Integrative East/West Approaches: Turning Stress and Anxiety into Resilience

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Part 1: Philosophy and concepts
Good Life
Good Health
SLOW DOWN  KEEP CALM  BE POSITIVE  TAKE IT EASY
UNPLUG     ENJOY LIFE  HAVE FUN  BREATHE
RELAX      GO OUTSIDE  MEDITATE
Qi – energy flow

Chinese Medicine

Diet & Lifestyle
Heading East for solutions

Guiding Principles of IBMS

- Strength-based and empowerment for change
- Meaning-focused and transformation-oriented
- Multi-modal mind-body approach with lots of fun
- Maintaining the problem is dynamic coping
- Promoting compassionate helper therapy principle

Holistic well-being

- Meaning in life
- Personal growth
- Life attitude
- Spiritual belief
- Connecting with nature

- Physical symptoms
- Health Condition
- Living styles
- Connecting with body

- Peaceful mind
- Relaxation
- Positive self
- Interpersonal harmony

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Chan et al., 2006; Chan et al., 2014; Lee et al., 2009
Interconnection among body, mind and spirit

Spirituality on Mind and Body

- Connecting mind-body-soul by unconditional love and forgiveness (Lee et al., 2009)
- Salutogenic model (Antonovsky, 1996)
- Benefits of positive religious coping and beliefs on physical and mental health (Weber & Pargament, 2014)

The Mind-body connection

- Regulatory mechanism of stress (e.g., HPA axis), effects of stress on immunity and cellular oxidation (Glaser & Kiecolt-Glaser, 2005)
- Emotional and spiritual impact of chronic diseases e.g., cancer, CV diseases
CHROMOSOMES ARE PAIRED STRANDS OF DNA FORMED AS THE DOUBLE HELIX

Telomeres
(protective tips)

Paired Strands
of DNA

Telomeres
Telomere Shortening

As cells divide over time, telomeres shorten, and eventually cell division stops.
Exercise - Neurogenesis
Part 2: Intervention
Enhancing well-being

- Self reflection
- Meaning reconstruction
- Forgiveness and appreciation

- Self-Awareness
- Emotion management
- Communication
- Social functioning

- Balance diet
- Exercise
- Massage and acupressure points

Techniques used in IBMS

Body:

- Palm rubbing
- Healing hands
- Pulling qi ball
- Clapping qi-gong
- Open and close fingers
- Swinging of hands qi-gong
- Roll the wrists with hands like a lotus flower
- Hand massage techniques
- Diaphragm breathing
- Using voice and sound in breathing
- Meditation breathing
- Techniques of the ears
- Techniques of the eyes
- Techniques of the mouth
- Techniques of the feet
- The ‘ten techniques to longevity’, etc.

Self learning platform: http://learning.hku.hk/IBMS/
Other body techniques used in IBMS

✓ Acupressure points
✓ Group back massage and transfer of Qi (傳氣)
✓ Simple physical exercises, e.g., raising legs to train thigh muscles
✓ Tapping – whole body, head
✓ Stretching
✓ Healthy eating and sleep hygiene education
Clipping Qigong
Meridian Lines
Back Massage
Acupressure
Energy Lines

• 14 meridian lines
• 361 acupuncture points
We are what we eat
Coping with anxiety
Breath - Blow
Chan, 2001 and
http://learning.hku.hk/IBMS/
Techniques used in IBMS - Mind

- Mindfulness-based techniques
  - Mindful breathing
  - Mindfulness bell
  - Mindful eating; mindful tea drinking

- Validating emotions and understanding their impact on the body

- Normalizing problems of living and understanding them as a developmental challenges

- Cultivating a sense of community – “I am not alone”
LEARN to be SMART and Resilient

L - LETTING-GO
E - PEACE OF MIND
A - APPRECIATION
R - RESILIENCE
N - CONTROL & DIGNITY

S - STRENGTH-FOCUSED
M - MEANING-ORIENTED
A - APPRECIATION
R - RESILIENCE
T - TRANSFORMATION
Spiritual Strength - Breathing

Breath in love & appreciation
Techniques used in IBMS - Spirituality

- Gratitude, appreciation, forgiveness, and self-compassion
- Autobiographical timeline – Life review
  - Reauthoring life narratives through writing “chapter titles” (Neimeyer, 2009)
- Analogies: Blowing away hatred and vengefulness through breathing exercises
- Loving kindness meditation
- Letting go rituals
- Use of stories and metaphors
Some days you may feel broken. May you feel whole again in days to come.
MAKE TIME FOR YOURSELF.
YOU ARE IMPORTANT.
Loving-kindness
Self-Compassion
Prayers
Breath in Unconditional Love, Gratitude and Appreciation
Love yourself. It is important to stay positive because beauty comes from the inside out.

