

# **New Evidence of the Determining Factors of Medical Tourism in the United Arab Emirates**

**Hallow Al-Talabani**

Submitted to the  
Institute of Graduate Studies and Research  
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy  
in  
Tourism Management

Eastern Mediterranean University  
September 2019  
Gazimağusa, North Cyprus

Approval of the Institute of Graduate Studies and Research

---

Prof. Dr. Ali Hakan Ulusoy  
Acting Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of Doctor of Philosophy in Tourism Management.

---

Prof. Dr. Hasan Kilic  
Dean, Faculty of Tourism

I certify that I have read this thesis and that in my opinion it is fully adequate in scope and quality as a thesis for the degree of Doctor of Philosophy in Tourism Management.

---

Assoc. prof. Dr. Ali Ozturen  
Co-Supervisor

---

Prof. Dr. Hasan Kilic  
Supervisor

---

Examining Committee

1. Prof. Dr. Turgay Avcı

---

2. Prof. Dr. Semra Gunay Aktas

---

3. Prof. Dr. Hasan Kilic

---

4. Prof. Dr. Guven Sevil

---

5. Prof. Dr. Mustafa Tumer

---

6. Assoc. prof. Dr. Ali Öztüren

---

7. Asst. prof. Dr. Mehmet Guven Ardaham

---

## ABSTRACT

Medical tourism provides essential advantages for destinations. On the other hand, the knowledge of developing competitive medical tourism destinations is still limited. This study proposes a conceptual framework on novel ways of sustaining the United Arab Emirates (UAE) Vision 2020 concerning the existing models on behavior. In the current study, the Theory of Planned Behavior (TPB) is utilized along with the Finance, System, and Connection (FSC) model. The data was collected with the aid of a questionnaire. As such, the study employs finance, system, and connections variables that are commonly adopted in testing medical tourism development. The designed model incorporates three critical factors that have remained the focal points in the world of medical tourism. Hence, the results reveal the empirical evidence that the finance, system, and the connection factors significantly foster the growth of tourist arrivals in Dubai. Moreover, the medical tourism infrastructure is expected to bring significant improvement in the economy of Dubai. By employing the SMART PLS (partial least square) software package, the structural analysis model affirms the robustness of the results. Besides, the thesis presents the policy implications for the stakeholders in the health sector, the tourism sector, and the government.

**Keywords:** medical tourism, finance, system, connections, economic growth, diversification, UAE

## ÖZ

Medikal turizm destinasyonlar için önemli avantajlar sağlar. Öte yandan, rekabetçi medikal turizm destinasyon geliştirmeye dair bilgi birikimi halen sınırlıdır. Bu çalışma, mevcut davranış modellerine atıfta bulunarak Birleşik Arap Emirlikleri (BAE) Vizyonu 2020'yi sürdürmenin yeni yolları üzerine kavramsal bir çerçeve önermektedir. Bu çalışmada, Planlı Davranış Teorisi (TPB), Finans, Sistem ve Bağlantı (FSC) modeli ile birlikte kullanılmıştır. Veriler bir anket yardımıyla toplanmıştır. Bu nedenle, araştırmada medikal turizm gelişiminin test edilmesinde sıkça benimsenen finans, sistem ve bağlantı değişkenleri kullanılmıştır. Tasarlanan model, medikal turizm dünyasında odak noktaları olmaya devam eden bu üç önemli faktörü içermektedir. Bu doğrultuda, sonuçlar finans, sistem ve bağlantı faktörlerinin Dubai'ye gelen turistlerin gelişimini önemli ölçüde artırdığına dair ampirik kanıtları ortaya koymaktadır. Ayrıca, medikal turizm altyapısının Dubai ekonomisinde önemli gelişmeler getirmesi beklenmektedir. SMART PLS (kısmi en küçük kare) yazılım paketini kullanılarak yapısal analiz modeli sonuçlarının geçerliliği onaylanmıştır. Buna ek olarak, tez sağlık sektöründeki, turizm sektöründeki ve hükümetteki paydaşlara yönelik politika tavsiyeleri sunmaktadır.

**Anahtar kelimeler:** medikal turizm, finans sistemi, bağlantı, ekonomik büyüme, çeşitlendirme, BAE.

# **DEDICATION**

To

My wife and I love you!

## **ACKNOWLEDGMENT**

With much appreciation, I am so thankful to you, Prof. Dr. Hasan Kılıc and Assoc. Prof. Dr. Ali Öztüren. You did not only supervise but encourage, support, exercising patience, and most importantly believing in my abilities.

# TABLE OF CONTENTS

ABSTRACT .....	iii
ÖZ .....	iv
DEDICATION .....	v
ACKNOWLEDGMENT .....	vi
LIST OF TABLES .....	ix
LIST OF FIGURES .....	x
LIST OF ABBREVIATIONS .....	xi
1 INTRODUCTION .....	1
1.1 Introduction.....	1
1.2 Medical Tourism .....	3
1.3 Medical Tourism in U.A.E. ....	10
1.4 Purpose and Importance of the Study .....	15
1.5 Scope of the Study .....	15
2 LITERATURE REVIEW .....	17
2.1 Health Tourism .....	17
2.2 Medical Tourism .....	19
2.2.1 The Trends in Medical Tourism.....	21
2.2.2 Hindrance to Medical Tourism .....	24
2.3 Medical Tourism Stakeholders .....	25
2.4 The Impacts of Medical Tourism.....	27
2.5 The Determinants of Medical Tourism .....	30
2.6 The United Arab Emirates in Context.....	35
2.6.1 Dubai .....	39

2.6.2 The Health Care Services in the United Arab Emirates: An Overview ....	41
2.7 Extant Models .....	42
2.7.1 Theoretical Underpinning the Study .....	44
2.8 Hypotheses Development .....	50
2.8.1 The Hypotheses .....	54
3 RESEARCH METHODOLOGY .....	56
3.1 Methodology .....	56
3.2 Sample and Procedure .....	56
3.2.1 Pilot Study .....	57
3.3 Measurements .....	58
4 FINDINGS AND DISCUSSION .....	60
4.1 Demographic Variables .....	60
4.2 Hypotheses Tests .....	62
4.3 Structural Model .....	64
4.3.1 Proposed Measurement Scales with Smart PLS .....	65
4.3.2 Model fit .....	65
4.3.3 The Models .....	66
5 CONCLUDING REMARKS AND POLICY IMPLICATIONS .....	70
5.1 Concluding Remarks .....	70
5.2 Policy Implications .....	72
5.3 Limitation of the Study .....	75
5.4 Recommendation for Further Study .....	75
REFERENCES .....	77
APPENDIX .....	102



# LIST OF TABLES

Table 1: Global Statistic Description of the Commonly Patronized Medical Procedure.....	22
Table 2: List of Common Specialties and the most Visiting Countries.....	41
Table 3: Respondents Profile (n=303).....	60
Table 4: Descriptive Statistics.....	61
Table 5: Correlation Matrix.....	61
Table 6: Model Summary.....	62
Table 7: Linear Regression.....	62
Table 8: Construct Reliability and Validity.....	65
Table 9: Model Fit Summary.....	66
Table 10: Estimated Path Coefficient Estimations and Bootstrap and Confidence Interval .....	68

## LIST OF FIGURES

Figure 1: The Proposed TBP/FSC Research Model .....	53
Figure 2: Model with T-value of the coefficient .....	66
Figure 3: Model with path coefficient and T-values.....	67
Figure 4: Model with path coefficient and P-values.....	68

## **LIST OF ABBREVIATIONS**

AED	The United Arab Emirates Dirham
DCT	Department of Culture and Tourism
DHA	Dubai Health Authority
FSC	Finance System Connection
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
MoU	Memorandum of Understanding
MT	Medical Tourism
MTA	Medical Tourism Association
MTI	Medical Tourism Index
MTSL	Medical Tourism Service Loyalty
MTSQ	Medical Tourism Service Quality
PPPs	Public-Private Partnerships
UAE	United Arab Emirate
UNESCAP	United Nations Economics and Social Commission in Asia and the Pacific
UNWTO	United Nations World Travel Organization
WTO	World Trade Organization

# Chapter 1

## INTRODUCTION

### 1.1 Introduction

Tourism as a standard service is believed to be associated with modern social arrangements and is dated to the 17th century in Western Europe but having an antecedent in Classical antiquity (Encyclopedia Britannica, 2019). Traditionally, tourism mainly involves the process of holidaying, especially spending time away from home for the pursuit of leisure, recreation, relaxation, and other similar activities. By engaging in tourism activities, several social, cultural, economic, and other events are being directly or indirectly entangled with thereby changing or redefining the traditional concept of tourism. For instance, certain shared categories such as business tourism, sports tourism, cultural tourism, religious tourism, and medical tourism have now formed the component of tourism (Encyclopedia Britannica, 2019). Importantly, the economies of the world have continued to explore these diverse concepts to harness the benefits associated with these tourism industries, thus strengthening the peculiarity and the economic importance of the tourism industry across the globe.

Globally, the evolution in the tourism sector has further position and reinforced the socio-economic relevance of the industry. Precisely, the United Nations World Tourism Organization (UNWTO, 2019) reported that the total export earnings from international tourism reached USD 1.7 trillion in 2018 (an equivalent of USD 5

billion a day on average). In the same report, the UNWTO 2019 informed that the international arrivals for the current year 2019 significantly grew by 4%, thus making tourism exports (+4%) recording the seventh year growth in a row which is higher than growth in merchandise exports (+3%) in 2018. Although the global tourism performance reportedly slowed down at the end of 2018, the recent growth experienced in 2019 has seen the Middle East leading by 8%. Subsequently, Asia and the Pacific, Europe, Africa, and the Americas equally recorded respective increase of 6%, 4%, 3%, and 2% in the arrivals in the first quarter of 2019. In addition, the growth in the sub-regions are also recorded to be 11% in the Caribbean (+11%), followed by 9% growth in North Africa, and 7% each in South Asia and North-East Asia (UNWTO, 2019). The degree of global uncertainties, socio-economic and political challenges, the growth in the tourism industry has yet driven by a strong economy, affordability and expanded the connectivity of the air travel.

The development of tourism in a specific location is dependent on various forms of present and organized types of events like housing, transport, retailing, nature and agriculture. Tourism has since become a platform through which both developing and developed countries grow foreign currency more than their local currency. However, this growth in both these developed and developing counties in their tourism sector, has created a lot of concern by observers who think that tourism might eventually result to the back fall in the economy of host countries (Essay UK, 2018). In the world today, tourism has become one of the most major boost of the economy; this is so because a generation of services, products, employment and investments can be directly traced to this segment. It is essential to note that, however, the influx of these resources through tourism can only be guaranteed

through the delivery of an exciting and fun-filled travel experience by tourists (Ashwani and Kul Vaibhav, 2015).

One of the most important parts of tourism as an institution is a tourism destination. Yet, both scholars and practitioners find it very difficult to conclude what an idea tourism destination is. For entrepreneurship promotion, construction of local geographies, we must learn to understand the type of destination a tourist center has. Destinations are usually small segments of actions where interactions, planning and all forms of deliberations occur among different organizations, establishments, host and guests. It is paramount to talk about tourist destination level marketing to be able to conclude what the depth and breadth of a tourism destination are (Saraniemi and Kylänen, 1955). Relaxation, pleasure and a general increase in one's health and wellbeing has become a cliché that cannot be separated from tourism. Although, cultural tourism and the fact that the tourism experience will always remain a learning process for tourist around the world, we cannot rule out the fact that a separate niche has been recently carved in this experience, which is medical tourism. The kind of learning that takes place in tourism is different from the conventional school experience; it is usually relaxing filled with fulfilled memories, achieved through spas, relax ions and gym experiences (Connell, 2005).

## **1.2 Medical Tourism**

Originally, tourism in the preliminary stage was meant to cater to better well-being and an increase in health care. An example of this is seen in the numerous spas, theistic places and lots of recreational center era scattered around Europe which has consequently served as medical improvement exercises for tourists (Connell, 2005). The concept of medical tourism is defined as a trip that has to do with travelling to

another country for the purpose of medical services. Observations have revealed that people do this due to so many reasons; one of such is when an unwell citizen weighs the cost of medical expenses in a home country against a foreign country and realize that assessing health care is cheaper abroad. (Al-Talabani, et al., 2019). Also, the advantage of getting treated with new technological facilities, and the long list of patients that wait to use this technology, alongside marketing via the internet has promoted the idea of medical tourism all over the world (Connell, 2005).

People all over the world often travel to more developed countries to get better medical care, which includes prolonged medical care and all kinds of surgeries. An aspect of medical tourism that is fast-growing and highly demanding is the reproductive section. This aspect of medical tourism defined as the act of seeking medical treatments in foreign countries where the kind of reproductive medical treatment needed can be provided. For these people to be able to meet up with the seven different secret factors are termed as being responsible for the successful operation of reproductive medical tourism. Reproductive health travelers always find the term tourism ridicule and the belittling of their effort of having to have a destination birth of a child. They tend to prefer the term reproductive exile to the sure, which can better explain tourism to the pleasure and act of touring to them Inhorn and Shrivastav (2010).

As a result of the boom in medical tourism, developed countries have become intentional in the advancement of technology-intensive tertiary care much more than the regular primary health care, which is usually patronized by citizens. In the tourism sector, health tourism is among the fastest-growing section of tourism internationally. The list of countries are working towards dominating and

championing this market legally and practically is fast increasing (Ramírez de Arellano, 2007). For a while now, the media has recorded a consistent growth in the medical tourism habit. Citizens have been noted to expressly travel for the sole purpose of bathing suit, sunblock, x-rays and medical checkups (Ramírez de Arellano, 2007). Over time the medical tourism industry has become one of the fastest-growing sectors of tourism. Despite the recent boom in this sector of tourism, the industry has been challenged and incessantly continually plagued with the challenge of convincing potential clients that intends to come to a specific location. The health care system is much is better, even with inadequate medical care in comparison with what can be obtainable in their home country (Connell, 2005).

The influence of medical tourism in both developing and developed countries is skyrocketing. Medical tourism is an organized vacation that entails traveling of a patient from the home country to a foreign country for enhancement, restoration or maintenance of the individual's health (Connel, 2013; Kim & Lee, 2017). Medical tourism (MT) is becoming the most increasing and fastest-growing sector in the tourism industry which contributes hugely to the world economy (Beladi, Chao, Ee & Hollas, 2019; Al-Talabani, Kilic, Ozturen & Qasim, 2019). The increasing trend in the attention to medical tourism has a great economic potential to the world (Beladi et al. 2019). Investment in the MT have directly and indirectly contributed to the gross domestic product (GDP), which is evidently seen in the contribution to generating foreign exchange and balance of trade (Skountridaki, 2017). To this effect, business practitioners eagerly look into this sector because of the tremendous growth rate (Kasemsap, 2018; Suess, Baloglu & Busser, 2018).



The MT sector is a global phenomenon that has an average growth rate of 25% contributing 100 billion United States currency to the world economy. Recently, many countries are working towards championing and dominating the market of MT either legally and practically. Monenai, Janati, Imani, and Khodayari (2018), opined that patients that think that they are spending more than the medical attention that they are receiving from their home country, they seek an alternative in other reduced medical expenditure. Sometimes depending on one's own country, especially developed countries, health services are relatively cheaper outside one's country and always in better quality than that of the home country (Goodrich & Goodrich, 1987; de, Munoz & Bakucz 2018). Also, Momeni et al. (2018) opined that countries such as India and Thailand are known for their reduced cost in medical fees and a high level of medical care. Many countries of the world use medical tourism as one of the ways to increase the tourist inflow in their country and increase revenue. The study of Inhorn (2017) also identified several businesses that are related to medical tourism.

Importantly, in 2005, the United Nations Economic and Social Commission in Asia and the Pacific (UNESCAP) list some of the countries that have increase MT inflow, Singapore, Thailand, India and Malaysia. India is one of the leading countries in major health-care destinations. For example, according to Bhaidkar and Aweshkar (2017), the Indian government in 2016, approved the 4-point strategy that will enhance and enable the promotion of the tourism sector and this forms the part of the 2010 vision. The procedure includes the regulation, accreditation, modernizing the tourism industry and the healthcare services. Recently, South Korea was listed as one of the fastest-growing medical tourism (MT) attractions in Asia (Eom, Yu & Han, 2019; Han & Hwang, 2018). According to the information from Korean Medical

Tourism Forum (KMTF, 2018), the number of MT arrival in 2016 was 364,189, South Korea is the 6<sup>th</sup> most populated MT arrival in Asia. It stands as the number eleven in the entire world with an increase in the country's annual growth rate from 2009-2016 to equal 29.3 percent (Kim, 2015; Chang & Baek, 2017).

Medical tourism is not left out in the Arab region; for instance, four centuries ago, Egypt became one of the most visited countries in the area in terms of a medical tourist. Then in the 1980s, the Jordanian became the most visited country topping Egypt because of a lack of investing in this sector by the Egyptian government. Recently, Egypt is among the countries in the Middle East region with over 50 IVF centers all over the country (Inhorn & Patrizio, 2015). Interestingly, some of the countries in the Middle East are not left out. Turkey has more than 100 IVF centers and Iran with more than 70 IVF centers (Inhorn, 2017, Inhorn & Patrizio, 2015) the rate of MT arrival have double in recent years, and this has given rise in boosting the tourism sector in the region mentioned above. The United Arab Emirates has ranked among the most visited tourist destination in the world. The availability of the necessary nature resources deposited in this region has not been fully maximized for the expansion of medical tourism in some of these regions. The UAE continues to be a destination favorite because of the untapped opportunity for many people seeking medical attention that is of high-quality (Kumar & Purani, 2018).

Globally, countries have intentionally invested in medical tourism for the global economic growth of their nation. Over time the medical tourism industry has served as a major upgrade in a gross domestic product, upgrade services and helped in the overall growth of the tourism industry. Not to mention the fact that, through tourism, more health professionals have been built bridges across borders, creating firmly

international relationships amongst countries. The question now is, how what is the contribution of medical tourism to public health? How has the local population benefits from this trend? Advocates, who found enough the need to probe on this concern raises two major points that can assist the growth of the local populace health care. (1) suggestions are made for incomes generated during medical tourism should be regenerated into the growth and enrichment of the local health care for the benefit of the entire populace. (2) The improved medical facilities that cater to the tourist can in a two way affect the health services rendered to the citizens. Firstly, the introduction of advanced technology and provision of better practitioners for medical tourism can serve as a pro in the improvement of health services. Secondly, in adverse serves as a plague to the growth of the local health services, developing countries might only be able to provide these services to the rich few, that can afford these services during medical tourism and not for the general masses. It is thereby widening the gap between the rich and the poor (Ramírez de Arellano, 2007).

