

Medical Tourism as a New Form of Niche Tourism in Egypt

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Abstract

Medical Tourism is an occasion where people who live in one country travel to another country to receive medical treatment, dental or surgical care. It is a growing new niche market in developing countries, where they can expand tourism products and maximize revenues. Recently, Egypt has emerged as a new medical destination through the innovation '*Tour n' Cure*', which motivates patients of Hepatitis 'C' to visit Egypt to receive affordable medical tourism packages. The study primary aim is to examine the contemporary growth of 'medical tourism', where medical treatment is deliberately associated with tourism. Moreover, the research explored international tourists' perception of medical tourism in Egypt. A questionnaire survey was conducted among a random sample drawn from tourists who used medical services in Egypt. The findings indicated that most of the tourists who visited Egypt for medical purpose were from Arab and Muslim countries, where they receive high quality medical services at international standards medical facilities at affordable prices, while staying in a first class accommodation and enjoying Egypt tourists' attractions.

Keywords: Egypt; Health tourism; Medical tourism Niche tourism; Pull factors; Push Factors.

Introduction

Medical tourism offers patients quick and convenient medical services via tourism, at lesser costs and, sometimes, at better quality than what they would receive in their home countries (Yu and Ko, 2012). Medical tourism is a fast growing niche market. It is considered a new form of tourism and a new market segment that emerged as a result of changing times and perceptions (Yu and Ko, 2012). It is a unique niche tourism that has developed to satisfy the needs of an increasing number of tourists, mostly in developed countries and an increasing number of destinations, mainly in developing countries (Connell, 2006). Medical tourism was estimated to be \$11 billion dollar in 2012 and was expected to reach \$33 billion by the end of 2019, with annual growth rate of 18% (Ganguli and Ebrahim, 2017). Deloitte (2009) estimates that there are about six million people engaging in medical tourism per year. It is also considered to be \$100 billion dollar industry (Fetscherin and Stephano, 2016).

The interest in developing tourism associated with healthcare industry has increased globally, and medical tourism is now marketed as a niche product that includes both medical services and tourism packages (Connell, 2006). Medical tourism is developing rapidly in many countries such as Hong Kong, India, Iran, Korea, Latin America, Singapore, Taiwan, Thailand and Turkey (Sarantopoulos et al., 2014; Tsoi, 2008; Yu and Ko, 2012). Middle Eastern countries such as; Jordan, Tunisia and the United Arab Emirates, are considered the most favorite medical-tourist destinations in the region, bringing almost competition to the area (Hallem and Barth, 2011; RNCOS, 2008). Egypt is emerging as a new medical tourist's destination, where recently, the Egyptian government has designated the country as a hub of medical treatment for Hepatitis 'C' to attract tourists from all over the world to seek cheap and effective treatment (Newmanon, 2017). In the effort to promote Hepatitis 'C' treatment; the world-renowned Argentinean football player Lionel Messi visited Egypt as part of the campaign '*Tour n' Cure*', which motivates patients of Hepatitis 'C' to visit Egypt to receive affordable medical tourism packages, where they can be treated for the disease while promoting tourism to the country (El-Nadar, 2017).

The study primary aim is to examine the contemporary growth of ‘medical tourism’, where medical treatment is deliberately associated with tourism. Numerous researches have been carried out in the field of decisive factors on the destination choice for medical tourism (Moghimehfar and Nasr-Esfahani, 2011). Yet, there is lack of research on this field in Egypt, especially, when assessing tourists’ characteristics and destination selection. It is forecasted that participants’ perceptions would vary depending on how well medical services and tourism are combined and integrated (Yu and Ko, 2012). Thus, the research main objective is to explore international tourists’ perception of medical tourism in Egypt. Though the study investigated the following research questions: what are the characteristics of tourists participated in medical tourism in Egypt? And, what are the factors that influence tourists’ perception of medical tourism in Egypt?

The paper is divided into five sections, where in the first section an introduction and background of the topic was given. Section two presented the existing relative literature. Section three discussed the survey methods adopted. The findings derived were discussed in section four. The last section concluded the paper and recommendations for implications and future research were also provided.

