

Medical Tourism and Egypt's Strategic Vision 2030: Pull Motivations That Trigger the International Patients' Intention to Visit Egypt as a Medical Tourism Hub

Gamal Sayed AbdelAziz ^a · Ibtesam Samir Kewina ^{b,c*}

^a Faculty of Commerce, Cairo University, Giza, Egypt

^b Consultant in the pharmaceutical industry

^c Part-time instructor, Faculty of Commerce, Cairo University, Giza, Egypt

* *Corresponding author*: ibtesamkewina@yahoo.com

Abstract

This research examines the effect of international patient motivators to travel (pull factors) on international patients' intention to visit Egypt as medical tourism destination. It proposes a model which examines the relationship between pull factors and patient intention toward Egypt as a medical tourism destination. Also, this research presents an integrated approach to understanding the tourist's motivations and attempts to expand the empirical evidence on the relationships between pull motives in order to determine the extent to which these motivating factors will contribute to the overall perception of a destination. The research was based on a quantitative survey applied among 118 patients who traveled to Egypt as a medical tourism destination to receive treatment using snowball sampling procedures. Data were gathered online using (Google forms) conducted with the patient who visited Egypt for medical treatment. Structural equation modeling was employed to test the hypothesized relationships among the model constructs. The research findings reveal that; both pull factors (healthcare provider-specific, destination specific) have positive impact on intention of patient. While, destination specific is the most effective pull factors. More specifically, the destination specific can be arranged as following: Environment and safety, Culture and historical attractions, then the tourism facilities. Moreover, the Healthcare provider service factors can be arranged as following: the service quality, waiting time, and medical cost. Finally, the results revealed six pull factor dimensions and the results of the correlation analysis indicate that significant relationships were found between the six pull factor dimensions.

Keywords

Motivation, Medical tourism; Pull factors; Customer intention; Satisfaction, Healthcare provider; Destination specific, Strategic vision of Egypt 2030 And Strategic vision of Africa 2063 for sustainable development.

Article history

Received: 22 January 2022 • **Accepted:** 27 April 2022

1. Introduction

Travel motivation has been investigated by many researchers from different fields like from sociology, anthropology, and psychology (Cohen, 1972; Dann, 1977; Crompton, 1979; Gnoth, 1997). Maslow's hierarchical theory of motivation was one among the foremost applied within the tourism literature (1970). The speculation was modeled as a pyramid whose base consists of the physiological needs, followed by higher levels of psychological needs and also the need for self-actualization. Many tourism scholars have attempted to change the model empirically, with the remarkable success of Pearce (1982), who proposed a model for stimulating tourism that reflected Maslow's model, but freed from the assumption of the oligarchs. In other words, motivation may be defined because the driving forces within individuals that compel them to require action (Jeong, 2014). These driving forces can serve to arouse, direct, and integrate a person's behavior (Dann, 1981; Yoon & Uysal, 2005).

The collaboration between the tourism and healthcare industry has resulted in what's, for several countries, one among the most important service industries, with medical tourism producing significant economic benefits for several destination countries. Indeed, medical tourism is taken into account to be one among the prompt-growing tourism sectors within the world (Bookman & Bookman, 2007; Heung et al., 2011; Han & Hwang, 2013). To amass a greater market share in an increasingly competitive medical tourism industry, an increasing number of medical centers in destination countries has been improving their pleasure and services such they analogous those found in many excellent hotels (Sheehan-Smith, 2006; Hume & DeMicco, 2007; Bernstein, 2012). These processes considerably offer not only quality treatment but also a superior level of services to their international customers.

The involvement of countries in establishing the medical tourism business has been expected to generate revenue and contribute to development of the economy. According to Bookman and Bookman (2007), medical tourism would help less developed countries escape the economic dependency that extractive industries have established by providing highly trained jobs, capital-intensive technologies, and interconnection. Theoretically, there is also a possibility of direct advantages to the public health system as a whole. According to a document from Egypt's Ministry of Health, revenue from international patients is frequently used to improve national health services for the benefit of the local people (MOH, 2003:51). The majority of the solution to the topic of why visitors come to Egypt is based on the framework of pull factors. This is due to the fact that Egypt can meet the requirements and desires of tourists or tourists' fulfillment of the inner factors of tourism motivation by external factors (destinations attribute).

The purpose of this research is to fill this gap by delineate the pull (independent variable) travel motivations of international patients supported the identification of socio-psychological and physical travel motivations and extend the theoretical and empirical evidence on the relationships among pull motivations, to create the customer intention (dependent variable) toward Egypt as a Medical Tourism destination hub. This research mainly attempts to discover the basic factors that may

influence the intention of international patients to seek medical treatment in Egypt. The applicability of push and pull theory provides the possibility to investigate the intent of international patients and gauge the past general attitudes and feelings of tourists towards traveling abroad to seek medical treatment. A quantitative research approach was used to conduct this research.

Supported the previous discussion, the research problem can be stated as "pointing out and examining the varied drivers (pull motivations) and therefore the interrelationship between pull drivers of international patients (customers) toward Egypt as a medical tourism destination hub."

Therefore, this research main objective is to identify major pull factors which influencing tourists to visit Egypt as a medical destination hub in Africa. The push-pull theory is applied to the medical tourism industry in order to identify sources of sustainable Egyptian economy.

2. Literature Review

2.1 Medical Tourism and Medical Tourism Motivation

Medical tourism integrate medicine with tourism, allowing patients to seek medical services while traveling for relaxation and leisure and have emerged united of the prompt growing areas of educational research interest in both tourism and health studies. Smith and Puczko, (2009) debate that health tourism consists of medical tourism and wellness tourism, meaning that medical tourism could be a subset of health tourism. The present literature employs very loosely and inconsistently the terms 'health tourism', 'medical tourism' and 'wellness tourism' (Connell, (2013). During this research, we seek to form a transparent uniqueness between these terms. First, the researcher reconcile with Smith and Puczko (2009) suggestion that 'health tourism' consists of 'wellness tourism' and 'medical tourism' and 'medical tourism' is that the correct term to use in cases during which medical, surgical or dental interventions are required, anything else is 'wellness tourism' (Connell, 2006). Yu and Ko (2012) articulated "medical tourism embrace not only going overseas for medical treatment, but also the planning for destinations that have the last word technical proficiency and which offer it at the foremost competitive prices. (Borman and Jonathan, (2017) define Health Tourism as known to draw in tourists through unique destination attractions moreover as health care services facilities. (Connell, (2006) points out that health tourism and medical tourism should be distinguished, as medical tourism is that the right term to be used in situations requiring medical intervention.

Motivation is defined as "a state of need, a condition that leads to individuals pushing toward certain types of work that are considered likely to bring satisfaction." (Moutinho, (1987). An investigation of tourist motivations is an effort to resolve the question "Why do people leave their homes to go to other places?" (Pearce, (1987). However, it's difficult to see a final relationship between individual motivation and

selection of destination "because tourists aren't just numerical abstraction, but whole individual personalities, they need a spread of full motives" (Bosselman, (1978).

Based on literature review, the motivations for medical tourism are cost savings, timely service, combining medical and holiday care, cultural similarity, medical treatment regulations or procedures (i.e. restricted, prohibited or unavailable), quality of medical services, information availability and support services (Glinos & Baeten, 2006; Barrowman, Grubor, & Chandu, 2010; Elliot-Smith, 2010; Lee, Kearns, & Friesen, 2010; Musa et al., 2011; Vequist & Stackpole, 2012; Hall, 2013). (Panteli et al., 2015) found the foremost travel drivers are cost savings, an honest experience with previous treatment, confidence during a given healthcare provider in another country and also the likelihood of blending medical treatment with a vacation.

The drives are heterogeneous and vary across treatments, while information related to tourist features don't exist (Lunt et al., 2016). Motivation can be a multidimensional concept within which tourists have many needs and desire varied experiences in an exceedingly very destination (Baloglu & Uysal, 1996). Studies of Lee & Lockyer (2012) and Weil (2009), as many reports have indicated that medical travel to Africa is vital as Africa has been considered a global hub for medical tourism. Additionally, travelling for medical treatment may be a growing trend, and has highlighted in concert of the vital key drivers of country economic development.

