

Taiji Self-Care: Exploring a Pilot Self-Care Program for Extended-Care Psychiatric Nursing Staff

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Left unchecked, work-related stressors can impact staff, leading to physical and psychological distress, injury, absenteeism, burnout, and attrition. However, self-care programs, such as Taijiquan, may help to reduce staff stress and improve the quality of patient care.

A growing body of evidence has demonstrated the inherent stress of health care work and the effects of this stress on worker health, quality of life (QOL), and job performance.¹⁻⁴ Although stressors like overwork, interpersonal conflicts, and the emotional strain of caregiving may be experienced across the health care professions, certain stressors may be more common to specific areas of health care. For instance, nursing home staff and nursing professionals in dementia care routinely care for patients who need assistance with ambulating, toileting, bathing, and other tasks that place strenuous physical demands on staff. Moreover, patients in dementia care may also exhibit behavioral control problems that present additional psychological stressors. Left unchecked, these work-related stressors can interact with other life stressors to create a downward spiral, leading to physical and psychological distress, injury, absenteeism, burnout, and attrition.^{2,3}

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A stable nursing workforce is essential to quality patient care. In recent years, calls have gone out for intervention strategies that can improve individual resilience to the stressors that are detrimental to QOL for staff and quality of care for patients.⁴ Ongoing staff training and quality leadership are two of the most crucial factors in reducing staff stress and improving quality of care, but even with the highest standards in these areas, the need for self-care programs remains.⁵ Several institutions have succeeded in reducing staff stress and improving quality of patient care through the establishment of self-care programs, such as Taijiquan (Tai Chi), yoga, and meditation.^{1,5-7}

This article reports on the feasibility, staff engagement, and self-reported benefits of an exploratory self-care program in Taijiquan (Taiji) offered to an extended-care psychiatric nursing staff at a local Veterans Affairs Medical Center.

TAIJI PRACTICE BENEFITS

The word *Taiji* designates a plurality of mind-body practices that have been organized into systems of practice or “styles of Taiji” over the past several centuries. Although little work has been done to assess how differences between styles or cur-

ricula may affect differences in outcomes, some evidence suggests that the Taiji curricula with the most benefits would include a range of traditional training modalities: meditation, iterative training, choreography, and partner training.⁸⁻¹⁰

Although Taiji is typically touted as a moving meditation, traditional Taiji training includes 3 broad categories of static meditation: seated meditation, standing meditation (similar to yoga), and recumbent or lying down meditation. Traditional Taiji also involves a form of iterative training called silk-reeling (Ch. *chansi*), where a single movement is mindfully repeated with focus and attention to relaxed, efficient movement and structural stability. As skill progresses, individual movements are strung together into sequences of choreography or forms. Taiji form training (Ch. *quan*) is perhaps the modality for which Taiji is best known. Form entails the rehearsal and performance of sequences of movements that vary in length and complexity from style to style and is typically executed in a slow, relaxed manner, especially in the more basic forms. Partner training is another essential modality in traditional curricula.¹¹ Partnered exercise allows practitioners to test their structure



and body alignment while developing reflex responses to external disturbances.

Studies of Taiji practitioners, some of which have been conducted in health care settings, have confirmed the potential of this training method to alleviate stress, improve immune system function, and maintain or improve fitness levels comparable to what is expected in a moderate intensity aerobic activity.^{7,12,13} Regular practitioners of Taiji also demonstrate better than expected levels of motor control and proprioception as well as heightened tactile acuity.^{14,15}

A Taiji curriculum involving the components previously discussed (Table 1) holds the most promise for supporting or improving staff mobility and QOL, because it would engage staff in a fuller range of mind-body modalities, including seated and recumbent meditation, yogalike standing postures, as well as more dynamic meditative movements. This program also has the potential to improve

socialization, job performance, and reduce the risk of injuries. While empirically testing such hypotheses was beyond the scope and means of this pilot study, it is important to justify the protocol with a literature review to better understand the mechanisms and pathways through which these benefits may occur.

