leader will also present the burnout and mindfulness PowerPoint, send the MIM PowerPoint to all participants via email, and begin week one activities. Weeks 2, 3, and 4 will involve two 30-minute sessions to ensure all the MIM 8-week activities have been implemented. The mindfulness program will conclude by administering the post-intervention CBI to evaluate any changes in the participant's work-related burnout and well-being, as well as a satisfaction survey.

Throughout the implementation, the project lead will address any issues and questions from the participants and management concerning the mindfulness program. Moreover, the project lead will administer and collect data. Appendix F contains a detailed description of the project's implementation timeline.

Tools

The tools that will be used to achieve the project objectives and carry out the interventions of the QI project are the Mindfulness in Motion Protocol (MIM) (Appendix B), The Copenhagen Burnout Inventory (CBI) (Appendix D), and the Satisfaction Questionnaire (Appendix G). The MIM protocol provides a pragmatic mindfulness-based onsite intervention for people working in chronically high-stress work environments, significantly increasing work engagement and resiliency. Klatt et al. (2015, 2021) have proved the protocol's feasibility, benefits, and adaptability to other high-stress workplaces. No permission is required to use the protocol.

The Copenhagen Burnout Inventory (CBI) is an open-access, valid, and reliable instrument that measures burnout. It is a 19-item instrument distributed across three factors: personal burnout, work burnout, and patient burnout. Barton et al. (2022), in their study among emergency medicine residents using factor analysis, observed that the CBI is a reliable, valid, and publicly accessible burnout inventory. The response is based on the question category as observed in Appendix D. Category 'a' will use a 5-point rating scale: never, almost never, seldom, sometimes, often, and always. Category 'b' uses a 5-point rating scale: to a very low degree, to a low degree, somewhat, to a high degree, and to a very high degree. Category 'c' will use a reversed score. If less than four questions have been answered, the respondent is classified as a non-responder.

The project lead developed the Satisfaction Questionnaire (Appendix G). The tool includes three-item questions to measure the participant's satisfaction with the Mindfulness in Motion program for nurses. It includes a 5-point Likert scale to rate the participant's satisfaction

level, with one as strongly disagree and five as strongly agree. The project team validated the tool.

Results

The Copenhagen Burnout Inventory

The personal burnout score was computed for elements 1, 2, 3, 4, 5, and 6. The sum of scores below 50 was considered low burnout levels, as the sum of 50 to 74 indicated moderate burnout and 75-99 indicated a high level of burnout. A score of 100 is considered severe burnout (Kristensen et al., 2005). Pre-intervention, personal burnout scores ranged from 73 to 89, with a total average mean score of 82.22 and a standard deviation of 6.179. Post-intervention, personal burnout scores ranged between 35 and 56, with a total average mean score of 48.056 and a standard deviation of 6.5.994, indicating low personal burnout levels. A paired t-test recorded a statistically significant decrease in burnout scores from pre-intervention ($M = 82.22$, $SD = 6.179$) to post-intervention ($M = 48.056$, $SD = 5.994$), $t(18) = 8.64$ $p = 0.0012$ (two-tailed). The mean decrease in personal burnout scores was 34.164 (95% CI=30.593, 36.007).

The work burnout score was computed for elements 7, 8, 9, 10, 11, 12, and 13. The sum of scores below 50 was considered low burnout levels, as the sum of 50 to 74 indicates moderate burnout and 75-99 indicates a high level of burnout. A score of 100 is considered severe burnout (Kristensen et al., 2005). Pre-intervention, work burnout scores ranged from 71 to 91, with a total average mean score of 81.61 and a standard deviation of 6.783. Post-intervention, work burnout scores ranged between 40 and 65, with a total average mean score of 53.17 and a standard deviation of 9.380, indicating low work burnout levels. A paired t-test recorded a statistically significant decrease in burnout scores from pre-intervention ($M = 81.61$, $SD = 6.783$) t post-

intervention ($M = 53.17$ $SD = 9.380$), $t(18) = 8.64$, $p = 0.02$ (two-tailed). The mean decrease in work burnout scores was 28.44 (95% $CI = 31.391, 36.929$).

Elements 14, 15, 16, 17, 18, and 19 were computed to determine the patient burnout scores. A sum below 50 was considered a low burnout level, 50 to 74 as moderate, 75-99 as high, and 100 as severe burnout (Kristensen et al., 2005). Before the intervention, the patient burnout scores were between 76 and 93, with a total average mean score of 82.61 and a standard deviation of 6.04. This result indicates high burnout levels. After implementing the MIM program, scores in the patient burnout elements ranged from 45 to 67, with an average mean score of 45.944 and $SD = 9.478$, thus a low burnout level. A paired t-test recorded a statistically significant decrease in burnout scores from pre-intervention ($M = 82.61$, $SD = 6.04$) t post-intervention ($M = 45.944$, $SD = 9.478$), $t(18) = 8.64$, $p = 0.005$ (two-tailed). The mean reduction in patient burnout scores was 36.22 (95% $CI = 24.23, 32.65$).