Literature Review

Medical tourism is not a new phenomenon; people have traveled to foreign countries to receive treatment for many years (Richard et al., 2011). The international travel history traces back medical tourism in time when patients traveled to spas in Europe and other places (Yu and Ko, 2012). For example, in the Middle East, Pharaoh Cleopatra is known to have built one of the first world’s spa resorts on the beach of the Dead Sea around 25 BC, and the Romans left behind a long list of bathing houses that they established between 54 BC and 450 AD around Europe, the Middle East and North Africa (Erfurt-Cooper and Cooper, 2009).

In the last couple decades, the concept of well-being while on vacation has gone further than ever before. No longer is improved health on vacation the only expected consequence of escape from the stressing work environment, but in some situations medical treatment has become the main reason of tourism (Connell, 2006). This legacy continued to the present ‘health tourism’, where tourists visit health spas for beneficial health outcomes (Schofield, 2004). Unfortunately, some authors have used ‘health tourism’ for all forms of health-related tourism (e.g. Garcia-Altes, 2005), but, it seems more beneficial to distinguish between medical tourism where medical treatment is included and an unintended benefit in relaxing contexts (Connell, 2006).

Though, there is a great confusion among the terms ‘health tourism’, ‘medical tourism’ and ‘wellness tourism’ in the related literature (Fetscherin and Stephano, 2016). Which might be due to the unclear boundaries between the terms as ‘a continuum exists from health (or wellness) tourism involving relaxation exercise and massage, to cosmetic surgery (ranging from dentistry to substantial interventions), operations (such as hip replacements and transplants), to reproductive procedures and even ‘death tourism’ (Connell, 2013, p. 2). Smith and Puczko (2009) suggest that ‘health tourism’ consists of ‘medical tourism’ and ‘wellness tourism’ and ‘medical tourism’ is the right term in which medical, surgical or dental interventions are used, anything else is ‘wellness tourism’.

The literature has provided various definitions of ‘medical tourism’. Connell (2006, p. 1094) defines ‘medical tourism as a niche has emerged from the rapid growth of what has become an industry, where people travel often long distances to overseas countries to obtain medical, dental and surgical care while simultaneously being holidaymakers’. Medical tourism involves not only seeking overseas medical treatment, but also searching for destinations which have the most technical proficiency and provide it at the most

competitive prices (English et al., 2005). Medical tourism is the process of combining products and services from the medical industry and the tourism industry together, i.e. treatment and vacation (Misung et al., 2012). Yu and Ko (2012, p. 81) emphasize on 'the degree of synthesis between medical services and tourism is also significant, in that medical tourism's fundamental characteristic is its combination of medical services and the tourism industry'.

The earliest form of medical tourism, in the period between the 18th and 20th century, wealthy patients used to travel from developing countries to medical centers in Europe and the United States of America for medical treatment, but, this trend was reversed in the late 20th century as less wealthier patients began to travel from developed countries to developing countries to receive medical treatment at a lower price (Johnson, et al., 2015; Misung et al., 2012). This trend has developed into a new niche market in developing countries, where the tourism industry has a great opportunity to expand its products (Abubakar and Ilkan, 2016), outsourcing local medical services (Hallem and Barth, 2011), and maximize revenues.

Currently, the global increase of medical costs and the decrease of medical insurance with the consequence reduction of medical coverage might encourage many patients to seek medical treatment in less developed countries where they balance between good quality and low cost (Hallem and Barth, 2011). Moreover, a growing interest in cosmetic surgery, LASIK eye surgery and different forms of cosmetic dental surgery, are not enclosed in the insurance in some countries like the UK and Australia (Connell, 2006). There lies the core of medical tourism nowadays (Bookman and Bookman, 2007). It is assumed that medical tourism could be beneficial to both developed and developing countries. On one hand, developed countries could solve the problem of long waiting lists and patients could benefit from the differences of cost, on the other hand, medical tourism is a profitable activity for developing countries (Hallem and Barth, 2011).

