

Evaluating the Feasibility and Impact of a Well-being Retreat for Physicians and Advanced Practice Providers

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ABSTRACT

Introduction: Work stress experienced by physicians and advanced practice providers (APPs) can have a detrimental psychological and physical impact. Targeted interventions that focus on self-awareness, peer connection, and intentional self-care may reduce stress and improve well-being and professional fulfillment.

Methods: This is a summative program evaluation of a two-day well-being retreat for physicians and APPs employed at a healthcare system headquartered in Florida. Led by mental health professionals in May 2022, this retreat combined facilitator-led workshops and experiential practice activities with opportunities for peer connection and designated time with family members. The retreat objectives were to facilitate social support, improve knowledge in areas of self-care, and build reflection skills that lead to intentional changes in well-being. Data collection occurred immediately before and after the intervention in May 2022. Wilcoxon Signed Ranks Tests were conducted to examine pre-post differences in the outcomes of self-reflection and insight, mindful self-care, anxiety, perceived stress, and professional fulfillment. Post-program feedback was collected, synthesized, and described.

Results: Twenty-one clinicians attended the retreat, and a self-selected sample of twelve attendees participated in the evaluation portion of the project. Perceived stress significantly decreased (19.00 vs. 15.92; $p = 0.01$), and professional fulfillment significantly improved (15.50 vs. 17.50; $p = 0.04$) following the retreat. Participants reported the following benefits of the retreat: a reminder to focus on self-care, motivation for healthy behavior change, and an opportunity to self-reflect.

Conclusion: Findings suggest that the retreat intervention met its objectives, and there is preliminary evidence that it may be a feasible approach to improve well-being and reduce stress in physicians and APPs. While significant changes in the practice environment are necessary to address the causes and consequences of work stress, individual-level programs remain important and relevant to the protection of well-being. This project builds upon the literature about interventions with diverse modalities.

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INTRODUCTION

As professional caregivers, physicians and advanced practice providers (APPs) can experience tremendous rewards from helping patients and families. However, chronic stress and burnout can lead to cynicism, apathy, and disillusionment, which interfere with connection to meaning and can cause distress for highly committed professionals. Without adequate rest and recovery, work stress can have harmful effects on psychological and physical health [1-6]. Job stressors such as heavy workloads, poor patient outcomes, and administrative burdens have altered the delivery of healthcare and diminished work satisfaction, fulfillment, and the well-being of clinicians [7]. High levels of work-related stress can also increase the risk for depression, anxiety, post-traumatic stress disorder and suicidality [8, 9], which may negatively affect patients and organizations through increased medical errors, lower quality

of care, decreased patient satisfaction, and increased safety incidents [3, 10, 11, 12]. Targeted interventions to address clinician stress and prevent burnout are imperative for the health of the individual and may improve quality of care and patient safety [13].

Causes of clinician burnout are multi-faceted. Efforts to enhance clinician well-being should utilize conceptual models that consider multiple factors [14]. The consensus is that clinician well-being is a shared responsibility between individual practitioners and the healthcare organizations that control the conditions and environment in which they work [14, 15]. Furthermore, workplace well-being literature shows that interventions can be effective at the individual, group, leader, and organizational levels [16]. Individual-level interventions can focus on resilience-promoting factors, which provide clinicians with the skills to access personal adaptive coping resources to

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manage stress effectively [17]. Programs that build skills (e.g., mindfulness training) and small group programs that promote community and connectedness have been effective in reducing personal distress [12, 18, 19, 20]. Well-being is not solely the absence of burnout; it is the presence of protective factors, such as self-care behaviors, peer support, and professional fulfillment. Individual-level efforts can be effective when focused on enhancing these factors [21, 22, 23, 24].

A “one-size-fits-all” approach for employee well-being is not effective across healthcare organizations [2]. Creative programming with a variety of different modalities can address barriers to seeking formal, standard treatment for mental well-being [25]. A retreat format might appeal to healthcare clinicians more than a series of sessions due to the lower time commitment, reduced stigma, combined agenda of professional learning and personal time with family members, and opportunity to connect with other clinicians outside of their clinical relationship [24]. There is a dearth of robust research on retreat interventions, though evidence supports their impact on well-being outcomes [26, 27, 28]. This project evaluated the feasibility of a two-day well-being retreat for physicians, medical residents, and APPs, to determine impact on participants’ self-reflection, insight, mindful self-care, anxiety, perceived stress, and professional fulfillment.

