Traditional Chinese Medicine and Western Medicine in China: Integration Policy

IAA Colloquium in Hong Kong

Dr Vincent CH Chung
Assistant Professor
Registered Chinese Medicine Practitioner

School of Public Health and Primary Care
Chinese University of Hong Kong
Our Health Beliefs

“The sage does not cure the sick but prevents illness from arising”

- Yellow Emperor’s Inner Classic
Barefoot Doctors are working all over villages on the mountain

Cooperative primary healthcare gives rise to a new prospect
TCM in the People’s Republic of China

- 1928: TCM used as a major treatment modality amongst Red Army Soldiers during the Civil War
- 1949: Mao highlighted the importance of TCM development
- 1954: Mao directed the establishment of the Chinese Academy of TCM
- 1955-6: Mao purposed the integration of TCM and western medicine
Traditional Chinese Medicine in 20th Century

Many of China’s “barefoot” doctors, in the Cultural Revolution, were farmers given basic medical training.
TCM in the People’s Republic of China

- 1955: Full time TCM learning program for western medical (WM) doctors launched. TCM Universities established in major cities.

- 1960: More than 2300 Western doctors enrolled in full time TCM education program. Integration of TCM and WM at all levels of care.

1980s-Today: TCM and integration of TCM and WM continued to be emphasized in China’s healthcare policy

Currently 40% all healthcare in China is provided by TCM practitioners

The full integration of TCM alongside WM at all levels of the Chinese healthcare system is recognized by the World Health Organization

2009: The current Chinese Ministry of Health highlighted the government’s commitment in TCM development

Chen Zu: Equal Emphasis of WM and TCM is “important and urgent”

陳竺在2009年全国中医药工作会议上指出 贯彻落实“中西医并重”重要而紧迫
How Culture affect Health Behaviour, and Beyond

1. formulate national policies, regulations and standards... ensure appropriate, safe and effective use of traditional medicine

2. integrating traditional medicine into their national health system

3. establish systems for the qualification, accreditation or licensing of traditional medicine practitioners.

• policy context,
• professional attitudes and training,
• patients’ choice, and
• financing of access and service development.

4. communication between conventional and traditional medicine providers should be strengthened
TCM in colonial Hong Kong

- TCM treated as indigenous custom
- Laissez-faire policy: very little regulation or support
- Monitored by “Secretary for Home Affairs” but not “Secretary for Health”
- In 19 century, TCM was the major healthcare option for HK citizens
- TCM experienced downturn after 1894 Plague and 1941 Japanese occupation
- TCM in 1940s-1980s: Small local practice with an unequal status compared to western medicine (WM)
Basic Law of Hong Kong SAR, Article 138

- The Government of the Hong Kong Special Administrative Region shall, on its own, formulate policies to develop Western and traditional Chinese medicine and to improve medical and health services.

- 1st July, 1997
Further Development in the Early SAR Period

- **October 1997**
  - The Chief Executive of the newly established Hong Kong Special Administrative Region (SAR) announced the government's commitment to Chinese medicine development in his first policy address.

- **November–December 1997**
  - Consultative Document on HK’s Chinese medicine Development was published.

- **July 1999**
  - Chinese Medicine Ordinance was passed by the Legislative Council (Legco).

- **September 1999**
  - Set up of the Chinese Medicine Council of Hong Kong (CMCHK), a statutory body responsible for implementing regulatory measures.
TCM Professional Development under CMCHK

- **2002**
  - First group of TCM practitioner gained registration
- **2003**
  - First qualifying exam for TCM practitioners held
- **2005**
  - Compulsory Continuing Chinese Medicine Education (CME) Program for license revalidation
- **2006**
  - Issuance of sick leave certification by registered TCM practitioners
- **2008**
  - Recognition of certification of sick leave, medical examination and reimbursement of medical expenses arising from work injuries by registered TCM practitioners (effective on 1 Sept 2008)
  - Regulation on Chinese herbal medicine traders
Transactional arrangement for TCM practitioners’ registration

- Mixed education and training background amongst TCM practitioners prior 3 January 2000 –
- 2 types of TCM practitioners during transitional period

