



GLOBAL JOURNAL OF MEDICAL RESEARCH: A  
NEUROLOGY AND NERVOUS SYSTEM  
Volume 15 Issue 1 Version 1.0 Year 2015  
Type: Double Blind Peer Reviewed International Research Journal  
Publisher: Global Journals Inc. (USA)  
Online ISSN: 2249-4618 & Print ISSN: 0975-5888

## The Effectiveness of Tai Ji Quan for Anxiety and Depression

By Mustafa M Amin

*University of Sumatra Utara, Indonesia*

**Abstract-** Tai Ji Quan is always considered to be an exercise that has the same benefit as other exercise when it is done properly. Once considered as a martial art, nowadays, people think that practising Tai Ji is one of many ways to prevent illness, and getting a better health. Some studies have proven the benefit of Tai Ji in several medical condition, however the efficacy of Tai Ji for psychiatric conditions is very limited due to the limitation of variety of studies. Some studies propose that Tai Ji might have efficacy in treating anxiety or depression, whether it is as an augmentation or a single therapy for the patients.

**Keywords:** *Tai ji quan, anxiety, depression.*

**GJMR-A Classification :** NLMC Code: WM 171.5



*Strictly as per the compliance and regulations of:*



# The Effectiveness of Tai Ji Quan for Anxiety and Depression

Mustafa M. Amin

**Abstract** - Tai Ji Quan is always considered to be an exercise that has the same benefit as other exercise when it is done properly. Once considered as a martial art, nowadays, people think that practising Tai Ji is one of many ways to prevent illness, and getting a better health. Some studies have proven the benefit of Tai Ji in several medical condition, however the efficacy of Tai Ji for psychiatric conditions is very limited due to the limitation of variety of studies. Some studies propose that Tai Ji might have efficacy in treating anxiety or depression, whether it is as an augmentation or a single therapy for the patients.

**Keywords:** *Tai ji quan, anxiety, depression.*

## I. INTRODUCTION

Tai Ji Quan (Tai Chi Chuan) is one of many types of the Chinese martial arts, which originates in the village of Chenjiagou in Wenxian county, Henan province, China. The first person whose practice and taught Tai Ji was Chen Wangting, in the seventeenth century, and he introduced a format that recognized as the Chen style. Nowadays, there are few styles of Tai Ji that have been derived from Chen style, i.e., Yang style, Wu (Hao) style, Wu style, and Sun style. Among them, Chen style is the oldest style, whilst Yang style is the most popular style.<sup>1,2</sup> Tai Ji has been seen as an exercise that can promote prevention of illnesses, health, and cultural exchange.<sup>1</sup>

The effect of Tai Ji for health includes its benefit to develop good concentration, memory, balance, and psychological conditions, e.g., anxiety, and depression.<sup>3</sup> It is thought that its advantage for health is due to "three regulations" that is explained in traditional Chinese medicine, i.e., posture and movement (body focus), breath focus, and meditative component (mind focus).<sup>4</sup> These regulations have been found to reduce markers of inflammation and alter cellular immunity, which have been linked to depression.<sup>5</sup>

## II. TAI JI QUAN

Tai Ji Quan is originated from Taoism, and accomplished in semisquat position. It has characteristics which include: 1) breathing mastery and mind concentration, 2) whole body effort, and 3) spiral, curved, and continuous body movements. Tai Ji can be formed alone or as group exercise, and its advantages

consist of emotional, physical, and social functions. Its potential use in medicine includes neurological disease, orthopaedic disease, rheumatological disease, cardiopulmonary disease, cancers, and mental health.<sup>1,2</sup> Tai Ji is also considered as meditative performance to promote longevity, stress neutralization, personal tranquility, and healing.<sup>4</sup> Tai Ji practice includes relaxed breathing, deep mental focus, and slow, deliberate movements.<sup>6</sup> Every Tai Ji practice costs between 3 and 6 metabolic equivalents (METs), and it activates coordination of muscular activities of legs and feet.<sup>2</sup> A person who is practicing Tai Ji will get the same benefit as getting a moderate intensity aerobic exercise,<sup>2</sup> in other word practicing Tai Ji is the same as getting brisk walking, competitive table tennis, bicycling with the speed between 5 to 9 mph, recreational swimming, and other exercises which have moderate activity.<sup>7</sup> Tai Ji Quan is also a low cost exercise due to there are not any facility and equipment needed when somebody practice it.<sup>2</sup>