2.2 Medical Tourism Motivators: The Push–Pull Model

A review of the literature indicates that travel motivation is often examined by motivation's theory supported push and pull factors (Mat Som, 2010). The concept of push and pull factors involves the idea that individuals travel because they're pushed by their internal forces and pulled by the external forces of destination attributes (Mat Som, 2010). in line with Jang, Bai, Hu, and Wu (2009), push factors are supported "socio-psychological needs that predispose someone to travel, and pull factors are ones that attract the person to a selected destination after push motivation has been initiated". In other words, "push factors are internal to the person and establish the will to travel, whereas pull factors are external to the individual and are aroused due to destination attractions".

To date, little information has been documented about travel motivations to Egypt. (Mat Som, (2010) focused on destination quality or overall satisfaction but didn't identify specific motivation dimensions. This research thus seeks to spot the motivation factors of international tourists to Egypt, which may have important marketing implications. "Knowing of pull factors and also the interrelation between them can help destinations to fulfill the specified needs of individual travelers from different markets." Knowledge of tourist's motivation is critical to predict future travel patterns and enable destination marketers to plan and execute effective marketing strategies. Capitalizing on destinations' strengths in pull motivations renders a competitive advantage within the travel industry (Jang et al., 2009). A

destination can capitalize with an optimal combination of pull factors to draw in and retain tourists.

2.3. Research Variables

2.3.1 Pull Factors (Independent Variable)

Planned Behavior Theory (TPB) is a theoretical model designed to clarify the relationships between consumers' beliefs, attitudes, intentions, and behaviors (Ajzen, 1985). Various studies that explore visiting intentions and review tourists' consumption behaviors based on travel motives, and the destination image have used the TPB hypothesis to support their models. The motivation was found to have a direct and positive relationship with behavioral intent, indicating that the motives of medical tourists positively influence the intentions of their visit.

The push and pull theory of motivation proposed by Dann (1977) is another widely accepted theoretical framework in tourism research. In line with Dann (1997), there are multiple factors that motivate tourists to go to specific destinations, but these factors are classified as either push or attraction (pull) motives. The concept of push and pull was introduced by Dann (1977) to clarify motivations for travel. Push factors relate to people who are pushed to create the choice to travel due to internal forces, while pull factors relate to those who are pulled in to shape the travel decision by the external forces of tourist attractions (Jang & Wu, 2006). Therefore, attraction motives also sit down with the attributes of a destination or attractions (Hsu & Huang, 2008). These two motivational factors are studied in numerous fields (Jang & Wu, 2006). Hanefeld, et al. (2014) conducted a scientific review of medical tourism and located that almost all papers explain patients' decisions to travel in terms of push and pull factors.

In line with Jang et al. (2009), pull factors are external to the individual and are aroused due to destination attractions". Pull factors help that individual locate an acceptable destination (Goossens, 2000). Gray (1970) whose research of travel motives is one of the first drivers of travel; 'sun lust' is to search for specific experiences or entertainment environments. Dann (1981, 1996) and Pearce (1987), Describe 'sun lust' is a 'pull' factor, whereby the characteristics of a tourist destination attract tourists away from their homes. Pull factors, are people who emerge as a results of the attractiveness of a destination because it is perceived by the travelers. (Baloglu & Uysal, 1996). Pull factors are the destination's attributes that attract travelers. Hence, the present research hypothesizes that:

H1: there is a significant relationship between pull factors and international patients' intentions to visit Egypt as a medical tourism destination hub.

A hospital or clinic is an organization or company that seeks to bring together a potential patient and a service provider. These organizations are generally facilitators and developers of medical tourism, which leads to a number of issues that do not

apply when a patient stays in their home country. Some of these institutions and companies specialize in specific areas of healthcare, such as plastic surgery, dentistry or transplant surgery, while others are more general in their approach, providing multiple services across a wide range of medical specialties (Mat Som, 2010). In the context of medical tourism Research indicates that the standard of experience received from treatment providers including the standard of their interaction with patients, the standard of the physical environment, the standard of results, the management of medical procedures, and also the perceived enjoyment all have a major impact on patient confidence, perceived value, and medicine which Satisfying the tourists (Wu, Li, & Li, 2016). The literature indicates that previous favorable medical travel / medical tourism experience within the chosen destination is probably going to extend the comfort level of international medical tourists (e.g., Henson, Guy, & Dotson, 2015). Hence, the present research hypothesizes that:

H1a: there is a significant relationship between healthcare-provider specific and international patients' intentions to visit Egypt as a medical tourism destination hub.

The service provider needs greater information regarding competitive strategies which will target offering the simplest possible service quality and at the identical time ensuring customer satisfaction (Ogorlec & Snoj, 1998). The patient's perceived quality of service is that the main determinant of the hospital's success and reputation because of its role in achieving patient satisfaction (Choi, et al., 2004; Guiry & Vequist, 2011). The literature within the field of medical tourism indicates that the standard of service for the health care provider includes various dimensions like services and physical facilities (Aziz, Samden, Awang, and Adaballah, 2015; Dangor, et al., 2015), quality of care, specialized services provided (Beladi, et al., & Hollas, 2015), use of state-of-the-art medical technology (Dangor et al., 2015; Jun & Oh, 2015). In line with Veerasoontorn and Beise-Zee (2010), attributes of service quality like innovation in medical technologies, quality of emotional service and patient-doctor relationship (interconnectedness) attract medical tourists to Egypt. Hence, the present research hypothesizes that:

H1a1: there is a significant relationship between service quality and international patients' intentions to visit Egypt as a medical tourism destination hub.

The growth of medical tourism could be a reflection of the continued globalization trend in health care, therefore the pull, or supply, factors the long waiting time and unavailability of the procedures due to technical, legal, (Ramamonjiarivelo et al., 2015), political, religious or ethical reasons (Crook et al., 2010., & Brannon, 2010). Based on literature review, the motivations for medical tourism are cost savings, timely service, combining medical and holiday care, cultural similarity, medical treatment regulations or procedures (Barrowman, Grubor, & Chandu, 2010; Elliot-Smith, 2010; Lee, Kearns, & Friesen, 2010; Musa et

al., 2011; Vequist & Stackpole, 2012; Hall, 2013). Hence, the present research hypothesizes that:

H1a2: there is a significant relationship between waiting time and international patients' intentions to visit Egypt as a medical tourism destination hub.

The pull factors discuss with the explanations that make the situations in foreign countries more appealing to patients such as: lower health care costs which will help the patient save the maximum amount as 80% for a few procedures (Pafford, 2009). (Ehrbeck, Guevara, & Mango, 2008), indicated that traveling outside the borders to obtain health care is being supported by the elderly who need more medical services, an increasing number of unaccompanied people, and the increase in local health care costs along with the ease of travel abroad. Medical travelers are encouraged to hunt care outside of their area of residence by many factors, including more advanced technology, quicker access, higher quality of care, or lower costs for care within the destination locality, Research report had revealed that international demand for medical interventions from developed countries has grown dramatically because of lower cost health care services which are provided within the respective countries (Crooks, Kingsbury, Snyder, & Johnston, 2010). Patients from everywhere come to Egypt seeking the smart combination of the best personalized treatment with the unforgettable touristic experience at an inexpensive and reasonable overall cost. Patients or their insurer can save to 60% -80% of the US healthcare costs. Certainly these high costs are driving more patients toward Egypt for treatment. The lower cost of healthcare isn't an indicator of caliber, after all the standards maybe even better with greater patient satisfaction. Hence, the present research hypothesizes that:

H1a3: there is a significant relationship between medical cost and international patients' intentions to visit Egypt as a medical tourism destination hub.

The image of a destination is defined as the concept of attitudes “the total of beliefs, ideas and impressions that a tourist has about a destination” (Crompton, (1979). The destination image has been claimed to be related to a personal interpretation of tourists' feelings and beliefs towards a particular destination (Baloglu & McCleary, 1999; Bigne, Sanchez, & Sanchez, 2001). Previous studies have reported that the destination image is formed from a complex process in which tourists develop a mental block based on their perceptions, ideas, beliefs, impressions, identities, or feelings towards a destination. Destination image is an important concept for tourism research for two main reasons. First, the destination image is undoubtedly one of the most pressing factors for tourists to decide to travel (Chen & Tsai, 2007; Byon & Zhang, 2010). Second, the destination image has been shown to have an effect on the level of satisfaction of the tourists based on their destination experience (May, 1975; Chun, 1990; Lopez, 2011). Medical tourism destinations are developed mainly for economic reasons. Different destination offers unique value propositions in attracting this lucrative and growing market.

