

Extension Trial of Qigong for Fibromyalgia: Quantitative and Qualitative Study



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INTRODUCTION

Fibromyalgia is a chronic pain condition associated with sleep and mood disturbances, and is a complex and difficult condition to treat [Arnold et al. 2012]. **Qigong** (*cultivation of qi, or energetic essence*) has a long history extending thousands of years, is part of contemporary Traditional Chinese Medicine, and constitutes a distinct approach to healing [Jahnke 2002]. There are now several studies indicating long-term benefits (to 6 months) of qigong practice in fibromyalgia [Haak & Scott, 2008; Liu et al, 2012; Lynch et al, 2012]. Qigong has recently been characterized as **meditative movement** [Larkey et al. 2009] and this has provided core domains for considering individual components of qigong.

Chaoyi Fanhuan Qigong, or CFQ [Yap & Hiew, 2009], was developed in the 1990s, and is available locally in Halifax. We recently evaluated effects of **level 1 CFQ (movement)** in fibromyalgia [Lynch et al, 2012], and demonstrated significant improvements in pain, impact, sleep, physical and mental functioning. Following completion of the trial, several participants voluntarily undertook community-based training and practiced extensively, and it became known that dramatic health benefits were occurring. Further cases of marked benefit in fibromyalgia from sustained practice were documented [Sawynok et al, 2012].

This extension trial was undertaken: (1) to determine whether level 2 CFQ (meditation) added to level 1 CFQ (movement) could lead to further health benefits in fibromyalgia, and (2) to document effects of sustained qigong practice at levels that would be difficult to examine prospectively.

METHODS

N=20 participants who completed the earlier trial [Lynch et al, 2012] entered the extension trial. Training in **level 2 CFQ (sitting meditation, also standing and lying meditation)** involved 2 half-day sessions (DM); this was followed by 8 weekly review sessions (90 min); participants were asked to practice qigong for 60 min/day for 8 weeks and were then encouraged to continue for 6 months.

Quantitative assessments determined at 8 ws, 4, 6 months: pain (numeric rating scale pain intensity, NRS-PI); impact (Fibromyalgia Impact Questionnaire, FIQ); sleep (Pittsburg Sleep Quality Index, PSQI) ; physical and mental function (SF-Health Survey), and extent of practice. **Qualitative comments** also were documented.

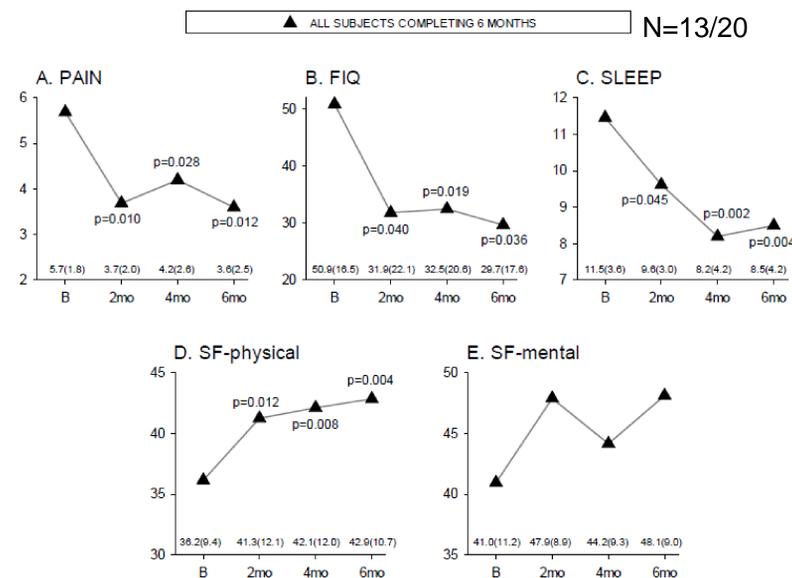
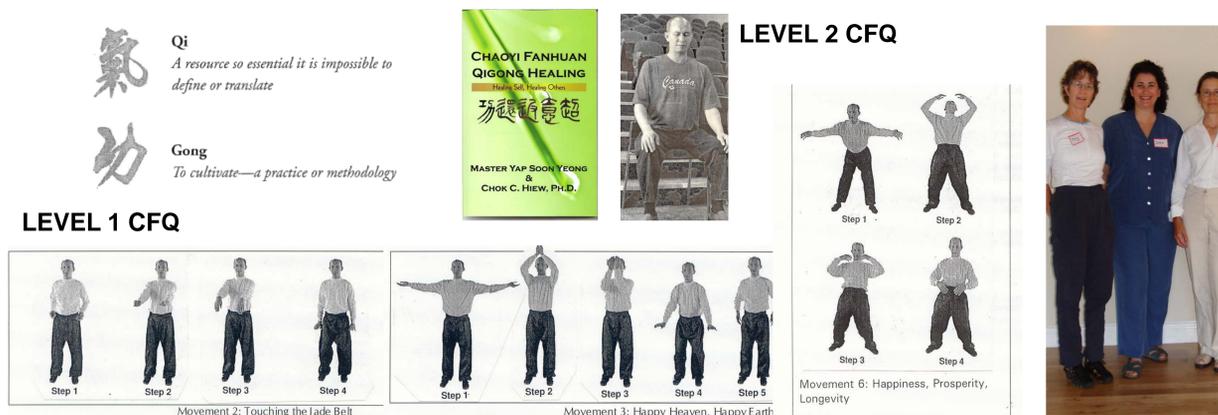


