

A Pilot Study of Gentle Yoga for Insomnia in Older Women with Osteoarthritis

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**Introduction:** Osteoarthritis (OA) affects 27 million adults and is the leading cause of disability in the United States. Over 50% of persons with arthritis report difficulty sleeping. Both OA and sleep disturbance are more prevalent in older women than men. Yoga is a multimodal practice that may reduce OA-related insomnia in older women. Study aims are (1) to test the feasibility and acceptability of yoga for older women with OA and insomnia, and (2) to gather preliminary evidence on the effects of the intervention on sleep outcomes.

**Methods:** The study design is one-group, quasi-experimental with pre- and post-intervention outcome assessment. Sixteen older women with OA and insomnia symptoms will attend 8 weekly 75-minute yoga classes and practice a 20-minute yoga routine nightly at bedtime. The yoga practice includes gentle stretching, strengthening, and relaxing poses and breathing techniques. Sleep is assessed before and after the intervention by one week of sleep diaries and wrist actigraphy (Actiwatch-64).

**Results:** Eight older women (mean age 67.2±6.9 years) with OA have been recruited. Baseline diary outcomes: sleep onset latency (SOL), 31.1±20.5 min; wake after sleep onset (WASO), 64.6±46.7 min; total sleep time (TST), 344.5±58.1 min; sleep efficiency (%SE), 80.0±14.4%, and VAS sleep quality, 40.8±8.8. Actigraphic findings were similar: SOL, 22.0±18.8; WASO, 59.9±29.2; TST, 375.4±62.4; %SE, 77.7±7.2. The mean PSQI score was 11.13±2.9.

**Conclusion:** Baseline sleep data are consistent with other studies of persons with OA, showing difficulty with sleep maintenance and quality more than sleep initiation. The first cohort completed the 8-week yoga program in December 2008 and data are currently being analyzed. A second cohort will complete the study in spring 2009. The data from this study will inform an R21 grant proposal of a randomized clinical trial (RCT) of gentle yoga for insomnia in older persons with OA.

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