While, in Asia medical tourism is the result of 'the unlikely child of new global realities: the fallout of terrorism, the Asian economic downturn, internet access to price information, and the globalization of health services' (Levett, 2005, p. 27). Besides, the high costs of treatments combined with long waiting times, affordability of airfares to overseas destinations and favorable exchange rate changes contributed also to this phenomenon (Connell, 2006). Moreover, the rapid development of medical infrastructure in Asian nations, low costs, lack of waiting times, high-tech industries, developments in the information technology sector and internet services, establishment of international standards and certification processes and cooperation between insurance companies and hospitals to lower treatment costs are also factors to be taken into consideration as contributing factors (Yu and Ko, 2012).

Notably, the use of internet in health care industry has changed the medical tourism worldwide, especially, in information search and decision making (Hallem and Barth, 2011). Medical tourists could find information about destinations, tours, hospitals and medical procedures through numerous websites and portals for example: medicaltourism.com; discovermedicaltourism.com; onlinemedicaltourism.com; medexplorer.com; netdoctor.co.uk and medicdirect.co.uk (Bookman and Bookman, 2007; Hallem and Barth, 2011) and consult with medical professional and participate in support groups (Cline and Haynes, 2001). Moreover, it could be noticed the growth of numbers of hospitals and travel agents promoting medical packages on the internet (Hallem and Barth, 2011), where the medical tourist deal directly with the service provider to make medical consultation and reservation for the treatment and the tours online.

It could be realized that, 'medical tourism is conceptually full of nuances, contradictions and contrasts' (Yu and Ko, 2012, p. 82). This makes medical tourism an ambiguous notion

with a various implications (Fetscherin and Stephano, 2016). Thus, researchers look at the economic literature that divides the factors that affect the medical tourism construction into two categories; the demand side or ‘push factors’ and the supply side or ‘pull factors’, in an attempt to understand the phenomenon (Crompton, 1992; Dann, 1977). Dann (1977) introduced the concept of ‘push’ and ‘pull’ factors for tourism as part of the international trade and services. Researchers of medical tourism used the same two categories (Crompton, 1992):

- (1) push factors focus on factors that generate demand for medical tourism. They are primarily linked to tourists and contain factors such as socio-demographics (e.g., age, gender, income, education) or health related (e.g., insurance status, health status);
- (2) pull factors focus on what the destination have to offer for medical tourism. They are merely linked to the overall country environment (e.g., stable economy, country image), health care and tourism industry of the country (e.g., health care costs, popular tourist attraction) and quality of the medical services and facilities (e.g., quality care, accreditation, doctors’ reputation).

It worth mentioning, that these factors are connected and interdependent (Fetscherin and Stephano, 2016). So, every country has push and pull factors which are either encouraging or attracting medical tourism. The pull factors include the country attractiveness, while the push factors are accessed after surveying tourists from country of origin to gather information about the tourists’ socio-demographics. Combining medical treatment with an optional visits to tourists attractions (khan and Allam, 2014), is a deceive factor in the choice of medical destination. Nowadays, most medical tourists are from rich countries such as North America, Western Europe and the Middle East; where the costs of medical services in their countries are assumed to be very high, but their ability to pay for alternatives is also high (Connell, 2006).

Medical tourism is now a growing market where an increasing number of patients engaged and countries once described as ‘third world’ promoting medical tourism, competition is becoming tougher day after day (Deloitte, 2008; Hallem and Barth, 2011; Herrick, 20017). Countries are setting new ways to promote medical services, attracting more medical tourists, increasing their numbers and satisfying them (Hallem and Barth, 2011); to enhance their experience. This is considered a key component of the tourists’ decision making (Zeithaml, 1988). Connell (2006, p. 1094) states that ‘the biggest hurdle that medical tourism has had to face, and continues to face, is the challenge of convincing distant potential visitors that medical care in relatively poor countries is comparable with that available at home’.