METHODS

Study Design

This summative program evaluation employed a pre-post, within-subjects design to evaluate the impact of the retreat for feasibility and objective outcomes related to stress [29].

Setting and Participants

A faith-based, multi-state healthcare organization headquartered in Florida offered a two-day well-being initiative, titled the Intentional Practitioner Retreat, to physicians, medical residents, and APPs. Licensed mental health professionals with job roles dedicated to the well-being of clinicians developed and delivered the retreat in May 2022. Hospital clinicians, as well as their family members, were invited to attend the retreat located in Fort Lauderdale, Florida. While participants were responsible for the cost of their travel and hotel stay, funds from the Physician Well-Being Foundation, a donation program funded by supporters of physician well-being, covered the cost of meals, activities, and resources (approximately \$13,000).

From February through April 2022, retreat facilitators marketed the program in Florida hospitals through email announcements, hospital lounge boards, and the hospital’s newsletter to providers. Key stakeholders supported and promoted the program, including senior physician and hospital administrative leaders. There were twenty-five spots open to interested physicians, residents, and APPs. A self-selected sample of retreat attendees voluntarily participated in the evaluation portion of the project. The organization’s Institutional Review Board determined this project not to be human subject research.

Intervention

Objectives

Retreat objectives were to facilitate meaningful peer connection, improve knowledge in areas of well-being and self-care, and build reflection skills that lead to intentional changes in personal and professional well-being. The retreat content focused on what it means to be intentional and taught strategies to increase intentionality at work and home (i.e., work-life balance). Intentionality means that one makes deliberate choices that lead to desired results, beginning with self-awareness. Epstein and Krasner described the importance of building self-awareness through self-reflection practices so as not to ignore signs of distress and intentionally respond to stress in a healthy way [30]. The workshops and activities aimed to highlight the pre-existing resilience and strength of participants while normalizing the need for self-care and support for even the most resilient individuals. This message was important because clinicians are trained to care for others, though they tend to not seek support themselves [3, 31, 32]. An important aim of the retreat was to create an environment that normalizes and destigmatizes emotional and psychological distress and promotes positive mental health.

Format and Delivery

The retreat combined facilitator-led workshops and experiential practice activities with opportunities for peer connection and designated time with family members. Family members were invited to join facilitators and participants for optional activities during free time, which included group dinners, expressive arts activities (e.g., mandalas), and mindful moments on the beach. **Table 1** (next page) provides a full outline of the retreat activities and objectives.

Participants received a learner guide with supplemental material, including the facilitators’ biographies, retreat agenda, retreat objectives, reflection opportunities, space for notetaking to track learning and growth, and relevant definitions.

Workshops

Structured psychoeducational workshops were facilitated by experienced licensed mental health professionals employed by the organization (i.e., two psychologists, three psychotherapists) who utilized teaching, discussion prompts, and self-reflection prompts. The workshops were designed to 1) increase participants’ knowledge of salient topics through didactic lectures about burnout and stress, self-awareness, and holistic well-being models and 2) guide the development and application of skills related to self-reflection, behavioral change through action plans, and intentional self-care using a holistic well-being model. Workshop content illuminated the importance of personal practices and attitudes in building resilience, while affirming the role that environmental factors play in impacting clinician well-being [14]. Continuing medical education units were offered for the completion of these workshops, which occurred on both days of the retreat.

