Evaluation of the health services management training course of Jiangsu, China

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Abstract

Health service management education programs emerged in the early 1980s in China as a result of changing demands on health service managers created by new directions in health policy. This paper reports on an evaluation of the Jiangsu-Victoria Health Management Training Program and discusses five of the main findings. Participants in the study believed that the Program has impacted positively on the health management practice of Jiangsu Province, and has made a significant contribution to health services management education in China. However, certain areas in teaching practice need to be improved and participants in the study provided suggestions to achieve this. The study also found that there were limitations to the impact of managerial education due to administrative and environmental factors.

Changing needs of Chinese health care managers

China has experienced extensive social and economic reform in the last twenty years. The health care system has also experienced dramatic change. In 1984 the Ministry of Health initiated reform in all tertiary hospitals and those hospitals with more than 600 beds. The core of the reform was to introduce a new system of management known as the Contract Managerial Responsibility System (CMRS). The CMRS includes the 'President Responsibility System' (PRS) that puts full responsibility for personnel management, production control, and financial management on the hospital president.

The CMRS also includes a decentralisation of responsibility within the hospital from the president to the departments known as the "Director Responsibility System' (DRS). Each departmental head has to sign a 'management responsibility contract' with the president each year, including management targets in patient care, teaching and research (Pei 1998, p36). The CMRS was a major step away from the previous system operating since the 1950s, where the Communist Party was responsible for management and leadership in the hospital. Under the PRS, the role for the Communist Party Committee in hospitals is one of supervision (Pei 1998, p33).

The CMRS has led to a shifting of responsibility to hospitals and increased their autonomy, with the expectation this will improve their efficiency and effectiveness – and consequently reduce the financial burden of hospitals on government. As part of this process more attention has been given to the management of health services and the education of health service managers.

Since the early 1980s a number of health service management training programs have emerged throughout China. However, very few of these programs have been evaluated, either in relation to the teaching and learning process, or how the programs could be improved in order to meet the changing needs of both students and educators. The aim of the evaluation reported in this paper was to improve the Jiangsu Health Management Training Program (JHMTP).

Jiangsu Health Management Training Centre

Jiangsu Province is a coastal province of 102,600 sq km, located in eastern China along the lower reaches of the Yangtze River. Its economy, culture, science and technology are well developed, and it has a population of 74 million people (Foreign Affairs Department of Jiangsu Province, 1997). The Province has 13,386 health service organisations, with 170,342 hospital beds and 324,201 staff members of whom 31,051 are managerial staff (Health Department, 1997).

In China, the majority of health services managers have a medical background with little training in management or administration (Tan, 1998). They manage their health institutions from their own knowledge and experience, as such many of them are ill equipped to meet the complex and changing needs of modern healthcare management.

In the early 1980s, the Health Department of Jiangsu Province and the Jiangsu Branch of the Society of Hospital Management held several short courses and workshops for hospital executives in order to improve the quality of health services management. However, until the late 1980s, there was no integrated or comprehensive training program for hospital managers in the Province. The Jiangsu Health Management Training Centre was established in 1990, and became the Jiangsu–Victoria Health Management Training Centre (JVHMTC) in the mid-1990s. The Centre developed from the sister states relationship between Jiangsu Province and the State of Victoria, Australia, and was supported by both governments. The Centre is also supported by the Health Department of Jiangsu Province and is the approved provider of formal training programs for health service managers in the Province (Brand and Dong, 1990).

Since 1990, the JVHMTC has conducted a Health Management Training Course (HMTC), which provides a comprehensive two-year part time program with lectures, correspondence tuition and individual study, and addresses practical problems closely related to the manager's work.

The objectives of the HMTC are to provide the participants with a better understanding of the attributes and responsibilities of management; to improve the management theories and skills of individual managers; and to improve the efficiency of the health sector. The HMTC currently consists of fourteen subjects. The curriculum was originally based on the health management courses of Australian and other Chinese medical universities, notably those of Shanghai and Beijing. The HMTC has also been formally recognised by the Hospital Accreditation Committee of Jiangsu Province as a training base for senior hospital managers, who have been required to receive formal health management training prior to hospital accreditation taking place.