TAIJI AS EXERCISE

Correct execution of Taiji movement involves lower extremity and core muscle strength and can be considered a moderate intensity cardiovascular exercise.^{11,16} Aside from the physical benefits of Taiji, several psychological benefits have also been reported that resonate strongly with the general psychological benefits of regular exercise.^{17,18} Thus, some of Taiji's mental health benefits may also be attributable to "exercise effects," however, the following sections detail other mechanisms through which Taiji may influence QOL and mental health.

TAIJI AND ENERGY CONTROL

Energy control is a term commonly used in coaching and sports psychology to discuss a variety of mental skills for maintaining optimal levels of arousal and positive emotions.¹⁹ The benefits of energy control for improving performance and preventing breakdown are well documented in the literature of that field.²⁰ Taiji's energy work components provide practitioners an opportunity to learn about mindfulness, relaxation, and flow through their practice. Practitioners are encouraged to find ways to apply these lessons to everyday living, and research has shown that individuals who engage in Taiji experience transfer of learning and spillover of positive psychological benefits into other domains of life.^{21,22} An example of a particular form of mindfulness that manifests through Taiji training

is an awareness of relaxed physical states vs tense physical states.¹¹ Recognition of these states and the mental skills to control them are among the keys to preventing stress-related downward spirals.²³

TAIJI AND QOL RESEARCH

Several studies have shown that Taiji training is associated with improvements in self-reported mental health and other indicators of QOL and productivity.^{7,24,25} The evidence of these effects is further supported by studies that have shown that Taiji practice leads to immediate changes in various biomarkers indicative of healthy levels of systemic function.^{26,27}

TAIJI AND SOCIAL SUPPORT

Taiji practice provides opportunities for social support and group bonding.^{28,29} The practice of Taiji provides an opportunity for relationship building through parallel and interactive leisure. For instance, practitioners share in the challenge of learning to use their bodies and minds in new ways. These shared challenges may provide an opportunity to develop relationships through discussion and shared experiences that are outside of the work routine. Taiji partner training exercises also provide a chance for practitioners to support each others' efforts to build their Taiji skill together through collaborative exercises. While the modality of Taiji partner training has been largely unexamined in the scientific literature, it may prove to be one of the most important aspects of Taiji, especially for building community.

OTHER POTENTIAL BENEFITS

Regular practitioners of Taiji demonstrate another set of benefits that have been explored through cross-sectional studies that may have important clinical and professional significance.

Table 1. Training curriculum

	Monday	Wednesday
Week 1	Discussion Seated meditation Standing meditation Recumbent meditation Self-massage	Discussion Seated meditation Standing meditation Recumbent meditation Self-massage
Week 2	Seated meditation Standing meditation Iterative movement Recumbent meditation Self-massage	Seated meditation Standing meditation Iterative movement Recumbent meditation Self-massage
Week 3	Standing meditation Iterative movement Recumbent meditation Self-massage	Standing meditation Iterative movement Recumbent meditation Self-massage
Week 4	Standing meditation Iterative movement Walking movement Recumbent meditation Self-massage	Standing meditation Iterative movement Walking movement Recumbent meditation Self-massage
Week 5	Standing meditation Iterative movement Partner movement Recumbent meditation Self-massage	Standing meditation Iterative movement Partner movement Recumbent meditation Self-massage
Week 6	Standing meditation Iterative movement Partner movement Recumbent meditation Self-massage	Standing meditation Iterative movement Partner movement Recumbent meditation Self-massage
Bold type indicates new exercises within a mode.		

These include heightened psychomotor abilities, such as manual dexterity, proprioception, force control, and improved tactile acuity.^{14,15} The clinical significance of these outcomes has not been explored, but it is hypothesized that improved functioning in these areas has the potential to reduce patient and staff injuries where physical interaction and caregiving are involved, such as administering injections and assisting with ambulation.

A literature review suggested that a multimodal Taiji program would have the best potential to provide staff with a range of relevant benefits (Table 1). Moreover, including multiple practices in the curriculum would familiarize staff with a range of options to pursue for their own self-care. What follows is a report on the protocol, participation, and staff response to the program.