They are looking at the current growth in the acceptability and the demand for cosmetic surgeries as against heart surgery that has commonly served as the core of medical tourism in time past. The sector is foreseen to await a tremendous growth in a better service and the demand in the nearest future. As this growth becomes noticeable, much more demand is envisaged by private individuals and also western insurance companies, who are likely to utilize the opportunity to encourage their clients to get oversea treatment as a means to combat costs (Connell, 2006). Countries have found a way to bring medical tourism to different markets. The crème de la crème of privacy and crème of the society likes and rich ones in the society were segregated for a special market. This is done for the sake of privacy for surgeries and other discreet information for the reputation of these personalities

(Ramírez de Arellano, 2007). These designated personalities have been known to discreetly patronize countries through a major medium, which is the internet. With the advent of the internet, the growth of medical tourism has taken a new turn. The internet now serves as a travel information source, tourist establishment base the online presence the central role of showcasing the available medical facility with the clients (Cormany and Baloglu, 2011).

Furthermore, certain conditions are used as a degree of measurement, which is to be considered when taking about international business. These conditions are theoretical and called Porter's diamond of national competitive advantage. This theory is named the International trade theory, and it is made up of four different components, which include demand conditions, factor conditions, related and supporting industries and firm strategy, structure and rivalry. Medical tourism is linked to the four components of this theory. Firstly, the aging population is a major determinant of the demand for medical services. This is not precisely the case in many countries, because quite a large part of the community do not conform to the health care insurance services; hence the public health care services are underpopulated, while the private hospitals are expensive. Secondly, for medical theorist, location, geographical environment, warmness and pleasantness of the location is seen as a considerable advantage. Thirdly, for effective services to be delivered, medical tourism relies on other industries like the airline, hotels and transportations for smooth running.

Moreover, for the delivery of smooth medical tourism activity, the individuals handling the logistics are delivery also significant determinants to the success of the industry (Ahmed, 2018). Different authorities who are in charge of tourism have always advocated for the growth of medical tourism. Because it is seen as a critical

section of the industry in which can help nations in the development of local health, care systems, job creation and also serves as a boost to tax revenues. Medical tourism is set up in such a way that set will consequently improve the living condition of the residents in the environment which it is located (Suess et al., 2018).

### **1.3 Medical Tourism in U.A.E.**

With the advent of medical tourism, countries have been able to export their products and services from one remote part of the end to the other. Tourists now have access to quality is not health care that is not available in their resident country; this theory gets at a relatively economical cost. In the UAE, so much has been invested in medical tourism as a means to create economic diversity. They have gone ahead to develop world-class medical equipment and professionals who cater to both tourists who visit the UAE, who from far as ends like Africa, the middle east and also citizens, respectively. In the UAE, exciting trends have been discovered concerning medical tourism. These trends are meant to be adopted by health authorizes to raise the status to create a better and more profit-making industry for the medical care section of the country.

In the past five decades, the UAE has grown to enjoy an enviable reputation in the medical tourism industry. It has become famous for the provision of standard global treatment equipment and medical facilities, which have been confirmed to be very appealing to medical tourism medical equipment. However, research have revealed that one-third of the UAE citizens still go outside the shores of the nations for medical treatment. Furthermore, findings also revealed that a very lump sum of the total health care budget in the UAE is being spent on the Emirati citizens for medical treatment sponsored by the government; this was revealed in a Korean study. The

study confirmed that Emirates, who are UAE nationals, makes up 2.1%, ranking second largest of the total population of visitors who visits Korea. These UAE Emirates nationals profess to be medical tourists. According to this study, word of mouth was the main driven force behind the selection of therapeutic location and hospital; after this was the availability of advanced medical facilities, and then privileges from the government and medical health providers were considered.

The UAE has been noted to always aspire to the best in all works of life; medical tourism is then not left out. They aspire to grow this sector to be able to bridge the gap between themselves and countries abroad for the sake of their citizens who still seek medical help in the Diaspora. Also able to meet with the demand of foreigner who loves to visit the UAE, especially Dubai, Abu Dhabi, from Africa and Asia countries for the sake of medical tourism in addition to the need to be (Ahmed, et al., 2018). Major investments such as the Dubai healthcare city and Moorfields hospitals in Dubai and Abu Dhabi, which were established with billions of dollars has broadened medical tourism in the UAE; it has become one of the fastest-growing industries in these countries. In UAE, the focus has been made on raising great and beautiful structures for health and services, as well as investment in training better medical practitioners. This also includes the provision of necessary travel requirements like visa, hotel, stay and transportations for foreigners coming to the country for health services. Also, the marketing strategy was set up in the form of language translations for potential clients who will be coming from some designated countries like South Asia and some (Ahmed et al., 2018).

The impact of tourism on the growth of the UAE economy is increasingly visible (Michael, Reisinger & Hayes, 2019). Tourism is the vital and most significant non-

economic sector in the UAE. According to Gulf News Business (2018), UAE has become one of the top countries in the world, especially in the Gulf region, attracting millions of tourists from all over the world (Sutton, 2016). Between 2013 and 2016, UAE, the number of international tourist arrival increased from 10.4 million to 14.4 million international visitors (TTCI, 2017), and contributed 44 billion USA dollars to the GDP. In the past centuries, the Gulf Cooperation Council (GCC) relies only on oil for a source of income. UAE uses the revenue generated from oil for countries' development (finance industry projects and advanced infrastructure). For sustainability of the country's socio-economic development, has brought about the urgent need for the state to diversify the economy. This urgent call for diversification leads to increased development in the tourism sector in 2016 (UAE Business, 2016).

Due to the diversification effort of the central government, tourism has gradually become the most critical and vital non-oil economic sector that contributes to the GDP of the United Arab Emirates economy. The country's tourism sector has added 617,500 jobs and indirectly assisted in creating employment of over 317,000 jobs (United Arab Emirate Travel and Tourism, 2019). This contribution of this sector contributed 5.4% of the total work of jobs in the country. Precisely, in 2016, the tourism sector contributed to GDP a total of 44 billion United States dollars. The government continuously invests in the travel and tourism sector; the total amount invested in this sector equals 7.1 billion USA dollars, which equals 7% of the total investment. Leisure travel spending accounts for 77.4% of direct travel and 22.6% for business spending (Dubai Tourism News, 2017).

According to the report from WTTC (2018), there is an expectation of an increase in the rise of tourism, tourism expenditure is expected to increase up to 4% in a year,

continuously from 2018-2028 accounting for 12.4% in total GDP amounting to 72 billion US dollars by the year 2027 (WTTC, 2017). By 2027, the tourism industry is expected to have contributed 770,000 per annum to employment, which is 2% expected to rise to 11.1%. On the other hand, Dubai Tourism News, (2017), reported that the leisure travel spending is anticipated to increase by 4.8% to \$52 billion and also business travel spending to increase from 4% to \$13.4 billion in 2027.

For the global forecast of the worldwide tourism industry, there is an existing massive plan for Dubai city by 2020 as the city is expected to attract up to 20 million international tourists. The government of UAE has entered a collaboration with some health practitioners like the Cleveland Clinic, John, and the Mubadala healthcare are among the new faces of UAE's health system. Dubai is becoming the fastest growing in medical tourism in the Emirates region. Dubai health sector has over 100 countries representing in the health sector, making up of 35,000 international health practitioners. Going by this, the figure and the current development in medical tourism in the country, Dubai Health Authority (DHA) is expected to attract over 500,000 medical tourists' inflow by 2020. Although UAE is increasing in the number of medical tourism arrival, nevertheless, they country lag behind in the world's biggest countries that house massive in the flock of medical tourism annually but reminds the highest in the Middle East region.

Similarly, the TTCI (2017) reported that five countries (United Kingdom, Italy, Spain, France and Germany) in total attracted 620 million out of the total 1.2 billion of the international visitors worldwide. The country ranks 29th in terms of tourism and revenue and 21st in terms of tourism expenditure (UAE Ministry of Economy). It also ranks 27th in terms of tourism's total contribution to GDP (23rd in terms of



tourism's direct contribution to GDP), 57th in terms of tourism's total contribution to employment (47th in terms of tourism's direct contribution to employment), and 22nd in terms of tourism investment (WTTC, 2018). Also, an essential feature of tourism that has not fulfilled its potential is the small number of citizens working in the tourism sector. The number of Emiratis working in UAE accounts for just 1% (Insight Magazine, 2016).

In light of the above, the UAE seeks to improve its competitive position in the international tourism market. Tourism businesses and entrepreneurs are crucial in the development of the country's attractiveness and competitiveness. There is little research on the dynamics of medical tourism in emerging economies such as the UAE. Until now, researchers have paid little attention to studying this trend; thus, only a few academic studies have focused on this sector, especially in this region. Most of the literature focuses only on some aspects of the industry, such as economic or marketing aspects of the health sector (Lovelock & Lovelock 2018; Connell, 2006; Smith & Forgione, 2007). There are several reasons for visiting a destination, either for health, for leisure, or business or for other things. People who need medical attention have many reasons for visiting overseas for medical attention; the striking ones are the affordability and level of quality of care (Ganguli & Ebrahim 2017).

Against this backdrop and the motivations, this study aims to develop an integrated new model that will potentially underpin how to trigger greater expansion and harnessing of the potentials of medical tourism. Such a model is expected to retain and maintain trend of the medical aspect of tourism in the UAE. The study proposes a novel model developed by the authors which are called FSC (Finance, System, and

Connections) Model. The model forms a triangular interaction of the factors. The factors are strong Finance (F), strong System (S), and strong Connections (C). This study includes an in-depth definition of the proposed theory and it is exploratory. To this effect, the study offers several research purposes.

#### **1.4 Purpose and Importance of the Study**

The primary purpose of the study is to understand the impact of MT in the UAE. Additionally, while underpinning the potential role of MT to the socio-economic development of the UAE, the study is designed to equally point out the strength and the weakness of this specialized part of tourism. Considering that the UAE is seeking diversification of its economy and MT is significantly becoming a global source of income to many countries of the world. This study is billed to contribute to the existing literature on MT. Hence, it is important to understand the policies and the underlying resources and management essentials that will be diverted to this sector to warrant the expected sectoral and economic development. This will enable the researcher to recommend policymakers, stakeholders and practitioners strategies to employ in achieving a competitive and sustainable medical sector.

#### **1.5 Scope of the Study**

The study entitles the list of the following scope of the study:

1. The study aims to provide a recommendation to the United Arab Emirates on the benefits of developing a strategic plan that will give them a competitive advantage in the globe.
2. Examine the stage of MT in the Emirates region and the quality of healthcare and medical tourism industry as a whole.
3. Analyze the vision 2030, what is the current stage and how obtainable is this vision.

The paper is expected to be arranged in the following ways. Chapter 2 presents the overall medical tourism within the health care sector. A brief discussion on the case study-UAE and the research city-Dubai is further discussed in the section. Chapter 3 illustrates the Study Methodology, Data description and the hypotheses. Chapter 4 contains the result and the discussion of the study using the Structural Equation Model and the fit indexes of the study will also be presented. In Chapter 5, the concluding remarks, policy implication and recommendations for shareholders and practitioners are presented.

## Chapter 2

### LITERATURE REVIEW

#### 2.1 Health Tourism

The provision of health facilities through the use of the country's natural resources and such that caters to the health and tourism motivations is inferred as health tourism. According to the International Union of Tourist Organizations (IUTO), health tourism is a promotion by tourist destinations of its natural resources that include mineral water, climate and the environment (International Union of Tourism Organizations, IUTO, 1973). Ever since the first description of health tourism by IUTO, different perspectives of the concept of health have been explored in the literature (Goodrich & Goodrich, 1987; Goeldner, 1989; Goodrich, 1994; Hall, 2003). By dueling on the earlier description of health tourism, Goeldner (1989) inferred that the market components of health tourism could be grouped into five.

Accordingly, the components of health tourism are observed that include; the leisure (comprising of the sun and fun activities), the healthy activities but not necessarily for health purpose (including wellness, sport, e.t.c), travelling for the motive of health (e.g. a sea cruise), travel for sauna, massage (e.g. spa tourism), and medical treatment (medical tourism). Additionally, Hall (2003) compressively expressed the concept of health tourism as:

“The commercial phenomena of industrial society which involves a person traveling overnight away from the normal home environment for the express benefit of maintaining or improving health, and the supply and promotion of facilities and destinations which seek to provide such benefits.”

Hence, the increasing demand for health services and the commodification of the health care system and especially with the therapeutic alternatives, has further motivated the development of health tourism products and services by the holiday destinations, health providers and other stakeholders. The Global Wellness Institute (2013) informed that the contribution of wellness tourism (a component of health tourism) was about half a trillion United States dollars which is about 14% of total global tourism revenues of 3.2 trillion United States dollars by 2012. Precisely, Han, Lee and Ryu (2018) opined that the growth in the health tourism sector is expected to drastically increase considering the aging phenomenon and the growth in disposable income, especially in the 21<sup>st</sup> century.

Nevertheless, the other significant drivers of health tourism as opined in the study of Aydin and Karamehmet (2017) includes; the increasing rate of globalization, increasing rate of health-care expenditures, increased availability of global travel, increasing demand for non-essential health-care services, significant differences in health-care costs, the increasing sophistication of health tourism sector, and the advances in information and communication technologies. From a critical perspective, Aydin and Karamehmet (2017) opined that advances in information and communication technologies have further reduced the significance of boundaries between international communities. With the increasing impact of globalization which is responsible for the increase in global travels, the world has continued to experience a significant increase in the number of airline companies due to technological advances, thus causing a relentless decline in the average cost of air travel.

However, the studies of Connell (2006), Hall (2011) and Balaban and Marano (2010) further presented medical tourism as a component of health tourism with the primary aim of seeking treatment for a medical condition or other traveling to destination medically assisted procedures. While Balaban and Marano (2010) opined that medical tourism as a more generic term that refers to "foreign travel to seek medical treatment, Connell (2006) asserted that the process of traveling for medical tourism should not necessarily be with or without a holiday or the consumption of tourism services. In any case, the two opinions (Balaban & Marano, 2010 and Connell, 2006) broadly support the assertion that the factors that influence ones' health are perceived to be of higher priority in determining the motive to travel than most consumption decisions (Clift & Page, 2015).

## **2.2 Medical Tourism**

The purpose of traveling to receive health care, medical treatment, and other medically-related assistance has continued to change the face of tourism. In recent times, medical tourists are observed to travel based on a novel and experimental treatment reasons to both developed and developing destinations across the globe. In the last decades, medical tourism has continued to represent the growing health care market of especially of the medical tourism destinations. Also, medical tourists are observed mainly travel to the target to seek the need to ensure up-to-date and state-of-art medical advice and sometimes as essential routine for follow-up care as required after specific procedures (Gaines & Lee, 2019). In addition to the economic benefits of medical tourism, the versatility and the trend of medical tourism has further position this aspect of tourism for more research and development. Hence, the development of medical tourism which was conventionally ascribed to most of the developing Asian countries are now rapidly being replicated in other countries, as

noted in existing literature. Importantly, studies have also revealed that the specificity of the medical attention or assistance being sought for by medical tourists has remained polarized, thus determines the choice of destination and purpose.

For instance, Chuang, Liu, Lu and Lee (2014) noted that the growing trend in medical tourism is based on two distinctive development paths. The study emphasizes that the evolution of medical tourism, in addition to the motivation factors, marketing strategies, and the economic implication constitutes one aspect of medical tourism. It further opined that the other part of medical tourism that details on organ transplant indicatively position the future potential of medical tourism within the context of transplantation and beautification. In conducting the study, Chuang, Liu, Lu and Lee (2014) employed 392 medical tourism-related papers using the principal path analysis to investigate the ethics and risks related to organ transplantation, among other related issues. The academic articles and associated citation information used are that of the Web of Science (WOS) citation database, including the Social Science Citation Index (SSCI), Conference Proceedings Index-Science (CPI-S), and Conference Proceedings Index-Social Science and Humanities (CPI-SSH). The principal path analysis employed in the study which was first introduced by Hummon and Dereian (1989), uses the citation information to trace the original ideas around a scientific discipline from the database as mentioned above sources (publications). By employing the keywords that include medical, health, transplant, stem cell, cosmetic, surgical, tourism and travel, the category of papers with such keywords in the title, abstract, author keyword are retrieved for the analysis. Hence, information from the study reveals that several demographic, socio-economic lifestyle, technological advancement, and government initiative factors have continued to drive medical tourism activities. Also, the work of Chuang, Liu,

Lu and Lee (2014) further validates the ethics, risks, regulatory, and operational issues associated with pre-and post-organ transplant by medical tourists.

### **2.2.1 The Trends in Medical Tourism**

The global trends in the medical tourism activities which comprise of the information on the cost of medical procedures, demographics of the medical tourists, rankings of favorite destinations, and other statistics, are made available in the 2016-2017 Global Survey Report of the Global Healthcare Resources (available at <https://www.medicaltourismassociation.com/en/research-and-surveys.html>). While sampling 1110 prequalified global buyers of services, the report found that the prospective medical tourists are nationals of these countries in the order of the United States (26.2%), the United Arab Emirates (9.8%), Canada (4.9%), Kuwait (4.9%), China (3.3%), Denmark (3.3%), Egypt (3.3%), Islamic Republic of Iran (3.3%), Nigeria (3.3%), Russia (3.3%), Ukraine (3.3%), Albania (1.6%), Bahrain (1.6%), Barbados (1.6%), and Botswana (1.6%). Similarly, the report posits that the leading medical tourism destination countries are in the order of the United States (40%), Germany (16%), Turkey (12.2%), India (10.5%), United Kingdom (9.6%), Thailand (5.9%), and the United Arab Emirate (5.8%). The findings further reveal that the number of medical travelers is expected to increase by 35% leading to 25% increase in the growth of medical tourism, thus making China the highest seeker of medical tourism by 2025. Besides, the global distribution of services that are being sought by medical tourists are distributed, as indicated in Table 1.



Table 1: Global Statistic Description of the Commonly Patronized Medical Procedure

Types of Medical Procedure	Medical tourists seeking medical procedure (%)
Orthopedic/Spine	72%
Oncology/Cancer Treatments	72%
Cosmetic/Plastics/Aesthetic	60%
Cardiovascular/Cardiology	54%
Neurology/Neurosurgery	52%
Surgery	46%
Cardiology	46%
Fertility/IVF	40%

Source: Global Survey Report of the Global Healthcare Resources

Also, the trend in medical tourism is observed to be linked with three sub-groups which are the *patient population*, *type of service*, and the *ethical or legal issue raised* (Cohen, 2012). But the study further re-categorized the *patient population* in three dimensions.

- Accordingly, Cohen (2012) further categorized the patient population as the patients paying out-of-pocket, the private insurer-prompted, and the government-prompted medical tourism. Specifically, in the United States, the paying out-of-pocket patients form the population that are uninsured or underinsured patients but rather using the services because of the cost implications. An example of medical services patronized by this group of people in the hip replacement procedure and other medical procedures that are not readily available in the home country.
- Also, Cohen (2012) further described the select insurer-prompted category of the patient as the population that is covered by the insurer when the patient patronizes the overseas services without any incentives. However, specific incentive packages like rebates, waived deductibles, or other payment

incentives as compensation for receiving overseas treatment are awarded to this group of individuals.

