OT Management of Chronic Pain
A Strength-based Approach

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Conventional Approach used by OT in Chronic Pain Management
Conventional Occupational Therapy Approach

- Viewing pain as symptom secondary to primary injury / illness
- Focus on solving discrete problems:
  - Reduction of pain level
  - Inflammatory control
  - Training and regaining ROM + strength
  - Functional improvement
  - Remediation of disabilities

The OT Management Continuum
Conventional OT strategies

Corset

Splints for protection, resting and symptom control

Conventional OT strategies

Work assessment, conditioning and hardening

Remedial & functional training
Conventional OT strategies

- Postural advice, aids and gadgets prescription for ADL & IADL

Office ergonomics

Conventional OT strategies - WR training

- Transportation work in warehouse
- Out-door training
- Work simulation
- Actual work task training
- Carrying and climbing stair training: logistic/transportation worker
- Push/pull sled (Graded weight)
- Shoveling
- Use of Cleansing trolley
However, are they enough for managing chronic pain?

Chronic Pain

- Work issues, pressure from family
- Side effects of Drugs
- Depressive mood, anxiety
- Drug dependence
- Treatment failure
- Negative thoughts
- Decrease physical tolerance
- Inactivity

Increase Suffering
The Interplay of the Systems in the Biopsychosocial Model

The World
- Social Systems
  - Society
  - Community
  - Family

The Person
- Psychological Systems
  - Cognition
  - Emotion
  - Motivation

- Biological Systems
  - Organs
  - Tissues
  - Cells

SPIRITUAL
- Hope
- Love
- Faith

The Fear Avoidance Model for Chronic Pain

Dysfunctional Pattern / Vicious Cycle caused by Chronic Pain

- Lifestyle imbalance
- Distortion of Domains of Concern
- Psychosocial problems

Paradigm Shift from Conventional Approach to Strength-based Approach

<table>
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<th>Pain as Symptom</th>
<th>Pain as Disease</th>
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<td>Problem-focused</td>
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Conventional Approach

- Focused on problem-solving: asking “what’s wrong?”
- Exploration of patient’s problems/pain
- Resolution of problem developed solely out of knowledge gained from problem discussion
- Encourage discussion of e.g. frequency, intensity, duration, cause of problems

Strength-based Approach

- Focused on goals / success: asking “what are your strengths/abilities?”
- Exploration of patient’s strengths / resources
- Create a vision of future where patient is coping as well as possible
**Strength-based Approach**

- **Operational Components:**
  - Identify patient’s personal strengths and resources
  - Exploration of life goals
  - Strengths are mobilized and goals are clarified
  - Solutions are co-constructed by therapist and patient
  - Understanding of discrete individual problem is not a necessary pre-condition

**Self-management through psycho-education**

**Occupational Life-style Redesign (Spiritual Resources)**

**Health Qigong Practice (Natural Healing Resources)**
Strength-based Approach

- Self-management through psychoeducation
- Occupational Life-style Redesign (Spiritual Resources)
- Health Qigong Practice (Natural Healing Resources)

Enhancing self-management through psychoeducation

Injury → Chronic Pain

Cognitive/Perceptual (e.g. injury getting worse, never recover) → Chronic Pain

Negative Emotions (e.g. worrying, depress) → Chronic Pain

The UCH Chronic Pain Management Group

Goals

• Empowering patients through psycho-education & group support

• Improve self-efficacy by activities engagement, including practice of health qigong Baduanjin (八段錦)

• Promote better coping and minimizing disabilities secondary to pain by increasing knowledge in pain

• Cognitive restructuring: Identify and dispute self-defeating statements and negative thoughts
Program Outline

1. Understanding Chronic Pain
2. Goal setting and Pacing
3. Disputing negative thoughts
4. Back care knowledge
5. Relaxation Technique
6. Sleep and Sex issues
7. Summary
   • Post-1/12 FU
   • ALL Sessions: 八段錦 Practice

Summary of Results (since late 2007)

Past results:
• No. of treatment groups conducted: 7
• Total no. of patients completed treatment: 40

Feedback from Patients:
• Positive feedback from patients after health qigong practice including: better trunk flexibility, better self-efficacy in coping with pain and also more positive mood
Strength-based Approach – Occupational Life-style Redesign

What is OSLR?