Only a few years ago a few hospitals and countries promoted medical tourism, ‘today there are hundreds of hospitals and clinics and over thirty different countries promoting it’ (Saadatnia and Mehregan, 2014, p. 156). In spite of, the increasing number of countries offering medical tourism, but there is very little knowledge about many of the key features of medical tourism and the actual size of the industry (Fetscherin and Stephano, 2016). However, many countries have benefited from medical tourism, for instance; India’s medical tourism was expected to gain \$2 billion by the end of 2015 with an annual growth rate of 30 percent (Abubakar and Ilkan, 2016). Singapore is one of the most attractive medical destinations in Asia (Ganguli and Ebrahim, 2017). Medical tourism revenue was expected to be \$1.5 billion by 2016 with growth rate 13 percent (Beladi et al., 2015). Singapore’s government has played an important role in attracting medical tourists by signing agreements with Middle Eastern countries for the provision of medical services (Ganguli and Ebrahim, 2017). Thailand receives one million medical tourists every year (Fetscherin and Stephano, 2016). Turkey is considered as the second-largest medical

destination in Eurasia in terms of arrivals and revenues (Beladi et al., 2015). Almost half a million medical tourists visited Turkey in 2014 and revenue was estimated to reach \$1 billion in 2015 (Abubakar and Ilkan, 2016).

On the other hand, medical tourism has developed in some Arab countries for instance; Jordan brings in revenue of \$1 billion annually with annual growth 10 percent. Jordan gained its reputation for offering outstanding medical services for the Middle Eastern countries such as: Yemen, Libya, Palestine, Sudan and North African Countries, i.e. mainly from neighboring Arab-speaking counties (Jordan's Competiveness Report, 2007). Similarly, and according to Tunisian Ministry of health, 85 percent of the patients seeking medical treatments that are not affordable in their countries come from Arab countries such as: Libya, Algeria and Morocco (Hallem and Barth, 2011). The United Arab of Emirates has accomplished a recognizable success in medical tourism in the Arab region, which is showed by the sharp increase of medical tourists in the last three years. The UAE focuses at becoming the medical tourism hub for the Gulf Cooperation Council countries by continuous and efficient marketing, building first class medical infrastructure, hiring top trained foreign doctors and staff, simplifying legalization for visa process, providing attractive medical packages and international cooperation with medical tour operators (khan and Allam, 2014).

For many years Egypt tourism is known for its climate, beaches especially in Sharm El Sheik and Hurgada and ancient civilization. Recently, Egypt has emerged as a new medical tourism destination, where patients can be treated at affordable prices. The most popular treatments in Egypt are cardiology, orthopaedics like hip replacement, cosmetic surgery and dentistry, offered at only 50 percent of the cost when compared to other countries in the world (Jagyasi, 2014). However, the low prices do not always mean low quality. The last few years has witnessed developments of private health care sector such as hospitals, clinics and eye care centers such as; Magrabi Eye Hospitals and Centers, Dar El-Fouad hospital (Helmy, 2011), Andalusia Group Hospitals and Saudi German Hospital. Some of these health care providers have gained international reputation through international accreditation, for example, Dar El-Fouad hospital is accredited by ISO (International Standard Organization) and JCI (Joint Commission International) (Helmy, 2011). Clinics are equated with those in the United Kingdom and most doctors and surgeons in Egypt received their credentials aboard from United Kingdom, Latin America or the United States (www.medic8.com). Patients are admitted immediately to medical services with no need to wait for long time to get an appointment with doctors (Jagyasi, 2014). Most of the patients taking medical trips in Egypt are from neighbor Arab countries such as; Libya, Sudan, Yemen, as well as, some African countries (Helmy, 2011).

To support medical tourism in Egypt; the Ministry of Health and Population within the initiative of promoting medical tourism has chosen 16 distinguished hospitals among the Ministry's hospitals (for example: Nasser Institute for Research and Treatment, Sheikh Zayed Hospital, Dar Al Shifa Hospital, Aswan Oncology Center, Luxor International Hospital and Sharm El Sheikh International Hospital) equipped with the latest medical devices, moreover, the ministry trained a team consisted of 10 from the working staff in each hospital (doctor- data entry- accountant- four nurses- three public relations) to be among the medical tourism units to provide medical treatments and services at international standard (State Information Service, 2017). 'Tour n' Cure' is the Egyptian latest initiative in medical tourism, which offers patients of Hepatitis 'C' from all over the world the opportunity to be treated with an effective and advanced complete treatment program, while enjoying their stay at a five star hotel with no waiting time and at a fraction of the cost (www.tourncure.com). Such, initiatives help to increase future medical tourism participation in Egypt.