The overall burnout level was calculated as an average of the mean and standard deviation of the three categories. Pre-intervention, the average mean was 82.1, and the standard deviation was 3.865. Post the MIM program, the overall burnout level had a total average mean score of 49.10 and a standard deviation of 5.861, indicating reduced overall burnout levels. A paired t-test recorded a statistically significant decrease in burnout scores from pre-intervention ($M = 82.1$, $SD = 3.865$) t post-intervention ($M = 49.10$, $SD = 5.861$), $t(18) = 8.64$, $p = 0.033$ (two-tailed). The mean decrease in overall burnout scores was 33.00. This shows a 40.194% decrease in overall burnout levels.

A paired t-test was completed for the statistical analysis of all four variables since the t-test assumptions were satisfied. The dependent variables (personal, work, and patient burnout, as well as the overall burnout levels) were continuous, and the independent variable was

dichotomous due to pre-and post-intervention. Furthermore, in the boxplots of the datasets, there were no outliers. The collected data also had a normal distribution according to the Kolmogorov-Smirnov test results, where for all variables, $p > 0.05$. Therefore, no statistical violations were observed, and no missing data was found. Table 1 shows the results of the paired t-tests.

Table 1

Paired t-test Results Comparing Compassion Satisfaction, Perceived Support, Burnout, Secondary Traumatic Stress, and Moral Distress Pre- and Post-Intervention

Variable	Pre-Intervention		Post-Intervention		t-test
	Mean	SD	Mean	SD	
Overall Burnout levels	82.1	3.865	49.10	5.8611	0.033
Personal Burnout	82.22	6.179	48.056	5.994	0.0012
Work Burnout	81.61	6.783	53.17	9.380	0.02
Patient Burnout	82.166	6.04	45.944	9.478	0.05

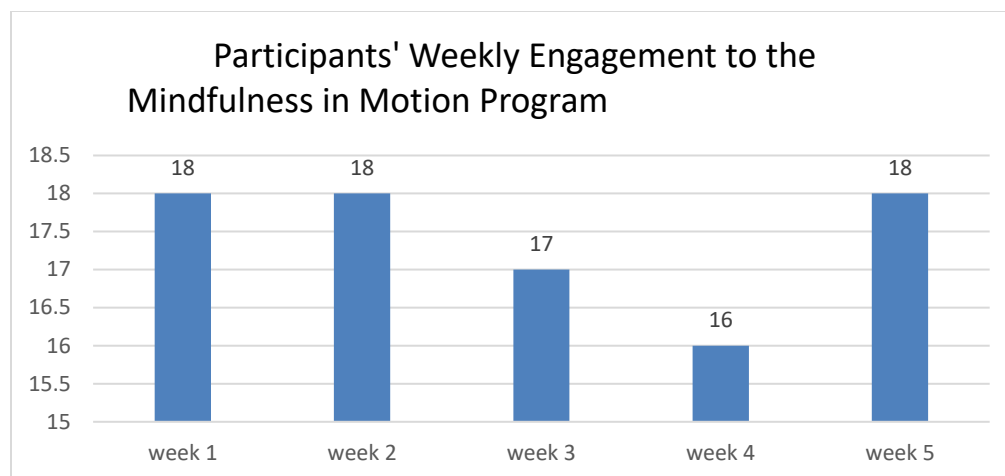
* $p < 0.05$

Participant Engagement in the Mindfulness in Motion Program

The participant's engagement in the program was calculated as the number of people participating in each weekly session. The frequencies and percentages were then analyzed since they are normal continuous data. The scores ranged between 0 (did not attend) and 1 (attended). No missing data or statistical violations were observed. From the results, 18 nurse participants agreed to participate in the MIM program. In weeks 1, 2, and 5, all participants attended the MIM programs, thus 100% attendance. In weeks 1, 2, and 5, all participants attended the MIM programs. Figure 1 below shows the weekly engagement of the participants in the MIM program.