On the other hand, the induced image is derived based on information specific to tourism such as a vacation website, social media communication, or a destination brochure, where the information is formulated as part of the destination's marketing efforts. (Gunn, 1972; Moon et al., 2013). A review of the literature on medical tourism shows that the country's image is composed of several features. These features include tourist attractions, public infrastructure, reputation of hospitals, and quality of hospital services, medical facilities, and social environment and transportation services. Accommodation, support services, food, personal safety, and communication were those common elements that make up the image of a medical tourism destination (Viladrich & Baron-Faust, 2014). Based on the above discussion, the research hypothesizes that;

H1b: there is a significant relationship between destination-specific and international patients' intentions to visit Egypt as a medical tourism destination hub.

Tourists in general are at risk. Tourists will take into account the safety and security aspect in their choice of destination other than country profile and price (George, 2003; Ayob & Masroni, 2014). Safety and security are seen as the odds of a tourist encountering criminal activity (such as pickpocketing), the nature of the environment (such as an earthquake), or physical violence. Safety and security have been recognized as prominent factors in tourism after the tragic terrorist acts of September 11th in the United States in 2001 (Zainal, et al., 2012). Safety and security are two vital conditions for the success of the tourism industry (Pizam & Mansfeld, 1996; Ayob & Masroni, 2014). Safety and security is defined in this research as a state that is relatively free from the risks associated with crime, terrorism, food, transportation, and natural disasters. Safety and security are prerequisites for shaping a country's image (Saiprasert, 2011; Chetthamrongchai, 2017). The medical tourist are going to be traveled to Egypt due to the safety and security, the weather, festival and recreation activities, the seaside/beaches the variety of shopping places, friendliness of individuals the supply of travel-related information. The nice and comfortable dry climate everywhere the year is that the milestone of medical tourism in Egypt; patient will be able to enjoy the proper climate in any season. Safety is paramount where health and medical services are concerned, and is of primary concern for those who traveling to a different country to get such services. Hence, a well-coordinated partnership between medical institutions and hotels is required to satisfy the requirements of medical tourists. (Chacko, 2006). Thus, the research hypothesizes that:

H1b1: there is a significant relationship between environment and safety and international patients' intentions to visit Egypt as a medical tourism destination hub.

Tourism exists due to attractions. Attractions provide the energizing power of the travel and tourism system (Gunn 1988). Pull factors, as expected and mentally conceived by the potential traveler, provide the drive and magnetism to get from one point to the next. The success of any attraction depends on how visitors measure the benefits and the level of satisfaction with their visit. One way to describe attractions is to divide them into two groups, cultural attractions, historical attractions; this research compared the attractiveness of various tourist attractions in Egypt as representatives of these two groups. Cultural attractions, Cultural landscapes that differ from those in the tourist's homeland are part of the destination's overall attraction. The destination's unique cultural expressions, including religion, architecture, museums, art galleries, dress code, galleries, and craftsmanship, add to its vacation charm and provide many avenues for exploration. Examples of cultural attractions in Egypt are traditional dances, sports, and music. Historical attractions, Tourists are interested in ancient ruins, castles, ancient homes, forts, battlefields, and other constructed sites that provide perspectives on the past. The main historical attractions in developing countries are mainly ruins of ancient civilizations, such as the pyramids and the Sphinx of Egypt. Many travelers wish to rediscover history by visiting these sites (Abeer Attia, et al., (2015). Hence, the research hypothesizes that:

H1b2: there is a significant relationship between cultural and historical attractions and international patients' intentions to visit Egypt as a medical tourism destination hub.

The rise of medical tourism in countries is made possible by low wages for highly trained medical professionals, limited medical liability, availability of the latest medical technology, affordable international transportation costs, the emergence of the internet, the emergence of new companies and agents who act as intermediaries between international patients and hospital networks, as well as government support. (Suthin, Assenov & Tirasatayapitak, 2007; Ormond & Mainil, 2015), Medical services in hospitals are usually presented as modern, high-tech, and high-quality, and doctors' (abroad) experiences are frequently cited in order to legalize medical tourism as a practice and sell medical tourism as a foreign public choice (Lunt, 2011). Medical services in hospitals are generally promoted as modern, high-tech, and high-quality, and the experiences of doctors (abroad) are frequently mentioned in order to legalize medical tourism as the practice and marketing of medical tourism as an option for the foreign public (Lunt, 2011). In addition to information regarding medical procedures, physicians, and facilities, this literature indicates that other common features on websites for medical tourism facilities (MTFs) include information on hospital accreditation; Costs; guidance for international patients, and assistance in obtaining medical travel visas; Travel, leisure activity and accommodation reservation services; book a medical appointment, process medical records, and translation services. In-country post-operative care / support; Patient testimonials or recommendations; Design / communication elements to demonstrate reliability such as photos, videos, and contact options for inquiries

(e.g., email contact, phone number, postal address, information request form, and real-time chat rooms), virtual tours of medical facilities, and dates of the last update webpage (Taylor et al., 2005; Lee, 2007; Smith & Forgione, 2007; Ye, Yuen, Qiu, & Zhang, 2008; Fedorov et al., 2009; Penney et al., 2011). Thus, the research posits;

H1b3: there is a significant relationship between tourism facilities and international patients' intentions to visit Egypt as a medical tourism destination hub.

2.3.2 Medical travelers' intention (dependent variable)

Customer intention is defined as the degree to which the customer forms an idea to interact or not engage in a future behavior, and it addresses the extent of efforts to filter certain behaviors (Webb and Sheeran, 2006; Jang and Namkung, 2009). From a firm's performance perspective, behavioral intentions are often used as indicators of customer loyalty and firm success. Items associated with the willingness to buy, willingness to recommend and providing positive word-of-mouth communication are commonly used as proxies of customer behavioral intentions (Choi et al., 2004; Jang and Namkung, 2009). Several scholars (e.g. Wu et al., 2008) have discussed the relationships among motivations and behavioral intentions in healthcare contexts. Models built around these constructs within the literature follow the logic of the multi-attitudinal framework, where the cognitive component precedes affective response, which successively, determines a conative attitude or intention (Abkar et al., 2010). Patient behavioral intentions are a product of private evaluation leading to conative intention (Lai et al., 2009). Patient satisfaction leads to behavioral intentions of the patient (Choi et al., 2004; Hansen et al., 2013) (Liang et al., 2013; Rauyruen and Miller, 2007). Researchers found that pull drivers are the primary precedents for the intention to buy back medical tourists (Wu et al., 2008; Lai et al., 2009; Wu et al., 2011). According to (Ferrero, (2009) there's often ambiguity in an external or internal situation after interpreting a conditional statement. He has determined that external conditions are people who simply enable a private to amass intention, but internal conditions are those who qualify the content of one's intention. The inner state is of high importance because of its true ability to develop intention. (Ferrero, (2009) divides internal conditions into two main categories: empowerment and constraint. The enabling condition is taken into account a cause for doing and obtaining an external condition which can be a vital reason for developing the intention to try and do so.

Therefore, patients from western and developed regions are said to accumulate "unconditional pure intentions". However, visualizing international medical travel from a broader perspective reveals that not only unconditional pure intentions lead to patients traveling to a different country but conditional restrictive intentions even have a vital role in international medical travel. As previously discussed, the bulk of patients in international medical travel are from developing countries and don't have options to avail the service in their home countries. The most push factors for these

patients are mainly unavailability and poor quality of services reception (Crush J, Chikanda A. Soc Sci Med (2015). These patients don't seem to be interested in low-cost or better-quality services in destination countries, but they're forced to travel outside the country because services aren't available or available in caliber. Matters with them are conditional and restricted, so it are often said that patients from developing countries acquire "conditional restrictive intentions."

Based on the above-mentioned hypotheses, the research constructs' relationships are presented in Figure (1).