JENN PROSKE
Self Appreciation - I LOVE MYSELF

I appreciate my…

1. ______________
   _

2. ______________
   _

3. ______________
   _
Life becomes easier when you learn to accept an apology you never got.
Dynamic Equilibrium through interventions

Multiple therapeutic entry-points (somatic, emotional, psychological, social)

Client-centered, respect individuality & collectivity

Strength-focused, dignified personhood

Dynamic process of change in context of search for equilibrium
Part 3:

Application and evaluation
Application with different populations

IBMS

Anxiety & Depression

Terminal Illness

Cancer (Colon, Breast, Lung)

Skin Disease (Psoriasis, eczema)

Women (Divorce, single parent)

Insomnia

Infertility

Chronic Fatigue

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<table>
<thead>
<tr>
<th>Category</th>
<th>Authors/References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients with psoriasis</td>
<td>C. H. Y. Chan et al., 2017</td>
</tr>
<tr>
<td>Patients with depressive symptoms</td>
<td>X.W. Ji et al., 2015, Rentala, Fong, Nattala, Chan, &amp; Konduru, 2015, Celia Hoi Yan Chan et al., 2014, Sreevani et al., 2013, F. H. Hsiao et al., 2011, Yang et al., 2009</td>
</tr>
<tr>
<td>Patients with adjustment disorder and depressive mood</td>
<td>F. H. Hsiao et al., 2014</td>
</tr>
<tr>
<td>Patients with depression and anxiety</td>
<td>H. H. M. Lo, Ng, Chan, Lam, &amp; Lau, 2013</td>
</tr>
<tr>
<td>Terminal cancer</td>
<td>C. Chan &amp; Ho, 2012</td>
</tr>
<tr>
<td>Women undergoing in vitro fertilization</td>
<td>C. H. Y. Chan et al., 2012, C. H. Y. Chan, Ng, Chan, Ho, &amp; Chan, 2006, C. H. Y. Chan, Chan, Ng, Ng, &amp; Ho, 2005</td>
</tr>
<tr>
<td>Trauma management</td>
<td>T. H. Y. Chan &amp; Ng, 2012, C. L. W. Chan, Chan, &amp; Ng, 2006, C. Chan et al., 2000</td>
</tr>
<tr>
<td>Mental health</td>
<td>S. M. Ng, Chan, Leung, Chan, &amp; Yau, 2009</td>
</tr>
<tr>
<td>Patients with colorectal cancer</td>
<td>A. M. Lee et al., 2007</td>
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<tr>
<td>Stress management</td>
<td>C. L. W. Chan, I. F. Tso, et al., 2006</td>
</tr>
<tr>
<td>Psychosocial oncology</td>
<td>C. L. W. Chan, Ho, Fu, &amp; Chow, 2006</td>
</tr>
<tr>
<td>Patients with chronic disease</td>
<td>S. Ng et al., 2006</td>
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</table>
The Holistic Well-Being Scale

- Well-being is conceptualized as peace of mind and engagement with the present (i.e. equanimity), while ill-being is conceptualized as resulting from non-attachment and inability to let-go of material and immaterial fixations (i.e. affliction)
- Validated in local population (Chan et al., 2014) and Singaporean cancer patients (Lee et al., 2015)

<table>
<thead>
<tr>
<th>Domains</th>
<th>Subscales</th>
<th>Sample item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affliction</td>
<td>Emotional vulnerability</td>
<td>My feelings are easily hurt</td>
</tr>
<tr>
<td></td>
<td>Bodily irritability</td>
<td>My whole body is very tense</td>
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<tr>
<td></td>
<td>Spiritual disorientation</td>
<td>I feel hopeless</td>
</tr>
<tr>
<td>Equanimity</td>
<td>Non-attachment</td>
<td>I can let go if I so desire</td>
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<tr>
<td></td>
<td>Mindful awareness</td>
<td>I am able to notice changes in my mood</td>
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<td></td>
<td>General vitality</td>
<td>I am full of energy</td>
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<tr>
<td></td>
<td>Spiritual self-care</td>
<td>I have a rich religious/spiritual life</td>
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</tbody>
</table>
IBMS with individuals with depressive symptoms

- An empowerment program targeting individuals with depressive symptoms but not under psychiatric care
- Intervention groups conducted from Feb to Aug 2011
- Notable improvement in depression and anxiety (HADS & BSI), and holistic well-being

