

A Medical Service Model Based on TCM Expertise to Ensure the Continuity of Medical Tour

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Abstract: The global market of medical tour has been growing because people need other options of medical treatment for various reasons. The biggest challenge for medical tour is to provide high-quality care and outcomes to ensure its continuity. TCM, with the national initiative to go global, faces the scarcity of its expertise to serve this purpose. To tackle this problem, this paper provides a service model that can help bring the limited resources of TCM expertise into its full play. Therefore, the strengths of TCM in the aspects of accurate clinical judgement and treatments, cost-effectiveness and the ability to get the whole body into equilibrium state after the mile stones in different phases of treatments make it stand out among other options.

1 INTRODUCTION

Unlike medical-health-wellness tourism (MHWT) which has become immensely popular for a variety of economic, cultural, lifestyle and leisure reasons (Nikezic, 2012; Lee, 2015; Wang, 2020), medical tour (MT) is defined as "the travel of people to a place other than where they normally reside, for the purpose of obtaining medical treatment at that location" (Tabish, 2012). Being a complex decision process, the sustainability of medical tour is based on the attributes of the host country, facilities of healthcare professionals, reasonable cost, and the service quality of hospitality and tourism (Chung, 2014; Fetscherin, 2016; Olya, 2021). Although medical travel facilitators around the world operate on a variety of different scales and market their services differently, they all emphasize the consumer experience through advertising quality assurance and logistical support (Dalstrom, 2013). Though medical tourism has been an expanding global phenomenon (Chaulagain, 2021; Rokni, 2019; Rouland, 2020) and millions of people take advantage of medical services available abroad (Eltorai, 2018; Leggat, 2015), quality and continuity of care are the problems associated with medical tourism (Turner, 2007), which heavily rely on the medical establishments that

can provide expertise/medical tourism products (Heung, 2011) apart from the service delivery skills, competencies, and kindness (From Servicescape to Loyalty in the Medical Tourism Industry).

Whatever services or products, the competitiveness is determined by the quality (From Servicescape to Loyalty in the Medical Tourism Industry). The level of perceived advantages, price perception and willingness to stay all depend on the medical results delivered by either special expertise or advanced technologies. The increased cost of care and the long waiting lists in western countries and the middle east have resulted in patients moving to other healthcare destinations or forced patients to look towards the east (Mishra, 2021). Apart from deteriorating state and the need for other options, perceived value of medical and service quality is a key predictor of tourist intentions (Wang, 2012). The outcome quality and service quality (Qolipour, 2017) are highly crucial for the continuity of MT. Even with TCM going global as the national initiative and its effectiveness highlighted in this long-lasting pandemic, there is still a long way for the experienced experts and TCM expertise to have their full play. For TCM, a profession, only for the talented throughout China's thousands-years of history to put the logical rules in use accurately, still faces the scarcity of

experienced TCM experts and TCM expertise even at home. What in urgent need is a kind of service model that can maximize the high-quality services of TCM for accountable health outcomes and the continuity of MT.

2 TCM EXPERTISE TO ENSURE THE CONTINUITY

From a holistic view that cure diseases through establishment of equilibrium in the human life, TCM has been practiced for thousands of years and attracted worldwide interest (Zhang, 2013). The major advantage of TCM is based on the treatment of various syndromes through the comprehensive analysis of clinical information gained by the four TCM diagnostic procedures (Lan, 2013; Sun, 2012): *Looking* for signs of illness, *Listening* to patients' account, *Asking questions* for the needed information and *Pause-feeling* for further information to confirm the already collected. Behind which, the rules, developed from the Book of Changes, which is so far the earliest and the only philosophical and mathematical system about the universe, consist of the relationships among the five basic elements (metal, wood, water, fire, earth) in their form of qi, the balance of Ying and Yang at the surface level and that within each individual internal organ and their interactions, and the changes of attributes of the six pairs of meridians. They are validated and explained in detail in the case analysis of books like *Shanghanlun*, *Jinkuiyaolue* and so on that have been practiced for thousands of years. The detailed explanations, in ancient Chinese (which makes it hard for most people today to drill into), have been given by many famous doctors in Chinese history such as Zhang Zhongjing, Li Shizhen, Huang Yuanyu to teach and alarm learners not to make mistakes. Thus, it is a total misunderstanding of TCM to say that the traditional diagnostic approach is mainly based on observation by doctor's nude eyes, which is non-quantitative and subjective.