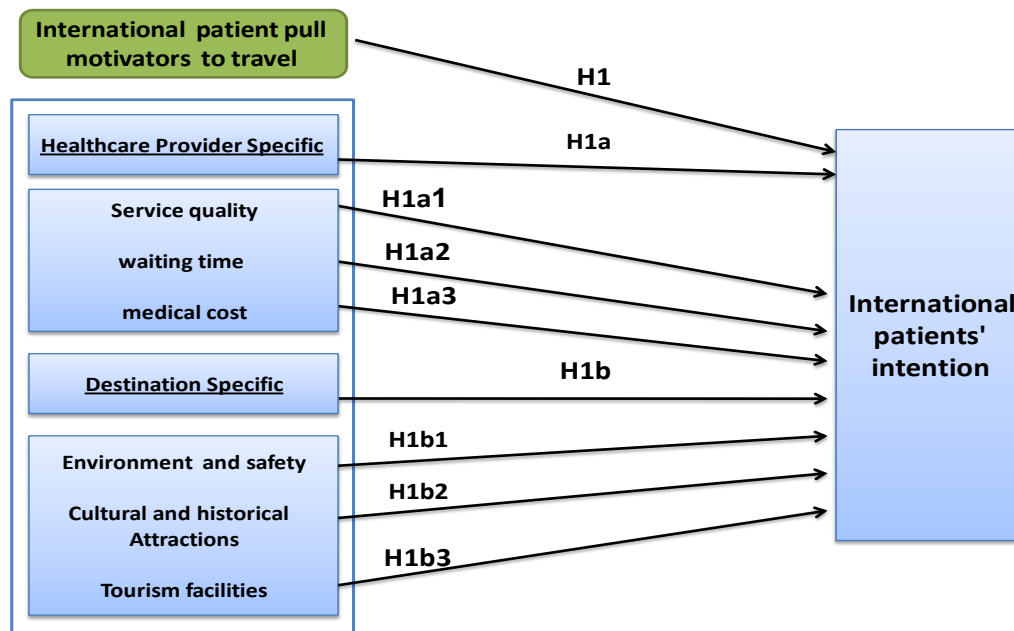


Figure (1): The Proposed Model

3. Research Methodology

3.1 The Population and Sample

The sampling unit will be the international patients in the most popular medical centers and hospitals in Egypt which deal with medical tourism industry. (Such as Dar-Elfoaad hospital, 57357 hospital, Magdi yacoub hospital, Air Force Hospital and Global Medical Center, German Saudi Hospital, Sharm ElShek international hospital and Ghoneim Center). The proposed research model will test the context of health care service industry. The survey will be restricted to a list of all medical tourist hospitals in Egypt. The international patients in all medical centers and hospitals operating on the medical tourism industry in Egypt will be represented the population of the research. Based on ten times rule, Hair et al. (2014) suggested that the minimum sample size for PLS-SEM is ten times the higher number of paths directed at endogenous variable. In this sense, the proposed sample size is 100. A sample of 118 is taken to compensate for non-response rate.

Data were gathered from the international patients in all medical centers and hospitals operating on the medical tourism industry in Egypt. A snow ball sample is used; the sample size should cover the required minimum sample size to run the needed statistical analyses to test the proposed relationships in the conceptual model. Accordingly, the minimum sample size should be more than 100 to run the Exploratory Factor Analysis (EFA) to check the Common Method Bias. As well as, these 100 observations covers the needed sample size to run the Partial Least Squares-Structural Equation Modeling (PLS-SEM) that is needs at least 60 observations (6 independent dimensions * 10 times), known as ten times rule.

3.2 Measure

According to literature, Six constructs are utilized to represent pull factors; service quality items adapted from Dagger et al. (2007) and Gallan et al. (2013) are also used to assess medical service quality. Furthermore, medical cost scales were developed by prior studies (Henderson, 2003; Martin et al., 2011; Ramamonjiarivelo et al., 2015; Wu et al., 2016). While, waiting time items adapted from Jackson & Barber, 2014. Environment and safety items were adapted from the scale items of (Hanqin and Lam, 1999) in addition to some modifications to the measure to fit the current research context, cultural and historical attractions items were adapted from (Hanqin and Lam, 1999) and were modified to be suitable for research site (Egypt), While , tourism facilities items were adapted from scale items of (Hanqin and Lam, 1999) in addition to some modifications to the measure to fit the current research context, Finally, patient intention items were adapted from scale items of Zeithaml et al. (1996) in addition to some modifications to the measure to fit the current research context.

4. Data Analysis and Results

SPSS v.26 was used to describe the characteristics of the respondents, while Structural Equation Modelling (SEM) was used to evaluate the proposed model and test the relationships among the research constructs. More specifically, this research applies the PLS-SEM. Using Smart PLS v.3.3.2 (Ringle et al., 2015). SmartPLS v.3.3.2 (Ringle et al.,) was used because it does not create identification problems with small sample sizes. In this regard, the PLS-SEM use is much cited by scholars in various business disciplines such as tourism management (Do Valle & Assaker, 2016; Ahmet & Kucukergin, 2018; Faizan et al., 2018). Accordingly, a PLS-SEM is applied using two-stage approach. While the first stage aims at building the measurement model using the Confirmatory Composite Analysis (CCA), the second stage aims to test the structural model. The CCA includes model specifying and identifying, item reliability, construct validity, and construct reliability. As well as the structural model includes the multicollinearity assessment, path coefficient, and predictive ability (Hair, Joseph F. et al., 2019; Hair, Joseph F. et al., 2020).

Sample Characteristics:

Demographic Characteristics

The results from profiling the tourists' backgrounds showed that the majority of respondents were male (64.5%), married (76.6% %), and 35 to 44 years old (45.8%) Most of them had less than US\$7,500 income per month (77.5%); and had higher education degree (73.8%). The respondents of this survey were mostly from Arabs (54.2%). Most of the respondents (39%) were visiting Egypt for the first time, obtained information about Egypt from the Internet (38.0%), stayed at hotels (43.0%), stayed in Egypt 30 days (29%), and traveled to Egypt for Treatment and tourism (46.7%).

Factor Analysis of Pull Motivational Factors

Since the data of all of the research variables have been collected using single instrument, a shared variance between the research variables can be occurred. Hence, a common method bias should be checked. To check the common method bias, an Exploratory Factor Analysis (EFA) has been implemented to test Harman's one factor (Jordan & Troth, 2020). Table (1) shows a summary of the EFA results that include Harman's one factor part.

Table (1), Summary of the EFA to Test the Common Method Bias

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.001	4.003	55.563	2.001	4.003	55.563
2	1.798	3.595	59.158	1.798	3.595	59.158
3	1.651	3.303	62.461	1.651	3.303	62.461
4	1.489	2.978	65.439	1.489	2.978	65.439
5	1.335	2.670	68.109	1.335	2.670	68.109
6	1.183	2.366	70.475	1.183	2.366	70.475
7	1.136	2.273	72.748	1.136	2.273	72.748
8	1.037	2.075	74.823	1.037	2.075	74.823
9	.953	1.906	76.728			
-	-	-	-			
-	-	-	-			
60	.033	.066	100.000			
Extraction Method: Principal Component Analysis.						
Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0.785						
Bartlett's Test of Sphericity: Approx. Chi-Square = 4069.332. <i>df</i> = 1225, Sig. = 0.000						

Table (1) illustrates that the EFA can be run with the current research sample size 107 since the KMO is 0.785 which is higher than 0.6. In addition, Bartlett's test

is significant. Hence, the total variance of the 9 factors of all measurement items is 78.573% which is higher than 50% (Pallant, 2011). Finally, the first factor, Harman's one factor, is only 29.899% which is less than 50% of the total variance of all 9 factors. Thus, the common method bias is not an issue in the current research.

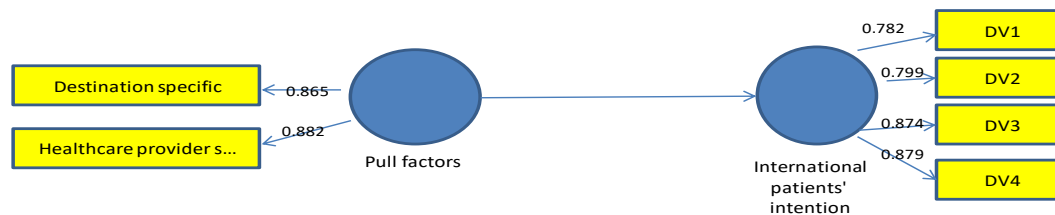


Figure (1): Measurement Model

The correlation test is incorporated in the current research statistical analysis to check the direction and significance of the relationships among the research variables. Moreover, a Pearson correlation test is applied to check the multicollinearity issue among the exogenous variables before applying the Structural Equation Modeling. As shown in figure (1), there are one exogenous variable and one endogenous variable. The exogenous variable is Pull factors and the endogenous variable is the international patient intentions. All constructs are reflectively measured. The pull factors are a High Order Construct (HOC) that is measured in disjoint reflective-reflective three-stage approach (Sarstedt et al., 2019). Where the First stage aims to validate the First-order dimensions from the observed variables, the Second stage aims to validate the Second-order construct from the latent scores of the valid dimensions. The international patient intentions construct is measured in a reflective First-order way.