- Registered Chinese Medicine Practitioners
  - >15 yrs of proven clinical experience
  - OR
  - >10 yrs of exp + recognized qualification in TCM
  - OR
  - >10 yrs of exp + passing qualifying exam part 2 (Oral)
  - OR
  - <10 yrs of exp + recognized degree in TCM + passing qualifying exam part 2 (Oral)
  - OR
  - Local TCM degree + Qualifying exam part 1 and 2 (written plus oral)

- Listed Chinese Medicine Practitioners
  - Some clinical experience prior 3 Jan 2000 but do not satisfy one of the first four possible registration criteria
  - Must pass qualifying exam part 1 and 2 to gain registration
  - No rights in prescribing restricted (potentially toxic) herbs
  - No rights in issuing sick leave certificates

As of 2010: 6241

As of 2010: 2772
TCM policy achievements

1. Formal regulation and registration of TCM practitioners
   Chinese Medicine Council of Hong Kong (CMCHK)
   Chinese Medicine Ordinance.
   Rights to issue sick leave and health condition assessment certificates

2. Introduction of TCM services into the public healthcare system
   Established 16 out of 18 planned TCM outpatient clinics. Private hospitals with TCM service proposed.
   [link](http://www.hacmk.org.hk/home.nsf/homeFrame?ReadForm&LANG=zht&muid=87004711&uid=0684D7DF3C76A6F74825781E002C1519&ViewType=information)

3. Professional education in TCM
   Establishment of full time undergraduate training in TCM
   Compulsory Continuing Medical Education (CME) program for all registered TCM practitioners

- Policy Address 1997
- Policy Address 2001
- Policy Address 2005
- Policy Address 2009
Health care reform in Hong Kong

Dear Citizens,

Hong Kong’s healthcare system is at an important crossroads. Over the years we have built a healthcare system that provides high quality services. We have achieved outstanding results and the healthcare professions have maintained high professional and ethical standards. At the same time, the system is facing major challenges due to the ageing population and the need to keep pace with rapid developments of medical technology.

Figure 3. Community Health Centres/CHC-like networks: possible model(s) of care

Source: Food and Health Bureau
The Primary Care Office strategies

Working Group on Primary Care Strategies:
- Develop comprehensive care by **multi-disciplinary teams**
- Improve continuity of care for individuals
- Improve co-ordination of care among healthcare professionals across different sectors
- Strengthen preventive approach to tackle major disease burden
- Enhance **inter-sectoral collaboration** to improve the availability
- of quality care, especially care for chronic disease patients
- Emphasise person-centred care and patient empowerment
- Support professional development and quality improvement
- Strengthen organisational and infrastructural support for the changes
Have you EVER consulted a Chinese Medicine (CM) practitioner?  

61.7%  

Financing Context:  

Western care is tax funded with wide accessibility  
TCM is mostly private, require out of pocket payment  

>=15 yrs, Hong Kong Thematic Household Survey, 2005 (N=36,724)
Double consulting of WM and TCM professionals is popular

>=15 yrs, Hong Kong Thematic Household Survey, 2005 (N=36,724)

Visited WM practitioner only: 80.23%

Visited both WM & TCM practitioners: 16.60%  “double consulters”

Visited TCM practitioners only: 3.17%

Visited a healthcare professional in the past 12 months: (n=18,087)
Who are using TCM in Hong Kong?

1) TCM is already sharing the local chronic disease burden, esp. among those with lower Quality of Life (QoL)

2) What are the possible role of TCM in managing chronic illness, and improving the wellbeing of the population?
Population Pyramids: 2010 & 2031

Mid 2010

Mid 2031

Age

85+
80-84
75-79
70-74
65-69
60-64
55-59
50-54
45-49
40-44
35-39
30-34
25-29
20-24
15-19
10-14
5-9
0-4

Thousands

0
100
200
300
400
500

Male
Female

Thousands

0
100
200
300
400
500

Male
Female
Increasing burden of Chronic Non Communicable Disease in Hong Kong

- ~61% of total registered deaths in Hong Kong were attributed to four major preventable NCD
  - cancer (32.3%)
  - heart diseases (15%)
  - stroke (8.8%)
  - chronic lower airway diseases (5.1%)

- Premature death measured in terms of the number of potential years of life lost (PYLL) is age 75

- NCD are result our lifestyles such as unhealthy eating, lack of exercises, smoking and alcohol misuse