Supported by the rules and philosophy of TCM, clinical judgement and decisions are made and confirmed by TCM experts by going through the four diagnostic approaches, instead of using machines and relying on all different kinds of tests that often fail to give a full picture of the problem going on inside the body. Upon the confirmed clinical decisions, the treatment plan is made at the micro and macro levels because TCM experts know how long and how many phases it will take before reaching the final

equilibrium state or the best possible outcome. With specific prescription, TCM experts only have to make small changes suggested in the ancient classics for formulae adjustments. At the micro level, urgent or serious symptoms/problems are handled at once to reduce and halt their harm and trouble on the patients. At the macro level, the treatment plan is about the phases that serve as the milestones for the upcoming problems before getting the body into equilibrium state, which doesn't request any tests but only timely communication with patients. During any phases with the prescriptions given for the patients, it will allow TCM experts time to take care of new patients, start new files and make the needed research for troublesome complications. This fully depicts how TCM treat and prevent at the same time.

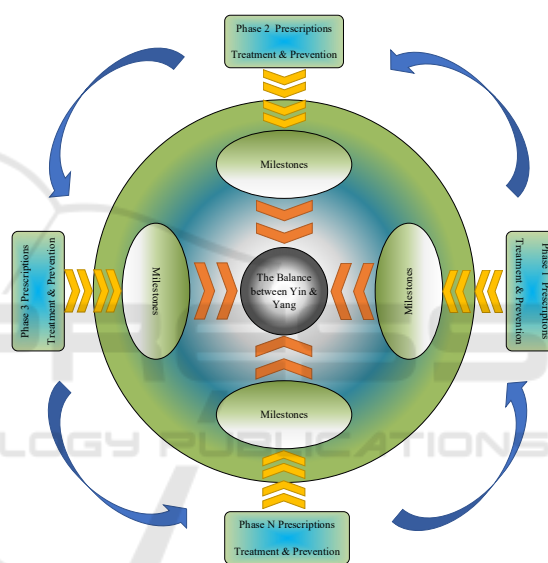


Figure 1: The Treatment Plan.

For any milestones, the effective use of TCM medicine for dynamic changes in the cycles of illnesses rather than operation and acupuncture plays the dominant role. The prescriptions for different syndromes have been unchanged and practiced for thousands of years, which leave very limited room for experienced experts to change one or two items of herbs and their doses, but no room for any innovation. As all the diseases are classified and the prescriptions have been used and validated by generations for more than five thousand years, why there should be any need for TCM to reach the standards of western medicine which has provided neither any rule for clinical judgement and documentation of the validations of treatment for different phases of syndromes nor any medicine that has been used effectively for more than one thousand years. Let's

look at some examples. Gout is considered as metabolic arthritis both in western medicine and TCM, but is diagnosed and treated very differently. In western medicine, the high level of uric acid in the blood is an obvious sign and other blood tests like white blood cell count, electrolytes, kidney function and erythrocyte sedimentation rate (ESR) have to be conducted as most people with raised uric acid levels never develop gout (Schlesinger, 2010; Sturrock, 2000). But in TCM, the diagnose is as simple as seeing the red swollen joints of the toes and knees. And herbs are used to help drain the waste through urine and perspiration while boosting energy productivity of the kidneys [Jinkuiyaolue by Zhang Zhongjing], which not only settle the acute attack but also solve the problem without having to use any preventative medicines like probenecid, febuxostat, benzbromarone that are used in western medicine to prevent further episode of gout, and colchicine (Shekelle, 2017; Dalbeth, 2016; Kydd, 2014). And people can eat as normal and just be careful enough not to catch a cold or overeat. Also, in this pandemic sweeping the world for years without a cure in western medicine, all the syndromes and medicines are given in the classic to help TCM experts to diagnose the complications and give the matching prescriptions. Contrary to the western medicine that the affected patients have to be quarantined for observation, TCM treat all the patients as early as possible once they have any symptoms of cold or flu, because the first two weeks are the only time left for the affected people, especially the seniors [Shanghanlun by Zhang Zhongjing].

