



Offshore teaching in chronic disease management: The Monash-Shenzhen experience

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Abstract

The important role of GPs and the high prevalence and burden of chronic disease in China have been discussed in other articles in this series, so there is no need to reiterate this background here. This article deals with the pedagogy of chronic disease management as presented to cohorts of Chinese GPs from Shenzhen attending an offshore program at Monash University in Australia. The program, which commenced in 2010, was 7 weeks in duration and has now expanded to 13 weeks, enabling greater coverage of important topics, more site visits, and instruction in teaching and research methods, along with development of research proposals often based on management of a chronic disease.

Keywords: Chronic disease; general practice; education and training

Significance statement: Since 2010, groups of GPs from Shenzhen have been trained at Monash University in Melbourne, Australia, as part of an agreement with the Government of Shenzhen to train GP leaders. This article describes the history and scope of the program.

More than 200 physicians have now participated in the program, which currently consists of 13 weeks of offshore experiential learning in Melbourne. As we confront the epidemic of chronic noncommunicable disease, in addition to clinical training with a strong emphasis on systems of care for patients with chronic disease, the Shenzhen physicians receive research training and are expected to implement projects in their clinics in Shenzhen designed to improve the care of patients with chronic physical or mental illness.

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Introduction

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Monash University in Australia. The program, which commenced in 2010, was 7 weeks in duration and has now expanded to 13 weeks, enabling greater coverage of important topics, more site visits, and instruction in teaching and research methods, along with development of research proposals often based on management of a chronic disease.



Background

To provide some context for the training, we present some background information about Monash University. It was established in Melbourne in 1958, is ranked among the top 100 universities in the world (74th in the Times Higher Education World University Rankings 2017), and is a member of the prestigious group of eight research intensive universities in Australia. The Faculty of Medicine, Nursing and Health Sciences at Monash University is ranked in the top 30 worldwide. Monash University is also Australia's most internationally engaged university, with more than 30% of its 70,000 students being international. The university's global engagement is enhanced by the presence of its campuses in Malaysia, South Africa, Mumbai (India), and Suzhou (China) and a center in Prato (Italy).

In the area of primary health care, including general practice, Monash University through its Department of General Practice (established in 1975) and multidisciplinary School of Primary Health Care (established in 2000) has engaged actively in China for more than 2 decades, with Monash University academics attending many conferences in China on primary health care reform, contributing regularly to the *Journal of Chinese General Practice*, including a 24-part series on mental health in general practice [1], and participating in innovative joint research programs through the Happy Life Club [2], and also with clinical articles by world-leading GP John Murtagh.

In 2006 the China General Practice Clinical Leadership Program was established in partnership with the Shenzhen Government's Health Department. The first group of ten Chinese physicians arrived in Australia for 7 weeks of training in 2010. Since then, ten groups of physicians have received training under the supervision of Monash University staff, and five groups of community health managers have also participated in training at Monash University. The program is learner centered, based on adult learning principles [3] and designed to respond to learners' needs as well as the organizational needs of the auspicing bodies. These needs are identified before the arrival of each cohort. The program is structured around context, content, teaching and research methods, administration, leadership, ethics, and professionalism. A vital component of the program includes site visits

to community GP clinics, hospitals, maternal and child care clinics, aged care facilities, the Royal Australian College of General Practice, the Eastern Victoria GP Training Program, the Royal District Nursing Service, and Monash University's simulation facilities. A significant part of the program is devoted to the nature of chronic disease in general practice and systems of care for managing these conditions aided by the use of clinical case studies as well as patients encountered in real GP clinical consultations during clinical placements.

Learning objectives with respect to chronic disease management

To optimize the visits to Australia, clear objectives are established to guide the curriculum, the site visits, and the evaluation of the program. For instance, the following objectives for GPs by the end of the training were established for a recent program:

- Appreciate the nature and prevalence of chronic disease in their clinical settings as well as nationally and globally
- Understand the significance of an evidence-based approach as well as cost-effectiveness in the management of chronic disease
- Recognize processes for diagnosis of chronic disease and clinical care of patients with chronic disease using a team-based, patient-centered approach that includes judicious use of investigations and treatments
- Understand the importance of information technology in supporting management and follow-up of patients with chronic disease.

Teaching methods

A range of teaching methods are used to enhance the learners' experience: seminars, clinic/hospital visits, role-play, and research proposal development. The program also involves continuous assessment and evaluation.

Seminars

Each seminar lasts for 2–2.5 hours and involves leading context experts who either are GPs or have a strong appreciation of the GP setting. The following topics are examples of those covered during the training:



- International comparison of chronic disease prevalence, including role of primary care in prevention and management.
- The Australian health system.
- Practice management.
- Leadership.
- Systems and models of care for chronic disease, including the biopsychosocial model and the Wagner model [4].
- Case studies in management of chronic disease.
- Management of chronic heart failure in patients with multimorbidity and polypharmacy.
- Management of diabetes.
- Care planning for chronic disease, both paper-based plans and electronic plans, including CDM-Net [5].
- Mental health, including both the acute and chronic mental health conditions and psychological responses to chronic physical illness.
- Women's health.
- Domestic violence.
- Men's health.
- Rational investigation and rational prescribing for patients with chronic disease.
- Breaking bad news and ethical issues in end-of-life clinical decision making.
- Palliative care.