- The other category described by Cohen (2012) is the individuals that are prompted by the government (government-prompted) to engage medical tourism. An example of this type can be found in the United States, where the United States Medicare and Medicaid incentives amounting to 18 billion dollars in annual savings based are being proposed. This approach is equally being contended with among some European Union countries where there are obligations for the reimbursement of citizens for treatments received overseas.

Furthermore, the *type of service*, according to legality that is being sought after by medical tourists is classified as the second category of medical tourism (Cohen, 2012). In this case, the medical tourism services that are illegal in both the country of origin of the tourists and the destination country and the medical tourism services that are illegal in the state of origin (tourists' home country) but legal in the destination country, are all encompassed. Additionally, the third group in this category is the medical tourism services that are legal in both the country of origin and the destination country, especially because of the lower cost of the services or availability of expertise overseas. While the paying out-of-pocket is peculiar to these three categories, the government-prompted and insurer-prompted medical tourism is only peculiar to the situation when the type of medical service is legal in both the home and destination country. However, the characterization of the legality mentioned above and the ethical issues in medical tourism services are further detailed by Cohen (2012).

### **2.2.2 Hindrance to Medical Tourism**

The hindrances to medical tourism could be country-specific in most cases. For instance, the insurance policy in most countries would not necessarily make provision or health insurance coverage the medical treatment that is being undertaken in foreign a country. This lack or inadequate coverage of the insurance policy expectedly hinder prospective patients from embarking on the oversea trip for health care irrespective of the cost effectiveness of receiving foreign medical attention (Reddy, York & Brannon, 2010). Also, as indicated in extant studies, different forms of ethical concerns that constitute probable drawbacks are being associated with medical tourism (Cohen, 2012).

In a developed country, it is almost considered a risk to seek medical treatment or procedures outside the country, especially in a less developed destination. The reason for this is not far from the fact that the level of strength of the malpractice laws in developing countries is considered weak when compared with those in developed countries. Should there be a procedure or treatment error, the platform to seek for justice might be too weak to deploy when considering a redress. For instance, the legal systems in the developing countries are less equipped compared to that of the United States in terms of litigation. Thus it makes it more difficult for patients who experience a wrongful treatment to sue or seek compensation (Bookman, 2007) successfully.

Because of the complexity of the social, physical landscape and cultural differences across the countries of the world, the differences between the developed world and developing countries are unavoidable. Unfortunately, these are sources of the stigma

that those medical tourists potentially encountered in the quest during the process of seeking foreign medical treatment. It is reported that most medical complications are experienced in the first stage of medical treatment or procedure (Marsek & Sharpe, 2009). Hence the lack or inadequate provision for a routine follow-up, especially when the patient has departed from the medical tourism destination, is set to pose a significant hindrance to the growth of medical tourism.

### **2.3 Medical Tourism Stakeholders**

In the medical tourism sector, a range of stakeholders are directly or indirectly responsible for the development of medical tourism in the destination country. Although the category of partnership and collaboration of the health care providers with other sector-specific institutions and personnel could vary across destinations, among these stakeholders are the medical tourism facilitator, insurance company, insurance agent or consultant, referring physician, employer or human resource manager, travel agent, and others (Global Healthcare Resources, 2017).

#### *Medical tourism facilitators*

Just as studies have overwhelmingly shown the strong interaction between medical tourists and tourism destinations, researchers have continued to expand the context of medical tourism concerning other related parties. As observed, the activities in medical tourism have continued to indicate the potential of medical tourism in changing the future of global medical care considering the global impact of technology and economy advancement. Hence, it suggests that the development of medical tourism is a catalyst for more participation from stakeholders apart from medical tourists. A medical travel facilitator is one of the practitioners in the medical tourism practices (Snyder et al., 2011; Mohamad, Omar & Haron, 2012). The

medical tourism facilitators are known to provide necessary help to intending medical tourists on various subjects that are posed to ensure trouble-free travel arrangements. Because of this, Mohamad, Omar and Haron (2012) further investigated the moderating role of medical tourism facilitators in engaging between the prospective medical tourists in the country of origin and the medical facilities in a medical tourism destination. In addition to the normative responsibility of providing logistic preparations and arranging follow-up care for the patient, Mohamad, Omar and Haron (2012) maintained that medical travel facilitators are effective negotiators between medical tourists, the hospital providers, hotels, and the tourism industry. Hence, medical tourists facilitator appropriately acts as a solution box that integrates the different networks of medical tourism.

#### *Other stakeholders*

In studying the role of other stakeholders in the medical tourism sector, Snyder et al. (2016) considered the emerging medical tourism activities of the two Latin American countries of Barbados and Guatemala. The methods of structured comparative which use semi-structured interviews of 50 medical tourism stakeholders in each of the case country was adopted for the study. Given that the number of observations ( $n$ ) employed is 100, the classification of the different categories of stakeholders employed are: the civil society (comprising of 5 per country); health human resources (comprising of 15 per country); the public health care and tourism sector (comprising of comprising of 15 per country), and private health care and tourism sectors (comprising of 15 per country). By starting with the interview process of these spectra of participants in the medical tourism sectors of Barbados and Guatemala, a collaborative process of scheme development and thematic analysis were performed on the transcribed and coded interview that was recorded. On an

important note, the findings revealed that most Guatemala stakeholders suggest that most of the medical tourists patronizing the health service providers in the country are most Guatemalan Americans. Also, the stakeholders in both countries (Barbados and Guatemala) share a similar perception that there exist intra-regional medical tourists and such constitutes a significant number to the total volume of patient visits. In general, the availability of the Affordable Care Act is largely expected to be a major driving force of the future medical tourism.

## **2.4 The Impacts of Medical Tourism**

### *Positive impacts*

A typical study of medical tourism would be incomplete without highlighting the effects of the subject (MT), as expressed in the existing literature. The impact of medical tourism on the medical tourists, the MTs' home and destination country, and to other stakeholders are generally perceived to be positive and negative (Snyder, Crooks, Johnston & Kingsbury, 2013; Tang & Nathan Abdullah, 2018). One of the main important of medical tourism to tourism destinations is being ascribed to economic growth. This is why the recent study of Beladi, Chao, Ee and Hollas (2019) primarily investigates the possibility of medical tourism causing economic growth across specific countries. By employing an empirical method, Beladi et al., (2019) found that medical tourism averagely impact the economies of the host countries, expectedly in a positive way. This positive impact observed in the study is reportedly peculiar to the OECD (The Organization for Economic Cooperation and Development) countries considering that the welfare of some hot countries are also negatively impacted by medical tourism.

In addition to the economic impact of medical tourism, Suess, Baloglu and Busser (2018) further explored the social exchange theory with the conceptual framework of the spillover theory to examine the impact of medical tourism on the overall community satisfaction, healthcare satisfaction, and other factors. The study opined that if the host communities nurture a positive perception of medical tourism, it in turn drives their willingness-to-pay higher taxes, thus aiding the development and expansion of the destination's medical tourism. Also, the study observed that a better economic performance resulting from medical tourism is capable of improving the community wellbeing perception of the destination. Hence, this perceived impact of medical tourism on the wellbeing of the host community is the effect of the attitudes toward medical tourism and overall community satisfaction. The expansion of the health care and hospital systems and the creation of employment opportunities all amount to the impact of the improved community wellbeing impact accounted for by the spillover effect theory. This generally suggests that medical tourism development is capable of impacting the commitment attitude of the host community such as the commitment to tax payment, thus increasing the confidence of the community in governance.

#### *Negative impacts*

On the demerit point of view, it is believed that medical tourism exerts an undesirable pressure on the public health sectors in medical tourism destinations. This could be, because there is high possibility of movement of health workers from the public to private health sectors ('brain-drain' such as in Ghana, Pakistan, and South Africa) considering that the private health sectors are the more likely active in the medical tourism market (Beladi, Chao, Ee & Hollas, 2015; Cohen, 2015). In respect to this perception, Snyder, Crooks, Turner and Johnston (2013) used the case

of Barbados to investigate the role of medical tourism on human health resources by employing a qualitative study of the stakeholders' perspectives. In the study, semi-structured in-person and via phone interviews of 19 stakeholders across the public health care, private health care, government, allied business, and civil society were transcribed and coded for thematic analysis. In doing this, Snyder et al (2013) investigation present three distinct results. First, the study found that there is short term limited usage of the health human resource in medical tourism, but the usage is expected to grow in the long term. Secondly, the benefits of improved quality control, training opportunities and health worker retention are the anticipated positive impacts of medical tourism on human health resources in Barbados. Lastly, the situations of longer wait periods for care, in addition to bottlenecks in planning priorities, constitute the unfortunate circumstances of the medical tourism sectors.

Additionally, while identifying the cost impact of medical tourism on the citizens/medical tourists, Heung, Kucukusta and Song (2010) and Awadzi and Panda, (2006) both opined that foreign medical procedure are mostly at the expenses of the individual customers. Hence, while it could be a source of the economic boom to the destination country, it poses an economic burden to both the prospective medical tourists and the patient's domestic economy. From this perspective, the individual cost and cost to the local economy are not only been shouldered by the patient and their domestic economy, but categorized forms of risks are also equally associated with the duo (Marlowe & Sullivan, 2007). Specifically, Marlowe and Sullivan (2007) inferred that the patient bears the risks associated with the complications from the surgical procedures. Interestingly, when a medical tourist returns to the home country, such associated risk (such as health relapse/recourse and legal implications)



is perceived to be borne by the health care services of the patient's home country (Hume & Demicco, 2007; Marlowe & Sullivan, 2007).

Moreover, the migration of health care practitioners from the public to private health systems in the destination country is also as harmful as the impact of the increased pressure of refurbishing the health care facilities and technologies (Cohen, 2015). Given the theoretical implication that medical tourism increases the demand for health care providers and necessary facilities to discharge services in the destination country, the expected demand surge can only be met by increasing the supply of the essential facilities and technologies. Unfortunately, meeting the demand for health care facilities and technologies has consistently been the bane of the health sector development across the globe, even in the developed nations. Hence, in the event of increased demand for health care services in the destination country, there is the likelihood of persistent lag in facility and technologies acquisition, especially the need to upgrade with the state-of-the-art facilities.

## **2.5 The Determinants of Medical Tourism**

Ordinarily, tourists are known to consider a particular destination over another depending on the parameter of their preferences which could be mostly rooted in the circumstances of the destination. In the same vein, medical tourists are expected to consider the choice of their destination based on the availability of treatment to the specific cases such as cosmetic and dental surgery, cardio, orthopedic and bariatric surgery, organ and tissue transplantation, Intra Vaginal Fistula (IVF) (Lunt, Horsfall & Hanefeld, 2016). But, the investigation has further revealed that the attractiveness of the medical tourism destination is a vital factor that determines the performance of medical tourism (Fetscherin & Stephano, 2016). In attempting to understand the

attractiveness of a destination, Fetscherin & Stephano (2016) employed a new country-based performance measurement known as the Medical Tourism Index (MTI). The MTI is a scale development and validation approach which is a multi-dimensional construct with four (4) dimensions and comprising 34 (thirty-four) underlying items that is based on 4995 respondents. According to Fetscherin & Stephano (2016), this new (MTI) approach provides significant results in measuring the differences between countries; thus, it is a useful tool for stakeholders in the industry for the effective management of the medical tourism brand.

Having considered the highlights of the effects of medical tourism in the previous section above, it is essential to mention that certain indicators are regarded as (potential) determinants of medical tourism development (Zolfagharian, Rajamma, Naderi & Torkzadeh, 2018). For example, Abubakar and Ilkan (2016) examined the impact caused on destination trust and travel intention by online or electronic Word of Mouth (eWOM) in the context of medical tourism. A structural equation model was used for a sample of 216 respondents to provide useful empirical insight into the dynamics of medical tourism. Importantly, the empirical inference suggests that eWOM is a positive determinant of destination trust and intention to travel. Also, while income rise is observed to interact between eWOM and intention to travel strongly, its interaction with destination trust and intention to travel is significantly weak. Hence, the findings of Abubakar and Ilkan (2016) inspires that eWOM plays an essential role in attracting prospective medical tourists to the destination countries.

Additionally, the association of service quality, satisfaction, trust, and price reasonableness with customer retention in the context of medical tourism have been

carefully examined in extant literature (Han & Hyun, 2015). The service providers in the medical industry destinations are conversant with the potentials in the sector, thus developing a strategic plan of attracting potential medical tourists has increasingly become a core priority. In the work of Han and Hyun (2015), the moderating role of price reasonableness is observed to be significant. The illustrated study opined that the perceived quality, satisfaction, and trust in the staff of the examined health service providers have a significant impact on the clients' intention to revisit the destination country vis-à-vis the clinic. With the structural analysis being utilized for the study, the proposed model significantly produced a good fit such that the moderating role of satisfaction and trust are also statistically significant.

In another study, Esiyok, Çakar and Kurtulmuşoğlu (2017) examined the potential interaction between the country of origin of medical tourists and their cultural disparity from the destination country, especially in a medical tourism perspective. In the study, a total of 109 medical tourists that visited Turkey for medical services between 2012 and 2014 were examined. The variables considered include religious similarity, Turkish diaspora in the origin country, number of inbound tourists, physical distance from between the medical tourists' country of origin and Turkey, and the GDP per capita. Interestingly, Esiyok, Çakar and Kurtulmuşoğlu (2017) found that irrespective of the medical specialty level, cultural disparity significantly impacts the choice of destination for medical tourism for prospective travelers to Turkey. Also, the impact of religious differences between the prospective medical tourists and the destination country (in this case, Turkey) is a vital determinant of medical tourism. As such, the religious similarity is found to affect the choice of destination irrespective of the medical specialty.

Furthermore, while using a cross-sectional study method, Qolipour, Torabipour, Khiavi and Malehi (2018) assessed the perspectives of 250 Iraqi tourists that were treated at the Ahvaz private and public hospitals in 2015 by using the medical tourism SERVQUAL questionnaire (MTSQ). By conducting the Kruskal-Wallis, Mann-Whitney, and Wilcoxon tests, the study reveals that most of the treatments were Orthopedics, Otorhinolaryngology, Obstetrics, and Gynecology cases. Also, the investigation found a negative gap in the dimensions of service quality of the examined health service providers, thus suggesting the urgent need to improve the quality of service in the hospital to develop the medical tourism in the country. In addition to the study of Qolipour, Torabipour, Khiavi and Malehi (2018), Jain and Ajmera (2018) further explored the contextual research of medical tourism to expand the factors affecting medical tourism in India. While using the Interpretive Structural Modeling (ISM) approach, Jain and Ajmera (2018) found that the determinants of MT does not only include quality of service of the health service providers but largely include the cost of medical procedures, facilitation, the infrastructure of an Indian hospital, doctors competence and their clinical experience.

Moreover, in choosing a medical tourism destination, Aydin and Karamehmet (2017) observed that there is a significant role played by the perceptions of the health and the hygiene level of the medical tourism destination. Aydin and Karamehmet (2017) investigated the disposition of the prospective medical tourists toward the international health-care facility choice by using employing Turkey as a destination country. The study employs 65 structured interview sections with the health-care professionals and medical tourists to further understand the different perspectives from both the demand (customers) and the supply (health practitioners') sides. The perspective opined by Aydin and Karamehmet (2017) is similar to the service quality

and service loyalty dimensions of Debata, Patnaik, Mahapatra, and Sree (2015) and Jabbari et al (2017). In their study, Debata, Patnaik, Mahapatra, and Sree (2015) utilized the exploratory factor analysis, employed the diagnostic procedure of the confirmatory factor analysis, and tested the investigated hypotheses by using the structural equation model. Then, it is revealed that treatment satisfaction in which appropriate service quality has a significant and positive impact of medical tourism service loyalty (MTSL). Thus, medical tourism quality is observed to impact the MTSL positively. In general, while the medical tourism service quality (MTSQ) is accounted for from the perspectives of accessibility, treatment satisfaction, courtesy, physical environment, technical quality care, promptness, facility premises, and finance factor, the MTSL is observed from the perspectives of behavioural loyalty, Altitudinal loyalty, and cognitive loyalty.

Notwithstanding, studies have equally indicated that the implementation of certain strategic priorities and synergies are effective mechanisms toward driving the medical tourism sector (Ebrahim & Ganguli, 2017; Ganguli & Ebrahim, 2017). Specifically, Ebrahim and Ganguli (2017) opined that the management strategy and the integration of related industrial-specifics are capable of driving the medical tourism prospects through the healthcare legislative reinvigoration and effective public-private partnerships. As such, the strategies are expected to attract and further encourage investment in the medical tourism sector of the destination countries. By using Singapore (one of the world-leading tourism destinations), Ganguli and Ebrahim (2017) explore a qualitative and holistic approach to examine further the determining factors that are responsible for the positioning of Singapore as a leader in medical tourism. The study notes that the implementation of diverse synergistic strategies in addition to the adaptation of effective government policies and efficient

management practices are key elements to the successful development of medical tourism and its competitiveness in a destination. In general, Ganguli and Ebrahim (2017) categorize the determinants (pillars) of Singapore's medical tourism development as the enabling tourism sector, strategic planning, Public-private partnerships (PPPs), marketing and branding strategies, technology and innovation, accreditation and governance, and human capital development. This is in addition to the macroeconomic factors such as the Gross Domestic Product (GDP) per Capita, trade in services, urban population, life expectancy childhood mortality, health-related factors, exchange rate, human development, and others explored in the studies of Johnson et al. (2015) and Tang and Lau (2017).

## **2.6 The United Arab Emirates in Context**

According to the UAE Government Strategy of 2007, the focus areas of the economy are on infrastructure, small and medium-sized businesses (the commerce), real estate and construction, banking and finance, tourism and hospitality, manufacturing and industrial development, medical, education, and the retail sectors. The seven-emirate administrative economies of the government of UAE compliment the relatively substantial economic activities and expansion of business opportunities to further drive its diversification agenda (Beladi, Chao, Ee and Hollas, 2017). The real estate sector received a new deal that attracted foreign investment in March 2006 that is now observed to contribute about 15% to the non-oil GDP (Esiyok, Çakar and Kurtulmuşoğlu, 2017).

In view of the diversification pattern of the UAE economy, it is paramount to consider the opportunities that come from the importing of goods and services. UAE is a net service importer (Trachtman, 2006). As such, vehicles, Machinery, electrical

equipment accounts for the largest share of the imported goods. Food items are other imported items that are of great value to the economy. According to the report of RNCOS in 2008, UAE introduced about 90% of food items in 2007. Studies reported that UAE was in negotiation with Pakistan and the Philippines to buy farms worth US\$ 5 billion and to sign a memorandum of understanding (MOU) for food supplies (Roberts and Rogerson, 2008; Maceda, 2008). In addition, plastic products are among the product that is far below the demand, according to a study released by the Emirates Industrial Bank in 2003. Also, reports by the UAE interact opined that as at 2007 a total of US\$ 3 billion was invested in expanding the capacity of polyethylene and polyolefin of the Borouge's petrochemical facility.

