

# FACTORS TO RAISE THE INTERNATIONAL PROFILE OF CHINA'S MEDICAL TOURISM: VALIDATING MALAYSIA'S MODEL IN CHINA



# **DOCTOR OF PHILOSOPHY**



# Faculty of Technology Management and Technopreneurship

# FACTORS TO RAISE THE INTERNATIONAL PROFILE OF CHINA'S MEDICAL TOURISM: VALIDATING MALAYSIA'S



**Doctor of Philosophy** 

# FACTORS TO RAISE THE INTERNATIONAL PROFILE OF CHINA'S MEDICAL TOURISM: VALIDATING MALAYSIA'S MODEL IN CHINA

#### **MAYUANER**

#### A thesis submitted

in fulfillment of the requirements for the degree of Doctor of Philosophy



UNIVERSITI TEKNIKAL MALAYSIA MELAKA

# **DEDICATION**

This thesis is specially dedicated to:

My family and my beloved father,

WANG Huixing



#### **ABSTRACT**

This thesis is written in order to raise the international profile of China's medical tourism industry. Currently, Malaysia is increasingly recognized as a world-leading destination for medical tourism and ranked among the top medical tourism destinations in Asia. Its medical tourism is famous for low cost and high standard of healthcare. The researcher found that the researcher's home country China, its medical tourism industry is just at the beginning stage and China can learn a lot from Malaysia in this field. The objective of this research is to explore how, within the strategic framework of Service Marketing Mix (7 P's), China can raise its profile as a popular medical tourism destination and improve the international competitiveness of the industry by referring to Malaysia's practices? The researcher identified eight value drivers from the successful experience behind Malaysia's medical tourism. The successful experience is from the articles written by authoritative Malaysian scholars and most of the articles are being indexed by SSCI and Scopus. The researcher then developed these eight value drivers into eight hypotheses, using them to test whether the industry can attract more foreigners and achieve great success once these elements are applied under a Mainland China context. Therefore, the researcher obtained the total number of medical tourists entering Malaysia in Year 2019 and their regional distribution from Malaysia Healthcare Travel Council (MHTC), so as to conduct a stratified sampling survey. Year 2019 is the most prosperous year for the global economy, including Malaysia's economy, before the outbreak of COVID-19 pandemic. The number of medical tourists entering Malaysia in 2019 is quite representative. The researcher selected 300 tourists with previous healthcare experience in Malaysia and asked them whether they would consider China as one of the alternative destinations if private hospitals in China had elements such as high affordability, easy accessibility, and cultural sensitivity, etc. The data collected fully supports that the regression model proposed by the researcher is valid. If China could do better in terms of affordability, accessibility, quality care, advanced medical technology, religious implications for clinical practice, language proficiency, cultural sensitivity and religious tolerance, it will undoubtedly enhance the perception of potential medical tourists from all over the world regarding China as a destination choice. In addition, the moderating effect of Income Level (M) is also valid for some hypotheses. For all the people, regardless of which income group they come from, the higher their income level, the better China performs in terms of cultural sensitivity, and the more likely they enhance the perception of taking China as a medical tourism destination. For the upper middle class of each country, the higher their income level, the better China performs in terms of affordability, quality care, cultural sensitivity, and religious tolerance, and the more likely these potential customers enhance the perception of taking China as a medical tourism destination. If China is aiming to get a piece of the global medical tourism market pie, it can choose some more developed cities or border cities to prioritize the development of medical tourism. Moreover, these cities must develop some disciplines

with their own characteristics and increase their influence through high-level international exchanges. In addition to the optimization of service procedures and access to more commercial health insurance, these cities must accelerate the transformation of leading disciplines into new products for international medical services. Taking the lead from popular destination country such as Malaysia, it is suggested that China launches a preferential visa policy for those seeking medical treatment. As for the limitation of this study, the number of respondents is relatively small. The questionnaire should actually be sent to locations like Singapore and Indonesia for survey. Singapore has a highly extensive service sector and is one of the world's top medical tourism destinations. Indonesia has a large number of people going abroad to seek medical treatment each year. The viewpoints collected there may represent a more global perspective. In the end, because this study spans both pre-COVID and post-COVID eras, the researcher also reflects on the future development trend for China's medical tourism. In the past, foreigners might have been more attracted to a variety of low-cost options, but now they may be more concerned about whether a destination could implement standards to mitigate the risks of COVID-19 or other infectious agents.