Figure 1: Improvements in pain, impact, sleep, physical-function in all those who completed the extension 6-month trial

Qualitative RESULTS: In open-ended reports, subjects recapitulate benefits from quantitative domains, and also report **improved asthma (N=2), allergies (N=3), blood pressure (N=2); headaches and migraine (N=2), carpal tunnel syndrome, tendonitis (N=1), weight loss (N=1), vision (N=1), mood (N=1)**. There was **discontinuation of medications** for asthma (N=2), sleep (N=1), mood (N=1), pain (N=2), several drugs (N=1). There were many comments of **improved quality of life**.

SUMMARY & CONCLUSION: This quantitative and qualitative open-label extension trial of adding level 2 CFQ practice (meditation) to level 1 CFQ practice (movement) reports **significant quantitative benefits in core domains relevant to fibromyalgia** (pain, impact, sleep, physical function). Benefit is related to amount of practice, and there is implied causality between practice and outcomes. **Qualitative comments reveal further health benefits** beyond those reflected in quantitative measures. In some cases **benefits were dramatic and resulted in discontinuation of medications**. Qigong, both CFQ and other forms, merit attention for their ability to positively influence long-standing health conditions that have not responded to other modalities.



Quantitative RESULTS

PRACTICE TIMES

N=5: 57-66 mins/day
Highly motivates group
Open format: 10-15 hrs/wk

N=8: 20-38 mins/day
Other study completers
Open format: 1-5 hrs/wk

N=7: 20 mins/day
Withdrawals by week 8
Open format: 2-5 hrs/wk

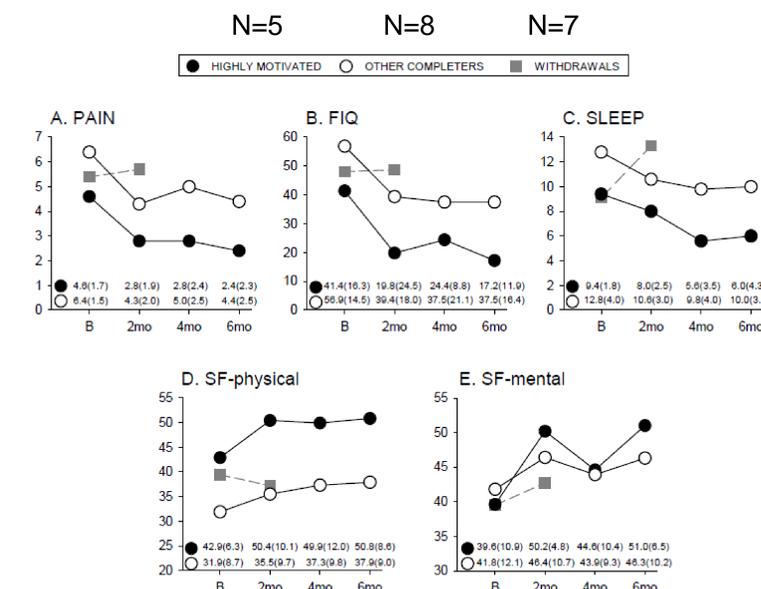


Figure 2: Highly motivated group who practiced the most had best outcomes; other trial completers had similar symptom reductions

REFERENCES

Arnold LM, Clauw, et al. A framework for fibromyalgia management for primary care providers. *Mayo Clin Proc* 2012;87:488-96

Haak T, Scott B. The effect of Qigong on fibromyalgia (FMS):A controlled randomized study. *Disab & Rehab* 2008;30:625-33

Jahnke R. *The Healing Promise of Qi: Creating Extraordinary Wellness Through Qigong and Tai Chi*, Contemporary books, Chicago IL, 2002

Larkey L, et al. Meditative movement as a category of exercise: Implications for research. *J Physical Activity Health* 2009;6:230-38

Liu W, Zahner L, Cornell, et al. Benefit of qigong exercise inpatients with fibromyalgia. *Int J Neurosci* 2012;122:657-64

Lynch ME, Sawynok J, Marcon D, Hiew C. A randomized controlled trial of qigong for fibromyalgia. *Art Res & Ther* 2012;14:R178

Sawynok J, Marcon D, Hiew C. CFQ and fibromyalgia: Methodological issues and two case reports. *J Alt Comp Med* 2013 [Epub Nov 9 2012]

Yap SY, Hiew CC. *Chaoyi Fanhuan Qigong. Healing Self, Healing Others*. iUniverse, Bloomington, IN, 2009

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