In addition, item reliability can be assessed using the outer loadings since all measures in the current research are reflective. The outer loading measures to what extent the items is correlated with the total scores of its construct. An item must be retained for the later stage if its outer loading is at least 0.708. Item must be removed if its outer loadings are less than 0.4. Item is nominated for deletion if their outer loading is between 0.4 and 0.708. It shall be deleted. If the rise of the counterpart items can compensate for the decline of a nominated item for deletion, it can be kept. A suggested item should be removed if this is not the case. (Hair, J. F. et al., 2014; Hair, Joseph F. et al., 2017). Respectively, In order to build the measurement model, items IV2B3_4, IV11_1, IV11_4, IV12_1, IV12_4, and IV12_6 have been removed due to their outer loadings that are less than 0.708 and their counterpart items at the same construct cannot substitute their decrease. All other observed variables are retained in the three measurement models.

Moreover, construct validity can be assessed using the convergent validity and the discriminant validity. On one hand, the convergent validity measures to what extent the observed items are correlated together to measure their construct. A convergent validity can be established if the Average Variance Extracted (AVE) of

the construct is at least 0.5 (Hair, et al., 2014; Hair, et al., 2017). On the other hand, the discriminant validity measures to what extent the items of each construct make it discriminant and unique among other constructs at the same model. Discriminant validity can be established if the Heterotrait-Multitrait (HTMT) ratio of correlations is less than 0.9 between a variable and each other variable at the same model (Henseler et al., 2015). Table 2 shows the results of the construct validity.

Table 2, Construct Validity Assessment Results

Constructs	Convergent validity	Discriminant validity using HTMT _{0.9}	
	AVE	International patient intention	Pull factors
International patient intention	0.705		
Pull factors	0.763	0.712	

As can be seen from Table (2), the AVE of each construct is higher than 0.5 as well as the HTMT is less than 0.9. Hence, the convergent and discriminant validity of each construct is well established.

Finally, the last step of the measurement model is to test the construct internal consistency. In doing so, the internal consistency can be assessed using the Cronbach's Alpha and Composite Reliability (CR). A construct has the internal consistency if its reliability measures are at least 0.6 (Hair, et al., 2017). Table (3) shows the results of the reliability tests.

Table (3), Construct Reliability Assessment Results

Constructs	Cronbach's Alpha	Composite Reliability
International patient intention	0.865	0.905
Pull factors	0.690	0.866

As can be seen from Table (3), the Cronbach's Alpha ranges between 0.69 and 0.865 as well as the Composite Reliability ranges between 0.838 and 0.905. Hence, all the research variables have the internal consistency using the reliability measures of the Cronbach's alpha and CR. To this end, the Measurement model's constructs are valid and reliable. Hence, a structural model can be tested.

Testing the Structural Model:

Testing the structural model include the multicollinearity assessment between the exogenous variables, assessing the path coefficients, and testing the predictive ability of the model.

First, the multicollinearity assessment between the constructs is assessed via the Variance Inflation Factor (VIF). A VIF higher than 3 reveals a multicollinearity problem. In the current research, the VIF between the Pull factors is 1.551 which is

less than 3. This confirms the results of the correlation coefficient between the same constructs. Therefore, the multicollinearity is not an issue between the exogenous variables at the current structural model.

Second, the path coefficient is assessed by running a bootstrapping procedure with 5000 subsamples and 300 iterations of the two-tail test. Table (4) shows the results of the path coefficients to test the proposed hypotheses.

Table (4), Path Coefficient Assessment

H	Paths	Beta	F ²	t-value	p.value
1	Pull factors -> International patient intention	0.542	0.281	6.240	0.000
1a	Healthcare provider service -> International patient intention	0.339	0.113	3.141	0.002
1a1	Service quality -> International patient intention	0.171	0.019	1.199	0.231
1a2	Waiting time -> International patient intention	0.118	0.009	0.786	0.432
1a3	Medical cost -> International patient intention	0.042	0.002	0.502	0.616
1b	Destination specific -> International patient intention	0.358	0.129	4.139	0.000
1b1	Environment and safety -> International patient intention	0.461	0.136	3.295	0.001
1b2	Culture and historical attractions -> International patient intention	-0.141	0.017	1.162	0.245
1b3	Tourism facilities -> International patient intention	0.009	0.000	0.075	0.941

A path coefficient evaluation in Table (4) shows the following results:

- The pull factors have a significant positive effect on the international patient intentions by 54.29% at a confidence level of 99.9%. Therefore, H1 is accepted.
- The healthcare provider service has a significant positive effect on the international patient intentions by 33.9% at a confidence level of 99%. Therefore, H1a is accepted.
- The service quality has a non-significant effect on the international patient intentions. Therefore, H1a1 is rejected.
- The waiting time has a non-significant effect on the international patient intentions. Therefore, H1a2 is rejected.
- The medical cost has a non-significant effect on the international patient intentions. Therefore, H1a3 is rejected.
- The destination specific has a significant positive effect on the international patient intentions by 35.8% at a confidence level of 99.9%. Therefore, H1b is accepted.
- The environment and safety has a significant positive effect on the international patient intentions by 46.1% at a confidence level of 99.9%. Therefore, H1b1 is accepted.
- The culture and historical attractions have a non-significant effect on the international patient intentions. Therefore, H1b2 is rejected.
- The tourism facilities have a non-significant effect on the international patient intentions. Therefore, H1b3 is rejected.

In addition, the factors can be arranged based on the effect size (F2). And effect size of 0.02, 0.15, and 0.35 reflect weak, medium, and strong effect size. Accordingly, the pull factors can be arranged as following: the destination specific (effect size = 0.129) then the healthcare provider service (effect size = 0.113). More specifically, the destination specific can be arranged as following: environment and safety (effect size = 0.136), culture and historical attractions (effect size = 0.017), then the tourism facilities (effect size = 0.000). Finally, the healthcare provider service factors can be arranged as following: the service quality (effect size = 0.019), waiting time (effect size = 0.009), and medical cost (effect size 0.002).

Moreover, the most effective factor of the pull factors is the destinations specific factors. More specifically, the most effective factor of the healthcare provider service is the service quality and the most effective factor of the destination specific factor is the environment and safety.

Finally, the predictive ability of the model can be evaluated via three criteria, namely, the coefficient of determination, the predictive relevance, and the PLS predict (Assaf & Tsionas, 2019; Shmueli et al., 2019). In this regard, the variance coefficient or coefficient of determination of 0.25, 0.5, and 0.75 reveals weak, moderate, and strong predictive power. In addition, a Blindfolding procedure to get the Q squared of 0.02, 0.15, and 0.35 reveals weak, moderate, and strong predictive relevance. Finally, if the Mean Absolute Error (MAE) of all, major, minor, none of the measurement items in PLS-SEM is lower than in linear regression model (LM), the PLS prediction validates the model's higher, medium, low, and none predictive potential. In this regard, Table (5) reports the results of the model predictive ability.

Table (5), Predictive Ability Evaluation

R ²	Q ²	PLS predict, k =5, r =10				
		Measurement items	PLS-SEM		LM	PLS – LM
			Q ² _predict	MAE	MAE	MAE difference
0.328	0.212	DV3	0.264	0.614	0.617	-0.003
		DV4	0.297	0.643	0.652	-0.009
		DV2	0.100	1.100	1.101	-0.001
		DV1	0.091	1.094	1.110	-0.016

According to Table (5), the model has a moderate explanation factor, R² = 32.8% (less than 0.5). Moreover, the model has a moderate predictive relevance Q² 21.2% (less than 0.35). Finally, since these measures have shortcoming, the new PLS prediction validates the model's excellent predictive potential by lowering the mean absolute error of all measurement items in PLS-SEM compared to LM.

5. Discussion

This research provides empirical evidence that adds to the industrial medical tourism literature, which still suffers from scarcity of empirical work. By measuring the relationships of pull factors on patient intention, Also, the interrelation of pull

factors on each other in a country whose culture is different from Western and Asian cultures.