### FAKTOR UNTUK MENINGKATKAN PROFIL ANTARABANGSA DALAM BIDANG PELANCONGAN PERUBATAN CHINA: PENGESAHAN MODEL MALAYSIA DI CHINA

#### ABSTRAK

Tesis ini ditulis untuk meningkatkan profil antarabangsa industri pelancongan perubatan di Negara China. Pada masa ini, Malaysia semakin diiktiraf sebagai destinasi terkemuka dunia untuk pelancongan perubatan, dan telah disenaraikan antara destinasi pelancongan perubatan teratas di Asia. Pelancongan perubatannya terkenal dengan kos rendah dan standard penjagaan kesihatan yang tinggi. Pengkaji mendapati bahawa negara asal penyelidik ialah negara China, dan industri pelancongan perubatannya baru berada dalam peringkat permulaan, dan China boleh belajar banyak-banyak daripada Malaysia dalam bidang ini. Objektif penyelidikan ini adalah untuk meneroka bagaimana China boleh meningkatkan profilnya sebagai destinasi pelancongan perubatan yang popular, dan bagaimana meningkatkan daya saing antarabangsa industri dengan merujuk kepada amalan Malaysia dalam rangka kerja strategik Campuran Pemasaran Perkhidmatan (7 P). Penyelidik mengenal pasti lapan pemacu nilai daripada pengalaman yang berjaya di sebalik pelancongan perubatan Malaysia. Pengalaman yang berjaya adalah daripada artikel yang ditulis oleh sarjana Malaysia yang berwibawa dan kebanyakan artikel sedang diindeks oleh SSCI dan Scopus. Penyelidik kemudiannya mula membangunkan lapan pemacu nilai ini kepada lapan hipotesis, dan menggunakannya untuk menguji sama ada industri itu boleh menarik lebih ramai orang asing dan mencapai kejayaan besar sebaik sahaja elemen ini digunakan di bawah konteks Tanah Besar China. Oleh sebab itu, pengkaji mendapatkan sejumlah bilangannya pelancong perubatan yang memasuki Malaysia pada Tahun 2019 dan pengedaran wilayah mereka daripada Malaysia Healthcare Travel Council (MHTC) untuk menjalankan tinjauan persampelan berstrata. Tahun 2019 merupakan tahun paling makmur bagi ekonomi global, termasuk ekonomi Malaysia, sebelum tercetusnya wabak COVID-19. Jumlah pelancong perubatan yang memasuki Malaysia pada tahun 2019 cukup mewakili. Penyelidik memilih 300 pelancong yang pernah mempunyai pengalaman penjagaan kesihatan terdahulu di Malaysia dan bertanya kepada mereka sama ada mereka akan menganggap China sebagai salah satu destinasi alternatif jika hospital swasta di China mempunyai elemen-elemen seperti kemampuan tinggi, akses mudah, dan sensitiviti budaya, dan lain-lain. Data yang dikumpul menyokong sepenuhnya bahawa model regresi yang dicadangkan oleh penyelidik adalah sah. Jika China boleh melakukan yang lebih baik dari segi kemampuan, kebolehcapaian, penjagaan berkualiti, teknologi perubatan canggih, implikasi agama untuk amalan klinikal, kecekapan bahasa, kepekaan budaya dan toleransi agama, ianya mesti akan meningkatkan persepsi bakal pelancong perubatan dari seluruh dunia mengenai China sebagai pilihan destinasi. Selain itu, kesan penyederhanaan Tahap Pendapatan (M) juga sah untuk beberapa hipotesis. Bagi semua orang yang tidak kira dari kumpulan pendapatan mana mereka berasal, semakin tinggi tahap pendapatan mereka, semakin baik prestasi China dari segi sensitiviti budaya, dan semakin besar kemungkinan mereka meningkatkan persepsi untuk mengambil China sebagai destinasi pelancongan perubatan. Bagi kelas menengah atas setiap negara, semakin tinggi tahap pendapatan mereka, semakin baik prestasi China dari segi kemampuan, penjagaan berkualiti, kepekaan budaya dan toleransi agama, dan semakin besar kemungkinan pelanggan berpotensi ini akan meningkatkan persepsi untuk mengambil