Workshop sessions were grounded in theoretical frameworks of cognitive behavioral therapy (CBT) and intentional change theory. CBT is an evidence-based therapeutic approach that helps individuals understand how thoughts and perceptions

Table 1: Retreat Agenda and Intervention Outline

Day 1

Time Allotted	Topic	Activity	Objectives
120 min	Welcome & Introduction	Welcome dinner with participants and families; Group photo	<ul style="list-style-type: none"> Establish group rapport

Day 2

Time Allotted	Topic	Activity	Objectives
30 min	Mindfulness	<i>Mindful Movement</i> : Guided stretching on the beach	<ul style="list-style-type: none"> Practice mindfulness skills Apply stress reduction technique
30 min	Group Breakfast		
45 min	Official Welcome, Group Guidelines, and Objectives	<p><i>Presentation</i>: How did we get here? Culture of Medicine, Burnout, and Well-being</p> <p><i>Activity</i>: Icebreakers</p>	<ul style="list-style-type: none"> Review retreat objectives and background Build rapport, cohesion, and trust
30 min	Holistic Well-Being Practices Part I	<i>Presentation</i> : Dimensions of Health and Well-being	<ul style="list-style-type: none"> Define holistic wellness principles Identify mindfulness-based strategies to integrate into self-care regimen
45 min	Intentional Well-Being Part I	<p><i>Presentation</i>: Intentional Well-being through Connection to Values</p> <p><i>Activities</i>:</p> <ul style="list-style-type: none"> Write values list Reflect on aligning values with behavior Review wellness wheel Complete self-care chart 	<ul style="list-style-type: none"> Define intentional well-being Define personal and professional values Identify values and role in well-being Apply self-reflection practice to build insight
35 min	Comradery Conversations Part I	<i>Break-out Groups</i> : Discuss meaning in medicine using question set	<ul style="list-style-type: none"> Facilitate collegiality and connection Practice self-disclosure
	Optional Family Activities	<p><i>Activities</i>:</p> <ul style="list-style-type: none"> “Wash Away Your Worry”: Interactive mindfulness meditation on the beach Family photos Group dinner 	<ul style="list-style-type: none"> Apply stress management skills Build connection

Day 3

Time Allotted	Topic	Activity	Objective
30 min	Mindfulness	<i>Mindful Movement</i> : Guided mindful walk on the beach	<ul style="list-style-type: none"> Practice mindfulness skills Apply stress reduction technique
30 min	Group Breakfast		
30 min	Resilience and Social Support	<i>Presentation</i> : Supporting the Strong	<ul style="list-style-type: none"> Describe model for giving and receiving social support List resilience-building strategies
30 min	Holistic Well-Being Practices Part II	<i>Presentation</i> : Dimensions of Health and Well-being	<ul style="list-style-type: none"> Define holistic wellness principles List coping strategies for managing stress, improving well-being, and reducing burnout
45 min	Intentional Well-Being Part II	<p><i>Presentation</i>: Intentional Change Theory and Cognitive-behavioral Theory</p> <p><i>Activity</i>: Writing reflections on the “5 discoveries”</p> <p><i>Group discussion</i></p>	<ul style="list-style-type: none"> Define intentional change theory Name cognitive-behavioral techniques Apply self-reflection practice to build insight Develop action plan for intentional change
30 min	Comradery Conversations Part II	<i>Break-out Groups</i> : Discuss professional well-being using question set	<ul style="list-style-type: none"> Facilitate collegiality and connection Practice self-disclosure
20 min	Closing	Distribute feedback forms	<ul style="list-style-type: none"> Closing and evaluation
	Optional Family Activities	<p><i>Activities</i>:</p> <ul style="list-style-type: none"> Mandalas on the beach Group photos 	<ul style="list-style-type: none"> Build connection Apply stress management skills

influence emotion and behavior through a present-oriented, solution-focused perspective [33, 34]. CBT-based interventions have been effective in reducing distress in healthcare workers [19]. CBT strategies used during the workshops included increasing self-awareness, exploring values, identifying unhelpful thinking patterns, observing behavior, and developing action steps toward positive change.

Intentional change theory guided learning and skill development during the workshops. Intentional change theory is a framework for how individuals and organizations achieve desired, sustainable change through five phases called “discoveries”: 1) my ideal self, 2) my true self, 3) creating the agenda and plan (i.e., identifying the gap between the ideal self and true self), 4) putting it into practice (i.e., experimentation with new thoughts and new behaviors), and 5) identifying and developing support [35]. Intentional change theory has been utilized as a framework for the promotion of healthy lifestyle behaviors [36]. Participants learned strategies to apply change processes for engagement in healthy self-care behaviors and connection to professional fulfillment. They also used reflection techniques to identify their current and desired states of well-being and methods for addressing the gap. Participants created a structured, personalized plan for change in areas they wanted to improve. They learned concrete strategies to employ for healthy living in different well-being domains, including mental (i.e., choice, outlook), physical (e.g., rest, nutrition), spiritual (e.g., trust), and social (e.g., interpersonal relationships).