- Using coaching as one of the techniques
- Focusing on patient’s ability, strength, solution-focused, goal setting
- Aim at building resilience by pursuing happiness-inducing or more health and wellness activities
Some typical strategies & techniques patient gained in OLSR program for pain

- **Activity Selection technique** (e.g. Priority assessment, Activity analysis)

- **Activity Performance technique**
  - Timing and pacing
  - Work process strategies (Work simplification, energies conservation)
  - Environmental adaptation / Use of assistive devices and furniture

- **Lifestyle Strategies**
  - Adopt new attitude (Accept the existence and persistent of pain)
  - Stop fighting with pain, start living with pain
  - Focus on achieving what you want to do rather than elimination of pain

**Pain Coping Strategies & Technique**

**Solution Focused Strategies of Pain Coping**

- **Therapist/Coach asking:**
  - Observe what works for yourself & do more
  - Observe what works for others & try if it works for you as well
  - Do what works for yourself often and avoid doing those don’t work

**Pain coping strategies**

- Observe and aware of antecedent event, timing and environment that trigger pain, aware and avoid those activities
- Aware personal ways of minimizing aggravation of pain / reducing intensity of pain
- Learn what to do and what not to do during pain
- Right attitude of the use of pain control medicine

*Solution generated from patients, not spoon-fed by therapist!*
Anticipated Outcome of OLSR

- **Immediate outcomes**
  - Increase participation in happiness-inducing activities
  - Improve mood and self efficacy in coping with pain
  - Enhance knowledge & skills for adapting to pain

- **Intermediate outcomes**
  - Reflect on personal thinking, attitude, believe, interests

- **Ultimate outcomes**
  - Redesigning and reconstruction of habit, life role, lifestyle and life functioning
  - More competent overcoming upcoming life challenges

Occupational Lifestyle Re-design
Group Program – QEH Experience

- Integrate occupational therapy and life coaching
- 10 weekly 3-hours sessions in 3 months
  - 8 indoor & 2 outdoor sessions
- Provide a road map for changes
- Teach strategies for living successfully with pain
- Coach the journey of change
  - Instead of problem solving, emphasize on pursuit of happiness inducing activities
  - Experiment the learned adaptive strategies and skills in everyday life
Coach the Journey of Change

- What to do? Cycles of goal setting & implementation
  - Weekly goal setting
  - Goals: progress from leisure → social → work
  - Detail activity analysis and synthesis → ensure successes
  - Group dynamic to energizes actions

- Two outing sessions: plan, analysis, design, implementation

WHO-5
Physical and Psychological wellbeing scale

- N = 30
- Pre = 37.6/100
- Post = 51.7/100
- T-statistic = 3.58
- P-value = 0.001**
### WHO-5

**Physical and Psychological wellbeing scale**

![WHO-5 Boxplot](image)

- **Overall Health**
  - N = 28
  - Pre = 2.25/5
  - Post = 2.71/5
  - t-statistic = 2.458
  - p = 0.025*

- **Overall QOL**
  - N = 28
  - Pre = 2.79/5
  - Post = 3.18/5
  - t-statistic = 2.017
  - p = 0.054

- **Overall Happiness**
  - N = 28
  - Pre = 2.54/5
  - Post = 3.04/5
  - t-statistic = 2.469
  - p = 0.020*

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### Single Questions

**Overall Health**

- N = 28
- Pre = 2.25/5
- Post = 2.71/5
- t-statistic = 2.458
- p = 0.025*

**QOL**

- N = 28
- Pre = 2.79/5
- Post = 3.18/5
- t-statistic = 2.017
- p = 0.054

**Happy Living**

- N = 28
- Pre = 2.54/5
- Post = 3.04/5
- t-statistic = 2.469
- p = 0.020*
Qualitative feedback from participants

- There are a lot of desirable changes in the person
  - Motivational, psycho-social, habits and lifestyle
- Successful achievement in goals of pursuing happiness inducing activities will result in:
  - Regular mood
  - Improve self efficacy
  - Methods and strategies learned to meet challenges
- All these further energize attempts of more difficult goals

Strength-based Approach

- Self-management through psycho-education
- Occupational Life-style Redesign (Spiritual Resources)
- Health Qigong Practice (Natural Healing Resources)
Strength-based Approach: Health Qigong, natural healing resources

- What is Health Qigong?
- “Qi” (氣)
  - vital energy or dynamic force, which sustains and nourishes life
- “Gong” (功)
  - skill or art acquired through REGULAR PRACTICE

Health Qigong is...