Currently, Egypt seems to have all the ingredients necessary to become a medical tourism hub such as: good weather, proximity to markets, affordable medical services and tours prices, a wide range of services at integrated medical centers, health care professionals (Fady, 2016), delicious Egyptian cuisine and low foreign exchange rate. In addition to, accommodation in Egypt tends to be low in cost, so those who require staying longer time for their recovery have the chance to stay in world first class facilities for cheap prices (www.medic8.com).

However, Egypt's share from international health tourism (including both medical and wellness tourism) is not more than 0.7 percent (Ahmed and Rabee, 2014). Reasons holding Egypt back from claiming a fair share of the medical tourism include: the delay in establishing international quality standards in hospitals and setting specific medical tourism programs for different types of medical procedures that could be promoted through travel agencies, in addition to, the strong competition of medical tourism programs in other countries in the Middle East and Africa region such as: Jordan, Lebanon, Tunisia, South Africa and Turkey (Ahmed and Rabee, 2014; Fady, 2016).

Medical tourism can be beneficial to the Egyptian's economies nowadays, as it is estimated that the average medical tourist spends anywhere from five to 12 times the amount of what a typical tourist would spend on travel costs (www.projectsforegypt.com). Medical tourist tends to stay a longer period of time than any tourists that range between two to four weeks and would reach five to six weeks; they would extend their stay to 10 more days for recovering from medical procedures before heading back to their country as doctors recommendations, which they would spend as any regular tourists enjoying other tourism purposes (Eraqi et al., 2008). Moreover, the medical tourist would visit the destination frequently for medical follow ups, besides; most of the medical tourists do not travel alone but with a companion (Whitmore et al., 2015), which means double the spending. In addition to, medical tourism helps to create a positive image of the destination, especially for patients, and this of course encourages more visits to the destination for other tourism purposes which would support tourism in the destination (Al Samad et al., 2014).

Methodology

Research Instrument

Due to the lack of research on this topic in Egypt, the design of the questionnaire was based after consulting a focus group consisted of six health care industry experts including doctors and managers of medical hospitals. Types of medical-tourism services considered in the study were as follows: major medical procedures such as cardiology, orthopedic and joint replacement, surgery (major and minor) and cancer and hepatitis 'C' treatments. Minor medical procedures include dentistry and cosmetic dentistry, infertility treatment, cosmetic and plastic surgery and gastrectomy (weight loss surgery). The questionnaire included other factors that affect tourists' perception of medical tourism. A list of such factors was formed thorough literature review that was found in the study of Fetscherin and Stephano (2016); Moghimehfar and Nasr-Esfahani (2011) and Yu and Ko (2012). The focus group helped also in assessing the preliminary list of factors and added some more; resulting in a list consisted of 19 factors which were considered as key drivers for medical tourism. The 19 factors were grouped into three main categories entitled 'destination attractiveness' (eight factors), 'costs' (four factors) and 'medical facilities and services' (seven factors). Each factor in the questionnaire was evaluated using a five-point Likert scale ranging from 1= 'strongly disagree' to 5= 'strongly agree'. Finally, socio-demographic and general questions such as: gender, age, education, annual income and country of origin, in addition to, general information about the respondents' visit to Egypt,

were included also in the questionnaire. They were considered also as potential contributing factors. Prior to the formal survey, a pilot test was conducted among 10 international tourists to modify any ambiguous or misleading questions. This procedure provided valuable information about the questionnaire design, wording and measurement scales.

Sampling and Data Collection

A random sample was drawn from tourists whose main purpose for visiting Egypt was medical. The study was carried out during a five month period from December 2016 to April 2017 (during the peak tourism season in Egypt). The original questionnaire was written in English then translated into Arabic, as all respondents could read and understand either of these two languages. Since, there is neither published data on the size of medical tourism in Egypt nor on the distribution of medical tourists, thus it was very difficult to calculate an accurate sample size and reach the eligible respondents. Sixty questionnaires were collected from tourists who referred to three private hospitals, who agreed to participate in the study, in Alexandria and Cairo. Only 54 were usable for analysis as six of them were incomplete.