The present research addresses one main objective. Were to distinguish important pull motivation factors toward Egypt. To address this objective, nine hypotheses were proposed for this objective, which are H1, H1a, H1a1, H1a2, H1a3, H1b, H1b1, H1b2, and H1b3 as follows:

- H1: which stated that "there is a significant relationship between pull factors and international patient's intention to visit Egypt as a medical tourism destination" The Pull factors have a significant positive effect on the international patient intentions by 54.29% at confidence level 99.9% Therefore, H1 is accepted.
- H1a: Which stated that " there is a significant relationship between healthcare provider specific and international patient's intention to visit Egypt as a medical tourism destination". The Healthcare provider service has a significant positive effect on the international patient intentions by 33.9% at confidence level 99% Therefore, H1a is accepted.
- H1a1: Which stated that " there is a significant relationship between service quality and international patient's intention to visit Egypt as a medical tourism destination". The Service quality has a non- significant positive effect on the international patient intentions by 17.1% at confidence level 95% Therefore, H1a1 is rejected.
- H1a2: Which stated that "there is a significant relationship between waiting time and international patient's intention to visit Egypt as a medical tourism destination" the waiting time has a non- significant positive effect on the international patient intentions by 11.8% at confidence level 95% Therefore, H1a2 is rejected.
- H1a3: Which stated that " there is a significant relationship between medical cost and international patient's intention to visit Egypt as a medical tourism destination". The Medical cost has a non- significant positive effect on the international patient intentions by 4.2% at confidence level 95% Therefore, H1a3 is rejected.
- H1b: Which stated that: there is a significant relationship between destination specific and international patient's intention to visit Egypt as a medical tourism destination". The destination specific has a significant positive effect on the international patient intentions by 35.8% at confidence level 99.9% Therefore, H1b is accepted.
- H1b1: Which stated that "there is a significant relationship between environment and safety and international patient's intention to visit Egypt as a medical tourism destination". The Environment and Safety has a significant positive effect on the international patient intentions by 46.1% at confidence level 99.9% Therefore, H1b1 is accepted.
- H1b2: Which stated that "there is a significant relationship between cultural and historical attractions and international patient's intention to visit Egypt as a

medical tourism destination" The Culture and historical attractions have a non-significant negative effect on the international patient intentions by 14.1% at confidence level 95% Therefore, H1b2 is rejected.

- H1b3: Which stated that" there is a significant relationship between tourism facilities and international patient's intention to visit Egypt as a medical tourism destination". The Tourism facilities have a non-significant positive effect on the international patient intentions by 14.1% at confidence level 95% Therefore, H1b3 is rejected.

6. Managerial Implications and Recommendations

The research provides practical implications for managers, doctors, hotels, and service providers in medical tourism sector in Egypt and better understanding of travel drivers which might help destination planners understand the changing patterns of traveler behavior and also the ways during which these changes have evolved over time. The theories examined above, when mixed with marketing strategies, can facilitate the creation of more relevant promotional directions and properly aligned approaches, ensuring that destination offerings reach the foremost relevant and comprehensive customer bases. In light of the research findings and the insights gained from exploratory phase of the research, the destination marketing organizations and stakeholders, as they provide clues as to how their products are designed and aligned with the market. Marketers should consider the following:

First, understand key aspects of travelers' motivations, and improve how planners perceive travel behaviors and factors that influence their decision-making processes. Applications of travel motivation theories provide insights into the behavior of tourists in specific destinations, including, among other factors, what tourists are looking for, what they want to experience while on vacation, the activities they are looking for and how they want to spend their comprehensive vacation.

Second, With respect to Maslow's Hierarchy of Needs (1943), the current research highlights that after a traveler's need is satisfied, the subsequent higher need arises. However, not all tourists have the identical needs, so further segmentation is extremely important so as to see the requirements and motivations of every segment at any given moment. The wants of tourists are constantly evolving and vary greatly between individuals. Therefore, planners must constantly adapt their offer to fulfill the wants, desires and expectations of tourists (Heather Gibson, 2002) in step with age, gender, lifestyle, education and income. As societies evolve and use technology, so do consumers' needs.

Third, the results of this research highlight the role of the environment in contributing to a customer-oriented heritage and cultural sector, this research offers some empirical direction for managers of heritage/cultural attractions. As a result, there's an ongoing need for research examining ways to form tourism facilities / attractions more competitive and supply greater differentiation during a highly competitive market. This research provides some guidance for attraction managers to

make sure that their attractions increase the revenue that's spent to entice the buyer and make a singular and memorable experience for his or her visitors.

Fourth, Combining current research and presenting various motivational theories as a coherent theoretical framework can provide a more robust understanding of the causes of medical tourists travel. This could help marketing managers and / or destination planners strategize their offerings. Application of theories to practical knowledge can encourage the choice of the most effective long-term policies and plans only, which might boost value creation and improve the way the tourism industry operates and integrates with its products.

Thus, Pull factors, as explained by Dan (1977), can help planners increase and enhance destination offerings by promoting attractions that can include better prices, increased quality of service, and good infrastructure. The cited motivational theory provides marketers with a clearer understanding of the factors within their destination that are important to the travelers who choose the destination. Because quality of service is a factor that motivates tourists to travel, destination planners must understand how they have to improve their service standards to attract travelers. In addition, Quality defined within the present research as meeting the necessities of a customer's needs and desires and these requirements need to be above the expectations so as to own a protracted term relationship, stay within the business and have the competitive advantage over the competitors (Zakaria, Hamid, & Karim, 2009).

Finally, Analyzing medical tourism from a pull perspective is beneficial to the industry, as it allows portraying the whole picture of the industry and revealing its strengths and weaknesses. The pull factors analysis highlights the key points of what medical tourists need, also, the information gleaned from such studies also has implications for the medical and hospitality services in one organization and on the industry as a whole, provide valuable information on medical tourism establishments in terms of promotional activities, infrastructure development and superstructure. Moreover an analysis and comparison of pull factors in a particular country or region, as well as their interaction with the decisions made by medical tourists, will undoubtedly reveal the managerial and structural approaches taken by all market players in the medical tourism industry.

7. Limitations and Future research

Medical tourism has become an important industry that tourism organizations cannot ignore. Given that this niche industry brings together the medical and tourism sectors, and has enormous economic and social implications, especially in developing countries, studies in this area will be of great interest to researchers and practitioners in both sectors. This research acknowledges some limitations, in which these limitations may also provide fruitful areas for future research. These limitations must be overcome to improve the accuracy and validity in the interpretation of this research.

First, this investigation refers only to one sector and a specific geographical area. Consequently, further investigation would be useful for generalizing the results to other sectors and other geographical areas. Limited generalizability of the results to broader contexts due to the specific sampling context (non-probability sampling), so for future research (systematic sampling) may be applied.

Second, the research is cross-sectional in nature and primary data collected at certain point of time not for a period of time (longitudinal research) as development of intention among customers can best be determined through longitudinal research. The research has not been able to take customers' past behavior into consideration. The data collected will be adequate for statistical analysis but for more accuracy and precision larger sample size could have been taken.

Third, the present research depends on perceptions of patients to investigate pull factor relationship (single cross-sectional) the usage of a single source approach (patients) introduces limitations. Future research needs to expand this research to investigate both (doctors and service providers) perceptions (multi-cross-sectional). Also, this research depends on descriptive and quantitative research which needs experimental method research for further research. Fourth, few factors were selected based on the result of the exploratory research on medical tourism sector in Egypt; further research should include other factors such as perceived value. Also recommending the development and testing of models that incorporate other moderators, mediators, antecedent variables, in an integrated model.

Furthermore, the results provide concrete evidence of the role of pull drive in boosting visitor numbers; there is still a great deal of investigation that needs to be addressed. The relationship between motivational dimensions and demographic characteristics not addressed in this research, this finding contrasts with previous research (Chang & Jogaratnam, 2006), which found that demographic characteristics (education and income) affected the travel motivation of women traveling alone. Further research needed to address the effect of demographics on medical tourism sector.

References

- Abeer Attia, Dalal Abd El-Hady & Salma El-Manhaly (2015). The Role of Dark Tourism in Developing the Demand for the Egyptian Tourist Product. *JOURNAL OF TOURISM RESEARCH*. VOLUME 12
- Abkar et al., (2010). Impact of Employee Empowerment on Job Satisfaction: An Empirical Analysis of Pakistani Service Industry, *INTERDISCIPLINARY JOURNAL OF CONTEMPORARY RESEARCH IN BUSINESS*. VL/2.
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckman (Eds.), *Action-control: From cognition to behavior* (pp. 11–39). Heidelberg, Germany: Springer.
- Aziz, Y. A., Samdin, Z., Awang, K. W., & Adbullah, Z. (2015). Developing an index for medical tourism. *International Business Management*, 9(4), 412–415.
- Baloglu & Uysal, 1996, Market segments of push and pull motivations: a canonical correlation approach, *International Journal of Contemporary Hospitality Management* ISSN: 0959-6119.