<table>
<thead>
<tr>
<th>Session</th>
<th>Theme</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working with Qi One</td>
<td>The harmony of body, mind and spirit</td>
<td>Introducing the concept of holistic health</td>
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<tr>
<td></td>
<td></td>
<td>Regaining autonomy to heal oneself</td>
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<td></td>
<td></td>
<td>Restoring equilibrium among physical, emotional, and spiritual well being</td>
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<tr>
<td></td>
<td></td>
<td>Restoring balance among work, family, and life</td>
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<tr>
<td>Working with Jing Three</td>
<td>The way of dynamic Balancing</td>
<td>Accepting pain and suffering</td>
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<tr>
<td></td>
<td></td>
<td>Letting go and accepting mishaps in life</td>
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<td></td>
<td></td>
<td>Evaluating gains and losses in life</td>
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<td></td>
<td></td>
<td>Fostering forgiveness to own self</td>
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<tr>
<td></td>
<td></td>
<td>Facilitating reconciliation with other people</td>
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<tr>
<td></td>
<td></td>
<td>Cultivating sense of tranquility and peace of mind</td>
</tr>
<tr>
<td>Working with Shen Five</td>
<td>The beauty of simplicity</td>
<td>Appreciating own self and life</td>
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<tr>
<td></td>
<td></td>
<td>Planning and committing to personal growth</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Instilling hope towards future</td>
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<tr>
<td></td>
<td></td>
<td>Planning and taking action to help self and others</td>
</tr>
</tbody>
</table>

IBMS with individuals with insomnia-related stress

- A qualitative study on the mechanism of change in IBMS interventions for individual with insomnia

<table>
<thead>
<tr>
<th>Experiences of insomnia-related stresses</th>
<th>Ways of living with insomnia</th>
<th>Beyond sleep improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life stressors that led insomnia</td>
<td>Improvement in sleep quality through mind-body exercises</td>
<td>Shift from insomnia to body-mind connection</td>
</tr>
<tr>
<td>Physical vulnerability</td>
<td>Reduction in sleep-related anxiety through acceptance and non-attachment</td>
<td>Centering of the self</td>
</tr>
<tr>
<td>Poor emotional state</td>
<td></td>
<td>Different perspectives towards hardships through group support</td>
</tr>
</tbody>
</table>

IBMS with helping professionals

<table>
<thead>
<tr>
<th>Day</th>
<th>Theme</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Foster awareness</td>
<td>• Awareness on energy, importance of bodily self-care and exercising</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Awareness on negative emotions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Awareness on the vulnerability of life and meaninglessness</td>
</tr>
<tr>
<td>2</td>
<td>Develop strength</td>
<td>• Physical exercises</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cognitive reappraisal, relaxation and meditation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Life planning, goal setting, mindfulness, Zen lifestyle</td>
</tr>
<tr>
<td>3</td>
<td>Discover meaning</td>
<td>• Acknowledging body-mind-spirit interconnection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Recognizing the adaptive value of positive and negative emotions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Appreciating the unpredictability of life, loving-kindness, live for the moment</td>
</tr>
</tbody>
</table>

- To examine the effectiveness of IBMS program in improving holistic well-being and work empowerment among helping professionals in continuous education.
- Significant changes in perceived impact on work outcomes and body-mind-spirit well-being (BMSWBI) were reported.
IBMS with non-metastatic breast cancer patients

• A 3-arm RCT comparing IBMS with supportive-expressive group (SEG) and social support group.

• All groups received eight 2-hour weekly sessions.

• While emotional suppression was significantly reduced in SEG; BMS produced significant decrease in perceived stress.

Assessment of outcomes – Biomarkers

Various biomarkers have been used to evaluate the effectiveness of IBMS immune functions and stress response.
The higher level of cortisol at 21.00h and a flatter diurnal cortisol pattern were more likely to occur in EDU than in BMS participants, indicating that BMS group therapy helps maintaining stable cortisol responses to everyday life for breast cancer survivors.

Hsiao et al., 2012

Our findings indicate the effectiveness of I-BMS in facilitating sleep and alleviating depression, as well as reducing IL-6 levels post-intervention.

Qigong as holistic intervention
Qigong: a body-mind-spirit exercise

• Qigong consists of two words:
  • ‘Qi’ (氣) is ‘vital energy’
  • ‘Gong’ (功) means the skill of cultivating and regulating "Qi" (the vital energy)

  (Lee, CT, Lei, T., 1999; Manek & Lin, 2012)

• Qigong is an ancient art of self-healing exercise
  • Mind regulation (調神)
  • Body regulation (調身)
  • Breath regulation (調息)

• To maintain the balance between body, mind and spirit, and achieve optimal health

  (Lee, CT, Lei, T., 1999; Manek & Lin, 2012)
Our studies on Qigong, Moxibustion and IBMS

Research studies on Qigong intervention

CFS-like illness
- 3 RCTs using Qigong

Cancer patients and family caregivers
- 1 RCT using Qigong

Insomnia and mild depression
- 1 RCT using Qigong and IBMS

Mild cognitive impairment and family caregivers
- 1 case-control pilot study using Qigong

Chronic pain
- 1 RCT using Moxibustion
First study on Qigong and telomerase activities

A Randomized Controlled Trial of Qigong Exercise on Fatigue Symptoms, Functioning, and Telomerase Activity in Persons with Chronic Fatigue or Chronic Fatigue Syndrome

Rainbow T. H. Ho, Ph.D. · Jessie S. M. Chan, M.P.H. · Chong-Wen Wang, Ph.D. · Benson W. M. Lau, Ph.D. · Kwok Fai So, Ph.D. · Li Ping Yuen, B.C.M. · Jonathan S. T. Sham, M.D. · Cecilia L. W. Chan, Ph.D.

