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Effectiveness of Yoga for Low Back Pain and Healthy Quality of Life Among Nurses

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Purpose: Lower back pain is an important occupational health problem among nurses and serious impact on nurses' healthy quality of life. Recent research has found that yoga exercise can effectively improve musculoskeletal discomfort and promote healthy quality of life. The purpose of this study was to test the effectiveness of yoga on lower back pain and healthy quality of life for nurses.

Methods: A quasi-experimental design was used. Participants were recruited from a medical center nurses who had low back pain and assign into yoga (N=20) or control group (N=25). The yoga group practiced one 60 min yoga per week for 12 weeks, and control group maintained general daily activities without practicing yoga. Both groups had pretest data collection and after-test follow-ups on the eighth and twelve weeks. Pretest and after-test measurements of self-reported low back pain severity, frequency and healthy quality of life were assessed with the Standardized Nordic Questionnaire and SF-36 Taiwan Version. Comparisons between those two groups were made using the Generalized Esti-mating Equations (GEE) method.

Results: Results show the baseline of the yoga and control groups for self-reporting their measure of low back pain severity, frequency and healthy quality of life showed no significant difference(p>.05). Results revealed that at both the eighth and twelve weeks, participants in the yoga group showed a significantly greater reduction in low back pain severity than did participants in the control group(p<.05). At the eighth and twelve weeks, participants in the yoga group reported significantly better healthy quality of life psychological domain than did participants in the control group(p<.05).

Conclusion: The yoga exercise can reduce low back pain severity and improve healthy quality of life. Suggestion of this yoga exercise is a valuable addition to the routine for nurses. Further larger randomized controlled trials are needed to confirm these findings and to assess long-term effectiveness.

Title:

Effectiveness of Yoga for Low Back Pain and Healthy Quality of Life Among Nurses

Keywords:

healthy quality of life, low back pain and yoga

References:

Aboagye, E., Karlsson, M. L., Hagberg, J., & Jensen, I. (2015). Cost-effectiveness of early interventions for non-specific low back pain: a randomized controlled study investigating medical yoga, exercise therapy and self-care advice. *J Rehabil Med, 47*(2), 167-173. doi: 10.2340/16501977-1910

Alexander, G. K., Rollins, K., Walker, D., Wong, L., & Pennings, J. (2015). Yoga for Self-Care and Burnout Prevention Among Nurses. *Workplace Health Saf, 63*(10), 462-470; quiz 471. doi: 10.1177/2165079915596102

Cramer, H., Lauche, R., Haller, H., & Dobos, G. (2013). A systematic review and meta-analysis of yoga for low back pain. *Clin J Pain*, 29(5), 450-460. doi: 10.1097/AJP.0b013e31825e1492

Fang, R., & Li, X. (2015). A regular yoga intervention for staff nurse sleep quality and work stress: a randomised controlled trial. *J Clin Nurs*, 24(23-24), 3374-3379. doi: 10.1111/jocn.12983

Patil, N. J., Nagarathna, R., Tekur, P., Patil, D. N., Nagendra, H. R., & Subramanya, P. (2015). Designing, validation, and feasibility of integrated yoga therapy module for chronic low back pain. *Int J Yoga, 8*(2), 103-108. doi: 10.4103/0973-6131.158470

Abstract Summary:

The yoga exercise can reduce low back pain severity and improve healthy quality of life. Further larger randomized controlled trials are needed to confirm these findings and to assess long-term effectiveness.

Content Outline:

Effectiveness of yoga for low back pain and healthy quality of life among nurses

Background: Lower back pain is an important occupational health problem among nurses. Recent research has found that yoga can effectively improve musculoskeletal discomfort and promote healthy quality of life.

Purpose: The purpose of this study was to test the effectiveness of yoga on lower back pain and healthy quality of life for nurses.

Methods: A quasi-experimental design was used. Participants were recruited from a medical center nurses who had low back pain and assign into yoga (N=20) or control group (N=25). The yoga group received one 60 min yoga session per week for 12 weeks, and control group maintained general daily activities without practicing yoga. Both groups had pretest data collection and after-test follow-ups on the eighth and twelve weeks. Pretest and after-test measurements of self-reported low back pain severity, frequency and healthy quality of life were assessed with the Standardized Nordic Questionnaire and SF-36 Taiwan Version. Comparisons between those two groups were made using the Generalized Estimating Equations (GEE) method.

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Conclusions: The yoga exercise can reduce low back pain severity and improve healthy quality of life. Suggestion of this yoga exercise is a valuable addition to the routine for nurses. Further larger randomized controlled trials are needed to confirm these findings and to assess long-term effectiveness.

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