Source: Promoting Health in Hong Kong: A strategic Framework for Prevention and Control of Non-communicable Diseases, Department of Health, Hong Kong SAR
Probability of health service utilization type by age and chronic non-communicable disease (NCD) status

[Graph showing probability of utilization by age and NCD status, with different symbols for each category: No ncd-W only, No ncd-C only, No ncd-double, NCD-W only, TCM only in past yr, Both WM and TCM in past yr, WM only in past yr.]
Choice amongst NCD patients

- Curves for using WM only and double consulting forms a hyperbola, with vertex located at the middle aged.
- Middle aged chronic disease patient are more probable to double consult, approaching a 7(WM): 3 (double) ratio.
Choice amongst those WITHOUT NCD

- Curves for using WM only and double consulting ALSO forms a hyperbola, BUT with vertex located at early elderly age range
- Probability of Sole CM use of increase with age

Probability of health service utilization type by age and NCD status
Insurance possession in Hong Kong

Percentage distribution of persons by whether entitled to medical benefits provided by employers / companies and whether covered by medical insurance

- Only entitled to medical benefits provided by employers / companies: 18.3%
- Only covered by medical insurance: 11.1%
- Both entitled to medical benefits and covered by medical insurance concurrently: 9.1%
- Neither of the two: 61.5%
### Persons entitled to medical benefits provided by employers / companies and / or covered by medical insurance by type of medical protection entitled / covered

<table>
<thead>
<tr>
<th>Type of medical protection entitled / covered</th>
<th>No. of persons ('000)</th>
<th>百分比</th>
</tr>
</thead>
<tbody>
<tr>
<td>入住醫院</td>
<td>1,910.3</td>
<td>74.6</td>
</tr>
<tr>
<td>Hospitalization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>西醫診治 Consultation with Western medicine Practitioner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>普通科醫生 General medical practitioner</td>
<td>1,379.1</td>
<td>53.8</td>
</tr>
<tr>
<td>專科醫生 Specialist</td>
<td>752.2</td>
<td>29.4</td>
</tr>
<tr>
<td>中醫/骨傷中醫/針灸中醫診治 Consultation with herbalist / bone-setter / acupuncturist</td>
<td>389.1</td>
<td>15.2</td>
</tr>
<tr>
<td>牙醫診治 Dental consultation</td>
<td>347.6</td>
<td>13.6</td>
</tr>
<tr>
<td>每年身體檢查 Annual body check-up</td>
<td>145.7</td>
<td>5.7</td>
</tr>
<tr>
<td>產科 Maternity</td>
<td>69.4</td>
<td>2.7</td>
</tr>
<tr>
<td>乳房造影檢查 Mammography</td>
<td>26.7</td>
<td>1.0</td>
</tr>
<tr>
<td>子宮頸抹片檢查 Pap smear</td>
<td>18.3</td>
<td>0.7</td>
</tr>
<tr>
<td>合計 Overall</td>
<td>2,561.1</td>
<td></td>
</tr>
</tbody>
</table>

Census and Statistic Dept Thematic Household Survey 2007
Medical Claims Statistics, HK Federation of Insurers

GRAPH 2.3 Average Paid and Billed Amounts Per Case (HK$) in 2008 and 2009

TABLE 2.10
Forecasting of Out-patient Medical Services in 2011/2012

<table>
<thead>
<tr>
<th>Out-patient Coverage</th>
<th>Trended Utilization Rate (%)</th>
<th>Trended Average Claim Size (HK$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese Medicine Practitioners</td>
<td>99.0%</td>
<td>275</td>
</tr>
<tr>
<td>General Practitioners</td>
<td>480.4%</td>
<td>232</td>
</tr>
<tr>
<td>Specialists</td>
<td>45.7%</td>
<td>540</td>
</tr>
<tr>
<td>Physiotherapists</td>
<td>18.8%</td>
<td>351</td>
</tr>
<tr>
<td>Chiropractors</td>
<td>1.7%</td>
<td>620</td>
</tr>
<tr>
<td>X-ray/Laboratory</td>
<td>29.9%</td>
<td>688</td>
</tr>
<tr>
<td>Dentists</td>
<td>50.8%</td>
<td>720</td>
</tr>
</tbody>
</table>
Caution: herb drug interaction

- Herb Drug Interaction
Western medical professional’s influence?