Experiential Practice Activities

Experiential learning theory proposes that learning is driven by the dynamic process of action/reflection and experience/abstraction [37, 38]. Experiential activities allow adult learners to practice what they are learning and engage with the environment for deeper understanding, constructing knowledge and meaning from real-life experience [37]. Retreat facilitators used this type of activity during the retreat to build interpersonal connections, increase self-awareness, and facilitate in-the-moment learning of skills.

Traditionally practiced in Buddhism and other spiritual traditions, mindfulness has been incorporated into psychological and mental health approaches over the last two decades [39, 40]. Mindfulness involves paying attention, on purpose and without judgment, to each present moment. This present awareness allows one to pursue choices and behaviors that promote well-being and align with values (i.e., intentionality). Mindfulness-based interventions, including mindful movement, meditation, or reflective groups, have been effective at reducing distress and improving well-being among healthcare clinicians [23, 41, 42, 43, 44]. Mindfulness training contributes to positive psychological outcomes, including subjective well-being, reduced psychopathology, emotion regulation, behavioral regulation, job satisfaction, and self-esteem [40, 42, 45]. Retreat participants learned the principles of mindfulness and engaged in guided mindful movement (e.g. stretching, walking) on both days of the retreat.

Participants also engaged in comradery conversations, which aim to increase a sense of connection, support, and collegiality among clinicians. Comradery conversations took place on both

days of the retreat. Participants utilized question sets to guide interpersonal sharing and self-disclosure in a structured environment (e.g., “How do you stay connected to why you became a doctor or APP?”; “What gives you the most meaning in work right now?”). This experiential activity can encourage a sense of social belonging, reconnection to meaning in work (i.e., professional fulfillment), and interpersonal learning, all identified as facilitators of well-being [21, 46].

Data Collection

Questionnaires were administered to retreat attendees through email links at three timepoints: pre-intervention, post-intervention, and one-month follow-up. Completion of these questionnaires was voluntary. An electronic data capture system called Formstack was utilized to deliver survey packages and collect data. To protect privacy, participants created an identification number using city of birth and birth year and did not provide any identifiable information (e.g., names, email addresses). All responses were anonymous, and only the study team had access to the data. The demographic variables of gender, race, ethnicity, job position, and years of experience were collected at each timepoint.

Five validated instruments were used to measure outcomes based on the program goals and objectives. The Self-Reflection and Insight Scale (SRIS) – Short Form (self-reflection subscale Cronbach’s $\alpha = 0.86$; insight subscale Cronbach’s $\alpha = 0.91$) examines one’s level of insight and their need for and engagement in self-reflection, which attendees practiced during experiential and writing activities [47]. The SRIS is a widely used measure and consistently predicts outcomes related to well-being and mental health [47]. The Mindful Self-Care Scale (MSCS) - Brief (physical care subscale Cronbach’s $\alpha = 0.64$; supportive relationships subscale Cronbach’s $\alpha = 0.81$; mindful awareness subscale Cronbach’s $\alpha = 0.92$; self-compassion and purpose subscale Cronbach’s $\alpha = 0.72$; mindful relaxation subscale Cronbach’s $\alpha = 0.73$; supportive structure subscale Cronbach’s $\alpha = 0.75$) measures one’s knowledge and engagement in self-care behaviors in six domains [48]. Mindful self-care is the integration of the practice of mindful awareness and purposeful self-care, and the MSCS is used in interventions designed to improve self-care behavior [49]. Given the high prevalence of anxiety among clinicians during and after the COVID-19 pandemic, the Generalized Anxiety Disorder 7-item scale (GAD-7) (Cronbach’s $\alpha = 0.95$) was used to assess for anxiety among participants [50]. The Perceived Stress Scale (Cronbach’s $\alpha = 0.85$) was selected to examine how the retreat’s focus on adaptive cognitive reframing and deliberate relaxation training may have influenced participants’ perceived levels of stress [51]. The Stanford Professional Fulfillment Index (professional fulfillment subscale Cronbach’s $\alpha = 0.77$) measured fulfillment as it aligns with meaning in medicine and peer connections, both of which were salient concepts cultivated during the retreat [52].