The safety of TCM prescriptions also lies in the small amount and few doses for each syndrome. Taking all the prescriptions recorded in the ancient medical classics into consideration, more than 85% only consist of 6- 8 types of herbs less than 10g respectively. Only a few doses are needed for urgent and acute syndromes, just one or two doses for non-severe cases. For maintenance, the prescriptions that help boost the energy may last for quite a long time with very mild and common herbs in daily life, like dates no more than 6 for each dose and ginger no more than 3 pieces. [Wenbing Tiaobian] This feature of being able to cure the urgent and acute syndromes in very short time with maintaining prescriptions that can be taken away is most crucial for the continuity of the medical tour. The herbs used as medicine are from the same sources of food, which means that most of them are used as ingredients of daily dishes. Chinese medical cuisine is the best option for the post-operation recovery, because they are enhanced in flavour by certain herbs that can help the digestion

and absorption of the needed nutrition. The word cuisine tells us that this kind of food can also be found on the daily dining table with different recipes for different seasons. They are very popular in the southern part of China, where people need to make up for the fast-consumed energy due to the hot weather. This is why TCM prescriptions and medical cuisine are highly recommended to patients for post-operation recovery by the doctors of western medicine in China.

Together with the cost-effectiveness, TCM can never be matched by any other options in the world. The total cost of medicine for the whole treatment plan sometimes will be incomparably less than even just the cost of tests in any hospital and any other options, not to say the cost of operation and afterward treatment in the western medicine. TCM also saves the labour and cost for developing expensive new medicines which become heavy burdens to the patients without expected outcomes but often strong side effects.

Apart from the safety and affordable cost of overseas treatment, effective communication is essential to medical practice. And medical ethicists emphasize the importance of informed consent as a dimension of effective communication (Manson, 2007). This is particularly important when considering a medical procedure that is inherently risky or poorly understood (Paling, 2003). This raises important ethical concerns regarding processes such as informed consent and the liability of brokers in the event that complications arise from procedures (Penney, 2011). There are no such worries in TCM practice, as there is no need to consider any risks about surgeries or operations. Even when the follow-up treatment is concerned, the communication doesn't involve any special terms that may confuse the patients and the language assistant. With today's advanced technology for distant communication, the conversation is just about patients' diet, the progress and the current physical condition so as to confirm the prescriptions for use in each different phase. It doesn't take much for the language training for such communication.

The efficient-and cost-effective follow-up treatments without the need for frequent visits, and the quality outcomes that far exceed the expectations are crucial for medical tour. TCM can cure many complications in quite a short time that western medicine fails, like chronic migraine and insomnia that trouble many people and their normal lives. In western medicine, they are considered as the problems concerning the brain and nerve system. But in TCM, it is never about the curing the specific part

of the body where the symptoms occur. Whenever our body is in trouble, TCM take the whole body into consideration, especial the work and coordination of the internal organs rather than cells. Take the chronic migraine for example. Migraine is a common disorder that affects approximately 10%–12% of the population of developed countries (18% of women and 6% of men), with similar prevalence rates just in North America and Europe (Láinez, 2013). Approximately, 60%–95% and 50%–62% of patients with migraines develop nausea and vomiting, respectively, during migraine attacks (Mateos, 2009; Bradley, 2007). But the pathophysiology of migraine (in western medicine) has long been debated and remains incompletely understood (Láinez, 2013). More than two-thirds of the patients with migraine experience vomiting during their migraine attacks (Stovner, 2007; Vikelis, 2012). Both nausea and vomiting are usually related to the intensity of pain (Kelman, 2006), although the exact link between pain and gastrointestinal symptoms in patients with migraines is not completely understood in western medicine (Láinez, 2013). And it's never taken into consideration why patients feel relieved for some days after vomiting and why patients drink a lot of water without much urine and sweet. But to TCM, vomiting obviously means that the stomach fails to function normally when it is weak for taking in and passing down the food. When migraine lasts for several days, this state of the weak stomach makes it hard for patients to sleep and intensifies the pain in the eyes, because the foul gas inside the stomach has no way to go but to rise up to the chest and brain, causing nausea and headache. When the stomach becomes empty after vomiting, the headache goes away for a while. As to the treatment, it is never about the head. It takes several steps to get stomach and gall bladder back into normal coordination by releasing the accumulated heat in the chest, boosting the energy productivity of the kidneys and helping the liver to pass on the energy. When the migraine is gone, it takes time to get the stomach and spleen back to normal function so as to push the whole system back to normal to stop its coming back.