There are 19 faculty members, plus two full time administrative staff. Most of the faculty members are part-time with lengthy management experience. The students come from hospitals, health bureaus (local health departments), primary health care agencies and other health settings in Jiangsu, with a few students from other provinces such as Zhejiang, Fujian, and Yunnan. About 95% of students pass the exams and graduate and the top four students visit Australia each year. By 2000, there were approximately 870 graduates, with a further 280 students in the program.

Research design and methods

This evaluation included two self-administered questionnaire surveys, one for students and one for teaching staff. The questionnaires were based on Pei's model, which in turn was adapted from Rawson (Pei 1998). All the students from 1990-1996 were asked to participate. Teachers were also important participants in this evaluation and their views of subject structure, philosophy of the objectives, and study methods provided a different perspective to that of the students. 223 questionnaires were returned from 700 students (a response rate of 32%) and 10 questionnaires returned from 12 faculty members.

The questionnaires were divided into four parts:

- personal information including gender, age, educational background, managerial position and experience, career management training;
- views about the HMTC including the aim in undertaking the study, the achievement of the aim, and the quality of the teaching materials, lectures, and course administration;

- views on the improvement of management knowledge and skills for students' own benefit and for hospital management as a whole; and
- further suggestions for improvement of the course.

The questionnaires had both closed and open-ended questions and the data was analysed using both quantitative and qualitative methods.

Findings and discussion

Student characteristics

The study found a number of characteristics of the participants that probably reflect the characteristics of health care managers in China overall and have implications for health service management education.

Lack of health management education

Of the 223 students, 196 (87.9%) were health professionals including doctors, nurses, and allied health staff. These managers or administrators were highly educated and not originally trained as health care managers. Table 1 shows that only 49.3 % of all managers had any management training, and the majority of this group had received less than three months training.

This finding is significant. While it is perhaps not unusual to have a high number of clinicians turned manager in the health sector the sheer numbers in China make the training of this group a huge task. Of the 31,051 managerial staff members who work in the health sector in the Province only half of them have received any management training. The HMTC only takes approximately 160 – 200 students each year and until 2001 was the only health service management training provider in the Province for health care managers who have already worked in the field. There is an obvious need for more programs and educational opportunities.

Table 1: management education experience

Period of time	Number of participants	Percentage
< 1 month	60	26.9
1-3 months	34	15.2
4-6 months	7	3.1
7-12 months	9	4.0
None	113	50.7
Total	223	100

Lack of training of presidents and administrators

Another significant finding was the gap in training at the highest level. 46.4% of participants were managers of departments, and 23% were vice-presidents. These two groups made up the majority of managers in the training program over the past ten years. As shown in Table 2, only 15.8% of participants were presidents of health institutions.

Liang (1998) analysed the statistics of on-the-job training for both health managers and medical professionals. He argues that the rank of position and rate of training for health managers show an inverse relationship. This means that the lower level managers have had more training opportunities than senior managers in the health field. This is particularly important as the president now has full responsibility for the operation of the institution. There is a question about the impact on the outcomes and effectiveness of institutional management if the president has had no training in management. There is also another concern that staff are receiving management training and returning to their organisations with perhaps more knowledge than their senior managers.

Table 2 also raises another problem, which is that only 9% of the students were general administrators. These figures imply that the majority of general administrators are not properly trained in health service management. This finding also has implications for the development of efficiency and effectiveness of hospital management.

Table 2: positions

Position	Number of participants	Percentage
President	35	15.8
Vice-president	51	23.0
Departmental head	63	28.4
Vice-departmental head	40	18.0
General administrators	20	9.0
Others	13	5.9
Missing	1	0.5
Total	223	100

Low interest in management

The participants were asked about the incentives in working in a health management position. Although 48.4% were interested in health service management, there were more than 50% who said they were only in their position because of government direction. They had little interest in management work. This might be a surprising finding to westerners, but for many years people in China did not have much personal career choice. The usual path to a management position was by government (or higher level management) decree, particularly for senior positions.

Another problem is access to a professional title. There are sets of professional titles for positions in China, such as engineer, professor, and medical specialist. These titles do not only relate to the level of pay, but also to social status. For historical reasons, a health services management title does not exist. This means that if a professional agrees to take a management position, he/she would lose access to a higher professional title, and their income and social status would also be relatively lower than their other professional colleagues with similar qualifications and experience (Ji and Feng, 1999). These two reasons lower people's interests in management, especially amongst younger professionals.