Attendees also had the opportunity to complete feedback forms about the impact of the retreat. The form contained open-ended prompts about what was most impactful, which elements of the retreat to keep or change, whether they would attend again in the future, and five-point Likert scales measuring the satisfaction with each component of the retreat.

Data Analysis

Quantitative data were analyzed through descriptive statistics and Wilcoxon Signed Ranks Tests to examine the differences between the pre- and post-surveys. IBM SPSS Statistics for Windows, Version 23, was used for the data analysis. Longitudinal analysis was planned; however, due to low response rate ($n = 3$) at the one-month follow-up timepoint, this data was not included in the analysis.

RESULTS

Approximately 100 clinicians completed interest forms, 26 registered, and 21 attended the retreat. Five clinicians did not attend due to last-minute scheduling conflicts. **Table 2** shows the demographic characteristics of the 12 participants (57.1%) who completed both the pre- and post-surveys, which were optional. The remaining nine retreat participants completed the retreat but did not choose to complete both the pre- and post-surveys; therefore, they were not considered participants in the program evaluation project.

Table 2: Demographic Characteristics of Participants

Variable	Frequency	Percent
Gender		
Male	3	25.0
Female	9	75.0
Race		
White	5	41.7
Asian	6	50.0
Other	1	8.3
Ethnicity		
Non-Hispanic or Latino/Latina/Latinx	11	91.7
Hispanic or Latino/Latina/Latinx	1	8.3
Job Role		
Advanced Practice Provider	3	25.0
Physician	9	75.0
Years of experience in the field		
0-2 years	1	8.3
3-5 years	2	16.7
6-10 years	0	0
Over 10 years	9	75.0

Table 3: Comparison Between Pre- and Post-Surveys

Variable	Pre- ^a	Post- ^a	Z	P
Anxiety	7.83(6.65)	6.33(5.58)	-1.409 ^b	0.159
Self-reflection	30.00(6.84)	33.25(5.46)	-1.527 ^c	0.127
Insight	31.67(7.55)	33.00(6.42)	-0.490 ^c	0.624
Perceived stress	19.00(5.67)	15.92(5.74)	-2.682^b	0.007
Professional fulfillment	15.50(3.31)	17.50(3.56)	-2.047^c	0.041
Mindful relaxation	10.92 (3.80)	11.25(3.57)	-0.776 ^c	0.438
Physical care	12.75(4.14)	11.92(3.26)	-0.627 ^b	0.531
Self-compassion and purpose	16.25(3.86)	15.00(2.49)	-1.347 ^b	0.178
Supportive relationship	16.25(3.86)	15.00(2.49)	-1.347 ^b	0.178
Supportive structure	14.92(3.06)	14.42(2.71)	-0.582 ^b	0.560
Mindful awareness	9.83(2.04)	10.50(2.39)	-0.724 ^c	0.469

- a. M(SD)
- b. Based on positive ranks
- c. Based on negative rank

Pre-Post Comparison

Table 3 shows the results of the Wilcoxon Signed Ranks Tests conducted to examine the differences between the pre- and post-surveys. Perceived stress significantly decreased (19.00 vs. 15.92; $p = 0.01$), and professional fulfillment significantly improved (15.50 vs. 17.50; $p = 0.04$). No statistically significant changes occurred in mindful self-care, self-reflection and insight, or anxiety.

Participant Feedback

Twenty-one participants, including thirteen physicians, seven APPs, and one resident physician, completed the anonymous feedback form. Responses were compiled and reviewed for evaluation and improvement. Representative responses and themes from open-ended items are shown in **Table 4** (next page).

Responses from these feedback forms identified the greatest impacts of the retreat on well-being as 1) the reminder to focus on self-care, 2) the opportunity to self-reflect, and 3) motivation for healthy behavior change. Participants unanimously agreed that program objectives were met.