- The root of such prejudice is believed to be the dominant social and political influence of allopathic (western) practitioners, extended from the one hundred year long colonial period. (Chiu et al. *Soc Sci Med*, 2005)

- TCM continues to be marginalized due to discrimination by the allopathic (western) medical sector after handover and professionalization. (Holliday I. *J Med Philos*, 2003)

- HK healthcare system dominated by western medicine
- Resisting integration via slow assimilation
- Lack inter-referral

Are these claims valid?
HK wide survey on WM doctors (WMD): Personal and Professional Behaviors Towards TCM

Supported by Health and Health Services Research Fund, 2007, FHB
Which group of WMD are LESS likely to refer?

<table>
<thead>
<tr>
<th>Referral CONSIDERATION</th>
<th>ACTUAL referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working in public sector (acupuncture)</td>
<td>Working in public sector (acupuncture)</td>
</tr>
<tr>
<td></td>
<td>Working in public sector (bone setting)</td>
</tr>
<tr>
<td>Aged &lt; 31 (CHM)</td>
<td></td>
</tr>
<tr>
<td>Aged 41-50 (Qi Gong)</td>
<td></td>
</tr>
</tbody>
</table>

Supported by Health and Health Services Research Fund, 2007, FHB
Which group of WMD are MORE likely to refer?

<table>
<thead>
<tr>
<th>Referral CONSIDERATION</th>
<th>ACTUAL referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aged 31-40 (acupuncture)</td>
<td></td>
</tr>
<tr>
<td><strong>Informal TCM education (acupuncture)</strong></td>
<td><strong>Formal TCM education (CHM, acupuncture, qi gong)</strong></td>
</tr>
<tr>
<td>Self use of CHM (CHM)</td>
<td>Self use of CHM (CHM)</td>
</tr>
<tr>
<td>Self use of Acupuncture (acupuncture)</td>
<td>Self use of Acupuncture (acupuncture)</td>
</tr>
<tr>
<td>Self use of Bone Setting (bone setting)</td>
<td>Self use of Bone Setting (bone setting)</td>
</tr>
<tr>
<td>Self use of Qi Gong (qi gong)</td>
<td>Self use of Qi Gong (qi gong)</td>
</tr>
<tr>
<td>Self use of Acupuncture (Bone setting)</td>
<td></td>
</tr>
<tr>
<td><strong>Higher “evidence” domains score (all 4 modalities)</strong></td>
<td><strong>Higher “evidence” domains score (all 4 modalities)</strong></td>
</tr>
<tr>
<td><strong>Higher “knowledge” domain score (CHM and acupuncture)</strong></td>
<td><strong>Higher “knowledge” domain score (CHM and acupuncture)</strong></td>
</tr>
</tbody>
</table>

Supported by Health and Health Services Research Fund, 2007, FHB
FIG. 2. Interface of Chinese traditional medicine (CTM) with public health through research and education of both CTM practitioners and mainstream clinicians.
Research priorities in traditional Chinese medicine

Jin-Ling Tang

Is the current Western model of research—trying out unknown treatments in animals—suitable for studying treatments that have long been used in humans?

<table>
<thead>
<tr>
<th>Mechanism based approach</th>
<th>Efficacy based approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding of the mechanism of disease</td>
<td>Evaluating safety and efficacy in humans (probably starting with phase II trials)</td>
</tr>
<tr>
<td>Design and synthesis of new compounds or molecules, or screening of those currently available</td>
<td>Surveillance of harmful effects</td>
</tr>
<tr>
<td>Screening in animal or in vitro models, and animal pharmacology, toxicology, and pharmacokinetics</td>
<td>Animal toxicology, in particular chronic</td>
</tr>
<tr>
<td>Evaluation of safety, pharmacology, and efficacy in humans (phase I, II, and III trials)</td>
<td>Better formulation</td>
</tr>
<tr>
<td>Approval for clinical application</td>
<td>Approval for clinical application</td>
</tr>
<tr>
<td>Post-marketing surveillance for long term rare harms (phase IV trials)</td>
<td>Post-marketing surveillance for long term rare harms (phase IV trials)</td>
</tr>
<tr>
<td></td>
<td>Identification of relevant substances</td>
</tr>
<tr>
<td></td>
<td>Dissection of mechanism of action</td>
</tr>
<tr>
<td></td>
<td>Further improvement of efficacy</td>
</tr>
</tbody>
</table>
Q: How can the belief system of TCM be reconciled with the Western approach to medicine?
Z.C.: First of all, you need to have proven clinical efficacy. And you need good models at the organism level, at the cellular level, and at the molecular level.