Practicing Tai Ji has been proven by research to have benefit: 1) improving aerobic capacity, particularly in middle-aged and older women and men, 2) increasing muscular strength of lower extremities due to it is performed in semisquat position, in subjects age between 20-45 years, 3) enhancing visual system in elderly people with visual impairment, 4) promoting proprioceptive function of upper extremities, it has been found that the facilitation of perceptual function and tactile acuity in Tai Ji practitioners are due to their focus on specific mental attention on the upper extremities and body, 5) advancing vestibular system in patients with dizziness and balance disorders, i.e., patients who did Tai Ji training showed improvement in their Dizziness Handicap Inventory Scores, patients with vestibulopathy showed improvement in their vestibular rehabilitation, and in older people it has been proven to improve the up to and go test, backward deflection, forward deflection, and the maximum sway area, 6) several studies have found that Tai Ji training is fruitful in the elderly, particularly on falls prevention and balance function, 7) older people who practice Tai Ji routinely, have reported improvement in their daily activities, 8) reducing anxiety, perceived stress, anger-tension, and improving mood state.<sup>2</sup>

**Author :** *Departement of Psychiatry Faculty of Medicine University of Sumatera Utara. e-mail: mustafamamin78@gmail.com*

### III. TAI JI AND ANXIETY

Tsai et al,<sup>8</sup> have found that Tai Ji practice has reduced state anxiety and trait anxiety, significantly. Zheng et al,<sup>9</sup> have reported a protocol in people who is healthy but stressed, Tai Ji activity was done 5 hours a week, for 6 weeks, however they have not published the result yet. A Meta-Analysis study by Wang et al,<sup>10</sup> has shown that practicing Tai Ji has beneficial effect on anxiety. They did a meta –analyses from a total 42 studies which included 27 studies from English databases, and 15 studies from the Chinese, and found that Tai Ji practice led to positive effects in reducing anxiety. However, a different result has been reported by Saeed et al,<sup>6</sup> when treating anxiety as a disorder, Tai Ji has not got any effectiveness.

### IV. TAI JI AND DEPRESSION

In a review by Saeed et al,<sup>6</sup> they have written that older patients with depression has gained benefit from Tai Ji practice, they thought that the benefit of Tai Ji comes from practicing it in a group format. whilst in a review and meta-analysis by Wang et al<sup>10</sup>, they concluded that when compared to waitlist controls, education controls, sham exercise controls, martial arts controls, and routine medication, Tai Ji proved to improve patients with depression. Chou et al<sup>11</sup> studied, Chinese older patients with depression who got Tai Ji, gained reduction in their scale for depression, compared to patients who got no treatment at all. Lavretsky et al<sup>5</sup> studied that when Tai Ji practice was used as augmentation in geriatric patients with depression who received escitalopram, it showed better reduction of depression symptoms, compared with those who received escitalopram and health education. Another study by Yeung et al<sup>12</sup>, who studied 39 Chinese Americans patients who diagnosed with Major Depressive Disorder got positive results in practising Tai Ji, in which they thought that Tai Ji would have beneficial effect for MDD. In general, Tai Ji practice might help patients with depression, particularly in the elderly.

### V. CONCLUSION

Tai Ji is originated from China, and it has been proven to have efficacy in several medical illnesses. In its origin country the practice of Tai Ji has begun from few hundreds years ago, and people have thought that it can promote health, and prevent illness. Studies have shown that people who practice Tai Ji will get benefit as getting a moderate intensity aerobic exercise, a low cost exercise, and almost no side effects to be known when practicing Tai Ji.