China sebagai perubatan destinasi pelancongan. Jika China sedang menyasarkan untuk mendapatkan sebahagian daripada pasaran pelancongan perubatan global, ia boleh memilih beberapa bandar yang lebih maju atau bandar sempadan untuk mengutamakan pembangunan pelancongan perubatan. Selain itu, bandar-bandar ini mesti membangunkan beberapa disiplin dengan ciri-ciri mereka sendiri dan meningkatkan pengaruh mereka melalui pertukaran antarabangsa yang beringkat tinggi. Sebagai tambahan kepada pengoptimuman prosedur perkhidmatan dan akses kepada insurans kesihatan yang lebih komersial, bandar-bandar ini mesti mempercepatkan transformasi disiplin terkemuka kepada produk baharu untuk perkhidmatan perubatan antarabangsa. Dengan menerajui negara destinasi popular seperti Malaysia, China Sudan dicadangkan untuk melancarkan polisi visa keutamaan bagi mereka yang mendapatkan rawatan perubatan. Bagi batasan tentang kajian ini, bilangan responden adalah agak kecil. Soal selidik sebenarnya harus dihantar ke lokasi seperti Singapura dan Indonesia untuk tinjauan. Singapura mempunyai sektor perkhidmatan yang sangat luas dan merupakan salah satu destinasi pelancongan perubatan terkemuka du seluruh dunia. Bagi Negara Indonesia, ianya mempunyai sejumlah besar orang yang pergi ke luar negara untuk mendapatkan rawatan perubatan setiap tahun. Pandangan yang dikumpul di sana mungkin mewakili perspektif yang lebih global. Akhirnya, kerana kajian ini merangkumi kedua-dua era pra-COVID dan post-COVID, penyelidik juga mencerminkan arah-arah aliran pembangunan masa depan untuk pelancongan perubatan China. Pada masa yang lalu, warga asing mungkin lebih tertarik kepada pelbagai pilihan yang mempunyai kos rendah, tetapi kini mereka mungkin lebih bimbang sama ada destinasi boleh melaksanakan piawaian untuk mengurangkan risiko COVID-19 atau ejen berjangkit lain.

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#### **DEFINITIONS**

In this thesis, unless otherwise stated:

**Medical tourism** means the process of traveling outside the country of residence for the purpose of receiving medical care, especially because it is less expensive than in your own country:

**Affordability** means the cost of medical procedures overseas being not too high and a destination country's ability of presenting a compelling option for individuals seeking quality healthcare at lower costs.

Accessibility means the ability of customer-patients can be transported across the world safely and efficiently by direct flight at lower prices, offering convenience and simplicity of e-medical visa and suitable accommodation when they traveling abroad for medical reasons.

Quality care means the organized provision of medical care to customer-patients including diverse cutting-edge treatment options, super-specialized expert medical care and personalized support that may not be available in their home country.

**Advanced medical technology** means the technologies that diagnose, treat and/or improve a person's health and well-being, including artificial intelligence, telemedicine, wearables, and data analytics, and that make healthcare delivery more accessible, efficient, and tailored to individual needs.

**Religious implications for clinical practice** means healthcare providers' spiritual and religious competencies in clinical practice, and the ability of developing policies and procedures that encourage culturally competent care that incorporates sensitivity to religious beliefs in healthcare.

Language proficiency means the ability of hospitals and clinics striving to create a multilingual staff so as to cater to medical tourists, which includes hiring healthcare professionals with diverse linguistic backgrounds, as well as investing in ongoing language competency training for staff.

**Cultural sensitivity** means the ability of health providers and organizations delivering health care services that meet the cultural, social, and religious needs of customer-patients and their families.

**Religious tolerance** means the ability of health systems and healthcare providers developing strategies and techniques that respond to the religious and spiritual needs of customer-patients and families.

**Medical tourist's perception** means the ability of a medical tourist seeing or becoming aware of a destination country and its medical tourism products through physical senses.

**Income level** means the amount of money or earnings that an individual or a household receives.

**B40, M40, and T20 income groups** mean the classification of household income groups in Malaysia. B40 represents the bottom 40% of income earners, M40 represents the middle 40%, and T20 represents the top 20% of Malaysian household incomes.

#### LIST OF PUBLICATIONS

Yuaner, Ma., and Juhaini, Jabar., 2021. The Chinese Private Medical Service Providers: A Review. *Journal of Medicinal and Chemical Sciences*. (indexed by Scopus)

Yuaner, Ma., and Juhaini, Jabar., 2023. Online Recommendation Method of Malaysian Medical Tourism Products Based on Collaborative Filtering Algorithm. Journal of Logistics, Informatics and Service Science. (indexed by Scopus)

Yuaner, Ma., Juhaini, Jabar and Aziz, Nor., 2023. Feature Selection with Integrated Gaussian Seahorse Optimization Data Mining for Cross-border Business Cooperation between the Malaysian Medical Industry and Tourism Industry. *International Journal on Recent and Innovation Trends in Computing and Communication*. (indexed by Scopus)

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### **CHAPTER 1**

#### **INTRODUCTION**

This chapter introduces that with the prosperity of Malaysia's medical tourism industry, the researcher merely thought about the idea of learning from Malaysia's successful experience to help China develop healthcare travel. This chapter introduces the background of the rise of medical tourism in Malaysia, and outlines the current problems in China's medical tourism. The researcher also provided the problem statement, research objectives, research questions, and research significance in this chapter.