The biggest advantage of TCM expertise lies in the solutions for complications, which are the bad consequences caused by the wrong and delayed treatments. The methods of diagnosis and the prescriptions for the treatments are also recorded in the ancient classics, which explains why doctors of western medicine in China have to visit TCM experts when they and their family members are in serious conditions. These solutions are of great value for the purpose of medical tour.

To benefit more patients far and near, it is in high need for a service model to maximize TCM expertise so as to ensure the continuity of the medical tour.

3 A SERVICE MODEL TO MAXIMIZE AND ENSURE THE CONTINUITY

The shortage of experienced TCM experts is not just a matter of numbers, but much more about making full and effective use of them. In current service model of the western medicine applied to TCM in hospitals for more profits, it has been highly difficult to make an appointment with these experts in any big hospitals in China. As a result, patients in serious conditions have to wait and come back again and again after using each one prescription, making the crowds bigger every day at the clinic and the waiting-lists longer for hospital beds.

On the contrary, there had been no hospitals in true sense in the long history of China before the first western hospital was built in Canton in 1835. By tradition, TCM physicians were invited to homes to attend the patients, who often were found at pharmacies or their own homes. And famous TCM physicians were invited to travel to other places. Being highly flexible and without the need of machines, TCM physicians in the long history of China had never been many in numbers because it has been a very demanding profession for great sense of responsibility, learning abilities, benevolence and patience.

Today, in this computer aided society, EMR system and telecommunication, it is possible for one TCM expert to serve more people both at home and abroad, as shown in figure 2. To carry out the treatment plan after the diagnosis which is recorded in EMR system, TCM physician can arrange reminders by time and priorities according to the condition of the patients. No matter how many phases there will be, TCM experts can call and receive calls on the appointments, supported by an assistant /assigned interpreter to record the follow-up decisions, suggestions and prescriptions. The only need is to change the service model that not only maximize the role of TCM experienced experts but also largely reduce the visit frequencies of patients.

First of all, let's take a look of a treatment plan so that the requirement of the service model becomes clear. Upon the first visit clinical judgement and decision, TCM experts have the plan in mind, which now has to be transferred into the EMR system simply

about the phases of the treatment needed and by some guidelines for later reminding. In this way, the system can compute how many follow-ups and how much work and cost will be involved for reaching the final goal of each case. A whole package of service will be crystal clear to the patients with depicted benefits, limited travels if necessary and the length of treatment.

To carry out the plan, the role of the system reminding is important. With the past records, it saves time for further clinical judgements and spares more

time and efforts for TCM experts to communicate with patients about the progress and current problems. Supported by online camera, experts only have to focus on looking for new signs and listening for the needed information. Throughout the course of communication, the assistant or interpreter help take and enter the notes under the direction of the experts, which will serve as reminders for further communication. The same happens when patients call in or required to report upon appointments.

