

Sigma's 30th International Nursing Research Congress

Evidence-Based Application of Yoga for Improving Menopausal Symptoms

Hui Mei Huang, MSN, RN

Jin-Lain Ming, PhD, RN

Department of Nursing, Taipei Veterans General Hospital, Taipei, Taiwan

Objectives Menopause-related symptoms often result in considerable distress to women's lives. Yoga is widely employed as a complementary method to manage menopause-related symptoms whereas its effects still need to be determined.

Methods This systematic review and meta-analysis examined the effects of yoga on improving menopause-related symptoms. A systematic literature search with identified keywords was conducted "yoga", "climacteric", "menopause" in electronic databases including PubMed, MEDLINE, CINAHL, the Cochrane Library and the Airiti Library for relevant English and Chinese language studies published before Feb. 2018. Results of the literature search were screened by the proposed inclusion and exclusion criteria. Eleven articles were retained for meta-analysis after we removed some articles with irrelevant topics. Two reviewers independently assessed of study quality was based on the Cochrane Risk of Bias Tool for Randomized Controlled Trials. Ranking of evidence was based on the Oxford 2011 Levels of Evidence. The meta-analysis was conducted by the Review Manager (RevMan) ver. 5.3.

Results A total of eleven RCTs with 1294 participants were included. Meta-analysis results showed that practicing yoga resulted in an improvement in overall menopause-related symptoms [standardized mean difference (SMD) -0.96, 95% confidence interval (95%CI): -1.60, -0.32, $p = 0.003$; heterogeneity $I^2=86\%$], depression (SMD -0.23, 95% CI: -0.42, -0.03, $p=0.02$; $I^2=0\%$), sleep disorders (SMD -0.21, 95% CI: -0.41, -0.02, $p=0.03$; $I^2 = 0\%$), and vasomotor symptoms (SMD -0.23, 95% CI: -0.41, -0.05, $p=0.01$; $I^2 = 0\%$). However, practicing yoga could not result in a significant reduction in the perception of stress.

Conclusions This systemic review and meta-analysis supports that yoga may improve overall menopause-related symptoms, depression, sleep disorders, and vasomotor symptoms. Base the result we designed the quasi-experimental tests the effectiveness of a 12-weeks training program of yoga for menopause symptoms. Recommendations related to practicing yoga for this specific population may be limited by influences associated with the internal and external validities of included studies. More rigorous studies need to be conducted to enrich the current available information.

Title:

Evidence-Based Application of Yoga for Improving Menopausal Symptoms

Keywords:

Evidence-based application, menopausal symptoms and yoga

References:

- Afonso, R. F., Hachul, H., Kozasa, E. H., de Souza Oliveira, D., Goto, V., Rodrigues, D., . . . Leite, J. R. (2012). Yoga decreases insomnia in postmenopausal women: a randomized clinical trial. *Menopause*, 19(2), 186-193.
- Avis, N. E., Legault, C., Russell, G., Weaver, K., & Danhauer, S. C. (2014). Pilot study of integral yoga for menopausal hot flashes. *Menopause*, (8), 846-854.
- Chattha, R., Nagarathna, R., Padmalatha, V., & Nagendra, H. R. (2008). Effect of yoga on cognitive functions in climacteric syndrome: a randomised control study. *BJOG: an international journal of obstetrics and gynaecology*, (8), 991-1000.
- Chattha, R., Raghuram, N., Venkatram, P., & Hongasandra, N. R. (2008). Treating the climacteric symptoms in Indian women with an integrated approach to yoga therapy: a randomized control study. *Menopause*, 15(5), 862-870. doi: 10.1097/gme.0b013e318167b902.
- Elavsky, S., & McAuley, E. (2007). Exercise and self-esteem in menopausal women: a randomized controlled trial involving walking and yoga. *American journal of health promotion: AJHP*, (2), 83-92.
- Han, Y., Duan, F., Xu, R., Wang, Y., & Zhang, H. (2015). Functional exercise in combination with auricular plaster therapy is more conducive to rehabilitation of menopausal women patients with anxiety disorder. *International journal of clinical and experimental medicine*, (11), 21173-21179.
- Jayabharathi, B., & Jayamohanraj. (2013). *Yoga: An Approach to Holistic Health for Climacteric Symptoms - A Prospective Randomized Interventional Study*.
- Jorge, M. P., Santaella, D. F., Pontes, I. M. O., Shiramizu, V. K. M., Nascimento, E. B., Cabral, A., . . . Ribeiro, A. M. (2016). Hatha Yoga practice decreases menopause symptoms and improves quality of life: A randomized controlled trial. *Complementary therapies in medicine*, 128-135.
- Joshi, S., Khandwe, R., Bapat, D., & Deshmukh, U. (2011). Effect of yoga on menopausal symptoms. *Menopause international*, (3), 78-81.
- Newton, K. M., Reed, S. D., Guthrie, K. A., Sherman, K. J., Booth-Laforce, C., Caan, B., . . . Lacroix, A. Z. (2014). Efficacy of yoga for vasomotor symptoms: a randomized controlled trial. *Menopause*, 21(4), 339-346. doi: 10.1097/GME.0b013e31829e4baa
- Vora, R., & Dangji, A. (2014) Effect of yoga on menopausal symptoms in the early menopausal period: a randomized controlled trial. *Indian J Physiother Occup Ther*, 14, 49-53.