The UAE and her economy have been a base for constant research since the inception of the country. The economy has been on the trend of moving from a particular source of revenue to the other starting, thus from Oil to presently enlarging its revenues from the tourism industry (Inhom, 2017). According to the UAE interact in 2008, UAE was among the largest oil-producing nation and rated 5<sup>th</sup>. Unlike most countries with similar resource concentration like the UAE, the UAE economy has drastically moved from a mono-economy and toward rapid diversification. Instead, the dependency of the UAE on oil went down to as low as 40%. According to the International Monetary Fund, IMF (IMF, 2008), the UAE has the largest Sovereign Wealth Funds (SWF) as an investment. The global diversified plans and strategies and the capital investments in infrastructural projects of the nation UAE have placed the country in a strategic position in the Middle East region in both the business and tourism (Balakrishnan, 2009). According to the record of Standard Chartered, the global recession of 2008-2009 could barely have significant impact on the UAE economy which is forecasted to have grown by 2.7% even when the global GDP is

expected to grow just by 0.5% even in the midst of the Global Financial Crisis (IMF, 2008) (Bundhun, 2009). In the Country Brand Index of 2008, UAE has been on the top list of performance both in tourism and on other sectors of the economy. In resorts and Holiday options, it is rated as the number one in the brand ranking. For new businesses and shopping destination with rising star, UAE became number two in the brand, number seven for conferences, and number ten for advanced technology and standard of living with fine dining. As further declared by Raza Siddiqui, the executive director of Ras Al Khaimah (RAK) (Paterson et al. 2009), UAE has higher and tremendous potentials and to emerge as the next crucial medical tourism destination in the region.

Not only that, the UAE is a business hub, but the wave of expansion in the tourism industry and now in the medical tourism, in particular, is viewed as a new dimension that taking the lead toward the 2020 sustainable goals. According to Al Deen, Dhabhi and Matar (2007), the UAE government has been spending over US\$2 billion every year for its citizens on medical treatment outside the country. Apart from capturing the market, UAE is shifting its attention towards medical tourism that had global revenues exceeding US\$56 billion in 2007. In addition, medical tourism generated Dh7 billion yearly to the UAE economy by 2010 following Abu Dhabi Chamber of commerce and Industry in 2007. With this, the UAE has strategized and place itself as a force to reference within the health tourism sector by positioning themselves at 16<sup>th</sup> most wanted to visit or destination choice of the medical tourists. This is because the government of UAE seems to be very proactive in developing and boosting the Medicare facilities (Inhorn, 2017). The report reiterated that the per capita Medicare consumption in the UAE is the second-highest in the region. To attract medical tourists from all over the world, the government came up with a program called



Dubai Health Experience (DXH). This program is made up of 25 healthcare facilities that formed the DXH group.

Additionally, the government has also come up with a single friendly window smart application and digital gateway for the medical tourists to benefit from the superior, comprehensive, integrated Medicare service system (available at <https://government.ae/en/information-and-services/health-and-fitness/healthcare-providers>). This program will aid the patients for booking platform for procedures, visas, discounted Emirates flight tickets, hotels, sightseeing, and insurance. The UAE will meet its target of becoming the fifth medical tourist destination by 2020 if the government continues with this progressive dimension (Assembly, 2015). Going by the strategic development through policies and planning of national brand and soft power mechanism, the governments are vastly turning the emirate (the state) to the global influencer (Sabeti, Paris & Marochi, 2018). In the word of Sabeti, Paris & Marochi (2018), the positive brand image created by the United Arab Emirates is vastly increasing the local and global content of the country as an emerging international brand, thereby attracting significant investment and consistently opening its corridor to millions of potential foreign tourists.

In specific, the growing investment in medical tourism in Abu Dhabi and Dubai of the UAE is an indication that the Emirate government is vastly pacing up with medical tourism development such as in China, India, Singapore, Thailand, and South Korea. As an indication, the Department of Culture and Tourism (DCT) in Abu Dhabi officially signed a memorandum of understanding (MoU) with the Medical Tourism Association MTA for ten years (Arab Health, 2019). According to the MoU, the partnering institutions are expected to promote the medical tourism

sector in Abu Dhabi. The partnership foresees the possible attraction of prospective medical health treatments in the areas of cardiology, oncology, and executive screening by the Russians, Chinese, and the Gulf Cooperation Council (GCC) member countries. Also, the benefits of the MoU to Abu Dhabi and the UAE at large entails both the establishment of a pioneer office of the MTA and the subsequent hosting of the World Medical Tourism and Global Health Congress in Abu Dhabi by 2020. Similarly, the Dubai medical tourism strategy was launched in 2014 by HH Sheikh Hamdan Bin Mohammed Bin Rashid Al Maktoum as a repositioning approach toward the development of medical tourism in Dubai (Dubai Health Authority, 2019). The report of Arab Health (2019) informed that AED1.4 billion was generated from the 326,649 medical tourist visitors to Dubai in 2016. Thus, the year 2016 posits an achievement of a 9.5% increase in the number of medical tourists, which mainly accounts for 37% Asian, 31% GCC member countries and the Arabians, and 15% European visitors. Indicatively, Dubai and Abu Dhabi were both ranked in the same year (2016) as the 16<sup>th</sup> and 25<sup>th</sup> best global destinations for medical tourism by the Medical Tourism Index (MDI) (2018).

### **2.6.1 Dubai**

In UAE, with a population of 9.4 million people and annually hosting about 10 million tourists annually, Dubai has no competitor in terms of the most populated and touristic city in the United Arab Emirates (Medical Tourism Index, MDI, 2018). It is positioned and located on the southern coast of the Persian Gulf within the Arabian Peninsula (Mainil et al. 2012). Dubai is currently gaining momentum in the healthcare service and the medical tourism destination (Ganji, Kashyap and Kamanna, 2015). This significant growth is due to the low cost in accessing medical facilities in the city, the right English language proficiency level of staff, and the

faster rate of receiving medical treatments. The Dubai administrative government places more values to the healthcare as a means of economic growth, given its limited oil reserves, and its drive toward the target of attaining a global center for high-level services (Rashid, 2002). It is not a surprise that Dubai recently became a potential hub for medical travel due to the strategic plan and the suggestive direction of the government (Singh and Sethi, 2009). In the speech accredited to the Vice and Prime Minister of UAE and the ruler of Dubai while appreciating the flagging off of a medical travel project, he commands the integrated process of development and likened it to a bridge between Europe and Asia. Moreover, Dubai city is recommended as a destination for medical tourism by the award from the international medical travel journal (IMTJ) (Godin and Kok, 1996).

The progressive trend of medical tourism development in Dubai as hinted above is a complimentary effort and the synergy of the industry stakeholders that include the DHA, private healthcare providers, Dubai Tourism and Commerce Marketing Authority (DTCM), General Directorate of Residency and Foreigners Affairs (GDRFA), Emirates Group, Dubai Airports, Dubai Tourism and Commerce Marketing, Dubai Healthcare City, and host of others. In about a decade, the number of the state-of-the-art healthcare facilities such as the Emirates Hospital, American Hospital Dubai, Al Zahra Hospital, American Academy of Cosmetic Surgery Hospital, and several others have continued to increase. Also, the list of medical treatment and procedures being sought after by medical tourists in Dubai has continued to increase (see Table 2).

Table 2: List of Common Specialties and the most Visiting Countries

Common Medical Specialization
(a) Orthopedics and Sport Medicine (b) Plastic Surgery (c) Ophthalmology
(d) Dental Procedures (e) Dermatology and Skin Care (f) Aesthetic Practices and Surgeries (g) Preventive Health Check-ups (h) Wellness
Visiting Countries
(a) Russia (b) CIS countries (c) GCC countries (d) India (e) Pakistan (f) Nigeria
(g) Angola (h) the United Kingdom
City's Medical Tourism Index
Overall Medical Tourism index of Dubai is 67.54
Destination Environment is 18 <sup>th</sup> (Scoring 61.71)
Medical Tourism Industry is 22 <sup>nd</sup> (Scoring 68.42)
Quality of Facilities and Services is 10 <sup>th</sup> (Scoring 72.49)
Source: Information is from the Medical Tourism Index (MDI) and the Dubai Health Authority (2019).

### 2.6.2 The Health Care Services in the United Arab Emirates: An Overview

In the Emirates, the Ministry of Health is consistently expanding and developing the healthcare sector through direct investment and private sector partnerships. With 79 hospitals, 10,165 medical doctors and 16,882 practicing nurses in the private sector of the country's health ministry in 2014, the country has vastly developed into a medical tourism hub in recent years (The Official Portal of the UAE Government, 2019). During the same period (2014), the UAE government boosts of 36 hospitals, 6,504 medical experts and 16,546 practicing nurses as part of its public sector resources. But, with over 40 public hospitals, the ministry currently offers medical services for various forms of treatment across the UAE (Al Mamari, 2017). For instance, Dubai Healthcare City is furnished with the state-of-art facilities to provide medical care to potential medical tourists effectively. In the UAE, the Ministry of

Health, the Federal Health Insurance, the Dubai Health Authority, the Health Authority of Abu Dhabi, and the Ministry of Finance are the main five regulatory agencies responsible for Emirate's Healthcare (Gulf News, 2016). By expanding their foreign affiliations and partnerships, the healthcare sector in the Emirate is continuously growing and improving the service quality to meet the need expected needs of the medical tourist seekers. While the public healthcare of the Emirate is directly supervised by the Federal and the Emirate governments, the private healthcare sector which provides specialized services is mainly under the control of the Federal government.

## **2.7 Extant Models**

Caballero-Danell and Mugomba (2007) developed a model that describes the market structure of health tourism and account for all the stakeholders involved. This action is geared towards providing good and more useful information to aid the understanding of both the current status of medical tourism and the expected development. The model originated from the data gathered from the newspapers, periodicals, electronic media, and magazines and academic materials. It also gives the consumers the access to the analysis and description of the industry as it relates to benefits, branding, legal framework, infrastructure, product, target market, communication channels, operators, intermediaries, and social issues.

In addition, the FSC theory illustrated by Smith and Forgione (2007) proposes a model that sorts the factors that affect the patient's decision or choice of a medical tourism destination. The model has two stages of depicting the elements. The first stage displays the factors involved in choosing a healthcare destination, while the second stage represents the factors involved in selecting a health care facility. There

is no dominant factor that determines the destination; rather, all factors are important and equal at the play (Smith and Forgione, 2007). The model maintained that country-specific features such as political environment, economic situation, and regulatory policies, determines the choice of destination. But the costs, quality of care, hospital accreditation and the level of expertise of the physician are known to influence the decision of health care facilities. However, the model presented the two stages of the model, but the selection of destination comes first before the consideration of the health care facilities.

Moreover, Ye Yuen, Qiu and Zhang (2008) developed a model that attempt to study the motivations and barriers to medical tourism among the prospective tourist in Hong Kong. They arrived at a conclusion that is based on their findings that the motivations of the medical tourists differ from that of a conventional tourist. While medical tourists are more interested in the therapeutic factors, conventional tourists are concern about the destination features. The research equally found some important implications for a health tourism destination. Such findings informed that marketing program should not focus only on less expensive medical services but highlight other features.

Another theory employed in the underpinning of medical tourism is the one developed by Smith and Forgione (2007) and that outlined the factors that aid the decision making of medical tourist seekers. The developed model is a two-stage; the first stage of the model showed that the factors involved in choosing a destination are identified. Also, the second stage involved the evaluation of the selected health-care facility. There are economic conditions, political climate and regulatory policies that are identified as the country-specific factors that influence the choice of destination.

Also, hospital accreditation, quality of care, and physician training are associated cost factors that impact the choice of health-care facilities. Hence, the concept of the two-stage model is that choosing a destination is the expected decision of medical tourists before considering the option of medical or tourism facilities in the selected destination.

By improving the models of Smith and Forgione (2007), Caballero-Danell and Mugomba (2007) and Ye, Yuen, Qiu and Zhang (2008), an integrated model was developed by Heung, Kucukusta and Song (2010). Since the earlier described models did not adequately describe medical tourism phenomena, the concept of demand and supply were incorporated in the model developed by Heung, Kucukusta and Song (2010). The design of the integrated model is generally compatible with accommodating different types of medical tourists such as seeking relatively simple procedures and more complicated procedures. The components of demand and supply employed are explained by the motivation theory that is defined by the five-stage hierarchy of needs in the existing studies. The five basic needs explored and that provided increased hierarchical motivation in the existing studies are namely the physiological, safety, social, esteem, and self-actualization needs.

### **2.7.1 Theoretical Underpinning the Study**

The study employed the theory of planned behaviour (TPB) (Ajzen, 1985) as a relevant theory for the study. The theory of planned behaviour is an extension of the theory of reasoned action (Ajzen & Fishbein 1980; Fishbein & Ajzen, 1975). The idea of TPB is not a new concept; it dated back since 1943 when it was a theory used for animal learning (Hull, 1943). Also, TPB has been applied in the performance on psychomotor and cognitive tasks (Fleishman, 1958; Vroom, 1964; Locke, 1965), aspirational level (Lewin, Dembo, Festinger & Sears 1944), and attribution and

perception (Anderson, 1974; Heider, 1944). Additionally, the conceptual behavioural concept has been included in the models of human behaviour: the concept of resources (Liska, 1984), opportunity (Sarver, 1983), control of action (Kuhl, 1985). This theory is a model with a limitation that deals with people's behaviour where an individual has control over their behaviour.

The central factor of TPB is the individual plan to exhibit a particular action. In this case, the intention is captured by the fact that individuals are motivated and influenced by behaviour. This behaviour indicates how and to what extent people try and how much effort they are willing to put in, in order to perform a particular behaviour. The rule applies that the stronger one performs a particular behaviour, the likelihood of actualization of the actual performance. When a behaviour is under volitional control, individual intention can lead to expression in behaviour. For instance, this happens when a person decides at will to perform or not to perform a specific behaviour. Some particular behaviour also may depend on non-motivational factors and the availability of resources and opportunities at the given time (Ajzen 1985). Motivation and behavioural control aids in the achievement of behaviour. Also, the interaction of motivation and ability in the achievement of behaviour, Intel's that individual intention influences performance in such a way that the individual exerts behavioural control and performance increases to lead to motivation to continue trying and never to give up (Locke, Mento & Katcher, 1978).

The TPB which is a modification of the Theory of Reasoned Action (TRA ) employs the constructs of Attitude Toward a Behavior (AT), Subjective Norm (SN; perceived social pressure), and PBC (PBC; perceived ease/difficulty of performing a particular action) which is central on intention. This intention could be acted on by individuals



when it is believed that such behaviour will yield an outcome they value, their meaningful social connections will value and approve of the behaviour. They possess the required resources, potentials, and privileges to carry out such behaviour. As such, the TPB presents a better result than the TRA model, especially in predicting human behaviour because it considers non-volitional factors such as resources, opportunities, and time. In other words, the TPB model predicts the situations where individuals are unable to exercise control over their behaviours. For instance, although the AT of a medical tourist may be positive and such might have received the families or social group acceptance to travelling abroad for medical treatments. However, the decision to travel will still largely depend on the affordability regarding time and money. Even when a company is paying the health expenses, the tourists might not still get permission to travel to a specific hospital in a foreign destination.

In recent times, many health-related Behaviours are being examined by using TPB. The identification of specific beliefs that can be targeted in interventions to improve attitudes, subjective norms, perceived control, and intention to perform a behaviour is being allowed for implementation by the theory. Attitudes towards specific Behaviours are determined by the likelihood of various outcomes of the behaviour. The subjective norms summarize the perceived beliefs that pertain to how specific class of individual thinks other individuals should behave. For instance, intending medical tourists will first need to believe that the people who are important to them, such as the members of the family, would have to approve of them embarking on such a trip in the first place. Hence, people's perception of their actual or perceived ability to carry out behaviour will predict the intention to perform such behaviour.

Many health-related interventions have been successfully implemented to increase healthy behaviour among diverse samples.

According to Ajzen (1991), TPB is to explain the action and motivation of behaviour. In recent studies, researchers have applied the TPB in diverse field of study, such as in travel choice destination (Lam & Hsu, 2006), word-of-mouth (Cheng, Lam, & Hsu, 2006), Transportation (Banberg Ajzen & Schmidt, 2003), tourist attitude (Sparks & Pan, 2009) and medical tourism (Seow, Choong, Moorthy & Chan, 2017). For this, the model is a proper predication in explaining individual behaviour. The authors developed a conceptual framework on new ways of sustaining the UAE vision 2020 concerning the existing models on health tourism. They adopted a health-related model of TPB (Theory of Planned Behavior) by Godin and Kok (1996) and employed further modification. Hence, three factors (known as the FSC- Finance, strong System, and strong Connections) are employed to display a triangular interaction of the mentioned factors in determining medical tourism.

Finance is a predominant factor in medical tourism (Ganguli and Ebrahim, 2017). Both from the side of the patients and the industry. Cost of medical service is put into consideration while deciding the medical destination of the patients; most people seek out-of-country care as in the case of America because of the cost effect (Alsharif, Labonté, and Lu, 2010). It is required in deciding the quality of the health care facility both in the areas of medical personnel and the infrastructures and equipment needed for the delivery of efficient health facilities. The quality of healthcare is always considered as a pointer to a medical destination by patients from high-income countries (Trachtman, 2006; Muhajarine, Vu, and Labonte, 2006). In an attempt to paint the importance of finance in his work, Hopkins, Labonté, Runnels,

and Packer (2010) compared the hospitals in the developing world (India) and developed world (America). This involves the pairing of hospitals in India with that of the USA hospitals for international accreditation in a bid to woo and attract medical tourists from high-income countries (Hopkins, Labonté, Runnels and Packer, 2010). A documented instance of malpractices and health misadventure which includes but not the least, novel infections and post-treatment complications that arise sometime after the patients have returned to their own country (Newman, 2005).

Availability of financial aid is more significant, especially with the integration and commercialization of medical tourism despite having its shortcomings such as brain drain and the lack of quality medical professional in the health care services. These shortcomings further limit the accessibility of medical services for the poor and patients stringent (Tang and Lau, 2017; Turner, 2007). The implication of this is that it will be a boost to the medical and tourism industry and the entire economy to having an effective and functional health delivery system as such that hope to aid the attainment of the vision 2020. The UAE is among the envisioned high-income country but with deficient overall healthcare service spending. Its public system, which covers 81% of health care finance, provides one bed, 0.33 doctors, and one nurse for every 1000 population, which is very insignificant by international standards.

*The system* in our model is the structure. It includes plans on how to establish and run the private healthcare program that will make the provision of the three essential factors that are meant to complement the public health system effectiveness. Medical tourism is best viewed and understood as originating from an increasingly privatized

global medical market arising in the awareness of globalization and enhancement of the non-restricted (neoliberal) economic policies. Moreover, this has subsequently led to the expansion of the space of private health care and increase the market growth of the sector, even across the globe (Labonté et al. 2009). This process is also often called corporate strategies. Thus it includes managing medical devices and suppliers, creating clinical standards, transferring skills, branding the name and sharing activities such as vertical integration, mergers, alliances, partnership, and diversification. Apart from corporate strategy, an operating strategy is considered part of the system, which is the formulation of policies, processes, technologies, human resources practices, and organization of work. The system also involves people and resources that influence the way patients perceive the service, and the results achieved on a day-to-day basis. As such, the theory is embedded around the system that is called Hallow Health Tourism System (HHTS).