Positive aspects of the HMTC

There is a high demand for health management training in Jiangsu Province and the HMTC continues to attract health managers. Four positive issues were identified that students and staff felt contributed to the success of the HMTC.

The structure of the program

Most health management education in China is either short-term training of a few weeks for practicing managers (offered by the health bureaus) or tertiary courses (three to five years), which focus on undergraduate education and are offered at medical universities and colleges (Pei, 1998, p. 53-54). In the undergraduate programs the trainees have to leave their jobs to study or enter straight from school. There are a limited number of courses that provide accessible study for existing practicing managers. The HMTC was the first health management education program in China provided through part-time 'on the job' study. Students and staff commented favourably on this feature arguing that it has enabled more health services managers and administrators to participate in the program without leaving their positions, thereby maximising the numbers of participants. As China has limited educational resources for health services managers, the model has proven to be a good example of how to effectively use limited resources.

Subject content

Over the past ten years the HMTC has given attention to practical knowledge and skills in health services management. The subject structures were originally designed to be practical and useful for practicing managers. The responses showed that most subjects were seen to be very useful to students in their management practice. More than 90% stated that their management knowledge and skills had been improved significantly since they participated in the training. They were able to put the knowledge and skills learned into practice immediately and this knowledge has provided guidance in their day-to-day work.

The staff

The HMTC has built an experienced faculty team consisting of part-time and full-time staff. The faculty members are from different backgrounds for example, health bureaus, hospitals, and universities and have a wide range of experience. These different backgrounds have enabled the faculty members to combine their management experience with management theory and bring them into their teaching practice. Students valued this mix of academic knowledge and experience.

International links

From the time the HMTC was established, the HMTC has built a close relationship with hospitals in Victoria, Australia. Delegations from both Jiangsu and Victoria visit each other every year. This link has opened access to the world for the Chinese health service managers, who felt that it has provided them with opportunities to broaden their ideas and experience in health management from other countries.

Room for improvement

While the advantages of the JVHMTC have been highlighted in this study, a number of areas needing further improvement were emphasised by participants.

Needs-based aims and objectives for the program

Lack of managerial knowledge and skills among health managers was one of the critical barriers to modernisation and improvement of the health care system (Pei, 1998, p. 52). According to the views of most of the respondents, the HMTC has achieved its objectives to a point. However, there is widespread agreement among managers that the reforms of China's health care system place enormous demands on providers of care, and managers are facing increasingly complex hospital management problems. Under these circumstances, the needs of health management training are changing and so there is a need to analyse their current demands. As Nettle (1998) argues in relation to changes in Australian management education, there is a need to rethink the training objectives including a means for measuring managerial skill development and improvement (Nettle, 1998, p. 178).

About 50% of participants suggested that the subject structure should be reorganised around altered goals and objectives. These suggestions are closely related to management skills and practice, such as *'the objectives should be practical and operational'*, *'learning by practising'*, *'managing change'*, *'international health management trends'*, *'business management theory'*, and *'computer skills'*. The participants emphasised that successful management training objectives should reflect the problems of management, and aim to improve management practice.

Student supervision

The questionnaire asked the participants to judge how their study was guided and supervised by teachers after they finished their class activities. The result (Table 3) shows that about 23% were less than satisfied, and 14.8% responded with poor or very poor.

Table 3: guidance and supervision

Degree	Number of participants	Percentage
Excellent	80	35.9
Good	48	21.5
Average	51	22.9
Poor	19	8.5
Very poor	14	6.3
Not sure	11	4.9
Total	223	100

Clearly, we need to explore effective ways for the teachers to provide routine guidance and supervision for this group of students who are largely busy people and mostly off campus. This is one of the key links between teaching and learning and for maintenance of the teaching quality in this model of education.

Active learning

Another significant finding, shown in table 4, is that 38% of participants considered that the discussion between teachers and students was poor, with another 30% responding as average.

Table 4: discussion between teachers and students

Degree	Number of participants	Percentage
Excellent	16	7.2
Good	50	22.4
Average	67	30.0
Poor	62	27.8
Very poor	20	9.0
Not sure	5	2.2
Missing	3	1.3
Total	223	100

A significant difference between Western countries and China in management education is the level of student participation. In western management education the use of case studies, project development, group discussion, and problem solving are common. These methods aim to encourage student participation and active learning. China has been slow to develop the concept of student participation although the students are conscious of the importance of participation and have shown their interest in being more involved in active learning. Their suggestions included more classroom discussion, hospital visits, a greater exchange of ideas between teachers and students, and the use of case studies. The HMTC needs to examine active learning methods and adult learning principles and introduce such methods into the course.