Clinic/hospital visits

A cornerstone of the Monash-Shenzhen program is the extensive site visits that give GPs first-hand experience of the workings of the Australian health system and primary health system. Examples of key site visits are discussed next.

GP clinic visits: Each GP attends five 3-hour GP clinic sessions, sitting in with a GP during consultations. Most of the clinics chosen are in geographic areas with a large aging population, so there is a higher prevalence of chronic disease. There is exposure to practice organization, specialist referral mechanisms, use of allied health services including pharmacy, pathology, and radiology, and links to local hospitals.

During the program in Australia, GPs visit three "super clinics" or "polyclinics," one in a metropolitan region, one

in an outer metropolitan region, and one in a rural region, each with different physical and organizational links to local hospitals.

Emergency departments: A valuable experience for the GPs is to visit a metropolitan hospital emergency department and a rural hospital emergency department, which allows GPs to witness how tertiary health services cope with acute exacerbations of chronic disease.

Aged care center visits: With the growing aging population and associated chronic diseases in China, an essential component of site visits is to explore how Australian health services are managing their aged populations. GPs visit both public sector providers and private sector providers of aged care. In both cases, there is instruction on assessment of the elderly with disabilities, including especially dementia, which may result in the need for supervised residential aged care.

Allied health professional visits: A key objective of the offshore training is to help Chinese GPs appreciate the way in which GPs in Australia interact and collaborate with team members from other health professions. Monash University is ideally placed to demonstrate various models of collaboration as it is expert in training health professionals across a wide range of medical and allied health specialties. Notably, GPs visit the Monash University School of Primary and Allied Health Care and School of Nursing, Peninsula Campus. The site visits provide insight into the training of allied health professionals (physiotherapists, occupational therapists, and ambulance paramedics as well as nurses) to work in teams with physicians and nurses so as to provide optimal team-based care of patients with chronic disease.

Role-play

At Monash University, our experience based on the educational literature has emphasized the effectiveness of role-play. Chinese GPs are introduced to role-play as a method of clinical instruction. Physicians practice this in carefully devised clinical scenarios involving simulated patients with chronic disease. To add to the realism of the experience, silicone masks depicting an elderly man and woman are used by role-playing patients.



Research proposal development

GPs undertaking the 13-week program are instructed each Friday on research methods, including developing a research question, designing a research protocol using qualitative and quantitative methods, basic statistical analysis, writing an ethics application, referencing, and critical appraisal of literature. During the program, a number of GPs have chosen “chronic disease” as an area of research in primary care settings. It is expected that these proposals are subsequently implemented at their clinic or in their community on return to Shenzhen. Examples include the following: “The effect of motivational interviewing on assisting smoking behavior change among patients with chronic obstructive pulmonary disease (COPD)” and “A study of factors influencing readmission rates for type 2 diabetes in Nansan District of Shenzhen City.”

Assessment

It is appreciated that the experienced GPs attending the Monash-Shenzhen program bring with them many years and often decades of clinical experience. Therefore the approach to training and assessment is based on adult learning models, and recognizes the significant skills and experiences of the GPs. Therefore assessment is informal and formative rather than summative at this stage with feedback given to participants.

Program evaluation

The Monash-Shenzhen program is committed to continual improvement of training and is responsive to the feedback from the GPs. For this reason, ongoing evaluations are collected throughout the training and collated to inform future programs. This includes rating forms, completed by both teachers and students. Results are expressed quantitatively and qualitatively and are fed back to stakeholders.

Conclusions and future directions

The Monash-Shenzhen Clinical Leadership Program has been highly successful, with a number of past participants already assuming leadership positions. It is anticipated that this will raise the standing of general practice in Shenzhen. There is potential to expand the program to other sites, and already there have been short training programs incorporating visits to Australia by GPs from other regions of China. In the longer term, there is the potential to create a recognized GP qualification such as a diploma in

family medicine/general practice, and Monash University may partner in this. On the research front, there are numerous opportunities to undertake collaborative research between Monash University and Shenzhen on aspects of chronic disease.

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Conflict of interest

The authors declare no conflict of interest.

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Author contributions

Leon Piterman was responsible for conceptualization, data gathering, and production of the first and final drafts. Hui Yang was responsible for conceptualization, provision of data gathered from 7 years of evaluation of the training program, and revision of the article. Grant Blashki was responsible for literature analysis and revision of the article.

References

1. Case studies of mental health in general practice. *Chin Gen Pract* 2012;13.
2. Browning C, Chapman A, Yang H, Liu S, Zhang T, Endicott JC, et al. Management of type 2 diabetes in China: the Happy Life Club, a pragmatic cluster randomised trial using health coaches. *BMJ Open* 2016;6(3):e009319.
3. Knowles MS, Holton EF, Swanson RA. The adult learner: the definitive classic in adult education and human resource development. New York: Routledge; 2015.
4. Wagner EH. Chronic disease management: what will it take to improve care for chronic illness? *Eff Clin Pract* 1998;1:2–4.
5. Jones KM, Dunning T, Costa B, Fitzgerald K, Adaji A, Chapman C, et al. The CDM-Net Project – the development, implementation and evaluation of a broadband-based network for managing chronic disease. *Int J Fam Med* 2012;2012:1–7. Article ID: 453450.