Moreover, the design, as mentioned earlier complies with the aim of the UAE in making Dubai a hub of healthcare that is meant to boost the growth of the medical tourism market. The awareness of this program was put up by the UAE as the first healthcare free zone with the initiative of embarking on the massive treatment of foreigners (Muhajarine, Vu, and Labonte, 2006). This idea was sold to the international entrepreneurial healthcare providers, such that it encourages their operational services across the city. Among the incentives involved is 100% tax-free, access to 100% foreign ownership, and no imposition of capital or trade restrictions. On this premise, and by utilizing the opportunity provided by the UAE government, the developer of the theory employs a practical by launching the system (HHTS) to coordinate the entire practical activity and not only theoretical approach.

The connection is considered as the international exposure of the health care providers. In most cases, the capability of the private healthcare provider is assessed through international exposure via connections with both domestic and international partners on the same line of operation (Bozinoff et al. 2014). It is perceived as a design for enhancing the viability of the business through the sponsoring of foreign experts into the place of domicile. The connection factor also arises when the operators are perceived to be well connected to the government officials. Thus such influence is expected to be advantageous as such fostering the operation of the operators without undue interference from the powers that be (Lawrence, 1985). This sometimes aids the private operators to quickly penetrate and collaborate with public-owned health care facilities that will enhance the performance of both parties.

## **2.8 Hypotheses Development**

The focal planned behaviour is the intention (i.e., travelling for health tourism), and this is what is described as the person's planned future behaviour (Swan and Mercer, 1981). In this work, medical tourism is expected to provide a better predictor of the behaviour as in the place of intention, as previously expressed by Fishbein and Ajzen (1975). The FSC/TPB model construct puts the individual's intention to perform a specific behaviour such as travelling for health tourism as being determined by the attitude and subjective norm. The attitude and subjective norms include both behaviour and perceived behavioural control. The health-related work by Godin and Kok (1996) with the application of the TPB model yielded an average R-square of 0.34. The FSC/TPB considers the attitude (AT), subjective norm (SN), and perceived behavioural control (PBC) as among the independent factors that determine the intention (travelling for medical tourism) and behaviour. AT is the individual reaction of being in support or against the intention or a particular behaviour (Ajzen,

1991). AT measures the Behavioral Belief System (Ajzen and Fishbein, 1980). Behavioural Belief evolves the attitude towards undergoing a task for the sake of overcoming (whether successful or not) (Cheng, Lam and Hsu, 2006; Han, Hsu and Lee, 2009; Ajzen and Madden, 1986). Concerning health tourism, if prospective tourist plan to visit Dubai for health care and the outcome of the medical care is anticipated to be satisfactory, they will expectedly embark on health tourism to Dubai again. In this circumstance, the projection for health tourism would expectedly increase.

The subjective norm measures the opinions of others who are either close or critical to someone as such influence his/her decision making (Ajzen and Madden, 1986). It also translates that the intentions of the prospective tourists to Dubai for health care or treatment might be influenced by the opinions of others who are either close or essential. Subjective norm characterizes a prospective tourist's normative beliefs that inform the decision of people on what not do (Han, Hsu and Lee, 2009). In the current study, and generally in health tourism, if the close relatives of a prospective tourist want him or her to embark on the medical travel to the Dubai, his or her intentions to go for the treatment will be high and vice versa. Hence, it is expected that subjective norm influences the intentions of the prospective medical tourists to travel to Dubai for health care or treatment.

Perceived Behavioral Control (PBC) is associated with someone's perception of how easy or difficult it is to perform a specific behavior (Cheng, Lam and Hsu, 2006). The perceived behavioural control comprises of the control beliefs (CBs). The control belief (CBs/ Finance) is the primary factor that measures the perception of the prospective tourists' resources availability (which is measured with finance) that

is required to execute a specific behavior (Ajzen and Madden, 1986; Francis et al. 2004). In respect to the current study within the context of health tourism, the perceived control belief means to know how one can gain access to Dubai and whether one can afford the medical treatment based on external resources constraints. It, however, suggests that even if a prospective tourist has gotten well with the other mentioned variables but is lacking on finance to pay for the travel to Dubai and all the expenses of the health medication, the intention of such tourist will be lower. In other words, a prospective medical tourist with high intention to visit Dubai for the health care services will be motivated because of the availability of a moderately inexpensive and quality medical standard of Dubai's medical system through the introduction of HHTS (see Figure 1).

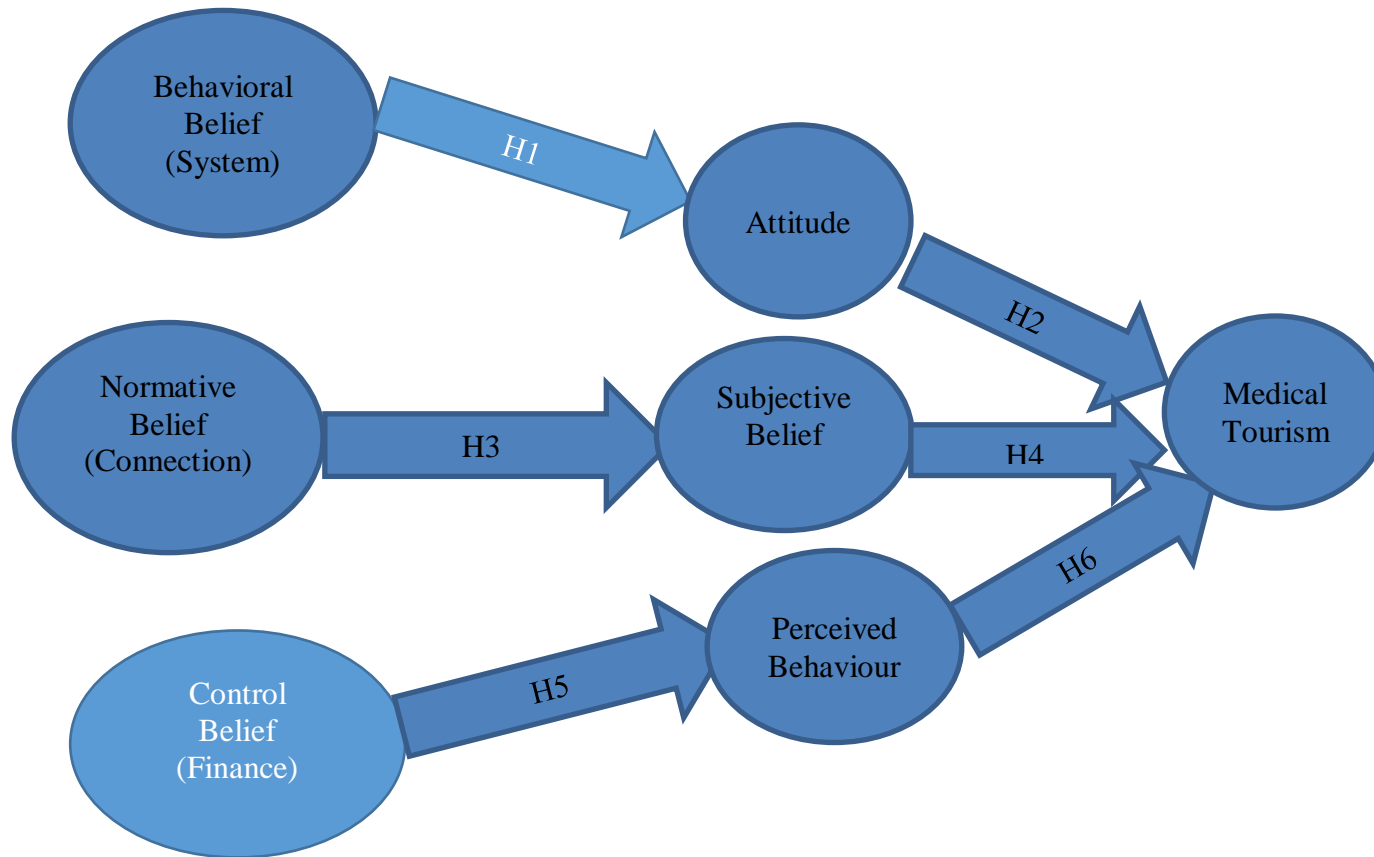


Figure 1: The Proposed TBP/FSC Research Model



### **2.8.1 The Hypotheses**

The hypotheses (as seen in Figure 1) are thus carefully presented with relevant extant studies.

**H1:** BB (SYSTEM) is not a positive predictor of AT for a prospective medical tourist's decision-making process to travel to Dubai for Health Treatment (HT). An illustration of the hypothesis is found in the study of Ertz, Karakas and Sarigöllü (2016).

**H2:** AT is not a positive determinant of intention to travel to Dubai for Health Tourism (HT). It explains that attitude of tourists significantly describes the psychological tendencies expressed by the prospective tourists such that consequently constitutes the positive or negative evaluations and intention toward the destination (Lam, & Hsu, 2006; Jalilvand, Samiei, Dini & Manzari, 2012; Yazdanpanah, & Forouzani, 2015).

**H3:** Normative Belief/ Connection (NB) is not positive determinants of the subjective norm (SN) for the prospective tourist's decision-making process to travel to Dubai for Health Treatment. In extant studies, the interaction of normative belief and the subjective norm is believed to significantly guide the prediction and intention to engage in an activity (Grube, Morgan & McGree, 1986; Yazdanpanah, & Forouzani, 2015; Shin & Hancer, 2016).

**H4:** Subjective Norm (SN) is not a positive determinant of intention to travel to Dubai for Health Treatment (HT). It is expected that subjective norms are a good predictor of intention to travel to tourism destination especially for medical tourism

(Ross & McLaws, 1992; Altawallbeh, Soon, Thiam & Alshourah, 2015; PaulModi & Patel, 2016).

**H5:** Control Belief/Finance (CBS) is not a positive predictor of PBC for the prospective tourist's decision making process to travel to Dubai for Health Treatment (HT). Cheng, Lam and Hsu (2006) and Raza, Umer, Qazi and Makhdoom (2018) are few of the studies that have examined the relationship between Control Belief and Perceived Behavioral Control.

**H6:** Perceived Behavioral Control (PBC) not is a positive determinant of the motivation behind the prospective tourist's intention to travel to Dubai for Health Treatment (HT). The evidence of the relationship between the Perceived Behavioral Control and intention has been examined in previous literature (Ajzen & Madden, 1986; Hsu, Chang & Yansritakul, 2017; Ru, Wang & Yan, 2018).

## **Chapter 3**

### **RESEARCH METHODOLOGY**

#### **3.1 Methodology**

This section contains the methodology of the study. Data that was used for this study were gathered through online questionnaire administration, in an attempt to get the opinion of the customers. This online approach has been used and validated by several researchers (Ali-Knight & Ensor, 2017; Gabor & Oltean, 2019).

#### **3.2 Sample and Procedure**

The questionnaire which was developed for the study is divided into two sections: the demographic variables are the first part and the second part is for the study variables. The questionnaires were distributed to Dubai tourists via an online platform. These questionnaires were administered without minding the nationality, educational qualification, age or marital status. The researchers went to the tourist destination area Dubai to seek for the customers' email addresses from the hotels that they have lodged, and some tourists were meet one on one, and they gave their email address. The respondents were asked the series of questions (see Appendix) related to the objective of the study in the perspective of medical centers in Dubai. The researchers utilized the online convenience sampling techniques which believed to be appropriate for this data collection (Davis et al. 2018; Habibi, Ariffin, & Aziz, 2018; Al-Talabani, Kilic, Ozturen, & Qasim, 2019). Before the data collection, the researcher sent a letter to the hotels establishing contact and stating the purpose of their study. When manages accepts the letter, the researcher sent messages to their

customers, telling them about the study and seeking their consent on behalf of the researcher. The researcher sent the questionnaires to the customers' email addresses with the assistance of the Medical centers (UAE Business, 2014; Davis et al. 2018). The customers were promised that their answers will remain confidential and will only be used for the purpose that it has been collected for. The first respondents returned the online completed form on the 7th of June 2018 at about 11:52:29 in United Arab Emirates time. The researcher received the last completed form from the respondents on 13th June 2018 at about 18:02:52. In total, 320 questionnaires were distributed. In order to reduce the potential of common method bias, the researcher did not give the Medical employees the access to the questionnaires by sending it directly to customers themselves. There was no need for back-translation (Mc Gory, 2000); the questionnaires were written and administered in English. The number of valid questionnaires out of the 320 shared is 303, thus yielding a response rate of 94.70% for the current study. The study applied the SMART PLS (partial least square) software package in analyzing the data. The researcher decided to use this software in order to throw more light on the model fit and the variance. Adopting from the recent study of Kumar & Purani (2018) and Hooi, Abu and Rahim (2018), the advantage of using SMART PLS is to be able to simultaneously incorporate both the estimates and the path coefficients without bias. The system is based on an iterative combination of major analysis and regression, and the model prediction is oriented that makes the parameter to be good.

### **3.2.1 Pilot Study**

Pilot test gathering helps to identify a problem that might come out in the process of distributing and collecting the questionnaire. According to Moxham (2014), a pilot study is a very vital tool and is the first process of data gathering. Before sending the

questionnaires to the customers, 25 questionnaires were used to conduct a pilot study to check the language flow, clarity and time taken in completing the questionnaire. The pilot study was used to check the readability and the potency of the questionnaire and to correct the possible mistakes or words that are ambiguous. The pilot study was administered through offline means, and the test identified some pitfall in the construction of the survey (Tashakkori, 2010). Greater clarifications in some questions were suggested after the pilot study (Saunders 2012). Due to the suggestion received from the pilot study respondents, the questionnaire was corrected to suit the final respondent's level of understanding.

### **3.3 Measurements**

After carefully examine extant literatures (Ajzen, 1991; Ajzen, 1985; Ajzen, & Fishbein, 1980; Cheng, Lam & Hsu, 2006; Fishbein, & Ajzen, 1977; Francis et al. 2004; Han, Hsu, & Lee, 2009; Janz & Becker, 1984; Swan, & Mercer, 1981), the author adapted and modified the questionnaire. Thirty questions were developed for the study. The questions were divided into four sections. The behavioural belief section consists of 12 questions. The examples of the questions include "I enjoy the extra care and services in a Clinic; I received the treatment that I needed with latest surgery devices; I received the treatment by highly trained professionals who have the latest medical skills". For the control belief, the section consists of 8 questions. The examples of the questions include; "I have resources, time, and opportunities to travel to Dubai; I am confident that if I want, I can travel to Dubai; whether or not I want to travel is completely up to me". The third section of the questionnaire is the normative section consisting of 4 questions; for example "My doctor thinks I should travel to Dubai because he knows a clinic that specializes in my case; My travel agent thinks I should travel to Dubai because he has a referral clinic in Dubai; I

travel to Dubai because of lack of information about specialists for certain surgeries, hospitals in other places". Finally, the fourth section consists of question from travel intention (medical tourism) made up of 6 sections, example of the question includes, "My family would want me to travel to Dubai for health treatment; Friends think I should travel for health treatment; My family (or relatives) thinks I should travel to Dubai for health tourism".

## Chapter 4

### FINDINGS AND DISCUSSION

#### 4.1 Demographic Variables

For the demographic variables (see Table 3), out of the 303 questionnaires that were considered as valid and imputed for analysis, 200 are male (66%), while 103 are female (34%). For the age distribution of the respondents, the participant that ranges between the ages of 18-28 was 30 (9.9%). For ages between 29 and 39 were 123 (40%), and the ages of the respondents with age brackets between 40 and 50 were 90 (29.7%). For the respondents that the ages were from 51 and above were 60 (19.8%). For the nationality responses, respondents from Africans were 165 (54.4%), from Europe were 100 (33.1%) and from Americans were 38 (12.5%).

Table 3: Respondents Profile (n= 303)

Characteristics	Frequency	Percentage
<i>Gender</i>		
Male	200	66
Female	103	34
<i>Total</i>	303	100
<i>Age</i>		
18-28	30	9.9
29-39	123	40.5
40-50	90	29.7
51 and above	60	19.8
<i>Total</i>	303	100
<i>Nationality</i>		
Africans	165	54.4
Europe	100	33.1
Americans	38	12.5
<i>Total</i>	303	100

n= number of respondents

The descriptive statistics in Table 4 shows both the mean and the standard deviations of the variables in question. The variable with the highest mean is the system with 40.43 followed by the finance with 25.69 and medical tourism is 17.45 and the connection with 13.25.

Table 4: Descriptive Statistics

<b>Variables</b>	<b>Observations</b>	<b>Mean</b>	<b>Standard Deviation</b>
<b>Medical Tourism Development</b>	303	17.4488	3.3969
<b>System</b>	303	40.4323	7.2674
<b>Finance</b>	303	25.6864	5.4247
<b>Connection</b>	303	13.2475	2.5072

The correlation test (see Table 5) depicts a positive and statistically significant result with the relationship existing among the examined variables. Besides, there is empirical evidence of lesser concern for the presence of the multi-collinearity problem. The assumption here is that the closer the relationship that exists between the variables, the higher the multi-collinearity. Besides, from the result of the test, it is observed that the highest number that is up to the average of one is 0.5858.

Table 5: Correlation Matrix

<b>Construct</b>	<b>Medical Tourism</b>	<b>System</b>	<b>Finance</b>	<b>Connection</b>	<b>Prob</b>	<b>Observations</b>
<b>Medical Tourism</b>	1.0000	0.4611	0.5406	0.4868	0.00	303
<b>System</b>	0.4611	1.0000	0.5858	0.5563	0.00	303
<b>Finance</b>	0.5406	0.5858	1.0000	0.5790	0.00	303
<b>Connection</b>	0.3299	0.5563	0.5790	1.0000	0.00	303



## 4.2 Hypotheses Tests

Following the establishment of the above hypotheses, a linear regression of quantitative analysis is employed to estimate the associated empirical evidence. The estimation observes that (see Table 6) the R-square is 35% which means that 35% of the relationship between the dependent (Medical Tourism) and the independent variables (FSC) can be explained. Although the result of the Durbin Watson (1.7) is close to 2, there is empirical evidence of no serial correlation or autocorrelation.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig. F Change	Durbin-Watson
1	0.592	0.350	0.344	2.750	0.000	1.7

Moreover, the estimates further show that the three factors (FSC) are all positively related to Medical Tourism, as indicated in Table 6. Except for the relationship between *System* and *Medical Tourism*, which is statistically significant at the 5% significance level, the associations of *Finance* and *Connection* with *Medical Tourism* are significant at the 1% significance level. Besides, the impacts of *Finance* and *Connection* on *Medical tourism* are very similar (respectively 0.2065 and 0.2881), while the *System* impact on *Medical Tourism* is lower (0.0699).