DISCUSSION

Given the harmful effects of stress and burnout, healthcare organizations must invest in evidence-informed programs at the individual and system levels [21]. This project builds upon the literature about interventions with diverse modalities to improve the well-being of physicians, medical residents, and APPs. The findings from this evaluation project support the feasibility and acceptability of the two-day retreat and provide preliminary support for its potential to improve professional fulfillment and reduce perceived stress. The retreat objectives of meaningful peer connection, improved knowledge of well-being and self-care, and self-reflection skills were met as evidenced by participant feedback.

Participants reported benefits of the retreat to be more self-awareness, motivation for positive behavior change, and focus on self-care, which also align with research on physician well-being by Hlubocky and colleagues [24]. They outlined three core themes that illustrate the strategies and attitudes leading to active coping and resilience: 1) job-related fulfillment, 2) behavioral practice (e.g., leisure activities, limited work hours, and professional development activities), and 3) change in attitudes (e.g., acceptance and self-awareness) [24]. Furthermore, workplace well-being literature identifies job satisfaction and positive relational support as factors associated with well-being [16, 53].

Table 4: Summary of Open-ended Responses from Feedback Form

Feedback Form Prompt	Response Theme	Representative Quotes
What was the impact of this program on your well-being?	1. Focus on self-care	<p>"I was able to enjoy a peaceful environment and connect with a well-rounded approach to my self-care"</p> <p>"It was a reminder to take care of my mental health, balance of work and life"</p> <p>"Remember to take time for me"</p> <p>"Take more mindful breaks to recenter myself"</p>
	2. Improved self-awareness/self-reflection	<p>"Opportunity for reflection"</p> <p>"More awareness, care for self"</p> <p>"Helping to realize what I need to do"</p>
	3. Well-being knowledge and motivation	<p>"Provided me the tools to intentionally care for myself and make positive changes in my life"</p> <p>"The program encouraged me to think about my well-being and work/life balance and gave me good strategies for them"</p> <p>"Motivation to change, to exercise, to take care of myself"</p>
What did you like about this program?	1. Mindfulness practice	<p>"Morning mindfulness activities! Helped me a lot to get refresh"</p> <p>"Body Scan, breathing - will help relieve stress at work"</p> <p>"Morning walks, stretches, meditation"</p>
	2. Interpersonal connection	<p>"Camaraderie of the group"</p> <p>"Everything! community, getting to know peers/staff"</p> <p>"Meeting fellow-minded team members"</p> <p>"Speaking to colleagues"</p>
	3. Improved knowledge	<p>"The deep dive approach to intentional living"</p> <p>"All the presentations were eye-openers"</p> <p>"The content and presenters were fabulous"</p>

Feasibility and Acceptability

As proposed in a framework by Gadke and colleagues [54], the feasibility of the retreat intervention was evaluated based on a review of the existing literature and the selected outcomes and assessment strategies. The present findings support its feasibility in terms of recruitment capability, implementation (i.e., content, format, delivery), and social validity (i.e., acceptability). An opportunity for improvement is data collection [54]. While the selected instruments are valid and reliable, two of these instruments (i.e., SRIS and MSCS) likely capture changes over time and require longitudinal measurement and analysis. Therefore, efforts to retain participants for follow-up data collection are crucial.

The acceptability of the retreat intervention in this population of physicians and APPs is reflected in the participants' engagement and feedback. All participants agreed that they enjoyed the retreat, would participate again in the future, and would recommend the retreat to a colleague. Responses on the feedback forms showed that participants unanimously agreed that the retreat components were helpful, learning objectives were met, and program content will be useful in professional activities. Participants also indicated that the material was relevant and well-presented, and it will have a positive impact on their well-being, self-care behaviors, and work-life balance. In

response to an open-ended item about what they liked about the program, participants' answers can be categorized as 1) mindfulness practice, 2) interpersonal connection, and 3) improved knowledge of well-being (see Table 3). Suggestions for future retreats included allotting more time to cover the content and allowing more clinicians to attend.