Telomerase activity increased in the Qigong group from 0.102 to 0.178 arbitrary units (p<0.05). The change was statistically significant when compared to the control group (p<0.05).
Qigong as a Mind-Body Intervention: anti-aging effects


<table>
<thead>
<tr>
<th>Telomerase activity (Arbitrary unit)</th>
<th>Time × group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telomerase activity (Arbitrary unit)</td>
<td>Baseline (T0)</td>
</tr>
<tr>
<td>-------------------------------------</td>
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</tr>
<tr>
<td>Intervention group (n=33)</td>
<td>0.102 (0.051)</td>
</tr>
<tr>
<td>Control group (n=31)</td>
<td>0.089 (0.036)</td>
</tr>
</tbody>
</table>

T0 | T1
---|---
Qigong group | 0.102 | 0.178
Control group | 0.089 | 0.104

Telomerase activity

Qigong group

P = 0.029

Control group
Using two different Qigong exercises for chronic fatigue

Qigong may not only reduce the fatigue symptoms, but also has **antidepressive effect** for patients with CFS-like illness.

Qigong was an efficacious and acceptable treatment for sleep disturbance in CFS-like illness.
Qigong alleviated anxiety and depressive symptoms

Qigong improves subjective sleep quality

Qigong reduced fatigue and improved mental functioning

Qigong significantly increased adiponectin levels in females with CFS-like illness. Decreases in depression symptoms were associated with increases in adiponectin levels following Qigong exercise, indicating that the potential contribution of adiponectin to Qigong exercise elicited antidepressive effects in human subjects.
Qigong significantly increased adiponectin levels and decreased depressive symptoms.

Conclusions

• IBMS intervention and Qigong exercise may be used as an effective behavioral intervention for the holistic health of chronic illness in prevention and rehabilitation.

• Studies with larger samples, objectively measured exercise, and more physiological markers are needed.
Part 4: Recent advances
Lung cancer patients and caregivers

• Lung cancer ranked second by incidence and ranked first by mortality in Hong Kong in 2014 (Hong Kong Cancer Registry, 2016).

• Although target therapies have significantly lengthened the prognosis, the survival rate remained low compared to other types of cancer (SEER Cancer Statistics Review).

• Both patients and caregivers suffer from great distress on physical, psychological, social, spiritual, and practical domains (Murray et al., 2007; Murray et al., 2010). Caregivers tend to suffer even more depression and anxiety than their patients (Badr et al., 2015)

• Parallel group for both patients and caregivers

• 8-sessions

• Served over 120 families since April 2016
Children with eczema and their parents

• **10-20% children worldwide** (Suarez et al. 2012).

• Locally, 31.3% of primary and secondary school students reported one or more skin diseases. Eczema was the most common problem (Fung & Lo, 2000).

• Significant impacts on sleep, anxiety, and depression. Social isolation, low self-esteem, withdrawal, and dependency are also common (Kelsay et al., 2010). Children are more susceptible to flare-ups when they are stressed (Suarez et al., 2012).

• Families often experience disrupted parental attachment (Howlett, 1999).

• 36-hour of parallel group for school-age children with eczema (age 6 to 12) and their parents.

• 150 families have enrolled in the summer batch.
Women waiting for the pregnancy result during an IVF cycle

- The “14-day wait” before the pregnancy test is one of the most stressful time for women going through IVF (Lancastle & Boivin, 2008).
- This trial evaluates a self-help IBMS program tailor-made to the psychosocial care needs of women enduring the 14-day wait of an IVF cycle.
- A 3-arm RCT is conducted to contrast the effect of IBMS with 2 control conditions – spiritual exercises only and health education only.
- Over 300 women have been admitted to the trial.
Future directions and physiological evidences

• Further vigorous study on behavioral interventions for other chronic diseases are needed.

• More strategies to promote it as a self-stress management tool and healthy lifestyle in the community

• Assess the non-pharmaceutical behavioral interventions with evidence in terms of molecular mechanism:
  
  • Inflammation-related gene expression,
  • Neurogenesis by brain imaging
Brain

Angiogenesis - the formation of new blood vessels - can occur even in adulthood and is correlated with neurogenesis.
Neurogenesis
Thank You for your attention!

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