- An Ancient Exercise for the “Mind” & “Body” applied in modern rehabilitation
- An alternative to conventional exercise
- An activity which can be fitted nicely into other rehabilitation programs, e.g. OSLR
Health Qigong …

- A cultural sport activity for exercising “the Mind & the Body.” Can be applied & fitted into modern rehabilitation & health promotion programs, e.g. OLSR
- An alternative to conventional exercise which the frail and weak can easily participated

1. Postural & Movement regulation
2. Breathing regulation
3. Mental regulation
4. INTEGRATION for a state of BALANCE / HOMEOSTASIS

Reference: HKOTA Health Qigong Working Group

Benefits of Health Qigong: Integration of the “three regulations” (三調合一)

- Improve concentration
  - Adjusting brain activity and response to stress

- Deep and coordinated breathing
  - Promote gaseous exchange and lymph circulation

- Postural correction
  - Muscles rhythmic contract and relax
  - Promote muscular activities for seldom-used muscles
  - Slow stretching of tensed muscles

- Stress reduction & eliminating body wastes
  - Promote blood & lymph circulation
  - Promote oxygen & nutritional transportation
  - Promote self-healing
  - Enhance immune system

Reference: HKOTA Health Qigong Working Group
The Four Health Qigong Styles regulated by General Administration of Sports of China (國家體育總局):

- 易筋經
- 六字訣
- 五禽戲
- 八段錦

*Local OTs have received formal training and certified as coaches in these four styles*
Why using health qigong for pain patients?

1. Forms are simple and easy to learn
2. Allow adaptations and gradual upgrading – important for gaining self-efficacy
3. Emphasized in spinal movement - stretching of back and trunk muscles (esp. 八段錦/易筋經)
4. Affordable, feasible for indoor practice - favors compliance
5. Facilitate life-style changes by engaging patients in a more active life-style

Recent studies of Health Qigong


- Pain reduced and improved insomnia and functional disability by health qigong practice for twice a day for two months. (“習練易筋經治療腰肌勞損臨床觀察” 趙立軍 (2007) 北京中醫 2007年10月第10期)
Health Qigong for Chronic Pain – in the News

Evidence-based HQG in Chronic Pain Management

- **Objective:**
  - Effectiveness of regular practice Health Qigong Yi Jin Jing (HQGYJJ) in improving pain and related symptoms

- **Subjects:**
  - 39 middle-age females, all community dwellers, with chronic LBP

- **Methodology:**
  - Study group: 8 weeks’ HQGYJJ training program was applied
  - Control group: No Rx

Siu, YYP, Qin L. *Regular Health Qigong Yi Jin Jing is effective in female community dwellers with chronic non-specific low back pain: A randomized controlled trial.*
Evidence-based HQG in Chronic Pain Management

- **Results:**
  - 20 subjects in experimental group reported decreased in median pain and depressive features, significant increased in trunk flexibility
  - Comparing to control group, experimental group showed a significant improvement in functional capacity

- **Conclusion:**
  - Regular HGQYJJ practice is helpful in reducing pain and depressive features, improve trunk flexibility and functional capacity in middle-aged female community dwellers.

Siu, YYP, Qin L. *Regular Health Qigong Yi Jin Jing is effective in female community dwellers with chronic non-specific low back pain: A randomized controlled trial.*
Conclusion

- Viewing chronic pain as a symptom? Disease?
- Complexity of chronic pain calls for more holistic and innovative approaches
- Paradigm shift in OT management – problem-based approach to strength-based approach
- Build up resilience through development of patient’s strength & resources
- Decrease health care utilization and overall cost

New Formula!

Conventional Approach + Strength-based Approach = Better Chronic Pain Management
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