Participants' suggestions for further development

Development of new training courses

Participants suggested that the Centre should consider developing new training programs aimed to meet the needs of different groups of health managers. These include managers from tertiary hospitals as well as from the primary health care sector. These continuing education programs could include a variety of short courses focusing on information about new developments and trends and new requirements in knowledge and skills.

Relevant content

The participants in this study identified a range of practically orientated management knowledge and skills as necessary parts of any training program. These included: leadership, organisational and personnel management, and basic management knowledge, such as personal and inter-personal skills, the skills of planning, coordinating and judgement, organising and managing people, and general management theory. The participants suggested that the HMTC should reorient its training goals, objectives, and course structure based on what health managers require for the new century and how management skills could complement the wide-ranging health care system reform. Pei's research identified training needs in specific areas, such as managing people, managing information, managing resources, policy, organisational management, and managing change (1998, p. 249-253). The HMTC needs to rethink, replan, and reorganise its subjects based on these ideas.

Interactive teaching methods

Teaching methods play an important role in any kind of education, particularly in management education, as in management there is a need to understand both theory and practice. This study has found some weaknesses in the way in which the HMTC carries out its teaching, which participants believe have limited the outcomes and effectiveness of the program.

The main areas that need to be improved are the amount of class contact time, guidance and supervision in distance education, enhancement of the links between teachers and students, and student participation in the teaching and learning process. In addition, the use of project based studies and active learning should also be encouraged in the teaching practice. The HMTC needs to rethink, re-plan, and reorganise its teaching processes, including teaching philosophy and learning style so that the objectives of the program can be better achieved.

Staff development

In the study both students and faculty participants argued that a staff development strategy needed to be established and regularly monitored in order to improve teaching standards. They emphasised that the goals and objectives of the HMTC would not be achieved unless the quality of staff continues to improve, and formal staff development programs were necessary to achieve such improvement. Regular seminars and other teaching activities with both part-time and full-time staff, undertaking research projects, attending conferences and workshops, and regular hospital visits for full-time teachers could be useful channels for effective staff development.

Factors limiting the impact of managerial education

While this study looked at the data regarding the impact of training on management practice, it also explored how management practice is affected and often limited by other factors in the workplace. In the questionnaire, the participants were asked to identify and elaborate on any factors that may restrict them from applying their management knowledge and skills in practice. 180 participants out of 223 answered this question and 350 factors were identified and sorted into 9 themes. Table 5 shows the results in numerical order.

Table 5: factors inhibiting from applying knowledge and skills

Factors	Number of answers	Percentage
Management system problems	99	28.5
Social environment	52	14.8
Leader's personal quality	48	13.7
Limited position level and responsibility	27	7.7
Staff quality	26	7.4
Personal factors	19	5.4
Too much unplanned and routine work	12	3.4
Others	30	8.6
Number of responses	350	100

Management system problems are the critical factors restricting the participants from applying their management knowledge and skills in practice. These problems included intervention of the bureaucracy, personal management barriers, the leadership system (mainly the relationship between the Party and the administration), irrational health regional planning and unbalanced resource allocation.

Social environment includes complicated inter-personal relationships, and the lack of understanding and support of the health agencies by others. 8% cited the complexity of inter-personal relationships as one factor inhibiting health services managers from using their management knowledge and skills, and also the efficiency and outcomes of management. 6.8% mentioned other social factors that affected the use of their knowledge and skills. As some respondents said *'Intricate inter-personal relationshisp have led to the unsuccessful and less than smooth process of implementation of reform.'*

Leaders' personal quality includes the basic qualities that are often seen as desirable for people in a management position, such as being fair, equitable, and objective. However, the results show that some leaders lack these basic qualities. 13.7% responded that the leaders' personal quality restricted them from applying their management knowledge and skills in practice. This was often related to the mechanism of the appointment system for health care managers.

Limited position level and responsibility means that higher positions have higher authority for institutional decision-making. 10.5% cited the relatively low position level as an important factor that restricted them from using their management knowledge and skills in practice. Their suggestions were not easily understood and accepted by the top managers who had not been trained in management.