Outcome Measures

Another aim of the evaluation was to examine the potential impact of the retreat program on well-being outcomes. In the quantitative analysis, scores show a significant improvement in professional fulfillment and a significant reduction in perceived stress among participants after the retreat compared to baseline. The findings align with current literature that shows experiential activities, such as mindfulness practice and camaraderie conversations, can contribute to stress reduction and professional fulfillment [24, 41, 55]. Professional fulfillment and stress management are essential for clinician well-being and can potentially buffer the effects of occupational stressors [3, 21].

Professional fulfillment is operationally defined as the reward one derives from their work, including happiness, meaningfulness, contribution, self-worth, satisfaction, and sense of control [52]. It has been associated with professional engagement, which is the positive opposite of burnout [56, 57]. Professional

fulfillment among physicians and nurse practitioners has been linked to beneficial social, intrapersonal, and financial outcomes, such as patient satisfaction, patient adherence, retention, and intrinsic positive reward [1, 52, 58]. During the retreat, participants engaged in meaningful discussions with peers about the practice of medicine and reflection activities that explored personal and professional values, which likely cultivated a connection to professional fulfillment. Participants' responses from the feedback forms identified the opportunity to connect with like-minded colleagues as one thing they most liked about the retreat (see Table 3). Furthermore, interventions targeting stress reduction in clinicians are variable in length but often involve similar components including psychoeducation, interpersonal connection, mindfulness training, and cognitive-behavioral skills, which are aspects of this retreat [59]. Furthering the rationale for the retreat format, evidence shows that time with loved ones, time away from work, and opportunity for reflection can significantly reduce stress in physicians and APPs [3, 12, 60].

No significant differences were found among participants when pre-post scores in mindful self-care were compared. It is likely that even if knowledge and awareness of self-care practice improved, detectable behavior changes that were measured on the survey instruments had not yet occurred after the two-day retreat. Although behavior changes may have occurred at the one-month follow-up timepoint, no longitudinal analysis was conducted, so it is not possible to determine the sustainability of effects. Few quality studies have assessed long-term or post-intervention effects, and this continues to be a gap in the literature [3, 55].

Contrary to the quantitative scores, participants identified the focus on self-care as a benefit of the retreat (see Table 3). For example, one participant noted that they were "...able to enjoy a peaceful environment and connect with a well-rounded approach to my self-care." Self-care is essential in the promotion of positive mental health [61]. Interventions that involve self-care planning have numerous benefits for clinicians [62], and physicians who engage in regular self-care have lower rates of burnout [26]. Mindful self-care protects by preventing the onset of mental health symptoms, burnout, and improving productivity [48, 63]. While participants anecdotally reported an increase in knowledge of and motivation for self-care, the application of knowledge toward behavior change will be captured using the MSCS only with longitudinal analysis.

Similarly, although there were no statistically significant improvements in self-reflection and insight scores, participants' responses on the feedback forms indicated perceived improvement in this area. They shared that the opportunity for self-reflection was one of the main elements of the retreat to positively impact well-being (see Table 3). Psychological theories posit that insight and self-awareness are crucial components of growth, healing, and well-being. Insight, which is a deep understanding of one's thoughts, feelings, and behaviors, is positively associated with well-being and satisfaction with life [64]. The capacity for and engagement in self-reflection are linked to numerous benefits including increased self-awareness, learning, resilience, and skill development [65, 66]. Improving self-awareness through reflection is foundational in physician well-being interventions aimed at reducing stress and burnout [12, 59].

There is evidence to suggest that self-care and self-awareness can be taught and enhanced [67]; therefore, these remain relevant aims for the retreat intervention, though different scales might more accurately capture these outcomes. For example, future studies might utilize the Self-Awareness Outcomes Questionnaire (SAOQ) [68], as it measures a range of self-awareness outcomes that can be developed through interventions like this retreat. This scale identifies the effects of self-awareness on one's life and the outcomes associated with the practice of mindfulness and self-awareness techniques, whereas the SRIS was developed as a measure of trait self-awareness [68]. It is possible that enhancing self-awareness results in increasing benefits beyond the initial impact of any intervention, which is not captured with the SRIS [68].

