New Research Findings on TJQMBB

Recent research on the *Tai Ji Quan: Moving for Better Balance*® (TJQMBB) program has provided updated evidence of its clinical efficacy for fall prevention that was initially evaluated in 2004. The results of a new study, released Monday, September 10, in the journal *JAMA Internal Medicine*, showed that older adults who received the therapeutic TJQMBB intervention significantly reduced the number of falls compared to a stretching exercise program and an evidence-based multimodal exercise intervention.

Researchers recruited 670 community-dwelling adults aged 70 years and older, who either reported a history of falls or were clinically determined to have impaired mobility, and randomly assigned them to one of three different exercise programs: TJQMBB, entailing modified Tai Ji Quan forms and associated therapeutic movement exercises; multimodal exercise, integrating aerobic, strength, balance, and flexibility activities; or stretching exercises (serving as a control group). Participants took part in twice weekly, 1-hour long community-based class sessions for 24 weeks. During the study, monthly falls and physical performance were measured. After 6 months, TJQMBB participants had reduced their incidence of falls by 58% compared with the stretching program and by 31% compared to those in the multimodal exercise group. Participants in both the TJQMBB and multimodal exercise groups demonstrated significant improvement in physical function and global cognitive function compared to participants assigned to the stretching program.

These new findings have substantial implications. First, the outcomes confirm the validity of the unique design of TJQMBB in facilitating therapeutic adaptations for improved balance and postural control in older adults with balance deficits or impaired mobility. Second, from the perspective of implementing fall prevention initiatives, the evidence that TJQMBB was more effective than the multimodal exercise program indicates that an equipment-free, low-cost, non-space-constrained exercise intervention can effectively address the clinical problem of falls and balance deficits in the aging population. Third, the results augment the distinctive status of TJQMBB as the only fall intervention program that has demonstrated both clinical efficacy (via multiple large-scale studies) and implementation effectiveness, as has been shown in diverse community dissemination studies involving senior service providers and clinicians.

Using intervention costs and participant health utilization data, researchers are currently analyzing the results of the study as it relates to the cost-effectiveness of TJQMBB in terms of the cost per additional fall prevented and quality of life years gained compared with the stretching and multimodal exercise interventions. Preliminary analyses (final results are forthcoming) provide compelling information on how to best invest prevention funds for evidence-based interventions to address the growing epidemic of falls, reduce healthcare costs for treating fall injuries, and improve the health, function, and life independence of community-dwelling older adults.

Information on the TJQMBB program can be found at tjqmbb.org. Training to teach the TJQMBB program as a community instructor is available via two-day workshops taught by authorized master instructors (refer to the list below). Updates on TJQMBB teaching materials are accessible through a free online resource at tjqmbb.org. The most updated Class Teaching Plan is version 3.13. Continuing education credits for TJQMBB training are available through the American College of Sports Medicine.

The following criteria will qualify an individual to become a certified community level-1 TJQMBB instructor:

- Attend one (1), 16-hour TJQMBB Level-1 Community Instructor Training Workshop
- Proof of 48 hours of class teaching (equivalent to one (1), 24-week twice weekly class) completed within 12 months of the start of the first class

For information on Level-1 Community Instructor Training Workshops, please contact the nearest authorized instructor trainer:

Linlin Choy (Oregon) – linlinchoy@gmail.com
Jan Voit, PT, (Washington) – jan@betterbalance.net (www.betterbalance.net)
Dawna Pidgeon, PT, (New Hampshire) – Dawna.M.Pidgeon@hitchcock.org
David Fink (Minnesota) – DFink@metroaging.org

For research related to TJQMBB please contact Peter Harmer, PhD., MPH., at pharmer@willamette.edu.

For issues related to program implementation, please contact Brian McCall at brian.exer.alt@gmail.com.

Dated: September 10, 2018