Abstract Summary:

Menopause-related symptoms often result in considerable distress to women's lives. Yoga is widely employed as a complementary method to manage menopause-related symptoms whereas its effects still need to be determined.

Content Outline:

Objectives Menopause-related symptoms often result in considerable distress to women's lives. Yoga is widely employed as a complementary method to manage menopause-related symptoms whereas its effects still need to be determined.

Methods This systematic review and meta-analysis examined the effects of yoga on improving menopause-related symptoms. A systematic literature search with identified keywords was conducted in electronic databases including PubMed, MEDLINE, CINAHL, the Cochrane Library and the Airtiti Library for relevant English and Chinese language studies published before Feb. 2018. Results of the literature search were screened by the proposed inclusion and exclusion criteria. Eleven articles were retained for meta-analysis after we removed some articles with irrelevant topics. Assessment of study quality was based on the Cochrane Risk of Bias Tool for Randomized Controlled Trials. Ranking of evidence was based on the Oxford 2011 Levels of Evidence. The meta-analysis was conducted by the Review Manager (RevMan) ver. 5.3.

Results Meta-analysis results showed that practicing yoga resulted in an improvement in overall menopause-related symptoms [standardized mean difference (SMD) -0.96, 95% confidence interval (95%CI): -1.60, -0.32, $p = 0.003$; heterogeneity $I^2=86\%$], depression (SMD -0.23, 95% CI: -0.42, -0.03, $p=0.02$; $I^2=0\%$), sleep disorders (SMD -0.21, 95% CI: -0.41, -0.02, $p=0.03$; $I^2 = 0\%$), and vasomotor symptoms (SMD -0.23, 95% CI: -0.41, -0.05, $p=0.01$; $I^2 = 0\%$). However, practicing yoga could not result in a significant reduction in the perception of stress.

Conclusions This systemic review and meta-analysis supports that yoga may improve overall menopause-related symptoms, depression, sleep disorders, and vasomotor symptoms. Recommendations related to practicing yoga for this specific population may be limited by influences associated with the internal and external validities of included studies. More rigorous studies need to be conducted to enrich the current available information

First Primary Presenting Author

Primary Presenting Author

Hui Mei Huang, MSN, RN
Taipei Veterans General Hospital
Department of Nursing
RN
Beitou District
Taipei
Taiwan

Author Summary: Hui-Mei Huang's clinical experience and expertise is in cardiac medical and surgical care and ophthalmologic care, and she has held positions as a clinical staff nurse in medical center in Taipei, Taiwan 26 years. Her education includes a B.S.N. from National Yang-Ming University, and a M.S.N. from the University of Taipei Medical University, School of Nursing. Her research interest areas includes: (1) Cancer Nursing, (2) Women health, (3) Health promotion, (4) Nursing workplace violence.

Second Author

Jin-Lain Ming, PhD, RN
Taipei Veterans General Hospital
Department of Nursing
Deputy Director
Taipei
Taiwan

Author Summary: I have nursing practice experience about thirty seven years. And now I am a deputy Director of Taipei Veterans General Hospital nurse Department in charge of nursing education and training services. I'm responsible of Clinical Nursing Education. A Chair, Committee of Nursing Education, a Committee member, NP Educational Planning and Vocational Discipline Task Force Committee and a Deputy Editor, Journal of VGH Nursing.