Notably, baseline anxiety scores were in the mild range for this sample of clinicians and remained so immediately after the retreat. Previous research shows the prevalence of moderate anxiety among clinicians ranging between 12 and 35 percent during and after the COVID-19 pandemic [6, 8].

Retreat Format

Previous studies on individual-level well-being interventions often involve multiple weeks, or many hours of touchpoints, making them time-intensive [19, 59]. This may be a barrier for busy physicians and APPs, and the retreat format could potentially integrate the methods and topics of longer evidence-based interventions [19, 42, 69]. Although there is limited evidence on the effect of brief interventions, such as retreats, one study of a brief mindfulness weekend training program for physicians found statistically significant improvements in stress, mindfulness, and burnout domains [20]. Results showed sustained changes at three-month follow-up, suggesting that retreat interventions might lead to sustained changes in the real-world setting. Retreats are a familiar modality among medical residents, and though there is a dearth of robust research in this area, preliminary evidence supports their impact on well-being outcomes [26, 27, 28]. The nature of this retreat format might contribute to greater internalization of knowledge and skills as it aligns with experiential learning theory compared to solely didactic training [37]. Although the retreat format might limit scalability given the required costs and ability to travel, its content and activities can be replicated in programs that do not require travel. This warrants further exploration and study.

Lessons Learned

The primary area of focus for program improvement is related to evaluation. Given the small sample size and lack of responses to surveys at the follow-up timepoint, future efforts will include strategies to improve recruitment for the retreat itself and the evaluation project and strategies to increase response rate to one-month data collection to allow for longitudinal analysis. For example, to gather more data at the one-month timepoint, survey links and reminders will be sent to participants via text message in addition to email, as feedback indicates physicians tend to prefer text versus email. As potential participants register for the retreat, they will verify interest in and consent to completing survey packages and provide best contact information, which will ideally improve

survey completion. Additionally, outcome measures for well-being indicators such as insight and self-care will be examined to determine if assessment of appropriate constructs is occurring with the aim of reducing survey burden. Scales that evaluate states or knowledge acquisition versus sustained behavior change may lead to more relevant outcome data for a brief retreat intervention. Open-ended items can be included to gauge the perceived influence of family involvement and retreat location on satisfaction and outcomes.

Given the level of interest forms completed, feedback from participants, and capacity of facilitators, developers will expand target enrollment number to 50, which will also likely increase sample size of study participants and account for attrition. A strategy to assess potential outcome effectiveness more accurately can include calculations of effect size measures and include use of a control group in future studies [54].

Implications

Healthcare organizations must support the development and study of creative programs to improve clinician well-being and make an investment in programs that are evidence-based and outcomes-driven [21]. While significant changes in the practice environment are necessary to address the causes and consequences of stress injuries, individual-level programs remain important and relevant to the protection of well-being.

Limitations

There are several limitations to this study. While there is some literature suggesting adequate sample size for feasibility pilots is 12-20 [70], complete pre-post data from only twelve participants limits ability to make conclusions about the retreat's impact and generalizability. Completion of questionnaires was voluntary and there were missing data points, especially at the one-month follow-up timepoint, and lack of longitudinal analysis is a limitation of this project. Furthermore, without a control group, it cannot be determined whether the improvements in scores were caused by the retreat itself or its component parts.

CONCLUSION

Healthcare organizations have a responsibility to develop, study, and promote a variety of well-being interventions to emphasize their commitment to healthy workplace culture and the health of each clinician. These interventions should continuously be evaluated and improved upon to ensure effectiveness and feasibility. This project evaluated a two-day retreat for physicians, medical residents, and APPs as a brief intervention to improve well-being. Findings support that the retreat may be a feasible approach in this population, and there is preliminary support for the potential of the intervention to improve professional fulfillment and reduce perceived stress. Benefits of the retreat, as reflected in participant feedback, include increases in self-awareness, motivation for positive behavior change, and knowledge of discrete tools for self-care, which align with program objectives laid out by the developers. Future research should include rigorous methodology and strategies to gather data at follow-up timepoint to allow for longitudinal analysis of effects. A randomized controlled trial could further examine

the retreat's effectiveness, and the study protocol could incorporate strategies to improve engagement and reduce attrition.

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