



Research and Practice of Integrative Medicine in Hong Kong

香港中西醫結合的研究與實踐

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Research of Integrative Medicine: How?

- R&D: Efficacy 療效
 - Randomized controlled trials 隨機對照試驗
 - Meta-analysis and systematic review 薈萃分析和系統綜述
- Policy: Effectiveness 現實效用
 - Outcome research 研究成果
 - Cost-effectiveness 成本效益
 - Quality of life 生活質量

Randomized controlled trials 隨機對照試驗

GASTROENTEROLOGY 2013;144:307-313

Electroacupuncture Reduces Duration of Postoperative Ileus After Laparoscopic Surgery for Colorectal Cancer

SIMON S. M. NG, WING WA LEUNG, TONY W. C. MAK, SOPHIE S. F. HON, JIMMY C. M. LI, CHERRY Y. N. WONG, KELVIN K. F. TSOI, and JANET F. Y. LEE

Division of Colorectal Surgery, Department of Surgery, The Chinese University of Hong Kong, Prince of Wales Hospital, Shatin, Hong Kong SAR

The American Journal of GASTROENTEROLOGY

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Efficacy of a Chinese Herbal Proprietary Medicine (Hemp Seed Pill) for Functional Constipation

Chung-Wah Cheng, Mphil¹, Zhao-Xiang Bian, PhD¹, Li-Xing Zhu, PhD², Justin C.Y. Wu, MD³ and Joseph J.Y. Sung, MD, PhD³

Systematic review and meta-analysis

Is it a viable solution?

系統回顧和薈萃分析：它是一個可行的解決方案？

AP&T Alimentary Pharmacology and Therapeutics

Systematic review: the efficacy of herbal therapy in inflammatory bowel disease

S. C. Ng, Y. T. Lam, K. K. F. Tsoi, F. K. L. Chan, J. J. Y. Sung & J. C. Y. Wu

Common conclusions

- Flawed methodology 有缺陷的方法
- Heterogeneity 異質性
- Publication bias 發表偏倚
- Need of randomized controlled trials

What has not been addressed in RCTs?

- Chinese medical diagnoses
- Multi-component treatment (多元的治療)
- Treatment individualization (個體化治療) according to CM diagnoses (辨証)
- Diagnoses and interventions change during the course of treatment
- Outcome measures (觀察指標) based on Chinese medicine theories

Pragmatic Trials Vs Randomized Controlled Trials

務實試驗 Vs 隨機對照試驗

	Randomized controlled trial	Pragmatic trial
Aim	Actual efficacy 實際功效	Practical success 實踐成功
Setting	Controlled environment 受控環境	Real life practice 現實生活中的實踐
Comparator	Placebo, sham 安慰劑，假手術	Conventional treatment 常規治療
Blinding	Blinded	Un-blinded 揭盲
Intervention	Standardized Often single component	Standardized or individualized Often multiple components
Health economics	Not evaluated	Cost-effectiveness Quality of life

Limitations of Pragmatic trials

務實試驗的限制

- Patient self-selection 患者的自我選擇
- Larger sample size needed for comparison with active treatment 比較積極治療需要較大的樣本量
- Lack of compliance and high drop-out rate 缺乏合規性和高退出率
- Inability to determine the essential components of a “package” of care 無法確定“一攬子”的護理的重要組成部分
- Inability to determine the placebo effect 無法確定安慰劑效應