Figure 1

Engagement from Weeks 1 to 5



Participant Satisfaction with the Mindfulness in Motion Program

To calculate the participant's satisfaction level, the total mean score of each of the three items on the satisfaction questionnaire was determined. Overall satisfaction was then calculated as a mean score of items 1, 2, and 3. Since all the scores were normal continuous data mean and standard deviation were also used for data analysis. No missing data or statistical violations were observed. For item 1 on the questionnaire, the score ranged from 3 (neutral) to 5 (strongly agree). The participants, on average, agreed to recommend the MIM intervention to their coworkers ($M = 4.39$, $SD = 0.68$). Item 2 had a score range from 4 (agree) to 5 (strongly agree). A mean score of 4.67 and a standard deviation of 0.47 was achieved. It shows that the participants agreed that the MIM program should be part of the facility's orientation program. Item 3 scored between 4 and 5, with 4 as agree and 5 as strongly agree. The mean score was 4.67, with a standard deviation of 0.47. These results prove that the intervention participants agreed that the MIM intervention was essential in helping make the environment healthier and safer. Lastly, the overall satisfaction rating of the program was a mean of 4.57 (91.4%) with a standard deviation of 0.092. This shows a high rate of satisfaction. The results of the participant's satisfaction with the MIM intervention are illustrated in Table 2.

Table 2

Level of Satisfaction with MIM Intervention

Variable	M (SD)	Minimum	Maximum
Likelihood to recommend the MIM program	4.39 (0.68)	3	5
Likelihood to recommend MIM be included in the orientation program	4.67 (0.47)	4	5
Likelihood of MIM to create a safer and healthier work environment	4.67 (0.47)	4	5

Note: Minimum value: 1- strongly disagree and maximum value: 5 – Strongly agree

Timeline

The DNP project was implemented as per the original plan. There were no modifications, and the timeline can be seen in Appendix F of this manuscript.

Summary

The mindfulness in motion program reduced the rate of burnout in nurse practitioners. The pre- and post-intervention scores showed statistically significant improvements in overall burnout levels and the three CBI categories. There was also a significant statistical decrease in personal burnout, work-related burnout, and patient-related burnout. Consequently, at the end of week 5, the engagement rate with the MIM program increased to 100%, satisfying objective (iv); to increase Mindfulness in Motion Program engagement to 90% by week five. However, in weeks 3 and 4, there was a decrease in attendance due to three participants not attending the sessions. They expressed their apologies for having to attend to personal matters. The program satisfaction rate was estimated at 4.57 out of 5. This is equivalent to 91.4% satisfaction rate. Thus, the program satisfied objective (v); to obtain a 90% satisfaction rating for the Mindfulness in Motion Program from program participants.

One of the DNP project's strengths is that it was scheduled according to the nurse practitioners' availability, as the sessions were conducted during their lunch breaks. This was a

major contributor to enhancing the rate of attendance. Furthermore, the program activities were shared with all available NPs before every session. Those who missed the sessions were also encouraged to execute the activities individually, as they can easily be done without prior training. Therefore, healthcare organizations can adopt the program since nurse leaders do not require prior training to oversee the intervention.

On the other hand, the DNP project had a small sample size (n=18), which was a major weakness. This can limit result generalization. The program had initially aimed to include all 25 nurse practitioners. Furthermore, it was only conducted for five weeks, hence limiting the evaluation of MIM's long-term effects on burnout levels. Thus, it is challenging to determine if the effects of the MIM can be generalized or sustained in the long term and if it has implications for nursing workload and other aspects. This would also determine if the project can be provided regularly to seasoned employees, apart from during orientation.

Interpretation

One of the most significant objectives of the DNP project was to evaluate the participant's burnout levels pre- and post-MIM program implementation to achieve a 15% reduction in self-reported burnout levels. From the results, it is evident that a wellness program can significantly reduce burnout levels in nursing. There was a 40.194% overall burnout reduction in the DNP program. This supports the available literature that wellness programs effectively reduce nursing burnout. For example, the mantra-based AMI Meditation intervention, which includes a 5-day in-person training and practice, resulted in reduced burnout levels at 3- and 6-months post-intervention (Pettus et al., 2022). Findings also confirmed that nurses who participated in the 8-week mindfulness program had an increased level of self-care than those who did not (Cocchiara et al., 2019).

The results show that, with increased engagement and high satisfaction rates, adopting the MIM program can benefit the organization, especially during orientation. The MIM program successfully achieved 100% participation at the end of week 5, higher than the anticipated results, while the satisfaction rating (91.4%) was above the estimated 90%. The organization can also use the project results to develop policies that provide guidelines for preventing burnout. The organization can schedule mindfulness sessions for nurses during breaks or in quiet rooms to promote mindfulness at work and reduce burnout. Since burnout significantly contributes to high turnover, Muir et al. (2022) observed that when an organization can reduce burnout by 50%, it can save around \$5000 per nurse annually.

Limitations

Despite the DNP project's positive findings, some limitations need to be considered before interpreting the results. First, the project depended on self-reports to measure participants' burnout levels, leading to potential bias (Anvari et al., 2023). This limitation was minimized by monitoring compliance with weekly activities during sessions, thus minimizing the impact of self-reported bias. Furthermore, since the project was a quality improvement, the project did not have a control group. This could have resulted in a setback of its design as the CBI pre-test could have sensitized the participants to the CBI post-test, resulting in higher scores and, hence, improved burnout levels. Therefore, a post-intervention Copenhagen Burnout Inventory (CBI) and the satisfaction questionnaire with the program were also administered to determine the effectiveness of the intervention.