Data Analysis

Statistical analysis was completed using Statistical Package for Social Sciences (SPSS/version 20) software. First, the characteristics of the respondents' socio-demographic data, country of origin, types of medical services and purposes for visiting Egypt were presented using frequency and percentage distributions. Next, Mean and Standard Deviation was calculated in order to derive meaningful patterns of the measured factors. Finally, Pearson Correlation and Multi Variant Analysis were also conducted to measure the degree of inter-relationship between the different study variables. The Cronbach alpha shows an overall value of 0.86, which indicates internal consistency of the questionnaire (Kaiser, 1974; Nunnally, 1978).

Findings and Discussion

Medical Tourists' Characteristics

Table 1 demonstrates the socio- demographic characteristics of the respondents. The male accounted for 53.7% of the respondents, while 46.3% were female. The age groups' breakdown was as follows: 37% were between 50 and 59 years, 25.9% were between 30 and 39 years, 18.5% were between 40 and 49 years and 9.3% were less than 29 years or above sixty years. Regarding education those who completed college constituted 51.9% of the respondents, followed by high school graduates (37%) and post graduates (11.1%). Annual incomes were, from highest frequent to lowest, US\$25,000–49,999 (33.3%), US\$50,000–74,999 (27.8%), more than US\$75,000 (20.4%) and less than US\$25,000 (18.5%).

Table 1: Respondents' socio- demographic characteristics

	Frequency	Percentage
Gender:		
Male	29	53.7
Female	25	46.3
Age:		
Less than 29 years	5	9.3
30–39 years	14	25.9
40–49 years	10	18.5
50–59 years	20	37
60 years or more	5	9.3

Education:		
High School	20	37
College	28	51.9
Post-Graduate	6	11.1
Annual Income:		
Below \$25,000	10	18.5
\$25,000–49,999	18	33.3
\$50,000–74,999	15	27.8
\$75,000 or more	11	20.4

Table 2 lists the respondents' country of origin. The highest percent (55.6%) of these countries belonged to the Arab countries, followed by African countries (24.1%), then Asian countries (11.1%) and Eastern Europe countries (9.3%). Of these, six countries: Yemen, Saudi Arabia, Libya, Sudan, Palestine and Syria were from Arab countries. Three were from African countries: South Sudan, Kenya and Uganda. Two were from Asian countries: Malaysia, and Indonesia. In addition to, three were from Eastern European countries: Azerbaijan, Kazakhstan and Albania. This indicated that most of the respondents were from Arab countries, where they share the same language, religion and culture with Egypt. Other respondents come from neighbor African countries where they share history with Egypt. While, the rest of the respondents were from Asian and Eastern European countries, where they share religion with Egypt as these countries have large Muslim population. This result is confirmed by earlier studies such as: the studies of Esiyok and associates (2016) and Moghimehfar and Nasr-Esfahani (2011), where they assume that culture and religious similarities are important factors that attract potential medical tourists. The study of Esiyok and associates (2016) implies also that religious similarity may lessen any discomfort related with staying in a foreign country concerning unfamiliarity with values, beliefs and attitudes. Thus, sharing some similarities with the medical destination would increase medical tourism in Egypt.

Table 2: Respondents' country of origin

Country	Frequency	Percentage
Arabic countries:	30	55.6
Yemen	8	14.8
Saudi Arabia	6	11.1
Libya	6	11.1
Sudan	4	7.4
Palestine	3	5.6
Syria	3	5.6
African countries:	13	24.1
South Sudan	6	11.1
Kenya	4	7.4
Uganda	3	5.6
Asian countries:	6	11.1
Malaysia	3	5.6
Indonesia	3	5.6
Eastern Europe countries:	5	9.3
Azerbaijan	3	5.6
Kazakhstan	1	1.9
Albania	1	1.9

Table 3 identified the types of medical services accessed by the respondents. Surgery either major and minor was the highest medical services accessed (33.3%), followed by cosmetic or plastic surgery (24.1%) and orthopedic and joint replacement (12.9%).

