The Effects of Tai Chi on Sleep Quality, Well-Being and Physical Performances among Older Adults

Sunuttra Taboonpong, RN, Ph.D
Associate Professor
Faculty of Nursing, Prince of Songkla University
Hat Yai, Thailand 90112

Napatharin Putsri, RN, M.Sc. (Nursing)
Khanjanadit Hospital,
Surathani, Thailand 84160

Wipawee Kong-in, RN, Ph.D
Assistant Professor
Faculty of Nursing, Prince of Songkla University
Hat Yai, Thailand 90112

Aimorn Saejew, RN, MSN
Assistant Professor
Faculty of Nursing, Prince of Songkla University
Hat Yai, Thailand 90112

Correspondence: Sunuttra Taboonpong, RN, Ph.D
Associate Professor, Faculty of Nursing, Prince of Songkla University
Hat Yai, Thailand 90112 Phone: 0818983085, Fax: 074212901,
email:sunuttra.t@psu.ac.th
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Sunuttra Taboonpong, Napatharin Putsri, Wipawee Kong-in, Aimorn Saejew

Abstract

The elderly face physiological decline leading to problems such as chronic illness, poor physical performance and emotional disturbance. The practice of Tai Chi is generally considered psychologically and physiologically beneficial for older adults but scientific reports on its benefits are still limited. This quasi-experimental study, a pre-post test with control group design investigated the effects of low intensity and short term Tai Chi practice on sleep quality, general well-being and physical performance. The subjects were purposefully selected from elders who lived in residential care facilities in accordance with the study inclusion criteria. There were 25 elders in each experimental and control group. The experimental group engaged in 22 minutes Tai Chi training at least three times a week for 12 weeks. The control group engaged in their usual activities, without Tai Chi. The Pittsburg Sleep Quality Index (PSQI) and General Well-Being Scale (GWBS) questionnaires were used to assess the subjects' sleep quality and well-being. The physical performances including 2 minutes step test, lung capacity, and sit and reach test were measured by a professional staff from a Provincial Sport Authority. These measures were taken at the first and fourteenth weeks of the study. Independent and paired t-tests were used in data analysis. The two groups had no difference in personal characteristics and baseline outcome measures. The experimental group showed significantly greater change score of the PSQI (p<.01) and step test (p<.05). The change scores of the GWBS, lung capacity, and sit and reach test between the two groups showed no differences. The results indicated that a low intensity Tai Chi exercise for 12 week could improve sleep quality and physical performance on balance and flexibility of legs in older adults.

Keywords: Tai Chi, sleep quality, well-being, physical performance, older adults