Table 7: Linear Regression

Independent Variable	Coefficient	Standard error	t-stat	p-value
(Constant)	5.499	0.9971	5.5147	0.000***
System	0.0699	0.0284	2.4577	0.015***
Finance	0.2065	0.0388	5.3159	0.000***
Connection	0.2881	0.0819	3.5141	0.001***

Dependent Variable (Medical Tourism) \*\*\* (p<0.01), \*\* (p<0.05), \*(p<0.10)

Similarly, the **H1**: BB (SYSTEM) is not a positive predictor of AT for a prospective health tourist's decision-making process to travel to Dubai for Health Treatment (HT). Also, **H2**: AT (Attitude) is not a positive determinant of intention to travel to Dubai for Health Tourism (HT). The outcome of the linear regression (see Table 7) shows that the null hypothesis is rejected given that the coefficient and the *t* statistics are respectively 0.0699 and 2.4577. Hence, the alternative hypotheses for the two hypotheses above are accepted. The results translate that *System* is statistically significant and with a positive relationship with *medical tourism*.

This is in line with the study expectation and an indicator that better achievement of medical tourism in UAE can be sustainable with System strategy. It means that there is a need to maintain an attractive and conducive system in the industry. Again, the **H3**: Normative Belief/ Connection (NB) is not a positive determinant of the subjective norm (SN) for the prospective tourist's decision-making process to travel to Dubai for Health Treatment. Moreover, the **H4**: Subjective Norm (SN) is not a positive determinant of intention to travel to Dubai for Health Treatment (HT). Given the t-statistics of 3.5141, which is statistically significant at 1%, the above null hypotheses of **H3** and **H4** are rejected. Then, the study accepts the alternative hypotheses. The result shows a positive coefficient of 0.2881 and is statistically significant the p-value (0.010). That means that there is a positive relationship between the *connection* and the medical tourism, which supports the alternative hypothesis that *connection* positively affects or determines the choice of a medical tourist in chosen a medical tourism destination. Lastly, the **H5**: Control Belief/Finance (CBS) is not a positive predictor of PBC for the prospective tourist's decision-making process to travel to Dubai for Health Treatment (HT). Also, **H6**: Perceived Behavioral Control (PBC) is not a positive determinant of the motivation

behind the prospective tourist's intention to travel to Dubai for Health Treatment (HT). Likewise, the null hypotheses **H5** and **H6** are rejected based on the result of the linear regression (see Table 7) that showed that *finance* determines the choice of medical tourist as regards to the choice of the tourism destination. The result shows that the *finance* has a positive relationship with medical tourism, given that the coefficient and t- statistics are respectively 0.2065 and 5.3159 with the p-value of 0.000.

### 4.3 Structural Model

In addition to the above regression analysis, we expanded our research by adding some structural analysis such as;

- i) Alpha reliability
- ii) Estimated composite reliability
- iii) Average Variance Extracted
- iv) Model Fit and  $R^2$
- v) Estimated path coefficients estimations and bootstrap confidence intervals

The three figures below displayed the results of the structural model; all are done in consistency with PLS Bootstrapping. The arrows included in the model shows the path coefficients for only path coefficient, path coefficient with t-values, and path coefficient with p-values that are listed in the path coefficient as estimates in Table 8. We adopted the 1000 sub by default to estimate the path coefficient, t-test, and p-values to determine and decide whether each causal order was significant. All the path coefficients were found to be significant at the 0.001 level with the expected signs and direction. Besides, all the t-values are above 1.96, which is 5% significant level. It then shows that all the coefficients are statistically significant. Furthermore, the p-values are all significant, even at 0.001 (1% significant level).

### 4.3.1 Proposed Measurement Scales with Smart PLS

Table 8 below represents the alpha coefficients for the items within each construct, and this shows that all of them are above 0.70, which is the threshold. In this case, the minimum is 0.662, which is the exact threshold if approximated to 0.70 as indicated by Fornell and Larcker (1981). The Composite reliability also conforms to the values obtained from the alpha that shows that it avoided the assumption of the equal weighting of the items. The Average variance extraction seems to be before the threshold of 0.5 (Jiang, Klein & Carr, 2002; Fornell & Larcker, 1981). However, this could be attributed to the nature of the AVE, which most times seem to be the tougher analyses of the reliability. With the Alpha and the Composite reliability values, the reliability of the model is robust. Moreover, the variables outcome for AVE did not worsen the fit statistics; also, the study of Coelho and Augusto, (2010), Karatepe, Ozturk, and Kim, (2019), confirms that the lower .50 provides solid support.

Table 8: Construct Reliability and Validity

	<b>Cronbach's Alpha</b>	<b>rho_A</b>	<b>Composite Reliability</b>	<b>Average Variance Extracted (AVE)</b>
Connection	0.662	0.687	0.673	0.344
Finance	0.864	0.867	0.864	0.444
Medical Tourism	0.807	0.812	0.807	0.458
System	0.890	0.892	0.889	0.402

### 4.3.2 Model fit

From the displayed Table 9 below, a model fit with the overall fit at 74.5 is estimated. The model fit is good at the overall goodness of fit, which falls into the index, according to Tenenhaus et al. (2005) GFI=0.77. The quality of the model is

sound and falls into the proposed overall fit. Our model shows a good and high level of forecasting power with 74.5 of the variance in satisfaction. The model has a good fit, and it is a useful model.

Table 9: Models Fit Summary

	<b>Saturated Model</b>	<b>Estimated Model</b>
<b>SRMR</b>	0.061	0.106
<b>d_ULS</b>	1.606	4.920
<b>d_G1</b>	0.583	0.719
<b>d_G2</b>	0.542	0.633
<b>Chi-Square</b>	921.28	1044.49
<b>NFI</b>	0.775	0.745

### 4.3.3 The Models

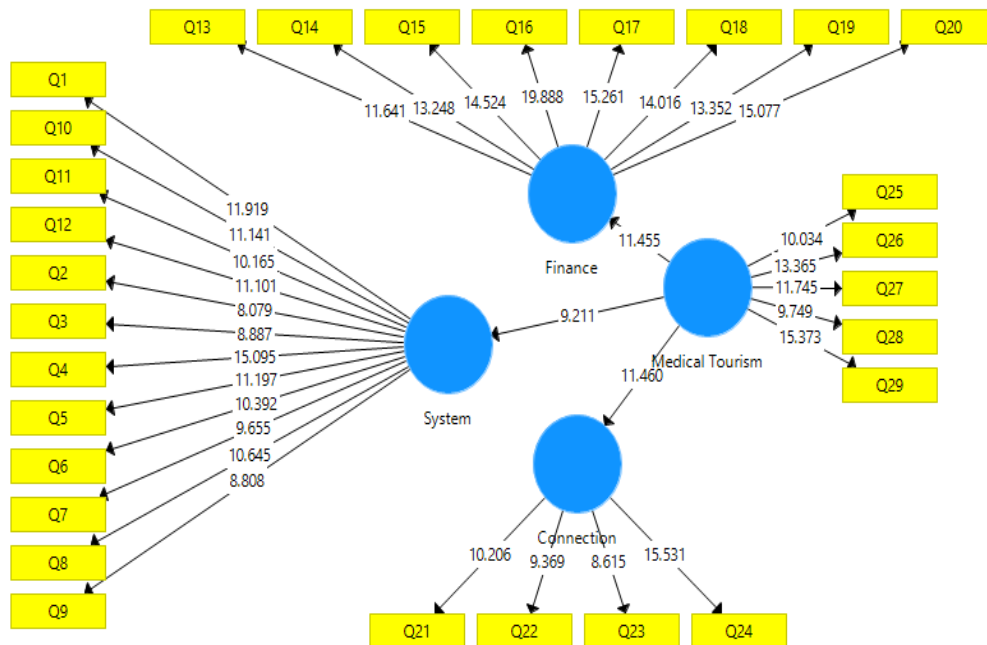


Figure 2: Model with T-value of the coefficient

From the model structure above, the path coefficients of the variables are highly significant with the t-values on the path coefficient arrows. The t-statistics of all the

coefficients of the variables are highly significant because they are above the threshold of 1.96; this is an excellent pointer that the model is free from collinearity problem.

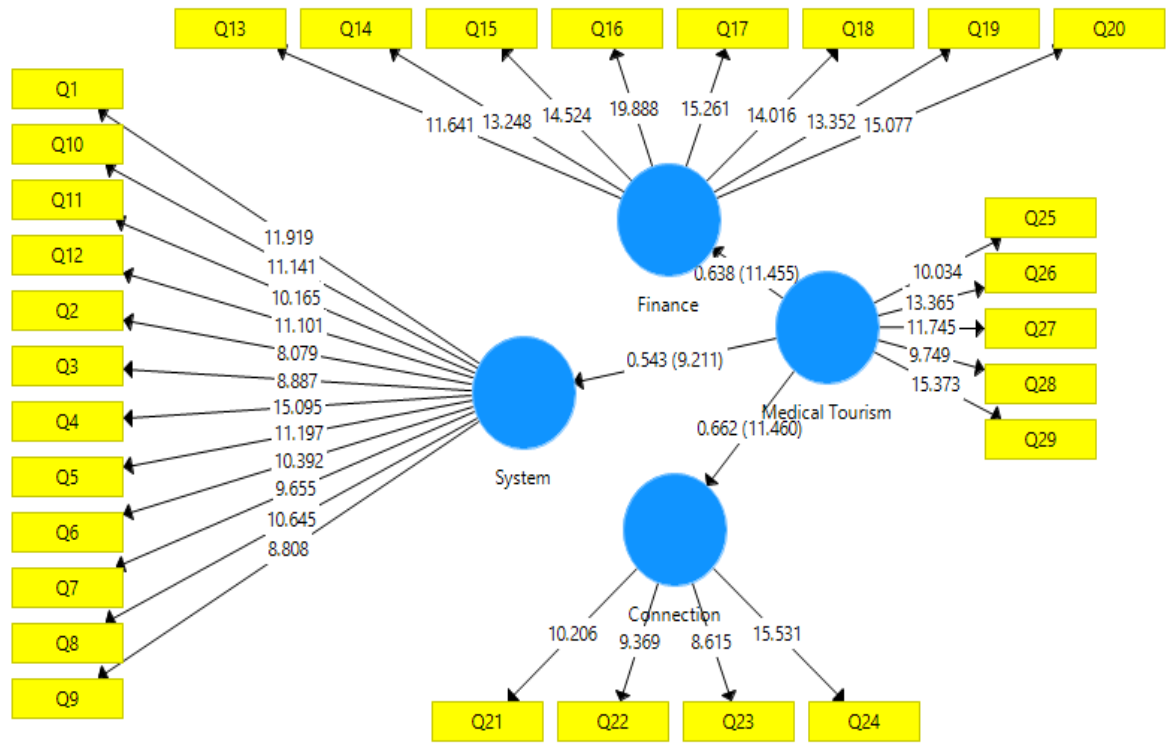


Figure 3: Model with path coefficient and T-values

From the model structure above, the entire path coefficients are significant with the values above or equal to 0.5 at 0.001. All the path coefficients were found to be significant at the 0.001 level with the anticipated signs and direction that shows an excellent structural model fit. This shows that there is an interaction or causality passing through the variables to the targeted variable, Medical tourism.

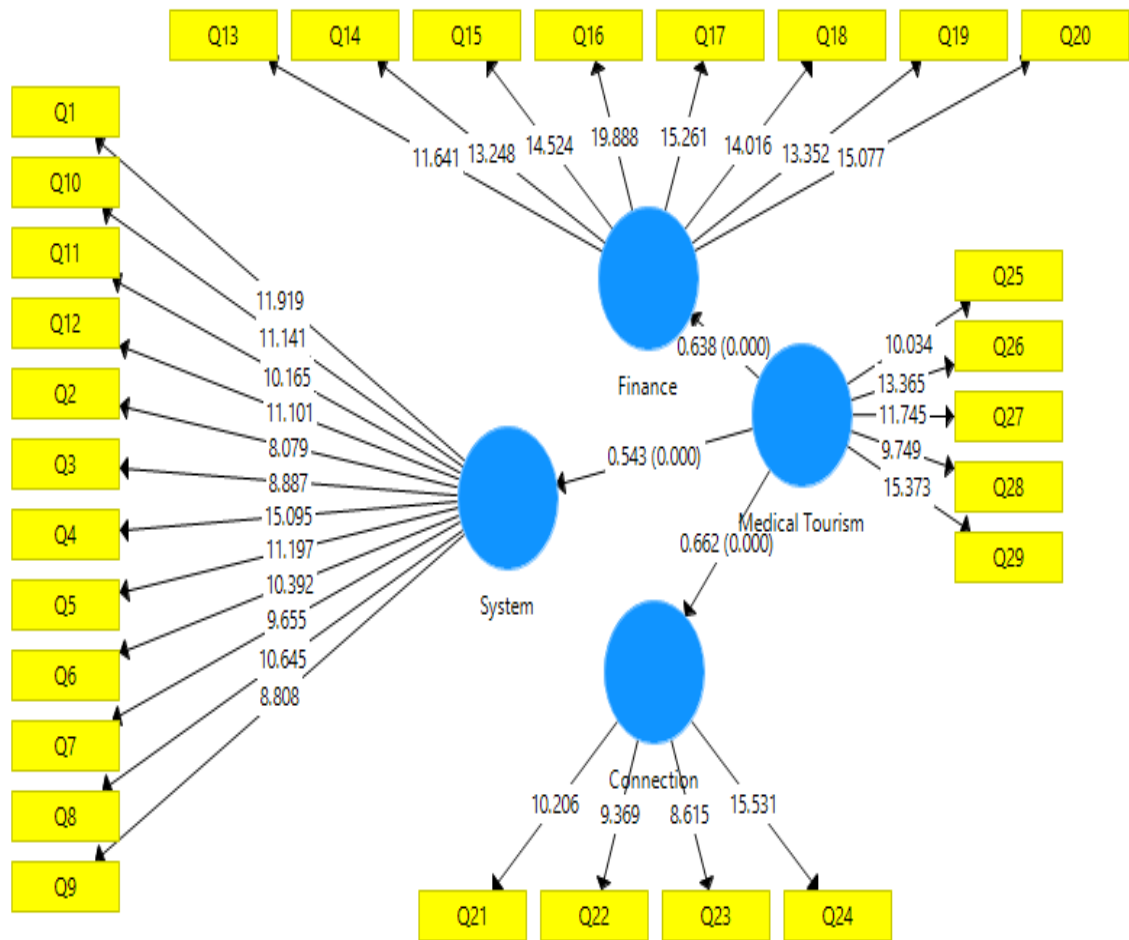


Figure 4: Model with path coefficient and P-values.

Besides, the path coefficients with p-values are all well measured with the expected signs and level of significant at 0.001. The p-values are statistically significant even at 1%.

Table 10: Estimated Path Coefficient Estimations and Bootstrap and Confidence Interval

From	TO	Estimate	R <sup>2</sup>	T-value	P-value
Medical Tourism	Finance	0.638	40.8%	11.455	.000
Medical Tourism	Connection	0.662	43.9%	11.460	.000
Medical Tourism	System	0.543	30%	9.211	.000

From the above table, the p-value for each estimated path shows that all path coefficients are significant. Besides, the t-statistics of all the coefficients of the variables are statistically significant since they are all above the threshold of 1.96. Hence, it is a good pointer that the model is free from collinearity problem and the estimated path have the same sign, which shows that the variables are normally distributed. Also, the analysis of R-square coefficients explained the robustness of the finance and connection. Thus over 30% of the system construct is explained by the model and its antecedents. Other endogenous constructs also displayed the value of the R-square coefficients.



## **Chapter 5**

### **CONCLUDING REMARKS AND POLICY**

#### **IMPLICATIONS**

##### **5.1 Concluding Remarks**

The robust growth experienced by the world regions in the number of tourist arrivals during the first six months of 2018 is also known to have caused the 7% increase in the number of tourists' arrivals to the European, Asian, and the Pacific regions (UNWTO, 2018). This surge in the number of tourist arrivals globally cannot be separated from the fact that it is a reflection of renewed behaviour toward a touristic adventure. In the 21<sup>st</sup> century, the linkage between the economy and the tourism activities has consistently been pointed out. This inter-linkage of the sectors is responsible for the drive of the destination countries toward sustainable growth and especially that of the Sustainable Development Goals (SDGs) 2030. For instance, the UAE is known for its avowed commitment to achieving economic diversification and growth, thus exploring the corridor of tourism has been a useful tool been utilized (Anwar & Sohail, 2004). Also, the positioning of sustainable tourism in the SDGs 2030 and the potential of tourism to directly or indirectly contribute to the goals mentioned above is not unconnected with the nexus of the economy and tourism. Indicatively, the importance of every aspect of tourism such as sports tourism, agricultural tourism, religious (and festivity) tourism, and specifically medical tourism are vastly receiving attention across the globe. In the case of medical tourism, there has been a growing record of development and investment in

the health sectors of the existing destinations countries as well as the emerging destinations such as the United Arab Emirate.

Dubai is considered among emerging cities. Likewise, the UAE is gravitating from a regional (Middle East) power bloc to one of the fastest-growing global tourism and destination. This significant development of the Emirates is reflected in the emirates' enormous infrastructural prowess such as in the airlines, hospitals, good roads, and the sophisticated hospitality industry. This characterization is responsible mainly for the opening up of the city of Dubai and the entire Emirate to the rest of the world. As such, the current study suggests that the UAE possesses the potential to increase the attractiveness of the region and especially for medical tourists. With the UAE's desire to meet the country's vision 2020 and subsequently turning Dubai into a medical tourism destination, evidence suggests that such a vision is not far from reach. Hence, the UAE's medical tourism policy is capable of being an effective policy vehicle for meeting the Sustainable Development Goals (SDGs) 2030, primarily through sustainable good health and well-being.

Moreover, the findings of the current study have significantly provided unusual perceptions and especially suggesting a progressive outlook of the medical tourism sector in the UAE. For instance, the evidence from the current study equally corroborates that the behaviour beliefs (affective and instrumental beliefs) are significant drivers of attitude toward leisure participation (Ostrom, 1969; Ajzen, & Driver, 1991). The evidence in the current study further opined that the intention of the prospective medical tourists to visit a destination is as important as his/her reflex behaviour toward such a destination. Hence, the current study implies that the role of the (S) system (behavioural belief) is quite essential to the determination of the

medical tourists' attitude, thus aiding the development of medical tourism in the UAE. Similarly, the (C) connection (the normative belief) and the (F) finance (the control belief) are observed to be significant factors responsible that aids the development of medical tourism in the UAE. However, the impact of the normative belief and control belief on the performance of medical tourism is notably without the moderating effect of the subjective belief and the perceived behaviour, respectively. To a large extent, the outcome of the current study in underpinning the nexus of the behavioural, normative, and the control beliefs vis-à-vis the FSC of the medical tourism 'customers' and medical tourism development shares similar perspectives of the extant literature (Bagozzi, Lee & Van Loo, 2001; Ajzen, 2002; Hagger & Chatzisarantis, 2005).