The project also had a risk of failing to track which participants participated in the pre- and post-surveys. Surveys were administered anonymously, as every participant received a unique identifier before the intervention session began. Thus, a participant could then answer a post-survey even though they did not answer the pre-survey. However, it was observed that

every participant who answered the pre-CBI survey also answered the post-CBI survey. No new participants joined the project after the pre-CBI survey was completed. Lastly, since the project was conducted for a short time, there is no evidence for the program's long-term effect. However, this short timeframe is backed by research, and the intended 8-week sessions were condensed to 5 weeks as illustrated on the timeline template in Appendix F. Furthermore, Cocchiara et al. (2019) implemented the MIM program sessions in 8 weeks and recorded a significant decrease in burnout levels.

Conclusion

This DNP project implemented a wellness program, the Mindfulness in Motion (MIM) program, for the NPs in the Alliance for Wellness medical group in California. Eighteen NPs took part in the study. The Copenhagen Burnout Inventory measured the participants' burnout levels pre- and post-intervention. Data from the project showed that the program significantly reduced overall burnout levels in three categories: personal, work, and patient burnout. The program's engagement rate ranged from 88.9% to 100%, and participants also recorded a high satisfaction level with the MIM program.

At the practicum site, the project provides an effective intervention to address burnout related to personal, work, and patients. The project can also support and inspire enhanced policies and programs that will support the well-being of NPs in an organization. However, for the program's effects to be sustainable, it is vital to include the Mindfulness in Motion program as part of the orientation program. It will create an educational opportunity for NPs to gain techniques to address and prevent burnout concerning work, personal, and patients. In addition, NP's burnout levels should be monitored regularly using the CBI questionnaire to determine the need for additional support, programs, and resources.

Consequently, for nursing practice, the project has considerable implications. The project added evidence that MIM is a useful intervention in reducing burnout in NPs. Additionally, the program supports previous findings that enhancing NPs' well-being requires the organization's and management's support, such as introducing wellness programs for staff during orientation.

The positive results show that the DNP project should be adopted continuously at the practicum site. This should include orientation programs to ensure new NPs have the right skills to prevent and address burnout. The organization should also encourage all NPs to participate in the MIM program using techniques such as incentives or designating quiet meditation rooms. Lastly, the project leader should liaise with nursing administrators and other management to design and customize the wellness programs at the facility to support NP's well-being. This alleviates and prevents the negative impacts of burnout on NPs, which also affects patients, their families, and the organization.

References

- Akyurek, G., Avci, N., & Ekici, G. (2022). The effects of “Workplace Health Promotion Program” in nurses: A randomized controlled trial and one-year follow-up. *Health Care for Women International*, 43(9), 980-996. <https://10.1080/07399332.2020.1800013>
- American Nursing Association. (n.d.). *What is nurse burnout? How to prevent it*.
<https://www.nursingworld.org/practice-policy/work-environment/health-safety/nurse-burnout-and-how-to-prevent-it/#:~:text=Results%20from%20a%202020%20survey,care%20systems%20in%20the%20U.S.>
- Anvari, F., Efendić, E., Olsen, J., Arslan, R. C., Elson, M., & Schneider, I. K. (2023). Bias in self-reports: An initial elevation phenomenon. *Social Psychological and Personality Science*, 14(6), 727-737. <https://doi.org/10.31234/osf.io/udwrg>
- Barton, M. A., Lall, M. D., Johnston, M. M., Lu, D. W., Nelson, L. S., Bilimoria, K. Y., & Reisdorff, E. J. (2022). Reliability and validity support for an abbreviated Copenhagen burnout inventory using exploratory and confirmatory factor analysis. *Journal of the American College of Emergency Physicians Open*, 3(4), e12797. <https://doi.org/10.1002/emp2.12797>
- Chen, Y., VanderLaan, P. A., & Heher, Y. K. (2021). Using the model for improvement and plan-do-study-act to effect smart change and advance quality. *Cancer Cytopathology*, 129(1), 9–14. <https://doi.org/10.1002/cncy.22319>
- Cocchiara, R. A., Peruzzo, M., Mannocci, A., Ottolenghi, L., Villari, P., Polimeni, A., Guerra, F., & La Torre, G. (2019). The use of yoga to manage stress and burnout in healthcare

workers: A systematic review. *Journal of Clinical Medicine*, 8(3), 284.

<https://doi.org/10.3390/jcm8030284>

Dall’Ora, C., Ball, J., Reinius, M., & Griffiths, P. (2020). Burnout in nursing: A theoretical review. *Human Resources for Health*, 18, 1-17. <https://doi.org/10.1186/s12960-020-00469-9>

De Hert S. (2020). Burnout in healthcare workers: Prevalence, impact and preventative strategies. *Local and Regional Anesthesia*, 13, 171–183.

