Integrating the Best of Traditional Chinese Medicine with Conventional Healthcare

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Questions

• How do we find the BEST of TCM?
• How do we INTEGRATE with conventional healthcare?
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Randomized controlled trials

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

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- ↓ Length of hospitalization
- ↓ Procedure cost
- Cost-effectiveness analysis underway
Systematic review and meta-analysis
Is it a viable solution?

Common conclusions
• Flawed methodology
• Heterogeneity
• Publication bias
• Need of randomized controlled trials
Challenges in searching for the BEST of TCM

- Lack of high quality evidence
- Non-English literature
- Individualized treatment (for both patients and physicians)
- Heterogeneity in herb combinations
Big Data Project of TCM

Web Programming

Data Warehouse
- Metadata
- Raw Data
- Summary Data

Integration of biomedical databases

Text Mining

Bioinformatics Analysis

R&D

Healthcare service

Public access
TCM Networks derived by Big Data Analysis

Clustering of Core Herb Combinations for Ischemic heart disease

TCM management networks for Hypertension

Courtesy of Prof. Aiping Lu, HKBU
Big Data: Ultimate solutions for TCM?

• Strength
  • Powerful tool to identify the commonest TCM combinations for specific disease entities
  • Facilitate TCM innovation with the development of new formula

• Weakness
  • Popular ≠ Effective (e.g. Aqua is present in most TCM formulae)
  • Lack of predictive value for clinical outcome
Big Data Project of TCM Management for Stroke Rehabilitation

Big Data Analysis → Commonest herbal formulae for stroke

Data mining of TCM Prescription Database → Patient identifiers

Clinical Outcomes (Recurrent stroke, cardiac event, bleeding complications, mortality, etc.)

Pragmatic Trial: Integrative Care Vs Conventional Care
Questions

• How do we find the BEST of TCM?
• How do we INTEGRATE with conventional healthcare?
Address the unmet needs of our patients

• Communication between TCM and Western physicians

• Combo treatment with monitoring of safety and herb-drug interaction

• TCM service with good credentials
Hong Kong Institute of Integrative Medicine

- CUHK-operated Integrative Medical Centre in Prince of Wales Hospital
- Clinical platform for research, education and practice of integrating TCM with conventional healthcare system
Choose the “right” diseases

- Common, chronic or recurrent in nature
- No effective treatment, marked side effects or high costs in conventional Western medicine
- Well accepted TCM treatment with high demand in the public
Integrative Model for Low Back Pain

Referrals to Orthopaedic clinic from primary care

▼

Screening by physiotherapist

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1st Joint consultation by Family Physician and TCM Physician

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Regular TCM follow up + on-demand FM visits

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2nd Joint consultation in at 4-6 months

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Discharge back to Primary Care or TCM Clinic

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Early Orthopaedic consultation
Integrative Model for Stroke Rehabilitation

- Acute Stroke Unit
- Stroke Rehabilitation Unit
- Multidisciplinary team including TCM Physician
- Stroke rehabilitation programme incorporating TCM treatment
- Joint consultations and case conferences
- Discharge to Medical Clinic

Herb-Aspirin interaction surveillance programme by School of Pharmacy
Development of Integrative Medical Care

Stage 1

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

Stage 2

– Cross validation of Western and TCM diagnosis
– Pragmatic trials, outcome and cost-effectiveness research

Stage 3

– Evidence-based, protocol-driven diagnosis and management algorithm supported by pragmatic trials and outcome research
– Credentialing of training and qualification
Integrating TCM with Modern Conventional Healthcare: Challenges

- Team building
- Frontline “buy-in”
- Clinical governance
- Quality assurance
- Risk and safety management
- Sharing of patient records
- Liability
- Credentialing
- Reimbursement
Integrating TCM with Modern Conventional Healthcare: Challenges

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Integrating the Best of Traditional Chinese Medicine with Conventional Healthcare

- New tools to identify the best TCM
  - Big Data Analysis
  - Pragmatic Trial
  - Clinical Outcome and Cost-effectiveness studies
- Modernized integrative model
  - Patient-centered and physician-friendly
  - Practice of modern healthcare administration
  - Protocol-based approach