- Baloglu & McCleary, 1999; Bigne, Sanchez, & Sanchez, 2001). Tourism image, evaluation variables and after purchase behavior: Inter-relationship December 2001 *Tourism Management* 22(6):607-616, DOI: 10.1016/S0261-5177(01)00035-8
- Bansal, H., & Eiselt, H. A. (2004). Exploratory research of tourist motivations and planning. *Tourism Management*, 25(3), 387–396.
- Barrowman, Grubor, & Chandu, 2010; Elliot-Smith, 2010; Glinos & Baeten, 2006; Hall, 2013; Lee, Kearns, & Friesen, 2010; Musa et al., 2011; Vequist & Stackpole, 2012). Dental tourism: Examining tourist profiles, motivation and satisfaction, *Tourism Management*, Volume 61, August 2017, Pages 538-552
- Beladi, H., Chao, C.-C., Ee, M. S., & Hollas, D. (2015). Medical tourism and health worker migration in developing countries. *Economic Modeling*, 46, 391– 396. doi: 10.1016/j.econmod.2014.12.045
- Bernstein, 2012; Hume & DeMicco, 2007; Sheehan-Smith, 2006), Customer retention in the medical tourism industry: Impact of quality, satisfaction, trust, and price reasonableness. *Tourism Management*, Volume 46, Pages 20-29
- Bookman & Bookman, 2007; Han & Hwang, 2013; Heung et al., 2011. Multi-dimensions of the perceived benefits in a medical hotel and their roles in international travelers' decision-making process. *International Journal of Hospitality Management* Volume 35, Pages 100-108
- Borman and Jonathan, Screening for Candida auris in patients admitted to eight intensive care units in England, 2017 to 2018, *Europe's journal on infectious disease surveillance, epidemiology, prevention and control*, Volume 26, Issue 8, 25/Feb/2021.
- Bosselman, (1978). Governmental responses to tourism development: three Brazilian case studies, *Tourism Management*, Volume 24, Issue 1, February 2003, Pages 97-110.
- Byon & Zhang, 2010; Chen & Tsai, 2007. How Destination Image and Evaluative Factors Affect Behavioral Intentions? August 2007 *Tourism Management* 28(4):1115-1122, DOI:10.1016/j.tourman.2006.07.007
- Carrera, P., & Lunt, N. (2010). A European perspective on medical tourism: The need for a knowledge base. *International Journal of Health Services: Planning, Administration, Evaluation*, 40(3), 469–484. doi: 10.2190/HS. 40.3.
- Chacko, (2006). What is known about the effects of medical tourism in destination and departure countries? A scoping review, *International Journal of Equity Health*. 2010; 9: 24. Published online 2010 Nov 3. doi: 10.1186/1475-9276-9-24
- Chang & Jogaratnam, 2006. The Impacts of Hospitality Services on Visit Experience and Future Visit Intention of Student Travelers. *International Journal of Business and Technopreneurship*.
- Choi, K., Lee, T. J., & Kim, H.-K. (2004). Strategic marketing development of hospitals participating in medical tourism: A case of South Korea. *Tourism Analysis*, 20, 129–136.
- Chun, 1990; Lopez, 2011; May, 1975. Cultural Correlates of Burden in Primary Caregivers of Older Relatives: A Cross-sectional Study, 03 March 2014 <https://doi.org/10.1111/jnu.12070>
- Chun, M., Knight, B. G., & Youn, G. (2007). Differences in stress and coping models of emotional distress among Korean, Korean-American and White-American caregivers. *Aging and Mental Health*, 11(1), 20– 29. doi:10.1080/13607860600736232
- Connell, (2006). Medical tourism: Sea, sun, sand and ... surgery, *Tourism Management*, Volume 27, Issue 6, December 2006, Pages 1093-1100
- Cohen, E. (1972). Toward sociology of international tourism. *Social Research*, 39(1): 164-82.
- Crompton, J. (1979). Motivations of pleasure vacations. *Annals of Tourism Research*, 6(4): 408-424.
- Crooks, V. A., Kingsbury, P., Snyder, J., & Johnston, R. (2010). What is known about the patient's experience of medical tourism? A scoping review. *BMC Health Services Research*, 10, 266. doi: 10.1186/1472-6963-10-266.

- Crush, J., & Chikanda, A. (2015). South-South medical tourism and the quest for health in Southern Africa. *Social Science & Medicine* (1982), 124, 313–320. doi: 10.1016/j.socscimed.2014.06.025
- Dann, G. M. S. (1981). Tourist motivation an appraisal. *Annals of Tourism Research*, 8(2), 187–219. doi: 10.1016/0160-7383(81)90082-7
- Dangor et al., 2015; Jun & Oh, (2015). Medical tourism by Indian-South Africans to India: An exploratory investigation. *Bulletin of Geography: Socio-Economic Series*, 29, 19–30.
- Ehrbeck, Guevara, & Mango, (2008). Mapping the market for medical travel, *McKinsey Quarterly*.
- Eissler, L., & Casken, J. (2013). Seeking health care through international medical tourism. *Journal of Nursing Scholarship*, 45(2), 177–84. doi: 10.1111/jnu.12014
- Ferrero, (2009), Intending, acting, and doing, *Philosophical Explorations*, 10.1080/13869795.2017.1356353, 20, sup2, (13-39).
- Fluker, M. R., & Turner, L. W. (2000). Needs, motivations, and expectations of a commercial white water rafting experience. *Journal of Travel Research*, 38(4), 380–389.
- Gan, L. L., & Frederick, J. R. (2013). Medical tourists: Who goes and what motivates them? *Health Marketing Quarterly*, 30(2), 177–194. doi: 10.1080/07359683.2013.787894
- George, 2003; Ayob & Masroni, (2014). Issues of Safety and Security: New Challenging to Malaysia Tourism Industry, January 2014SHS Web of Conferences 12(2), DOI:10.1051/shsconf/20141201083
- Gill, H., & Singh, N. (2011). Exploring the factors that affect the choice of destination for medical tourism. *Journal of Service Science and Management*, 4(3), 315–324. doi:10.4236/jssm.2011.43037
- Gotecastera, (2010) Khan et al., 2016a; Khan, Chilia, and Haroun, 2016b; Lam, de Croce, and Fong, 2011; Viladrich & Baron-Faust, 2014.
- Goossens, C. (2000). Tourism information and pleasure motivation. *Annals of Tourism Research*, 27(2), 301–321
- Gunn, 1988; Moon et al., (2013). The influence of consumer's event quality perception on destination image, May 2011, *Journal of Service Theory and Practice* 21(3):287-303 DOI:10.1108/09604521111127974.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, P. L. (2006). *Multivariate data analysis* (6th ed.). Upper Saddle River, NJ: Prentice Hall.
- Hair, Joseph F. et al., (2020). Beyond a tandem analysis of SEM and PROCESS: Use of PLS-SEM for mediation analyses! *International Journal of Market Research*. <https://doi.org/10.1177/1470785320915686>.
- Hanqin, Z. Q., & Lam, T. (1999). An analysis of Mainland Chinese visitor's motivation to visit Hong Kong. *Tourism Management*, 20(5), 587–594.
- Hanefeld, J., Lunt, N., & Smith, R. (2014). Health tourism and the NHS: Facts or fiction? *Lancet* (London, England), 382(9890), e2. doi: 10.1016/S0140-6736(13)61675-X
- Hanefeld, J., Lunt, N., Smith, R., & Horsfall, D. (2015). Why do medical tourists travel to where they do? The role of networks in determining medical travel. *Social Science and Medicine*, 124, 356–363. doi: 10.1016/j.socscimed.2014.05.016
- Heather Gibson, (2002). Leisure in the lives of retirement-aged women: Conversations about leisure and life. *Leisure/Loisir* 28:3-4, pages 203-230.
- Henderson, J. C. (2003). Healthcare tourism in south east Asia. *Tourism Review International*, 7(3–4), 111–121.
- Henson, J. N., Guy, B. S., & Dotson, M. J. (2015). Should I stay or should I go? Motivators, decision factors, and information sources influencing those predisposed to medical tourism. *International Journal of Healthcare Management*, 8(1), 4–14.
- Hsu, C. H. C., & Huang, S. (2008). Travel motivation: A critical review of the concept's development. In A. G. Woodside & D. Martin (Eds.), *Tourism management: Analysis, behavior and strategy* (pp. 14–27). Cambridge, MA: CABI Publishing.