<https://doi.org/10.2147/LRA.S240564>

Freudenberger, H. J. (1974). Staff burn-out. *Journal of Social Issues*, 30(1), 159-165.

<https://doi.org/10.1111/j.1540-4560.1974.tb00706.x>

Gabriel, K. P., & Aguinis, H. (2022). How to prevent and combat employee burnout and create healthier workplaces during crises and beyond. *Business Horizons*, 65(2), 183-192.

<https://doi.org/10.1016/j.bushor.2021.02.037>

Heeter, C., Allbritton, M., Lehto, R., Miller, P., McDaniel, P., & Paletta, M. (2021). Feasibility, acceptability, and outcomes of a yoga-based meditation intervention for hospice professionals to combat burnout. *International Journal of Environmental Research and Public Health*, 18(5), 2515. <https://doi.org/10.3390/ijerph18052515>

Jun, J., Ojemeni, M. M., Kalamani, R., Tong, J., & Crecelius, M. L. (2021). Relationship between nurse burnout, patient and organizational outcomes: Systematic review.

International Journal of Nursing Studies, 119, 103933.

<https://doi.org/10.1016/j.ijnurstu.2021.103933>

- Kelly, L. A., Gee, P. M., & Butler, R. J. (2021). Impact of nurse burnout on organizational and position turnover. *Nursing Outlook*, 69(1), 96–102.
<https://doi.org/10.1016/j.outlook.2020.06.008>
- Klatt, M., Bawa, R., Gabram, O., Westrick, A., & Blake, A. (2021). Synchronous mindfulness in motion online: Strong results, strong attendance at a critical time for health care professionals (HCPs) in the COVID Era. *Frontiers in Psychology*, 12, 725810.
<https://doi.org/10.3389/fpsyg.2021.725810>
- Klatt, M., Steinberg, B., & Duchemin, A. M. (2015). Mindfulness in Motion (MIM): An onsite Mindfulness Based Intervention (MBI) for chronically high stress work environments to increase resiliency and work engagement. *Journal of Visualized Experiments: Jove*, (101), e52359. <https://doi.org/10.3791/52359>
- Knudsen, S. V., Laursen, H. V. B., Johnsen, S. P., Bartels, P. D., Ehlers, L. H., & Mainz, J. (2019). Can quality improvement improve the quality of care? A systematic review of reported effects and methodological rigor in plan-do-study-act projects. *BMC Health Services Research*, 19, 1-10. <https://doi.org/10.1186/s12913-019-4482-6>
- Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & Stress*, 19(3), 192-207. <https://doi.org/10.1080/02678370500297720>
- McNicholas, C., Lennox, L., Woodcock, T., Bell, D., & Reed, J. E. (2019). Evolving quality improvement support strategies to improve Plan-Do-Study-Act cycle fidelity: A retrospective mixed-methods study. *BMJ Quality & Safety*, 28(5), 356–365.
<https://doi.org/10.1136/bmjqs-2017-007605>

Menon, G. R., Yadav, J., Aggarwal, S., Singh, R., Kaur, S., Chakma, T., ... & Panda, S. (2022).

Psychological distress and burnout among healthcare worker during COVID-19

pandemic in India—A cross-sectional study. *PLoS One*, 17(3), e0264956.

<https://doi.org/10.1371/journal.pone.0264956>

Muir, K. J., Wanchek, T. N., Lobo, J. M., & Keim-Malpass, J. (2022). Evaluating the costs of

nurse burnout-attributed turnover: A Markov modeling approach. *Journal of Patient*

Safety, 18(4), 351–357. <https://doi.org/10.1097/PTS.0000000000000920>

National Academy of Medicine (2023). *National plan for health workforce well-being*.

<https://nam.edu/initiatives/clinician-resilience-and-well-being/national-plan-for-health-workforce-well-being/>

Pettus, M., Netter, B., Perlmutter, L., Perlmutter, J. C., & Hosler, A. S. (2023). The effects of

mantra-based AMI Meditation on burnout, secondary traumatic stress, and compassion

satisfaction levels in healthcare providers. *Lifestyle Medicine*, 4(1), e72.

<https://doi.org/10.1002/lim2.72>

Ryu, I. S., & Shim, J. (2021). The influence of burnout on patient safety management activities

of shift nurses: The mediating effect of compassion satisfaction. *International Journal*

of Environmental Research and Public Health, 18(22), 12210.