## **5.2 Policy Implications**

The findings of the current research did not only corroborate the outcome of a similar investigation in the literature, but it also presents useful policy implications and direction for the stakeholders in the tourism industry in the UAE. By extension, the result of this investigation should be appropriate for policy implementation in the medical tourist destinations within the Middle East and the distant destinations or global tourism. Because of the significance of the FSC (Finance, System, and Connection) to states' economies as indicated in the outcome of the current investigation, effective policy design specifically that targets the aspect of medical tourism in UAE is essential. Given the diversification intention and drive of the government of UAE toward enhancing sustainable growth, there should be direct or indirect mechanism targeting at the examined factors (FSC). For instance, in the aspect of finance, the central governments, emirates of UAE, and especially the central government of Dubai are all expected to be active partners in creating enabling

environment for private and foreign partnerships. Given that the core of every business and investment is finance, investment in medical tourism vis-à-vis the health sector is not an exemption. A significantly improved and deliberate attempt at making medical assistance, treatment, procedures available at a relatively non-extreme price is expected to be a practical and attractive policy design. The implementation of such policy direction is billed to yield the success report enumerated by the Gulfnews (2018).

Since the industry is liberalized to an extent, the government policies like tax reduction policy on importation of medical equipment will go a long way at aiding the performance of the privately-owned health outfit. Given that the performance of the healthcare providers could be improved by the provision of adequate and modern medical facilities through tax waiver or improved tax policy, the service quality and service delivery would be adjudged effective by potential healthcare seekers. Hence, considering a sustained investment drive, healthcare system improvement, the aftermath of such developmental contributions will undoubtedly target the aid in the growth of medical tourism in the UAE.

Additionally, considering some of the hindrances to medical tourism development illustrated in the earlier chapters of this study, it is expected that well-tailored policies are implored to mitigate the effect of the hindrances. For instance, a weak legal institution would expectedly discourage prospective medical tourist from exploring the medical opportunities in a destination. As such, there should be the provision or an improved useful legal framework that guides the medical practitioners, practices and the administration of justice without compromise. This is necessary because of the unforeseen circumstance of wrongdoing or mistake that

potentially arises during medical procedures. Hence, the likelihood of getting the right justice or redress over an act of wrongdoing or medical error will determine the behaviour or the future intentions of both the returning or prospective medical tourists.

Moreover, given that the intention of prospective medical tourists could also be influenced by the social and cultural behaviour or norms in a destination such as Dubai and the U.A.E, a conscious effort must be geared toward reducing the cultural difference between the visitors' country of origin and the destination. For the case of Dubai and the U.A.E, this destination is known to be conservative and more importantly is a religious destination. From this perspective, both the provincial and central governments in the U/A.E could further liberalize certain cultural beliefs, especially that tends to affect the intentions and behaviours of prospective medical tourists. An example of such liberalized atmosphere was the one created by the Saudi Arabian government at the beginning of the year 2019 that now allows women to drive and watch live football (match) directly from the stadium stand.

Generally, the collaboration of the stakeholders in both the healthcare sector and the tourism sector is required for a compromised, balanced and productive policy-driven development. This approach of inclusive collaboration would be essential if the envisaged development is to be explicitly achieved in the medical tourism of UAE (Moghavvemi et al. 2017). Considering that the medical tourism industry in the U.A.E is yet at infancy level compared to that of other destinations like India, Singapore, Malaysia, it posits that the U.A.E has so much to learn from the medical tourism practices in those countries. In so doing, the country design a structured procedure of acquiring both the human capita vis-à-vis the services of skilled

medical experts and technology-know-how from the leading destinations for medical tourism.

### **5.3 Limitation of the Study**

Expectedly, this study is not void of limitation and potential gaps that are suitable for further investigation. The main challenge encountered in the course of the study is in the data collection procedure. This is because there is limited persuasive means or approach to ensure the respondents to respond to the survey questions. Given that it is an online survey, the only hope of getting the attention of the respondents was not beyond, including an introductory and captivating statement at the beginning of the survey questions. Another limitation of this study is that there are fast-growing medical tourism destinations within the same region as the UAE such as Turkey, but that could not be captured in the current study (Momeni et al. 2018). Because of the demography (especially from different language and culture background) of the visitors, some questions were not answered either because of the language barrier or cultural or religious beliefs.

### **5.4 Recommendation for Further Study**

In any future research, attention should be paid to the method of collecting information from the respondent. For instance, if the same online method is employed or in any way, the survey questions should be adequately translated in the major international languages French, German, Dutch, Chinese, English, Korean, Swahili, Turkish, Arabic, and many others. As such, a large number of observation could be collected that is expected to provide a more reliable outcome. Additionally, a future study could consider expanding the investigation to cover other neighbouring medical tourism destinations such as Turkey, Saudi Arabia that are increasingly developing the countries medical tourism capacities. Moreover, the

information collected from some of the respondents indicates that language competence and diversity among the staff of the major hospitals and other healthcare centres is an essential factor for effective data gathering. The concerns, as mentioned above, are not only essential toward ensuring an effective data collection but also necessary for the development of medical tourism in the UAE. Lastly, considering that this study was conducted during and post-the period of the civil unrest, especially around the Middle East (the Arab spring period), a replicated study shortly could posit interesting underpinnings.

## REFERENCES

- Abubakar, A. M., & Ilkan, M. (2016). Impact of online WOM on destination trust and intention to travel: A medical tourism perspective. *Journal of Destination Marketing & Management*, 5(3), 192-201.
- Ahmed, et al. (2018) Outward Medical Tourism: Case of UAE. *Theoretical Economics Letters*, 8, 1368-1390.
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In *Action control* (pp. 11-39). Springer, Berlin, Heidelberg.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior 1. *Journal of applied social psychology*, 32(4), 665-683.
- Ajzen, I., & Driver, B. L. (1991). Prediction of leisure participation from behavioral, normative, and control beliefs: An application of the theory of planned behavior. *Leisure sciences*, 13(3), 185-204.
- Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behaviour.



- Ajzen, I., & Madden, T. J. (1986). Prediction of goal-directed behavior: Attitudes, intentions, and perceived behavioral control. *Journal of experimental social psychology*, 22(5), 453-474.
- Al Mamari, S. A. S. (2017). An examination of performance management in public health care in the Emirate of Dubai (Doctoral dissertation, The British University in Dubai (BUiD)).
- Ali-Knight, J., & Ensor, J. (2017). Salute to the sun: an exploration of UK Yoga tourist profiles. *Tourism Recreation Research*, 42(4), 484-497.
- Alsharif, M. J., Labonté, R., & Lu, Z. (2010). Patients beyond borders: A study of medical tourists in four countries. *Global Social Policy*, 10(3), 315-335.
- Al-Talabani, H., Kilic, H., Ozturen, A., & Qasim, S. (2019). Advancing Medical Tourism in the United Arab Emirates: Toward a Sustainable Health Care System. *Sustainability*, 11(1), 230.
- Altawallbeh, M., Soon, F., Thiam, W., & Alshourah, S. (2015). Mediating Role of Attitude, Subjective Norm and Perceived Behavioural Control in the Relationships between Their Respective Salient Beliefs and Behavioural Intention to Adopt E-Learning among Instructors in Jordanian Universities. *Journal of Education and Practice*, 6(11), 152-159.
- Anderson, R. C. (1974). Concretization and sentence learning. *Journal of Educational Psychology*, 66(2), 179.

- Anwar, S. A., & Sohail, M. S. (2004). Festival tourism in the United Arab Emirates: First-time versus repeat visitor perceptions. *Journal of Vacation Marketing, 10*(2), 161-170.
- Arab Health (2019). <https://www.arabhealthonline.com/magazine/en/latest-issue/2019-show-issue/uae-is-set-to-become-hub-of-medical-tourism.html>.
- Assembly, N. P. (2015). Hybrid warfare: NATO's new strategic challenge? *DSC 2015*.
- Awadzi, W., & Panda, D. (2006). Medical Tourism: Globalization and the marketing of medical services. *Consortium Journal of Hospitality & Tourism, 11*(1).
- Aydin, G., & Karamehmet, B. (2017). Factors affecting health tourism and international health-care facility choice. *International Journal of Pharmaceutical and Healthcare Marketing, 11*(1), 16-36.
- Bagozzi, R. P., Lee, K. H., & Van Loo, M. F. (2001). Decisions to donate bone marrow: The role of attitudes and subjective norms across cultures. *Psychology and Health, 16*(1), 29-56.
- Balaban, V., & Marano, C. (2010). Medical tourism research: A systematic review. *International Journal of Infectious Diseases, 14*, e135.
- Balakrishnan, M. S. (2009). Approaches to enter emerging markets: A UAE case study.

- Bamberg, S., Ajzen, I., & Schmidt, P. (2003). Choice of travel mode in the theory of planned behavior: The roles of past behavior, habit, and reasoned action. *Basic and applied social psychology*, 25(3), 175-187.
- Beladi, H., Chao, C. C., Ee, M. S., & Hollas, D. (2015). Medical tourism and health worker migration in developing countries. *Economic Modelling*, 46, 391-396.
- Beladi, H., Chao, C. C., Ee, M. S., & Hollas, D. (2019). Does medical tourism promote economic growth? A cross-country analysis. *Journal of Travel Research*, 58(1), 121-135.
- Beladi, H., Chao, C. C., Ee, M. S., & Hollas, D. (2019). Does medical tourism promote economic growth? A cross-country analysis. *Journal of Travel Research*, 58(1), 121-135.
- Bhaidkar, A., & Goswami, A. (2017). Medical tourism in India and the Health policy of the NDA government: An overview. *Aweshkar Research Journal*, 22(1).
- Bookman, M. (2007). *Medical tourism in developing countries*. Springer.
- Bozinoff, N., Dorman, K. P., Kerr, D., Roebbelen, E., Rogers, E., Hunter, A., & Kraeker, C. (2014). Toward reciprocity: host supervisor perspectives on international medical electives. *Medical education*, 48(4), 397-404.
- Bundhun, R. (2009). UAE monthly household income revealed. *CULTURE & SOCIETY-NEWS*.

- Caballero-Danell, S., & Mugomba, C. (2007). Medical tourism and its entrepreneurial opportunities: A conceptual framework for entry into the industry.
- Central Intelligence Agency (CIA, 2019).  
<https://www.cia.gov/library/publications/the-world-factbook/geos/ae.html>.
- Chang, S. K., & Baek, J. S. (2017). A study on design medical tourism strategy and business service model. *The Journal of Society for E-Business Studies*, 22(3), 43-55.
- Cheng, S., Lam, T., & Hsu, C. H. (2006). Negative word-of-mouth communication intention: An application of the theory of planned behavior. *Journal of Hospitality & Tourism Research*, 30(1), 95-116.
- Chuang, T. C., Liu, J. S., Lu, L. Y., & Lee, Y. (2014). The main paths of medical tourism: From transplantation to beautification. *Tourism Management*, 45, 49-58.
- Clift, S., & Page, S. (2015). *Health and the international tourist (routledge revivals)*. Routledge.
- Coelho, F., & Augusto, M. (2010). Job characteristics and the creativity of frontline service employees. *Journal of Service Research*, 13(4), 426-438.

- Cohen, I. G. (2015). Medical Tourism, Access to Health Care, and Global Justice. *Can. J. Comp. & Contemp. L.*, 1, 161.
- Cohen, I. G. (2012). How to regulate medical tourism (and why it matters for bioethics). *Developing world bioethics*, 12(1), 9-20.
- Connell .J. (2005) Medical tourism: Sea, sun, sand and surgery. *Tourism Management* 27 (2006) 1093–1100.
- Connell, J. (2006). Medical tourism: Sea, sun, sand and... surgery. *Tourism management*, 27(6), 1093-1100.
- Connell, J. (2013). Contemporary medical tourism: Conceptualization, culture and commodification. *Tourism Management*, 34, 1-13.
- Cormany and Baloglu. (2011). Medical travel facilitator websites: An exploratory study of web page contents and services offered to the prospective medical tourist. *Tourism Management* 32 (2011) 709e716.
- Davis, K. A., Coleman, J. R., Adams, M., Allen, N., Breen, G., Cullen, B., ... & Howard, L. M. (2018). Mental health in UK Biobank: development, implementation and results from an online questionnaire completed by 157 366 participants. *BJPsych open*, 4(3), 83-90.
- Debata, B. R., Patnaik, B., Mahapatra, S. S., & Sree, K. (2015). Interrelations of service quality and service loyalty dimensions in medical tourism: a structural

equation modelling approach. *Benchmarking: An International Journal*, 22(1), 18-55.

de la Hoz-Correa, A., Muñoz-Leiva, F., & Bakucz, M. (2018). Past themes and future trends in medical tourism research: A co-word analysis. *Tourism Management*, 65, 200-211.

Dubai Health Authority (2019). <https://www.dha.gov.ae/en/HealthRegulation/pages/dubaimedicaltourismprogram.aspx>.

Dubai Tourism News (2017). UAE travel and tourism sector's economic importance growing: WTTC. The First Group. Accessed online at <https://www.thefirstgroup.com/en/news/2017/7/uae-travel-and-tourism-sector-s-economic-importance-growing-wttc/>.

Ebrahim, A. H., & Ganguli, S. (2017). Strategic priorities for exploiting Bahrain's medical tourism potential. *Journal of Place Management and Development*, 10(1), 45-60.

Encyclopedia Britannica (2019). Tourism. <https://www.britannica.com/topic/tourism>.

Eom, T., Yu, J., & Han, H. (2019). Medical tourism in Korea—recent phenomena, emerging markets, potential threats, and challenge factors: a review. *Asia Pacific Journal of Tourism Research*, 24(6), 563-573.

- Ertz, M., Karakas, F., & Sarigöllü, E. (2016). Exploring pro-environmental behaviors of consumers: An analysis of contextual factors, attitude, and behaviors. *Journal of Business Research*, 69(10), 3971-3980.
- Esiyok, B., Çakar, M., & Kurtulmuşoğlu, F. B. (2017). The effect of cultural distance on medical tourism. *Journal of Destination Marketing & Management*, 6(1), 66-75.
- Essays, UK. (2018). The Concept of Sustainable Tourism Development Tourism Essay. Retrieved from <https://www.ukessays.com/essays/tourism/the-concept-of-sustainable-tourism-development-tourism-essay.php?vref=1>.
- Fetscherin, M., & Stephano, R. M. (2016). The medical tourism index: Scale development and validation. *Tourism Management*, 52, 539-556.
- Fishbein, M., & Ajzen, I. (1977). Belief, attitude, intention, and behavior: An introduction to theory and research.
- Fleishman, E. A. (1958). Dimensional analysis of movement reactions. *Journal of Experimental Psychology*, 55(5), 438.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50.

- Francis, J., Eccles, M. P., Johnston, M., Walker, A. E., Grimshaw, J. M., Foy, R., ... & Bonetti, D. (2004). Constructing questionnaires based on the theory of planned behaviour: A manual for health services researchers.
- Gabor, M. R., & Oltean, F. D. (2019). Babymoon tourism between emotional well-being service for medical tourism and niche tourism. Development and awareness on Romanian educated women. *Tourism Management*, 70, 170-175.
- Gaines, J., & Lee, C. V. (2019). Medical Tourism. In *Travel Medicine* (pp. 371-375). Elsevier.
- Ganguli, S., & Ebrahim, A. H. (2017). A qualitative analysis of Singapore's medical tourism competitiveness. *Tourism Management Perspectives*, 21, 74-84.
- Ganji, S. H., Kashyap, M. L., & Kamanna, V. S. (2015). Niacin inhibits fat accumulation, oxidative stress, and inflammatory cytokine IL-8 in cultured hepatocytes: Impact on non-alcoholic fatty liver disease. *Metabolism-Clinical and Experimental*, 64(9), 982-990.
- Global Healthcare Resources (2017). 2016-2017 Global Buyers Survey. <https://www.medicaltourismassociation.com/en/research-and-surveys.html>.
- Global Wellness Institute (2013). *The global wellness tourism economy 2012*. New York. [www.gsws.org](http://www.gsws.org).



- Godin, G., & Kok, G. (1996). The theory of planned behavior: a review of its applications to health-related behaviors. *American journal of health promotion, 11*(2), 87-98.
- Goeldner, C. (1989). 39th congress AIEST: English workshop summary. *Revue de Tourisme, 44*(4), 6-7.
- Goodrich, J. N. (1994). Health tourism: A new positioning strategy for tourist destinations. *Journal of International Consumer Marketing, 6*(3-4), 227-238.
- Goodrich, J. N., & Goodrich, G. E. (1987). Health-care tourism—An exploratory study. *Tourism Management, 8*(3), 217-222.
- Grube, J. W., Morgan, M., & McGree, S. T. (1986). Attitudes and normative beliefs as predictors of smoking intentions and behaviours: A test of three models. *British Journal of Social Psychology, 25*(2), 81-93.
- Gulf News (2016). <https://gulfnews.com/>.
- Gulf News (2018). <https://gulfnews.com/>.
- Habibi, A., Ariffin, A. A. M., & Aziz, N. A. (2018). The influence of perceived benefits, perceived sacrifices and perceived value on behavioural intention in the context of medical tourism. *International Journal of Services, Economics and Management, 9*(3-4), 295-316.

- Hagger, M. S., & Chatzisarantis, N. L. (2005). First-and higher-order models of attitudes, normative influence, and perceived behavioural control in the theory of planned behaviour. *British journal of social psychology*, 44(4), 513-535.
- Hall, C. M. (2003). Health and spa tourism. *International sports & adventure tourism*, 273-292.
- Hall, C. M. (2011). Health and medical tourism: a kill or cure for global public health? *Tourism review*, 66(1/2), 4-15.
- Han, H., & Hwang, J. (2018). Growing competition in the healthcare tourism market and customer retention in medical clinics: New and experienced travellers. *Current Issues in Tourism*, 21(6), 680-702.
- Han, H., & Hyun, S. S. (2015). Customer retention in the medical tourism industry: Impact of quality, satisfaction, trust, and price reasonableness. *Tourism Management*, 46, 20-29.
- Han, H., Hsu, L. T. J., & Lee, J. S. (2009). Empirical investigation of the roles of attitudes toward green behaviors, overall image, gender, and age in hotel customers' eco-friendly decision-making process. *International Journal of Hospitality Management*, 28(4), 519-528.

- Han, J. S., Lee, T. J., & Ryu, K. (2018). The promotion of health tourism products for domestic tourists. *International Journal of Tourism Research*, 20(2), 137-146.
- Heider, F. (1944). Social perception and phenomenal causality. *Psychological review*, 51(6), 358.
- Heung, V. C., Kucukusta, D., & Song, H. (2010). A conceptual model of medical tourism: Implications for future research. *Journal of Travel & Tourism Marketing*, 27(3), 236-251.
- Hooi, T. K., Abu, N. H. B., & Rahim, M. K. I. A. (2018). Relationship of Big Data Analytics Capability and Product Innovation Performance using SmartPLS 3.2. 6: Hierarchical Component Modelling in PLS-SEM. *Int. J. Supply Chain Manag*, 7, 51.
- Hopkins, L., Labonté, R., Runnels, V., & Packer, C. (2010). Medical tourism today: what is the state of existing knowledge? *Journal of public health policy*, 31(2), 185-198.
- Hsu, C. L., Chang, C. Y., & Yansritakul, C. (2017). Exploring purchase intention of green skincare products using the theory of planned behavior: Testing the moderating effects of country of origin and price sensitivity. *Journal of Retailing and Consumer Services*, 34, 145-152.