Whilst Tai Ji has been proven by many studies to have beneficial effect in some medical conditions, however the effect of Tai Ji in psychiatric illnesses is very limited due to there are not many study support its

effect. The efficacy of Tai Ji can only be seen on two psychiatric conditions, i.e., 1) anxiety, the results of Tai Ji on anxiety varies in which some studies suggest it might have benefit for anxiety syndrome but not as a disorder, 2) depression, patients with depression as a syndrome or disorder have found that Tai Ji has helped them to get reduction on their depression score, however attention should be made in relation with these results due to several studies were done in particular population, i.e., in older patients with depression and in Chinese population. In conclusion, at the moment the effect of Tai Ji is limited in treating depression, particularly in older patients. Future studies should be done with more variety of psychiatric illnesses to get result of the beneficial effect of Tai Ji for psychiatric patients.

### REFERENCES RÉFÉRENCES REFERENCIAS

1. Guo, Y., Qiu P., and Liu, T. Tai ji quan: an overview of its history, health benefits, and cultural value. *Journal of Sport and Health Science*, 3, 2013; 3-8.
2. Lan, C., Chen, SY., Lai, J.S., and Wong, A.M.K. Tai chi chuan in medicine and health promotion. *Evidence-Based Complementary and Alternative Medicine*, 2013; 1-18.
3. Wang, C., Collet, J.P., and Lau, J. The effect of Tai Chi on health outcomes in patients with chronic conditions. A systematic review. *Arch Intern Med*, 164, 2004; 493-501.
4. Jahnke, R., Larkey, L., Rogers, C., Etnier, J., and Lin, F. A comprehensive review of health benefits of qigong and tai chi. *Am J Health Prom*, 24, 6, 2010; 1-37.
5. Lavretsky, H., Altstein, L., Olmstead, R.E., Ercoli, L., Riparetti-Brown, M., Cyr, N.St., and Irwin, M.R. Complementary use of tai chi chih augments escitalopram treatment of geriatric depression: a randomized controlled trial. *Am J Geriatr Psychiatry*, 19, 10, 2011; 1-18.
6. Saeed, S.A., Antonacci, D.J., and Bloch, R.M. Exercise, yoga, and meditation for depressive and anxiety disorders. *American Family Physician*, 81, 8; 981-5.
7. Ainsworth BE, Haskell WL, Leon AS, et al. Compendium of physical activities: classification of energy costs of human physical activities. *Medicine and Science in Sports and Exercise* 1993, 25, 1; 71-80.
8. Tsai, J.C., Wang, W.H., Chan, P., Lin, L.J., Wang, C.H., Tomlinson, B, et al. The beneficial effects of Tai Chi Chuan on blood pressure and lipid profile and anxiety status in a randomized controlled trial. *J Altern Complem Med*, 2003, 9; 747-54.
9. Zheng, S., Lal, S., Meier, P., and Sibbritt, D. Protocol: The effect of 12 weeks of tai chi practice on anxiety in healthy but stressed people compared to

- exercise and wait-list comparison groups: A randomized controlled trial. *J Acupunct Meridian Stud*, 7, 3, 2014; 159-65.
10. Wang, F., Lee, E-K.O., Wu, T., Benson, H., Fricchione, G., Wang, W., Yeung, A.S. The effects of tai chi on depression, anxiety, and psychological well-being: a systematic review and meta-analysis. *Int J Behav Med*, 21, 2014; 605-17.
  11. Chou, K.L., Lee, P.W.H., Yu, E.C.S., Macfarlane, D., Cheng, Y.H., Chan S.S.C., and Chi, I. Effect of Tai Chi on depressive symptoms amongst Chinese older patients with depressive disorders: a randomized clinical trial. *Int J Geriatr Psychiatry* 19, 2004; 1105-7.
  12. Yeung, A., Lepoutre, V., Yeh, G., Slipp, L.E., Fava, M., Denninger, J.W., and Benson, H. Tai chi treatment for depression in Chinese Americans: a pilot study. *Am J Phys Med Rehabil* 91, 2012; 863-70.





This page is intentionally left blank