<https://doi.org/10.3390/ijerph182212210>

Shiri, R., Nikunlaakso, R., & Laitinen, J. (2023). Effectiveness of workplace interventions to

improve health and well-being of health and social service workers: A narrative review of

randomized controlled trials. In *Healthcare* (Vol. 11, No. 12, p. 1792). *Multidisciplinary*

Digital Publishing Institute. <https://doi.org/10.3390/healthcare11121792>

- Taylor, M. J., McNicholas, C., Nicolay, C., Darzi, A., Bell, D., & Reed, J. E. (2014). Systematic review of the application of the plan-do-study-act method to improve quality in healthcare. *BMJ Quality & Safety*, 23(4), 290–298. <https://doi.org/10.1136/bmjqs-2013-001862>
- Williams, V. W., & Finkelstein, J. B. (2023). Speaking and listening: The importance of stakeholder engagement in quality improvement in pediatric urology. *Journal of Pediatric Urology*. <https://doi.org/10.1016/j.jpurol.2023.08.017>
- Yingling, J. K. (2020, October 29). Rationing evidence-based nursing practice: Considering a resource-based approach. *The Online Journal of Issues in Nursing* 26(1). <https://doi.org/10.3912/OJIN.Vol26No01PPT62>
- Zhu, H., Xie, S., Liu, X., Yang, X., & Zhou, J. (2022). Influencing factors of burnout and its dimensions among mental health workers during the COVID-19 pandemic. *Nursing Open*, 9(4), 2013–2023. <https://doi.org/10.1002/nop2.1211>

Appendix A PDSA Cycle



Appendix B**Mindfulness in Motion Links**

<https://doi.org/10.3389/fpsyg.2021.725810>

<https://doi.org/10.3791/52359>

Appendix C
Permission Letter from the Practicum Site

March 15, 2024

Dear Dr. Julie Astrella,

This letter confirms that the Alliance for Wellness Medical Group Mental Health Facility has allowed the Doctor of Nursing Practice student Olajumoke Bell to conduct quality improvement project activities as outlined below:

- Project site: Alliance for Wellness Medical Group Mental Health Facility 14860
Roscoe Boulevard #307, Panorama City, CA 91402
- Project purpose: Quality improvement
- Project mentor: Dr. Rose Onyekwe
- Authorization ends: April 30, 2024

The project site understands that any activities that involve Personal Private Information or Protected Health Information must comply with HIPAA Laws and institutional policy. Our organization agrees to the terms and conditions stated above. If there are any concerns related to this project, we will contact the above DNP student and the faculty.

Appendix D

The Copenhagen Burnout Inventory (CBI)

Personal burnout

- 1 How often do you feel tired? ^a
- 2 How often are you physically exhausted? ^a
- 3 How often are you emotionally exhausted? ^a
- 4 How often do you think: "I can't take it anymore"? ^a
- 5 How often do you feel worn out? ^a
- 6 How often do you feel weak and susceptible to illness? ^a

Work burnout

- 7 Is your work emotionally exhausting? ^b
- 8 Do you feel burned out because of your work? ^b
- 9 Does your work frustrate you? ^b
- 10 Do you feel worn out at the end of the working day? ^a
- 11 Are you exhausted in the morning at the thought of another day at work? ^a
- 12 Do you feel that every working hour is tiring for you? ^a
- 13 Do you have enough energy for family and friends during leisure time?^{a,c}

Patient burnout

- 14 Do you find it hard to work with patients? ^b
- 15 Do you find it frustrating to work with patients? ^b
- 16 Does it drain your energy to work with patients? ^b
- 17 Do you feel that you give more than you get back when you work with patients? ^b
- 18 Are you tired of working with patients? ^a
- 19 Do you sometimes wonder how long you will be able to continue working with patients? ^a

^a 5-point rating scale: never/almost never, seldom, sometimes, often, always.

^b 5-point rating scale: to a very low degree, to a low degree, somewhat, to a high degree, to a very high degree.

^c Reverse scored.

Appendix E

Burnout and Mindfulness Slide Presentation

**COMBATING NURSING BURNOUT
THROUGH NURSE EDUCATION AND
PROVIDING RESOURCES**

OLAJUMOKE BELL
DNP 751 DNP PROJECT I, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DOCTOR OF NURSING

1

INTRODUCTION

- The American Nursing Association [ANA] (n.d.) defines nursing burnout as a state of physical, mental and emotional exhaustion due to work-related stressors, a large patient ratio, long hours, decision-making pressures, changing shift schedules, and the strain of providing compassionate care.
- Approximately two-thirds of nurses, 62%, experience burnout.
- Burnout is particularly more common in younger nurses with at least 69% of nurses below 25 years facing burnout.
- Despite its prevalence and adverse effects, there is limited resources that can help nurses to combat the issue

2

CAUSES OF BURNOUT

- Maslach theorized that burnout is a state in at least one of the six work dimensions:
- **Workload:** excessive workload and demands, so that recovery cannot be achieved.
- **Control:** employees do not have sufficient control over the resources needed to complete or accomplish their jobs.
- **Reward:** lack of adequate reward for the job done.
- **Community:** employees do not perceive a sense of positive connections with their colleagues and managers, leading to frustration and reducing the likelihood of social support.
- **Fairness:** a person perceiving unfairness at the workplace, including inequity of workload and pay.
- **Values:** employees feeling constrained by their job to act against their own values and their aspiration or when they experience conflicts between the organization's values.

