

SHORT REPORT

Using Yoga Nidra to Improve Stress in Psychiatric Nurses in a Pilot Study

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Abstract

Given today's hurried and stressful healthcare system, nurses need mechanisms to take care of themselves, promote their own wellness, and build resilience in managing sick patients. Yoga is one such mechanism; it can decrease anxiety and improve sleep and quality of life. In this pilot study, nine nurses participated in 6 weekly sessions of yoga nidra. Measures of sleep, stress, and muscle fatigue were obtained to determine whether yoga had a positive impact upon quality of life and stress. Although based on a small sample of nurses, results indicated positive findings for both perceived stress level and muscle fatigue. This pilot study demonstrated the potential benefit of yoga in stress reduction, muscle tension, and self-care in nurses.

Keywords: yoga, stress, nursing

Introduction

TODAY'S HEALTHCARE SYSTEM is hurried and stressful.¹ Programs aimed at promoting both well-being and resiliency demonstrate greater awareness of actions and attitudes, especially in nurses.² In a review by Edwards and Burnard, relaxation, behavioral training for problem solving, workshops on the principles of stress management, and therapeutic skills training were identified as effective coping strategies for stress.³

Yoga is another method that promotes well-being and has been studied in hospital-based workers.⁴ Yoga can decrease anxiety and improve sleep and quality of life.^{5,6} Yoga can be practiced in any quiet setting at any time. Its essential components include breathing, meditation, and relaxation. Meditation reduces physiologic arousal, synchronizes brain waves, reduces stress, improves immune responses, offers peace of mind, and improves interpersonal relationships, mood, and sleep. To this effect, meditation helps nurses with stress and builds resiliency when it comes to the suffering of others.^{7–9} The authors hypothesized that a short-term course of yoga would lead to improvements in stress levels, and, therefore, improve resilience and well-being for nurses who practiced it. The aim of this pilot study was to examine yoga's impact upon those elements.

Materials and Methods

Nine registered nurses between the ages of 24 and 49 years and working on an inpatient psychiatric unit at a major urban hospital volunteered to participate in the study. The majority of nurses worked rotating 8- or 12-h shifts. Years of nursing experience ranged from 2 to 18 years. All of the nurses were Caucasian female, with the exception of one African American female. After IRB approval, participants completed a presession questionnaire generated for the study by the authors that assessed their existing stress level utilizing a Likert scale, with 0 equating to no stress and 10 equating to the highest level of stress possible. The questionnaire also queried participants about areas of muscular tension on their body, utilizing a Likert, sleep patterns, and their previous experience with yoga. Participants attended six professionally led yoga nidra sessions lasting 1.5 h each. Yoga nidra is a meditation and relaxation technique designed to introduce physical, emotional, and mental relaxation. The sessions occurred within the workplace during their regular shift. They were asked to complete a presession questionnaire asking about current stress levels, areas of tension, and if they had practiced yoga outside of the session. They also completed a postsession questionnaire, assessing perceived stress level and muscular tension. At the

completion of all six sessions, the participants were asked to complete a poststudy questionnaire 4 weeks after the study's conclusion, asking about the change in their overall stress level, muscular tension, and sleep patterns.

Results

There were notable differences between the pre- and postsession muscle tension scores for all sessions with the exception of weeks 3 and 6. The average muscle tension score for all sessions was higher than the average post-muscle tension score (pre-2.13, post-1.17), which is consistent with this hypothesis. Although only sessions 4 and 5 showed a positive change within the session with regard to perceived stress levels, the average pre- and postsession stress levels for all sessions demonstrated a noteworthy change (pre-1.82, post-1.0). When compared with those at the start of the study, both average muscle tension and perceived stress decreased by the end of the study. Although only four of the participants completed the poststudy survey, the overall trend suggested persistence on decreased muscle tension and perceived stress. An appreciable change in sleep was not found at the end of the study.

Discussion

Although the population was small and so it is hard to draw conclusions, this pilot study appeared to demonstrate that perceived stress levels and muscle tension were notably lower after yoga, especially in a cumulative manner. Each postsession muscle tension was also lower than its corresponding pre-session level. This suggests that yoga not only reduced muscle tension and perceived stress levels but also overall it appears that there was less accumulative stress.

Several limitations were identified. Yoga sessions were at least 1.5 h per session and only on specific days, which made it difficult for nurses to leave the floors and participate. For future studies, participants are recommended to have the option to practice yoga at their own convenience and with shorter session duration. A quiet setting, preferably away from one's workspace, is also desirable. To gain greater power for the sake of statistical analysis, the sample size will also need to be larger. Another design improvement for subsequent studies is the use of a valid tool to analyze the impact of yoga interventions.

In conclusion, nurses experience pressure from multiple sources, including physical, mental, and emotional challenges of caring for sick patients; maneuvering in ever-changing hospital systems and operations; and having more demands placed on them to do more with limited resources. When given the opportunity to practice yoga as a mechanism to build resilience and for self-care, psychiatric nurses valued this practice. Most participants reported some improvement in their perception of stress after their yoga

session. Participants appreciated a reduction in muscle tension as well. Although at face value yoga appears to be a viable option for self-care, this pilot study is recommended to be expanded to include not only a larger sample size but other healthcare staff within an acute care setting as well. It is hoped that the evidence obtained from larger studies will support the use of yoga nidra for nurses and encourage hospital systems to routinely offer yoga among available mechanisms of self-care.

Author Disclosure Statement

No competing financial interests exist.

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