Program Procedure, Structure, and Curriculum

Two weeks before the start of the program, the staff were informed that a voluntary Taiji mind-body exercise program would be offered. Since Taiji is a modality that is used therapeutically, continuing education unit (CEU) credits were offered as an incentive for attendance.³⁰ Before beginning the program, all participants signed an informed consent to participate. Participants were told that completion of pre- and postprogram surveys were voluntary and confidential. The surveys were used to establish a need for self-care by assessing staff health and stress and to understand the staff perspective on the effects of Taiji training. The preprogram survey consisted of general health and QOL questions taken from the Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System (BRFSS) Questionnaire. Open-ended qualitative questions were included to gain insight on staff perspectives of

stress, stressors, and coping strategies, as well as staff views on the relevance of the pilot programming to meet their needs. The postprogram survey sought staff feedback and response to the program.

Three, 30-minute Taiji sessions were offered 2 times a week for 6 weeks. The program was open to all staff operating in the Extended Care Psychiatry Program, but the times offered best accommodated third and first shift staff. The start times for the first class coincided with the end of the third shift; the

second and third classes were offered during the first shift so that staff could rotate down to participate. The training room was located near the staff's duty area, and staff members were always prepared to be called back to their units if they were needed.

This Taiji program was modeled after Dr. Yang's Evidence-Based Training (EBT) Program.⁹ This multimodal curricula was initially developed for clinic use through a series of successful trials at the University of Illinois.^{9,10} The program introduced Taiji

sitting, standing (similar to yoga), and recumbent meditation, as well as basic Taiji silk-reeling movement, Taiji walking, and basic partner training practices. One minor modification to the EBT curriculum was made due to the brief duration of this pilot: The EBT 7 movement choreography was replaced with a traditional walking sequence that contains 4 choreographed movements known as Peng, Lu, Ji, and An.

RESULTS

Participants and Participation

On a typical training day, about 15 staff from the 2 participating units were on-site and potentially could have participated in the program. This included 5 staff finishing third shift and 10 staff on duty during first shift. Daily attendance averaged 6 participants, and most were from the first shift. Verbal feedback indicated that some staff finishing the third shift may have been too tired to attend. Although the three 30-minute sessions generally supported accessibility by allowing staff to rotate down, some days staff reported difficulty attending because of staff shortages due to call-ins or holiday staffing.

Over the course of 6 weeks (11 sessions) a total of 19 staff members attended the program. Fourteen of 19 attendees were able to make it to ≥ 3 sessions, and about one-third of the staff (6 of 19) attended ≥ 1 session per week. Members of this high-attendance group displayed a strong affinity for the program, some coming in off-shift or on days off to attend.

Preprogram Questionnaire and Feedback Survey

Although a total of 19 staff members attended the program, only 4 staff members completed the voluntary preprogram survey, and 5 staff mem-

Members of this high-attendance group displayed a strong affinity for the program, some coming in off-shift or on days off to attend.



bers completed the voluntary post-program survey. Thus, the degree to which these findings are representative of all attendees is indeterminable, but it is felt that the data provide insight and represent the stressors generally faced by staff, as well as the potential benefits of this kind of self-care programming. Still the results are, at best, anecdotal.

Preprogram Survey Findings

Respondents to the preprogram survey indicated exercising ≥ 1 time per week before starting the program. On a self-rated health scale, none of the respondents rated their overall health as “Excellent” or “Very Good,” choosing instead “Good” or “Fair.” None of the respondents indicated that they were in “Poor” health. Three out of 4 respondents indicated having “Somewhat Unhealthy” diets, characterized by infrequent consumption of fresh fruits and vegetables, frequent intake of fast and processed foods, and overeating. One respondent indicated having a “Healthy” diet characterized by regular consumption of fresh fruits and vegetables, infrequent consumption of fast and processed foods, and infrequent overeating.

All respondents rated their job stress “Moderate” (3 on a 5-point scale). Respondents were also able to give examples of daily stressors, most stressful events, spillover stress between work and home-related stressors, and coping strategies. “Everyday stressors” and “Most stressful events” involved either patient care issues or personal or professional disagreements among staff. One respondent indicated that the constant and worsening state of patients in extended care was an everyday stressor. Another indicated that extreme cases of outbursts were upsetting both to staff and other patients, and that these were among the most stressful events that needed to be handled. Some respondents indicated that staff interactions were among their daily stressors; others felt that staff conflicts were the most stressful events.