SIGNS OF BURNOUT

- The term burnout was introduced by Freudenberg in 1974 when he observed a loss of motivation and reduced commitment among volunteers at a mental health clinic.
- Burnout is a response to excessive stress at work, which is characterized by feelings of being emotionally drained and lacking emotional resources
- Burnout presents as:
 - Physical and emotional exhaustion
 - Cynical attitude toward work
 - Sense of panic about going to work
 - Lack of empathy for patients
 - Withdrawal from personal and professional relationships
 - Decreased work ethic
 - Slower response to workplace requests
 - Increased irritability around patients and co-workers

IMPACT OF BURNOUT

- Increased risk of depression and other mental health issues
- Reduced quality of patient care
- Increased turnover rates
- Reduced job satisfaction among nurses
- Increased rate of taking off days and sick leave
- Increased cost of healthcare, with approximately \$11,000 to \$90,000 for every nurse, with up to \$8.5 million in associated costs such as patient deferment, unfilled vacancies, and orientations or training

5

PROJECT PURPOSE & OBJECTIVES

- The purpose of this DNP quality improvement (QI) project is to implement an evidence-based wellness program known as Mindfulness in Motion (MiM) for nurses to reduce burnout among nurse practitioners at the Alliance for Wellness Medical Group Menard Health Facility.
- **Project Question**
- **PICOT:** Among nurse practitioners at Alliance for Wellness Medical Group (P), does implementing an educational program (I), compared to no intervention (C), lead to a decrease in reported nursing burnout and adverse patient outcomes related to nursing burnout (O) within a five-week timeframe (T)?

6

PROJECT OBJECTIVES

- Objectives
- The following objectives will be met within the five-week timeframe of this QI project:
 - Educate the nurse practitioners on burnout and ways to address it, including the Mindfulness in Motion (MiM) program.
 - Implement the Mindfulness in Motion (MiM) program for nurse practitioners at the Alliance for Wellness Medical Group Menard Health Facility.
 - Evaluate the participant's burnout levels through pre- and post-intervention using a self-reported questionnaire, the Copenhagen Burnout Inventory (English version) (I), to achieve a 15% reduction in self-reported burnout levels.

MINDFULNESS & MEDITATION

- They improve provider's well-being and enhance job performance (Shiri et al., 2023).
- More effective when implemented at work through a combination of training, participatory ergonomics, and behavioral training
- Providers recorded a reduction in:
 - emotional exhaustion and depersonalization, with an increase in personal accomplishment

MINDFULNESS IN MOTION

- The intervention to satisfy the project's objectives is Mindfulness in Motion
- It is a mindfulness-based program for nurses that is a vital resource in addressing work-related burnout
- MIM is a structured 8-week yoga program accompanied by 20 minutes of meditative awareness.
- MIM is an evidence-based, workplace mindfulness-based intervention that reduces perceived stress and burnout while enhancing work engagement and resilience.
- This program will be administered at the workplace and involves an individual meditation practice
- Nurses who took part in the 8-week program, there was an increased level of self-care than those who did not.

Appendix F

Project's Timeline

Introduction	
Project Site	Alliance for Wellness Medical Group Mental Health Facility
Project Mentor	Dr. Rose Onyekwe
Project Purpose	The purpose of this DNP quality improvement (QI) project is to implement an evidence-based wellness program known as Mindfulness in Motion (MiM) for nurses to reduce burnout among nurse practitioners at the Alliance for Wellness Medical Group Mental Health Facility.
Project Question	Among nurse practitioners at Alliance for Wellness Medical Group (P), does implementing an educational program (I), compared to no intervention (C), lead to a decrease in reported nursing burnout and adverse patient outcomes related to nursing burnout (O) within a five-week timeframe (T)?
Project Timeline	
The purpose of this timeline is to keep you and the project team on track during the implementation phase which will occur in DNP Project III. Intervention or project timeline should be clearly described. The time to carry out the implementation, collect data, and evaluate the project should be clearly delineated. Please plan out the activities you will be performing each week during the implementation phase. Please set actual concrete dates for any training, interventions, data collection, and/or data analysis.	
Week 1 Dates February 28–March 5	<ul style="list-style-type: none"> • Invite all interested NPs to join the upcoming wellness program • Meet with the participants to provide an overview of the mindfulness program. • Administer Copenhagen burnout inventory • Present the MIM PowerPoint • The project lead will also send the MIM PowerPoint to all participants via email. • Begin week 1 protocol and activities
Week 2	<ul style="list-style-type: none"> • Facilitate week 2 & 3 intervention activities