Big Data Research of Chinese Medicine

中醫藥的大數據研究



Web Programming 網頁編程

Data Warehouse

Metadata
Raw Data
Summary Data

Integration of
biomedical databases
整合生物醫學數據庫

Text Mining
文本挖掘

Bioinformatics
Analysis
生物信息學分析

R&D

Healthcare service

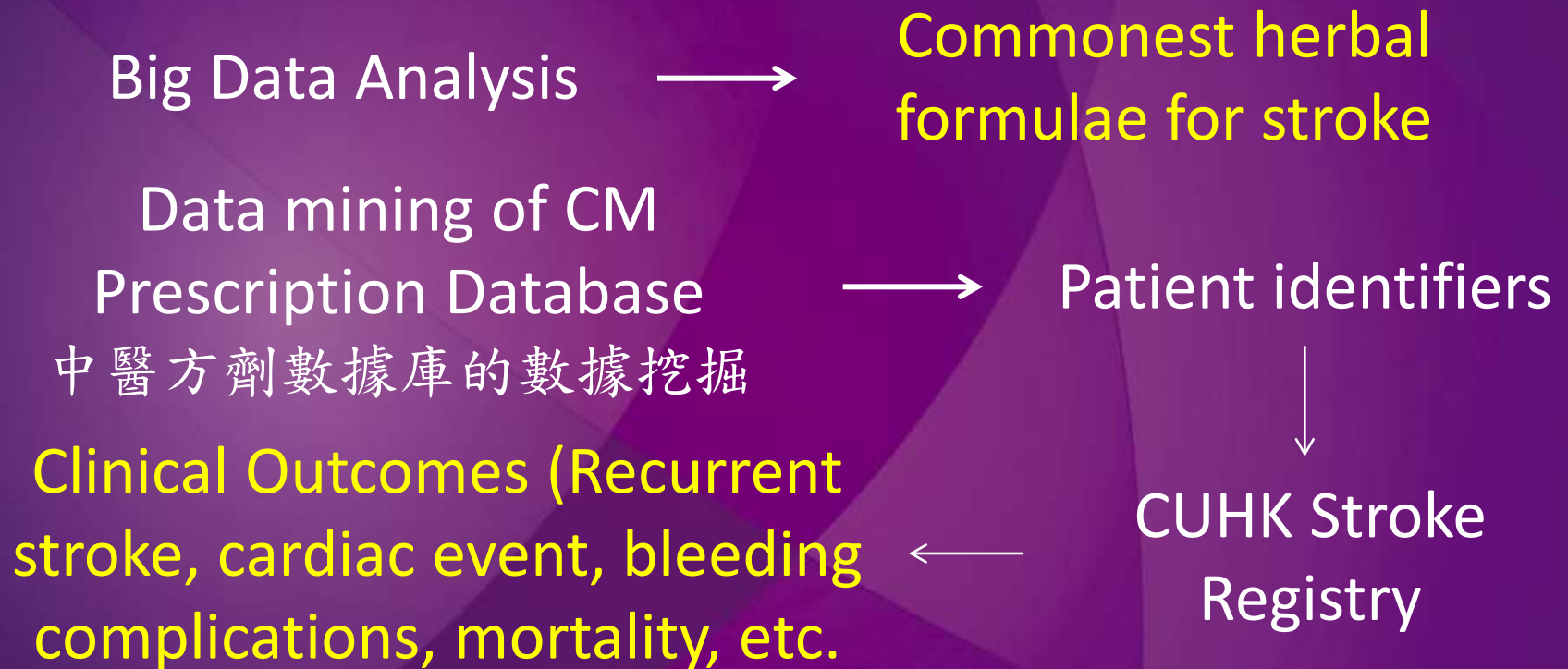
Public access

Big Data: Ultimate solutions for CM Research?

大數據：中醫藥研究終極解決方案？

- Strength
 - Powerful tool to identify the commonest TCM combinations for specific disease entities
 - Facilitate CM innovation with the development of new formula
- Weakness
 - Popular \neq Effective (e.g. Aqua is present in most TCM formulae)
 - Lack of predictive value for clinical outcome

Combined Approach of Big Data and Pragmatic Trial for Integrative Stroke Rehabilitation Model (中西醫結合中風康復模式)



Pragmatic Trial: Integrative Care Vs Conventional Care

Research directions of integrative medicine

- **Cross validation** 交叉驗證
 - Diagnoses 診斷
 - Outcome measures 觀察指標
- **Effectiveness** 效益
 - Clinical outcome 臨床療效
 - Quality of life 生活質量
 - Healthcare cost and resource utilization 醫療成本與資源利用
- **Safety** 安全性
 - Herb-drug interaction 藥草藥物相互作用
 - Adverse events 不良反應

Practice of Integrative Medicine: How?

- One clinician serving both roles 一個醫生兼任中醫和西醫的角色
- Joint consultation 中西醫會診
- Multidisciplinary model 多學科綜合治療模式
- Bidirectional referral 雙向轉介

Practice of Integrative Medicine: To address the unmet needs of our patients

- Communication between TCM and Western physicians 中西醫之間的溝通
- Effective Combo treatment with monitoring of safety and herb-drug interaction 有效的組合治療以及安全性的監測和藥草藥物相互作用
- CM service with good credentials 具有良好的信用憑證中西醫結合治療服務

Practice of Integrative Medicine in Hong Kong: Challenges

中西醫結合在香港實踐的挑戰

Team building 團隊建設

Frontline “buy-in” 前線認同

Clinical governance 臨床管治

Quality assurance 質素保證

Risk and safety management 風險
與安全管理

Sharing of patient records 病歷
共享

Liability 賠償責任

Credentialing 資格認證

Reimbursement 報銷

Affordability 經濟負擔能力



Hong Kong Institute of Integrative Medicine

香港中西醫結合醫學研究所

- CUHK-operated Integrative Medical Centre in Prince of Wales Hospital
- Clinical platform for research, education and practice of integrating CM with conventional healthcare system



Practice of Integrative Medicine: Strategy

Stage 1: Team building and management 團隊建設與管理

- Communication, transparency, safety monitoring
- Risk management, clinical governance and quality assurance

Stage 2: Evidence-based medicine 建立循證醫學

- Cross validation 交叉驗證 of Western and CM diagnosis
- Pragmatic trials, outcome and cost-effectiveness research

Stage 3: Algorithm and accreditation 認證

- Evidence-based, protocol-driven diagnosis and management algorithm supported by pragmatic trials and outcome research
- Credentialing of training and qualification 培訓和資格認證

Integrative Model for Stroke Rehabilitation



Integrative Model for Low Back Pain

Referrals to Orthopaedic clinic from primary care



Screening by physiotherapist



Early Orthopaedic
consultation



1st Joint consultation by Family Physician and
CM Physician



Regular CM follow up + on-demand FM visits



2nd Joint consultation in at 4-6 months



Discharge back to Primary Care or TCM Clinic



Research and Practice of Integrative Medicine: New Directions 研究與實踐的新方向

- Research 研究
 - Pragmatic trials 務實試驗
 - Big data 大數據
 - Incorporation of CM diagnosis and outcome measures 結合中醫辨証論治
- Practice: Hong Kong Model 實踐
 - Multidisciplinary model 多學科綜合治療模式
 - Bidirectional referral 雙向轉介