Quality of staff was another major factor. 7.4% stated that the use of their management knowledge and skills was limited by the poor quality of their staff. As some participants said: *'Poor quality of staff is a common phenomenon in the health sector. Some of them refuse to do the things which management tells them, for example, they see quality control as a game played by management, and refuse to cooperate. Other staff members are easily affected by this kind of attitude.'* *'Many young professionals are interested in business, such as the stock market, instead of concentrating on their professional work. Sometimes their beeper rings about information on their shares during the ward-round. They simply leave the ward-round team, to make a phone call to buy or sell their shares.'*

Overcoming the obstacles

Overcoming these obstacles to the effectiveness of health service management training is clearly beyond the scope of this study. However, the obstacles need to be identified for the benefit of policy makers recognizing that if they are not addressed they create a frustrating and demoralising environment for managers. Most of the obstacles relate to the relationship between health bureaus, the Communist Party and senior managers.

Improving the President Responsibility System

There are a number of problems relating to the implementation of the CMRS. These include, first, the real independence of the president and the relationship between the hospital and health bureau. Second, the separation of the role of the Communist Party and administrative management contains a number of difficulties, in particular the relationship between the Party Secretary and hospital president. Third, there are inadequate supervision and monitoring systems for hospital accountability. Finally, there is a lack of criteria and poor processes for the appointment of hospital presidents. All these problems need to be explored by government with hospital managers' participation, and new solutions need to be identified. Furthermore, within the PRS and DRS, clear duties, responsibilities, authority, and benefits for all managers and staff at the different levels of the hospital need to be considered.

Improving policies and procedures

The participants pointed out that their environment creates critical difficulties for health care managers. They face interference from direct and indirect higher authorities, peer health organisations, and members of other departments. This issue needs to be addressed through the creation and improvement of clear policies and procedures agreed by all parties. First, a set of regulations and statutes needs to be established for both health agency and government authorities in order to standardise their behaviour. Second, under the regulations and statutes, the health agencies need to build on the concept of using the legal system to protect their interests. Third, and perhaps most of all, it is important to make sure that the use of 'guanxi', is limited so that a healthy environment will be built for effective hospital management.

Staff development strategy

This study also found that poor quality of personnel, including top management, administrative and other staff, is a significant problem in management practice. More importantly, staff development lags behind the improvement in other areas of the hospital, such as hospital revenue and facility development.

Staff development needs to be looked at urgently by management. As the study shows, different groups of staff have different problems. For example, lack of management knowledge is a common problem in the management group, low education standards and poor service morale are commonly seen among other staff and how to make sure that the senior leadership is fair and equitable is a concern for senior managers. Furthermore, lack of modern technology and skills, such as computer skills, is a common problem among all staff in the health field. A staff development strategy needs to be established in all sectors, aimed at improving the quality of all health service workers, and to provide the best services for the community.

The quality of senior leadership was a particular concern of participants. The main reasons causing this problem are a lack of a proper process for appointment, a lack of management training, and a lack of performance appraisal. The traditional appointment system, including criteria, processes, and methods, were the product of the planned economy and a major feature was a lack of competition and transparency. With the reform of the health sector new methods need to be utilised in particular an open appointment process needs to be introduced into the health sector, so that the best person can be selected for every position.

Conclusions

This evaluation has examined the benefits and limitations of the HMTC, and highlights a number of suggestions for improvement.

In terms of educating health care managers, it is significant that the JVHMTC provides an integrated and comprehensive training program with on-the-job study for senior health managerial staff in Jiangsu Province. The experienced faculty team and the relevant subjects have allowed the HMTC to achieve its educational goals and meet the needs of the students. However, there is evidence that a number of areas need to be further improved such as student participation, more needs-oriented subjects, and increased staff development. Suggestions have been put forward to enable these improvements to take place.

To provide a healthy environment for managers to manage the health sector with full use of their knowledge and skills, the government needs to give more attention to improving the CMRS and PRS of hospitals through

system reform. In order to standardise the behaviour of both health service providers and government authorities, a set of policies, statutes and regulations needs to be developed for health service operations.

In China, health services management education faces significant challenges that have resulted from the socialist market economic system and health system reforms. This study focused on the health services management training of the JVHMTC. The results cannot be generalised to the entire population of health services management education programs in China. However, these programs have some characteristics that are common under the Chinese education system. Thus, the results of this research should be of interest to other health services management education programs and provide a reference for their further enhancement.

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