Mar 6–12	<ul style="list-style-type: none"> • Begin data analysis
Week 3 Mar 13–19	<ul style="list-style-type: none"> • Facilitate week 4 & 5 intervention activities
Week 4 Mar 20–26	<ul style="list-style-type: none"> • Facilitate week 6 & 7 intervention activities • Continue data analysis
Week 5 March 27–April 2	<ul style="list-style-type: none"> • Facilitate week 8 intervention activities • Administer satisfaction questionnaire • Administer CBI post-intervention • Analyze results and begin data presentation
Weekly Summary	
Clearly and succinctly summarizes project status and discussion includes any updates to the project timeline.	
Week 1	<p>The DNP quality improvement project at the Alliance for Wellness Medical Group aims to implement the Mindfulness in Motion (MIM) program to reduce burnout among nurse practitioners (NPs).</p> <p>In the first week of the implementation phase, several key activities are planned, including inviting interested NPs to join the wellness program, conducting meetings to provide an overview of the mindfulness program, administering the Copenhagen burnout inventory, presenting the MIM PowerPoint, and initiating the Week 1 protocol and activities. The project lead also sent the MIM PowerPoint to all participants via email.</p> <p>The current project status is in the early stages of implementation, focusing on the engagement and education of NPs regarding the mindfulness program. The activities in the first week lay the foundation for assessing burnout levels and introducing the MIM</p>

	<p>program. The timeline from weeks 1 - 5 illustrates a structured approach to rolling out the MIM program intervention.</p> <p>During this first week, there were no updates to the project timeline. The project plan proceeded as initially planned.</p>
Week 2	<p>In the previous week, the project lead oriented participants about the project. During the second week of implementation, any concerns from the participants and the facility administration regarding the MIM program were discussed and addressed. The scheduled activities were performed, including facilitating the intervention through structured delivery of the MIM program to nurse practitioners and commencing data analysis. This week marked the first of three weeks to conduct two 30-minute sessions to ensure all the MIM 8-week activities are completed. The project timeline is progressing as planned, focusing on executing intervention activities and collecting data that will be analyzed later.</p>
Week 3	<p>Like in the second week of implementation, during the third week, any concerns from the participants and the facility administration regarding the MIM program were discussed and addressed. The project lead ensured all participants had the "How to Reduce Work-related Burnout" slide presentation (Appendix B). The project lead continued with the training on Mindfulness in Motion (MIM) program and analyzed the data from the Copenhagen Burnout Inventory (CBI) administered earlier to determine patterns in burnout levels before the program. Patterns in burnout levels after the program will be analyzed in the last week post-intervention. This week's 1-hour wellness program session was delivered during the staff's break time.</p>
Week 4	<p>The activities started in Week 3 and stretched into the fourth week of implementation. The project lead continued with the distribution of the "How to Reduce Work-related Burnout" slide presentation for</p>

	<p>participants who may have missed it. The training sessions on the Mindfulness in Motion (MIM) program continued during the staff's break time, and concerns that arose were discussed and addressed appropriately. More data collected from the Copenhagen Burnout Inventory (CBI) were analyzed to determine patterns in burnout levels before the program. Patterns in burnout levels after the program will be analyzed in Week 5 post-intervention. The training sessions end this week, and a substantial amount of data will have been collected.</p>
Week 5	<p>This was the final week of implementation. This week, the project lead completed the Mindfulness in Motion (MIM) program by administering the post-intervention Copenhagen Burnout Inventory (CBI) to evaluate any changes in the participant's work-related burnout and well-being. The pre-intervention was also evaluated alongside the post-intervention to gauge the program's effectiveness. Moreover, a satisfaction survey was administered to gather feedback on the program experience. The DNP project was implemented as per the original plan with no modifications. Appendix F contains a detailed description of the project's implementation timeline.</p>

Appendix G

Satisfaction Questionnaire

The survey will be used to improve the Mindfulness in Motion program for nurses. All answers will be confidential and will not influence your status as an employee in the organization. Please answer each item as accurately as possible by encircling the number in the Likert 5-point scale that most closely describes your level of agreement with the statement.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Based on my experience with the Mindfulness in Motion program, I would likely recommend the program to my colleagues at work.	1	2	3	4	5
Based on the impact of the Mindfulness in Motion Program on my well-being, I would recommend that the program be included in the organization's orientation program.	1	2	3	4	5
Based on the impact of the Mindfulness in Motion Program on my well-being, I can say that the program will contribute to making the work environment in the organization safer and healthier.	1	2	3	4	5