- Jang, S., Bai, B., Hu, C., & Wu, C-M. E. (2009). Affect, travel motivation, and travel intention: A senior market. *Journal of Hospitality & Tourism Research*, 33(1), 51–73.
- Jeong, (2014). Advanced communication systems for enhanced big data technology and applications *INTERNATIONAL JOURNAL OF COMMUNICATION SYSTEMS* Int. J. Commun. Syst.2014; 27:825–827. DOI: 10.1002/dac.2789
- Klenosky, D. B. (2002). The “pull” of tourism destinations: A means-end investigation. *Journal of Travel Research*, 38(4), 411–416.
- Lee, H. K., & Fernando, Y. (2015). The antecedents and outcomes of the medical tourism supply chain. *Tourism Management*, 46, 148–157. doi: 10.1016/j.tourman.2014.06.014
- Lee, M., Han, H., & Lockyer, T. (2012). Medical tourism— Attracting Japanese tourists for medical tourism experience. *Journal of Travel & Tourism Marketing*, 29(1), 69–86. doi: 10.1080/10548408.2012.638564
- Lunt, N., Horsfall, D., & Hanefeld, J. (2016). Medical tourism: A snapshot of evidence on treatment abroad. *Maturities*, 88, 37–44. doi: 10.1016/j.maturitas.2016.03.001
- Lunt, N. T., Mannion, R., & Exworthy, M. (2011). A framework for exploring the policy implications of UK medical tourism and international patient flows. *Social Policy and Administration*, 47(1), 1–25. doi: 10.1111/j.14679515.2011.00833.
- Mat Som, (2010). an Analysis of Push and Pull Travel Motivations of Domestic Tourists in Nepal, *International Journal of Business and Management* Vol. 5, No. 12.
- Martin, D. S., Ramamonjariavelo, Z., & Martin, W. S. (2011). MEDTOUR: A scale for measuring medical tourism intentions. *Tourism Review*, 66(1/2), 45–56. doi: 10.1108/1660537111127233
- Mmutle & Shonhe, (2017). The role of service performance mediating the effect of management commitment to service quality structure on the reputation of hospitality industry companies in West Java, *Management Science Letters* 10(12):2869–2874 DOI:10.5267/j.msl.2020.4.021
- Moutinho, (1987). Consumer Behavior in Tourism, *European Journal of Marketing*, ISSN: 0309-0566
- Nicolau, J. L., & Mas, F. J. (2006). The influence of distance and price on the choice of tourist destinations: The moderating role of motivations. *Tourism Management*, 27(5), 982–996.
- Ogorlec & Snoj, (1998). Guests' satisfaction with tourism services: A case of health resorts in Slovenia, *The Tourist Review*, ISSN: 0251-3102, Article publication date: 1 February 1998.
- Oliver RL. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Marketing Research Journal*; 17(3):460–9.
- Pafford, (2009). the Third Wave—Medical Tourism in the 21st Century, September 2009 *Southern Medical Journal* 102(8):810-3, DOI:10.1097/SMJ.0b013e3181aa8ce4.
- Panteli et al., (2015). Medical tourism services and medical tourism destinations in Central and Eastern Europe - *Economic research*, Vol. 32 No. 1, 2015.
- Parasuraman A, Zeithaml V, Berry L. (1985). A conceptual model of service quality and its implications for future research. *Marketing Research Journal*; 49(4):41–50.
- Pearce, P. L. (1982). Perceived changes in holiday destinations. *Annals of Tourism Research*, 9(2): 145-164.
- Pearce, P. L., & Lee, U. (2005). Developing the travel career approach to tourist motivation. *Journal of Travel Research*, 43(3), 226–237.
- Ramamonjariavelo, Z., Martin, D. S., & Martin, W. S. (2015). The determinants of medical tourism intentions: Applying the theory of planned behavior. *Health Marketing Quarterly*, 32(2), 165–179. doi: 10.1080/07359683.2015.1033934.
- Saiprasert, 2011; Chetthamrongchai, (2017).The Influence of Travel Motivation, Information Sources and Tourism Crisison Tourists' Destination Image, January 2017, *Journal of Tourism & Hospitality* 06(02) DOI:10.4172/2167-0269.1000278
- Sarantopoulos, I., Vicky, K., & Geitona, M. (2014). A supply side investigation of medical tourism and ICT use in Greece. *Procedia—Social and Behavioral Sciences*, 148, 370–377. doi: 10.1016/j.sbspro.2014.07.055

- Smith and Puczko (2009). Health and Wellness Tourism January 2009. DOI:10.4324/9780080942032
- Suthin, Assenov & Tirasatayapitak, (2007). Ormond & Mainil, 2015, promotion of medical tourism in tertiary care hospitals of Delhi: opinion of medical administrators and managers. *Health and population :perspectives and issues* 32(3):159-165.
- Taylor et al., (2005). cultural differences in the impact of social support on psychological and biological stress responses. *Psychological science* 18(9):831-7. doi:10.1111/j.1467-9280.2005.01987.x
- Tran, X., & Ralston, L. (2006). Tourist preference influence of unconscious needs. *Annals of Tourism Research*, 33(2), 424–441.
- Turner, L. (2010). “Medical tourism” and the global marketplace in health services: U.S. patients, international hospitals, and the search for affordable health care. *International Journal of Health Services*, 40(3), 443–467. doi: 10.2190/HS.40.3.d
- Uysal (2005) an Examination of the Effects of Motivation and Satisfaction on Destination Loyalty, *Tourism Management* 26(1):45-56 doi:10.1016/j.tourman.2003.08.016
- Uysal, M., & Jurowski, C. (1994). Testing the push and pull factors. *Annals of Tourism Research*, 21(4), 844–846. doi: 10.1016/0160-7383(94)90091-4
- Veerasoontorn, R., & Beise-Zee, R. (2010). International hospital out shopping: A staged model of push and pull factors. *International Journal of Pharmaceutical and Healthcare Marketing*, 4(3), 247–264. doi:10.1108/17506121011076174
- Viladrich & Baron-Faust (2014) Medical tourism in tango paradise: The internet branding of cosmetic surgery in Argentina, March 2014, *Annals of Tourism Research* 45:116–131, DOI:10.1016/j.annals.2013.12.007, Project: Medical Tourism (in Argentina).
- Walker, J. R., & Walker, J. T. (2010). *Tourism: Concepts and practices*. Upper Saddle River, NJ: Pearson Education.
- Walsh, K. (2014). The economics of medical education. *Irish Medical Journal*, 107(1), 28–29.
- Webb, T. L., & Sheeran, P. (2006). Does changing behavioral intentions engender behavior change? A meta-analysis of the experimental evidence. *Psychological Bulletin*, 132(2), 249–268. <https://doi.org/10.1037/0033-2909.132.2.249>.
- Wu, H., Li, T., & Li, M. (2008). A study of behavioral intentions, patient satisfaction, perceived value, patient trust and experiential quality for medical tourists. *Journal of Quality Assurance in Hospitality & Tourism*, 17(2), 114–150. doi: 10.1080/1528008X.2015.1042621.
- Yoon, Y., & Uysal, M. (2005). An examination of effects of motivation and satisfaction on destination loyalty: A structural model. *Tourism Management*, 26(1), 45–56.
- Yu and Ko (2012, p. 81), Transcutaneous ultrasound for evaluation of vocal fold movement in patients with thyroid disease, *European Journal of Radiology* Volume 81, Issue 3, March 2012, Pages e288-e291.
- Yu, J., Lee, T. J., & Noh, H. (2011). Characteristics of a medical tourism industry: The case of South Korea. *Journal of Travel & Tourism Marketing*, 28, 856–872. doi: 10.1080/10548408.2011.623052.
- Zakaria, Hamid, & Karim, (2009). Measuring Tourist Behavioral Intention Through Quality in Malaysian Medical Tourism Industry. *Procedia Economics and Finance* Volume 31, 2015, Pages 280-285.
- Zakaria, Z., Hamid, A.C., & Karim, Z.A., (2009). Tourists’ Expectations and Perceptions on the Service Quality in Malaysian Tourism Industry. *Global Business and Management Research: An International Journal*, 1(3 & 4), 69-83.
- Zainal, Radzi, Hashem, Shek, Abu, (2012). Does Marketing Success Factors Influence Private College Admission? Evidence From Malaysia, June 2019, *International Journal of Financial Research* 10(5):440, DOI:10.5430/ijfr.v10n5p440.
- Zhang, Q. H. & Lam, T. (1999). An analysis of Mainland Chinese visitors’ motivations to visit Hong Kong. *Journal of Tourism Management*, 20(5), 587–594.