### 1.1 Research Background

# 1.1.1 Definition of Medical Tourism

Medical tourism is the term used when travelers go to another country for medical treatment (Kim et al., 2021). Medical tourism is often associated with people from lesser-developed countries with poorer health systems travelling to more advanced countries to receive high-quality medical care (Şahbaz et al., 2022). Medical tourism provides access to specialized treatments and medical expertise that may not be readily available in the patient's home country (Denizli, 2022). Patients may choose to travel to countries that specialize in the type of treatment they need. In addition, in nations that have long waiting lists for certain procedures, medical

tourism provides a mechanism to clear backlogs by sending patients to foreign countries without expanding local capacity (Sevim and Sevim, 2023). In some cases, patients choose healthcare travel to avoid long waiting lists for certain procedures in their home country.

#### 1.1.2 The Rise of Medical Tourism

Today, increasingly people are searching for health and wellness related information over the Internet and seeking for medical treatment abroad, in order to solve their health problems. Only a few years ago, going abroad for medical treatment was mostly for emergency treatment by expensive doctors (Md Zain et al., 2023). Now cheaper travel and the falling cost of healthcare in some countries have made medical tourism affordable for thousands of people who may not have thought about it seriously in the past.

As the pressure in healthcare services in North America and many European countries increases with the ageing population, medical tourism looks like it is becoming a popular choice for more and more people (Sarker et al., 2021). The trend is growing as a result of the increase in people's needs for health check, plastic surgery, knee replacement, hip replacement, in-vitro fertilization (IVF), heart bypass surgery, spinal surgery, cancer treatment and the success of some countries across Asia (such as Malaysia, Thailand, Singapore, India, South Korea, and Japan) marketing themselves to medical tourists as inexpensive places for treatment. A comparison between the cost of treatment in Canada or the UK and the cost in the above countries — particularly in Southeast Asia and South Asia region — has sent

thousands of people to local hospitals in Southeast Asia or South Asia region (Alfarajat et al., 2019). The long waiting lists in their own country are another reason why people form Europe or North America look elsewhere for medical treatment.

Dozens of countries are embracing and investing in medical tourism as part of their economic development (Deeparechigi et al., 2018). Medical tourism represents an excellent opportunity for these destination countries, fostering the creation of vast foreign-exchange earnings, the creation of new, well paying, long-term quality jobs, the retention of health workers, investment in new health facility infrastructure, investment in the new advanced medical technology and the development of related health and research industries (Najafipoor et al., 2020). And the other Asian countries, such as China, the Philippines, and Vietnam, are also proactively preparing to develop, and benefit from, this enormous world market.

# 1.1.3 Medical Tourism in Malaysia

Malaysia's medical tourism industry is a vibrant sector in the country's economy. Why choose Malaysia as a benchmark compared to other countries? Firstly, Malaysia has gradually developed a relatively mature commodification of healthcare (Nikbin et al., 2019). This development is taking place in the context of the globalization of the healthcare industry. The Malaysian government has also institutionalized the standardization, quality control, promotion, advertising, and marketing measures of healthcare services, committed to providing customer-patients with relatively low-priced and high-quality healthcare services. Secondly, an important part of Malaysia's strategy to develop medical tourism is to make good use of its image as a

"Muslim country" and provide convenience for Muslim patients who believe in Islam (Saragih and Jonathan, 2019). Indonesians from the neighboring country are known for their unique behavior and willingness to seek medical treatment abroad. More than half of the healthcare travelers traveling to Malaysia come from Indonesia.

Over the last decade, this country has been making waves all over the world for excellence in this sector (Ahmed et al., 2019). Medical tourism is one of the 12 National Key Economic Areas (NKEAs) of the Government of Malaysia, and hence is considered a key driver of economic growth (Kadir and Nayan, 2021).

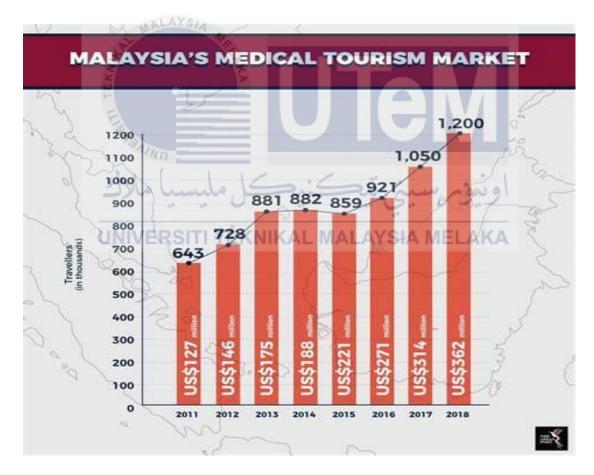


Figure 1.1: Malaysia's medical tourism market value

(Source: Malaysia Healthcare Travel Council Official Website, 2019)

Medical tourism started to be given prominence by the Malaysian government