Examples of spillover between work and home-related stress were highly idiosyncratic. One respondent indicated that stressful workdays contributed to irritability at home. Another discussed her situation as a working mother for whom work-related stress ended only while she was sleeping. Yet another respondent admitted that both work and home were stressful but did not feel that one spilled over into the other.

The coping mechanisms discussed by respondents in the preprogram survey included: (a) focusing on or prioritizing patient care, (b) self-talk strategies, and (c) avoidance. Focusing on patient needs or patient care was discussed by respondents as a means of coping with both staff conflicts and home-life conflicts. Another means of coping discussed by respondents was self-talk strategies. These typically included self-encouragement or reminding one’s self of facts to reduce stress. For instance, in a situation where a patient is being

disruptive, reminding one's self that patients with dementia cannot help their behavior. Avoidance strategies involved avoiding coworkers with negative moods or attitudes. There was no indication of avoiding patients who were described as being a source of stress.

FEEDBACK SURVEY

At the end of the Taiji Self-Care Program, a feedback survey was administered to gain insight into how the program could be improved and whether or not the program affected staff stress levels. The survey consisted of 8 questions that were designed to elicit balanced feedback about the experience of the program. The answers to these questions have been divided into 2 categories: program benefits and program improvements. Again, survey response rates were low, and although these comments are generally in line with the benefits discussed in the earlier review, some of the data may be seen as anecdotal.

Program benefits were wide ranging. The most common feedback was that the program was a good "stress relief." The program was also described as invigorating, interesting, and educational. Participants commented on enjoying the relaxing nature of the movement, focus on breathing, recumbent meditation, social time, and "aromatherapy," a reference to the use of an outdoor-scented air freshener where the program met.

Program improvements included requests to extend the program and hold sessions more often throughout the week. One respondent requested that information about healthy diet be included with the program. Although no negative feedback via survey response was received, it is believed that the curriculum may not have been suitable to all. For in-

stance, one staff member verbally discussed not being comfortable with the slow speed and high concentration involved in Taiji. Also, some staff exhibited mild strain and discomfort getting up and down off of the floor for the recumbent relaxation period. Thus, the wholly positive feedback among respondents may not have been representative and must be considered in the context of the low response rates.

Other comments written in the margins of the surveys expressed appreciation to the VA and the volunteers who provided the program to VA employees.

DISCUSSION

The general need for self-care programming among health care workers and especially among extended-care staff has already been established.¹⁻⁵ There was also no evidence in this study to indicate that this sample was any less in need of self-care programming. The preprogram survey specifically highlighted the need for programs that can aid staff in managing social and emotional stressors related to patient and coworker interactions as well as the biochemical stress of poor diets.

In the postprogram feedback, survey respondents reported a range of positive psychological experiences, such as relaxation, focus, and vitality, and expressed their desire to share these experiences with friends and staff in other units. Staff descriptions of the program's effects are highly resonant with a positive psychological state that is often termed *flow*.²² Anecdotally, these reports indicate the value of this protocol to meet staff needs for self-care, especially where stress relief and revitalization are issues of concern.

Based on written and verbal feedback, there was an interest among staff to learn more about dietary

health. It would be easy to augment the existing protocol with a dietary information component of brochures, presentations, and brief discussions. Last, there was a need to find sustainable options to continue programming in ways that can maximize staff attendance and participation.

Also, other types of programming such as yoga, meditation, or light exercise might also be suitable and capable of producing similar benefits without causing pain, fatigue, or drowsiness. This issue is especially crucial when offering programming in midshift, so as not to interfere with job performance. Previous studies suggested that Taiji would not be a problem in this regard, and as expected, participants in this study did not report negative effects on job performance, either verbally or in survey responses.

Although it was felt that program attendance rates were a good indicator of program engagement and success, the low survey response rate was a notable limitation to the findings. Future iterations of this program may want to offer incentives or compensate staff for the time taken to complete the lengthy survey. ●

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