- Hull, C. L. (1943). The problem of intervening variables in molar behavior theory. *Psychological Review*, 50(3), 273.
- Hume, L. F., & Demicco, F. J. (2007). Bringing hotels to healthcare: A Rx for success. *Journal of Quality Assurance in Hospitality & Tourism*, 8(1), 75-84.
- Hummon, N. P., & Dereian, P. (1989). Connectivity in a citation network: The development of DNA theory. *Social networks*, 11(1), 39-63.
- Inhorn, M. C. (2017). Medical Cosmopolitanism in Global Dubai: A Twenty-first-century Transnational Intracytoplasmic Sperm Injection (ICSI) Depot. *Medical anthropology quarterly*, 31(1), 5-22.
- Inhorn, M. C., & Patrizio, P. (2015). Infertility around the globe: new thinking on gender, reproductive technologies and global movements in the 21st century. *Human reproduction update*, 21(4), 411-426.
- Jabbari, A., Gholami, M., Kavosi, Z., Chamanpara, P., & Gholami, M. (2017). Potential Factors Affecting Medical Tourists' Viewpoint about Healthcare Services Quality in Shiraz, Iran. *International Journal of Hospital Research*, 6(2), 85-89.
- International Union of Tourism Organizations (IUTO) (1973), *Health Tourism*, United Nations, Geneva.

- Jain, V., & Ajmera, P. (2018). Modelling the factors affecting Indian medical tourism sector using interpretive structural modeling. *Benchmarking: An International Journal*, 25(5), 1461-1479.
- Janz, N. K., & Becker, M. H. (1984). The health belief model: A decade later. *Health education quarterly*, 11(1), 1-47.
- Jalilvand, M. R., Samiei, N., Dini, B., & Manzari, P. Y. (2012). Examining the structural relationships of electronic word of mouth, destination image, tourist attitude toward destination and travel intention: An integrated approach. *Journal of Destination Marketing & Management*, 1(1-2), 134-143.
- Jiang, J. J., Klein, G., & Carr, C. L. (2002). Measuring information system service quality: SERVQUAL from the other side. *MIS quarterly*, 145-166.
- Johnson, T. J., Youngquist, J. S., Garman, A. N., Hohmann, S., & Cieslak, P. R. (2015). Factors influencing medical travel into the United States. *International Journal of Pharmaceutical and Healthcare Marketing*, 9(2), 118-135.
- Junio, M. M. V., Kim, J. H., & Lee, T. J. (2017). Competitiveness attributes of a medical tourism destination: The case of South Korea with importance-performance analysis. *Journal of Travel & Tourism Marketing*, 34(4), 444-460.

Karatepe, O. M., Ozturk, A., & Kim, T. T. (2019). Servant leadership, Organisational trust, and bank employee outcomes. *The Service Industries Journal*, 39(2), 86-108.

Kasemsap, K. (2018). The role of information system within enterprise architecture and their impact on business performance. In *Global Business Expansion: Concepts, Methodologies, Tools, and Applications* (pp. 1078-1102). IGI Global.

Kasemsap, K. (2018). The role of medical tourism in emerging markets. In *Medical Tourism: Breakthroughs in Research and Practice* (pp. 211-231). IGI Global.

Kim, S. (2015). The conception and factors that affect the utilization of health care services among foreign migrant workers in Korea. *Journal of Multi-Cultural Contents Studies*, 18, 255-297.

Korea Health Industry Development Institute. (2017). Analysis of medical overseas expansion status in 2016. Retrieved from <https://www.khidi.or.kr/board/view?pageNum=1&rowCnt=10&no1=276&linkId=>

Korea Medical Tourism Forum. (2018). The 8th Korea medical tourism forum, (presentation material).

- Kuhl, J. (1985). Volitional mediators of cognition-behavior consistency: Self-regulatory processes and action versus state orientation. In *Action control* (pp. 101-128). Springer, Berlin, Heidelberg.
- Kumar, D. S., & Purani, K. (2018). Model specification issues in PLS-SEM: Illustrating linear and non-linear models in hospitality services context. *Journal of Hospitality and Tourism Technology*, 9(3), 338-353.
- Kumar, D. S., & Purani, K. (2018). Model specification issues in PLS-SEM: Illustrating linear and non-linear models in hospitality services context. *Journal of Hospitality and Tourism Technology*, 9(3), 338-353.
- Labonté, R., Schrecker, T., Packer, C., & Runnels, V. (Eds.). (2009). *Globalization and health: pathways, evidence and policy*. Routledge.
- Lam, T., & Hsu, C. H. (2006). Predicting behavioral intention of choosing a travel destination. *Tourism management*, 27(4), 589-599.
- Lawrence, D. M. (1985). Private Exercise of Governmental Power. *Ind. Lj*, 61, 647.
- Lawrence, D. M. (1985). Private Exercise of Governmental Power. *Ind. Lj*, 61, 647.
- Lewin, K., Dembo, T., Festinger, L., & Sears, P. S. (1944). Level of aspiration.
- Liska, A. E. (1984). A critical examination of the causal structure of the Fishbein/Ajzen attitude-behavior model. *Social psychology quarterly*, 61-74.

- Locke, E. A. (1965). Interaction of ability and motivation in performance. *Perceptual and Motor Skills*, 21(3), 719-725.
- Locke, E. A., Mento, A. J., & Katcher, B. L. (1978). THE INTERACTION OF ABILITY AND MOTIVATION IN PERFORMANCE: AN EXPLORATION OF THE MEANING OF MODERATORS 1. *Personnel Psychology*, 31(2), 269-280.
- Lovelock, B., & Lovelock, K. (2018). “We had a ball... as long as you kept taking your painkillers” just how much tourism is there in medical tourism? Experiences of the patient tourist. *Tourism Management*, 69, 145-154.
- Lunt, N., Horsfall, D., & Hanefeld, J. (2016). Medical tourism: A snapshot of evidence on treatment abroad. *Maturitas*, 88, 37-44.
- Maceda, C. (2008). UAE signs MoU with Philippines to ensure food supply. *Gulf News*, 22.
- Marsek, P. W., & Sharpe, F. (2009). *The complete idiot's guide to medical tourism*. Penguin.
- Mainil, T., Van Loon, F., Dinnie, K., Botterill, D., Platenkamp, V., & Meulemans, H. (2012). Transnational health care: From a global terminology towards transnational health region development. *Health Policy*, 108(1), 37-44.



Marlowe, J., & Sullivan, P. (2007). Medical tourism: the ultimate outsourcing. *People and Strategy*, 30(2), 8.

Medical Tourism Index (MDI, 2018).  
<https://www.medicaltourismindex.com/destination/dubai/>.

Michael, N., Reisinger, Y., & Hayes, J. P. (2019). The UAE's tourism competitiveness: A business perspective. *Tourism Management Perspectives*, 30, 53-64.

Moghavvemi, S., Ormond, M., Musa, G., Isa, C. R. M., Thirumoorthi, T., Mustapha, M. Z. B., & Chandy, J. J. C. (2017). Connecting with prospective medical tourists online: A cross-sectional analysis of private hospital websites promoting medical tourism in India, Malaysia and Thailand. *Tourism Management*, 58, 154-163.

Mohamad, W. N., Omar, A., & Haron, M. S. (2012). The moderating effect of medical travel facilitators in medical tourism. *Procedia-Social and Behavioral Sciences*, 65, 358-363.

Momeni, K., Janati, A., Imani, A., & Khodayari-Zarnaq, R. (2018). Barriers to the development of medical tourism in East Azerbaijan province, Iran: A qualitative study. *Tourism Management*, 69, 307-316.

- Muhajarine, N., Vu, L., & Labonte, R. (2006). Social contexts and children's health outcomes: Researching across the boundaries. *Critical Public Health*, 16(3), 205-218.
- Newman, A. B., Foster, G., Givelber, R., Nieto, F. J., Redline, S., & Young, T. (2005). Progression and regression of sleep-disordered breathing with changes in weight: the Sleep Heart Health Study. *Archives of internal medicine*, 165(20), 2408-2413.
- Ostrom, T. M. (1969). The relationship between the affective, behavioral, and cognitive components of attitude. *Journal of experimental social psychology*, 5(1), 12-30.
- Paterson, A. H., Bowers, J. E., Bruggmann, R., Dubchak, I., Grimwood, J., Gundlach, H., & Schmutz, J. (2009). The Sorghum bicolor genome and the diversification of grasses. *Nature*, 457(7229), 551.
- Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of retailing and consumer services*, 29, 123-134.
- Qolipour, M., Torabipour, A., Khiavi, F. F., & Malehi, A. S. (2018). Assessing medical tourism services quality using SERVQUAL model: A patient's perspective. *Iranian journal of public health*, 47(1), 103.

- Rashid, A. M., Albert, I., Cosley, D., Lam, S. K., McNee, S. M., Konstan, J. A., & Riedl, J. (2002, January). Getting to know you: learning new user preferences in recommender systems. In *Proceedings of the 7th international conference on Intelligent user interfaces* (pp. 127-134). ACM.
- Raza, S. A., Umer, A., Qazi, W., & Makhdoom, M. (2018). The effects of attitudinal, normative, and control beliefs on m-learning adoption among the students of higher education in Pakistan. *Journal of Educational Computing Research*, 56(4), 563-588.
- Reddy, S. G., York, V. K., & Brannon, L. A. (2010). Travel for treatment: students' perspective on medical tourism. *International Journal of Tourism Research*, 12(5), 510-522.
- Roberts, A., & Rogerson, R. (2008). Chinese approach on regulating food additives, novel foods, functional foods and dietary supplements. In *Nutraceutical and Functional Food Regulations in the United States and around the World* (pp. 291-303).
- Ross, M. W., & McLaws, M. L. (1992). Subjective norms about condoms are better predictors of use and intention to use than attitudes. *Health Education Research*, 7(3), 335-339.
- Ru, X., Wang, S., & Yan, S. (2018). Exploring the effects of normative factors and perceived behavioral control on individual's energy-saving intention: An

empirical study in eastern China. *Resources, Conservation and Recycling*, 134, 91-99.

Saberi, D., Paris, C. M., & Marochi, B. (2018). Soft power and place branding in the United Arab Emirates: examples of the tourism and film industries. *International Journal of Diplomacy and Economy*, 4(1), 44-58.

Saraniemi and Kylänen. (2011). Problematizing the Concept of Tourism Destination: An Analysis of Different Theoretical Approaches. *Journal of Travel Research*, 50(2), 133–143.

Sarver, V. T. (1983). Ajzen and Fishbein's "theory of reasoned action": A critical assessment.

Seow, A. N., Choong, Y. O., Moorthy, K., & Chan, L. M. (2017). Intention to visit Malaysia for medical tourism using the antecedents of Theory of Planned Behaviour: A predictive model. *International Journal of Tourism Research*, 19(3), 383-393.

Shin, Y. H., & Hancer, M. (2016). The role of attitude, subjective norm, perceived behavioral control, and moral norm in the intention to purchase local food products. *Journal of foodservice business research*, 19(4), 338-351.

Singh, M. K., & Sethi, P. K. (2009). Apeejay Stya Education Research Foundation.

- Skountridaki, L. (2017). Barriers to business relations between medical tourism facilitators and medical professionals. *Tourism Management*, 59, 254-266.
- Smith, P. C., & Forgione, D. A. (2007). Global outsourcing of healthcare: a medical tourism decision model. *Journal of Information Technology Case and Application Research*, 9(3), 19-30.
- Snyder, J., Crooks, V. A., Adams, K., Kingsbury, P., & Johnston, R. (2011). The 'patient's physician one-step removed': the evolving roles of medical tourism facilitators. *Journal of Medical ethics*, 37(9), 530-534.
- Snyder, J., Crooks, V. A., Johnston, R., Cerón, A., & Labonte, R. (2016). "That's enough patients for everyone!": Local stakeholders' views on attracting patients into Barbados and Guatemala's emerging medical tourism sectors. *Globalization and health*, 12(1), 60.
- Snyder, J., Crooks, V. A., Turner, L., & Johnston, R. (2013). Understanding the impacts of medical tourism on health human resources in Barbados: a prospective, qualitative study of stakeholder perceptions. *International journal for equity in health*, 12(1), 2.
- Snyder, J., Crooks, V., Johnston, R., & Kingsbury, P. (2013). Beyond sun, sand, and stitches: assigning responsibility for the harms of medical tourism. *Bioethics*, 27(5), 233-242.

- Sparks, B., & Pan, G. W. (2009). Chinese outbound tourists: Understanding their attitudes, constraints and use of information sources. *Tourism Management*, 30(4), 483-494.
- Suess, C., Baloglu, S., & Busser, J. A. (2018). Perceived impacts of medical tourism development on community wellbeing. *Tourism Management*, 69, 232-245.
- Swan, J. E., & Mercer, A. A. (1981). Consumer satisfaction as a function of equity and disconfirmation. *Conceptual and Empirical Contributions to Consumer Satisfaction and Complaining Behaviour*, School of Business, Indiana University, Bloomington, IN, 2-8.
- Tang, C. F., & Lau, E. (2017). Modelling the demand for inbound medical tourism: The case of Malaysia. *International Journal of Tourism Research*, 19(5), 584-593.
- Tang, C. F., & Nathan Abdullah, A. S. (2018). Can inbound medical tourism boost Malaysia's economic growth? *Tourism and Hospitality Research*, 18(4), 505-513.
- Tenenhaus, M., Vinzi, V. E., Chatelin, Y. M., & Lauro, C. (2005). PLS path modeling. *Computational statistics & data analysis*, 48(1), 159-205.
- The Gulf Today (2016), "The Gulf Today", 11 July, Retrieved from UAE logistics industry to grow 4% in 2016, available at: <http://gulftoday.ae/portal/f6e9d0dd-0bc6-4042-a12a-937d98268f39.aspx/>

- The Official Portal of the UAE Government (2019).  
<https://government.ae/en/information-and-services/health-and-fitness/healthcare-providers>.
- Trachtman, J. P. (2006). The Constitutions of the WTO. *European Journal of International Law*, 17(3), 623-646.
- Turner, L. (2007). Medical tourism: Family medicine and international health-related travel. *Canadian Family Physician*, 53(10), 1639-1641.
- United Arab Emirate Travel and Tourism (2019). Tourism and Economy.  
<https://www.government.ae/en/information-and-services/visiting-and-exploring-the-uae/travel-and-tourism>.
- United Nations World Tourism Organization (UNWTO, 2018). International Tourism Maintains Strong Momentum <https://www2.unwto.org/press-release/2018-10-09/international-tourism-maintains-strong-momentum>.
- United Nations World Tourism Organization (UNWTO, 2019). UNWTO World Tourism Barometer and Statistical Annex, May 2019. <https://www.e-unwto.org/doi/abs/10.18111/wtobarometereng.2019.17.1.2>.
- Vroom, V. H. (1964). *Work and motivation* (Vol. 54). New York: Wiley.
- WTTC. (2018). World Travel and Tourism Council Q1/2018, European Tourism in 2018—Trends and Prospects.

- Yazdanpanah, M., & Forouzani, M. (2015). Application of the Theory of Planned Behaviour to predict Iranian students' intention to purchase organic food. *Journal of Cleaner Production*, 107, 342-352.
- Ye, B. H., Yuen, P. P., Qiu, H. Z., & Zhang, V. H. (2008, July). Motivation of medical tourists: An exploratory case study of Hong Kong medical tourists. In *Asia Pacific Tourism Association (APTA) Annual Conference, Bangkok, Thailand*.
- Zolfagharian, M., Rajamma, R. K., Naderi, I., & Torkzadeh, S. (2018). Determinants of medical tourism destination selection process. *Journal of Hospitality Marketing & Management*, 27(7), 775-794.



## **APPENDIX**

**((Medical Tourism: New Approach - Case of UAE.))**

**QUESTIONNAIRE**

Dear Respondent,

My name is **Hallow Al-Talabani**. I am a PhD student in the Tourism and management Department at University of the Eastern Mediterranean University, TRNC/Cyprus. In the delimitation of my thesis, the purpose is to evaluate and examine the new approach to view tourism as a sustainable factor to UAE and its impact. Please, kindly attempt to answer all the questions sincerely and do note that any information given in this questionnaire will be treated confidentially.

**Demographics Variables**

Gender: Male  Female  Age: 18 – 2  29 – 3  40 -5  51 and above

Nationality:

<b>Item</b>	<b>Never 1</b>	<b>Rarely 2</b>	<b>Sometimes 3</b>	<b>Usually 4</b>	<b>Always 5</b>
<b>Behavioral Belief / (System) Traveling to Dubai for Medical Treatment would enable me to;</b>					
1. I enjoy the extra care and services in a Clinic					
2. I received the treatment that I needed with latest surgery devices					
3. I received the treatment by highly trained professionals who has the latest medical skills					
4. I experienced the traditional Dubai medical practice					
5.I like the confidentiality					
6. It seems less risky (Medical Accident)					

7. It is inconvenient because of a language barrier in Dubai					
8.It requires easily accessible information (doctor, clinic, record of mal-practice)					
9. It is difficult to communicate with a Dubai professional					
10.I received a skin treatment/esthetic treatment in a cosmetic clinic.					
11. Enjoy my experience because its Enjoyable					
12. I had experience for beautification treatment					
<b>Control Belief/ ( Finance)</b> <b>I am traveling to Dubai for Medical Treatment because ;</b>					
13. It saves medical costs					
14. It is inexpensive					
15. It is convenient at a short distance					
16. It is cost-effective					
17. It takes time and effort					
18. I have resources, time, and opportunities to travel to Dubai					
19. I am confident that if I want, I can travel to Dubai					
20. whether or not I want to travel is completely up to me					
<b>Normative Belief/ ( Connection)</b> <b>Traveling for Medical Treatment is good because;</b>					
21. My doctor thinks I should travel to Dubai because he knows a clinic that specializes in my case					
22. My travel agent thinks I should travel to Dubai because he has a referral clinic in Dubai					
23. I travel to Dubai because of lack of information about specialists for certain surgeries, hospitals in other places					
24. it requires easily accessible information (doctor, clinic, record of mal-practice)					
<b>Travel Intention/ ( Medical Tourism)</b> <b>Traveling for Medical Treatment is good because;</b>					
25. My family would want me to travel to Dubai for health treatment					
26. Friends think I should travel for health treatment					

27. My family (or relatives) thinks I should travel to Dubai for health tourism					
28. I am willing to travel to Dubai for health treatment					
29. I make an effort to travel to for health treatment					
30. My close acquaintances who had a previous health treatment in Dubai believe I should travel to					