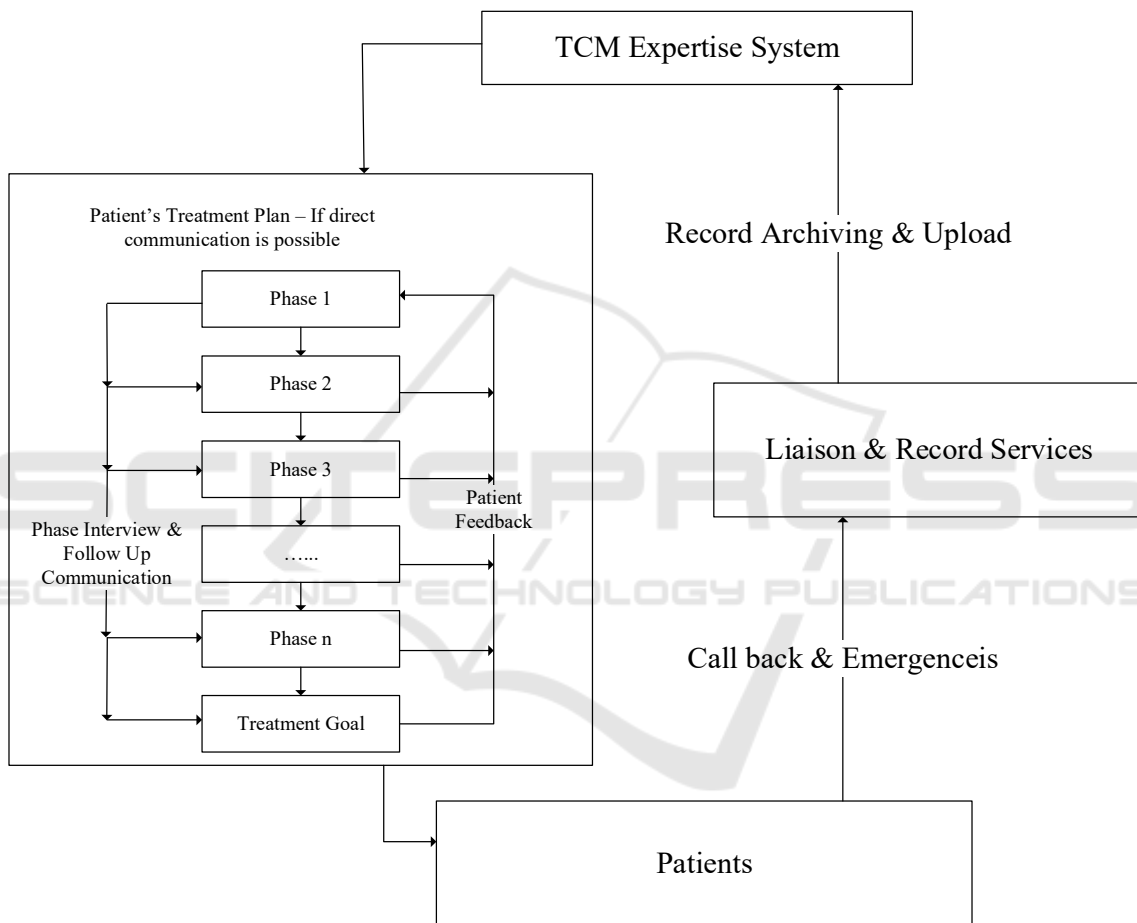


Figure 2: Medical Service Model based on TCM Expertise.

In this way, the number of patients can be multiplied with limited resources of expertise required for care and outcomes. And patients don't need to change hospitals and doctors for each disease or syndromes. Aided with computer system and assistant/interpreter, TCM expertise can be maximized to its most extent for high quality treatments and saving as many people as possible. With the package of services for high quality outcomes, hospitals don't need to worry about the

revenue and TCM experts are relieved from the pressure of number of patients they have to take care each day. When there is time for communication, TCM experts have the time to focus and work more efficiently. From the patients' perspective, the stress is greatly reduced by the treatment plan and the package of service to ensure the follow-up treatments and final outcomes. Without the need to travel often or afar, patients for most of the time are much more comfortable and relaxed at home, which is the best

environment for recovery and life at the same time. With the high-quality outcomes and the cost-effectiveness, words of mouth become the best advertisements to the long lasting the medical tour.

4 CONCLUSION

The application of this service model is more about the change of business model for TCM in the hospitals. Once it is in its full play, TCM experts can reach out to the patients with more allowed time for the communication and thinking for the best solutions. The consistent treatment saves patients' time, labor and money, while giving the opportunity to TCM experts to care and look after much more patients than they used to in one period. The cut in the waiting time, the perceived value and the high-quality outcomes, exactly what TCM expertise can provide, will be brought to its greatest extent by this model, which in turn will attract more patients to come and stay in the future. The complete records of each patient in the system will not only save the time and efforts of TCM experts, but also become highly valuable for the training of TCM physicians. With the detailed records, the treatment plan and the profile of reaching each milestone will give a full picture about how each different syndromes are tackled, which will be of great value for research as well. The assistants will soon become experts themselves, who can join in the team for the long-lasting medical tour services.

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