To establish clinical efficacy, I encourage my colleagues in TCM to organize multicenter studies. I tell them, this is not Western practice; this is universal practice!

I oppose the idea that TCM is something sacred, something you cannot dissect.

Q: Some TCM practitioners argue that you just have to trust that it works.
Z.C.: If it works, there must be some material basis, there must be mechanisms.

TCAM articles published over the period 1997-2002 in MEDLINE

<table>
<thead>
<tr>
<th>Type of publication</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>General articles</td>
<td>58.8</td>
</tr>
<tr>
<td>Reviews</td>
<td>17.1</td>
</tr>
<tr>
<td>RCTs clinical trials</td>
<td>7.6</td>
</tr>
<tr>
<td>Letters</td>
<td>7.6</td>
</tr>
<tr>
<td>Clinical trials</td>
<td>5.3</td>
</tr>
<tr>
<td>Editorials</td>
<td>3.0</td>
</tr>
<tr>
<td>Meta-analyses</td>
<td>0.5</td>
</tr>
<tr>
<td>Guidelines</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Raschetti et al, JACM, 11(1), 2005, 209-212
<table>
<thead>
<tr>
<th>Type of disease</th>
<th>Name of disease (number of reviews)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular &amp; cerebrovascular</td>
<td>Angina pectoris (6), pneumocardial disease (1), coronary heart disease (1), stroke (36), &amp; hypertension (1)</td>
</tr>
<tr>
<td>Nervous system disease</td>
<td>Vascular dementia (2), pulmonary encephalopathy (1), anxiety disorders (1), Bell’s paralysis (1), &amp; epilepsy (1)</td>
</tr>
<tr>
<td>Metabolic &amp; endocrine disease</td>
<td>Hyperlipemia (1), adiposis hepatica (2), &amp; diabetes peripheral neuropathy (2)</td>
</tr>
<tr>
<td>Hepatitis</td>
<td>Jaundice-virus hepatitis (1) &amp; type B hepatitis (3)</td>
</tr>
<tr>
<td>Stomach/intestinal disease</td>
<td>Chronic gastritis (1) 7 colitis gravis (2)</td>
</tr>
<tr>
<td>Air-tube disease</td>
<td>SARS (4), respiratory infection (2), &amp; asthma (1)</td>
</tr>
<tr>
<td>Urinary system disease</td>
<td>Renal failure (1), primary nephrotic syndrome (4) &amp; hyperplasia of prostate gland (1)</td>
</tr>
<tr>
<td>Gynacopathia</td>
<td>Postmenopausal osteoporosis (3), hyperplasia of mammary glands (1), endometriosis (2) &amp; dysgenesia (3)</td>
</tr>
<tr>
<td>Cancer &amp; chemotherapy</td>
<td>Non–small-cell lung cancer (1), carcinoma of esophagus (1), carcinoma of stomach (1), hepatoma (1), tumor chemotherapy assisting (1), leucopenia after chemotherapy (1), &amp; emesia after chemotherapy (1)</td>
</tr>
<tr>
<td>Arthropathy</td>
<td>Arthritis deformans (2), gonarthritis (1), &amp; caput femorisnecrosis (1)</td>
</tr>
<tr>
<td>Skin disease</td>
<td>Psoriasis (1) &amp; bedsores (2)</td>
</tr>
<tr>
<td>Other disease</td>
<td>Opioid withdrawal syndrome (2), <em>Schistosoma japonicum</em> infection (1), repair of trauma (1), syndrome of blood stasis (1), T-cell expression (1), &amp; deafness (1)</td>
</tr>
</tbody>
</table>

The number in parentheses shows how many reviews were on each disease.
SARS, severe acute respiratory syndrome.
Number of Controlled Clinical Trials Reports on TCM published in 13 randomly selected Chinese journals appears to be increasing in the past 2 decades.

Wang et al, Clinical Therapeutics, 29(7), 1456-1467, 2007
Thank You

Email address:
vchung@cuhk.edu.hk