Though, the remaining medical services had less than 10% frequency, dentistry and cosmetic dentistry and gastrectomy (weight loss surgery) (7.4%), infertility treatment (5.6%), cardiology and cancer treatment (3.7%), while, hepatitis ‘C’ treatment had only (1.9%). This is aligned with the study of Yu and Ko (2012), which confirms that both major and minor surgery display high demand from medical tourists, in addition to increasing demand for cosmetic or plastic surgery. However, it was disappointing that hepatitis ‘C’ treatment had only (1.9%), especially; that the Egyptian government puts a great weight on it to attract medical tourists, but this could be due to the novelty of the innovation and timing of the survey.

Table 3: Types of medical services

Medical services	Frequency	Percentage
Surgery (major and minor)	18	33.3
Cosmetic/plastic surgery	13	24.1
Orthopedic and Joint Replacement	7	12.9
Dentistry and Cosmetic Dentistry	4	7.4
Gastrectomy (weight loss surgery)	4	7.4
Infertility treatment	3	5.6
Cardiology	2	3.7
Cancer	2	3.7
Hepatitis ‘C’ (tour n’ cure)	1	1.9

Table 4 demonstrated general information about the respondents’ visit to Egypt. The results indicated that almost half (53.7%) of the respondents had visited Egypt before and 46.3% had visited Egypt once. Almost three quarters (74%) of the respondents combined their medical trip to Egypt with other tourism purposes. Among these purposes; sightseeing was ranked first (55%), followed by recreation (37.5%) and business (7.5%). This is a very beneficial result as medical tourism could be a key driver for other tourism purposes in Egypt.

Table 4: General information about the respondents’ visit to Egypt

	Frequency	Percentage
Number of visit to Egypt:		
First time visit	25	46.3
Repeated visitation	29	53.7
Medical trip to Egypt combined with other tourism purpose:		
Yes	40	74
No	14	26
Other purposes for visiting Egypt besides Medical Tourism:*		
Sightseeing	22	55
Recreation	15	37.5
Business	3	7.5

*n=40

Factors influencing tourists’ perception of medical tourism

The results of the analysis of factors regarding respondents’ perception of medical tourism in Egypt are illustrated in Table 5. The Mean scores (*M*) and Standard Deviation (*S.D.*) of each of the 19 factors in the three different categories were calculated. The results indicated that the highest factor category that influence respondents’ perception of medical tourism in Egypt was ‘costs’ ($M=3.85$, $S.D.=0.92$), followed by ‘medical facilities and services’ ($M=3.72$, $S.D.=0.97$) and ‘destination attractiveness’ ($M=3.48$, $S.D.=1.10$). All of

the respondents cited low travel costs as a major factors regarding perception of medical tourism, ranking it first, followed by experience of doctors. Pre- and post- medical care and high quality in treatments and supplies were ranked third and fourth. Good weather, low medical treatment costs, popular tourists' attractions, low accommodation costs, accredited medical centers (e.g., ISO, NCQA, ESQA) and low tours costs were among other strong factors.

All 'costs' such as: travel ($M=4.04$, $S.D.=0.86$), medical treatment ($M=3.87$, $S.D.=0.86$), accommodation ($M=3.76$, $S.D.=0.97$) and tours ($M=3.72$, $S.D.=0.98$) were important factors that influence perception of medical tourism. As Smith and Forgione (2007, p. 25) state, 'the number-one factor cited for why Americans travel abroad for health care is cost'. Previous studies confirm that most of medical tourists travel for treatment abroad for financial reasons (Herrick, 2007). Some figures show that treatment prices are 80 percent less abroad than the United States (walker, 2006). For instance, the rhinoplasty (nose reconstruction) procedure would cost only US\$1500 in Egypt compared to US\$4500 in the United States (Herrick, 2007). Thus, the medical services prices in Egypt are relatively low.

Regarding 'medical facilities and services', four factors were considered the most important such as: experience of doctors ($M=3.93$, $S.D.=1.13$), pre- and post- medical care ($M=3.93$, $S.D.=1.07$), high quality in treatments and supplies ($M=3.91$, $S.D.=0.96$) and accredited medical center (e.g., International Organization for Standardization (ISO), National Committee for Quality Assurance (NCQA), European Solutions in Quality Assurance (ESQA)) ($M=3.73$, $S.D.=0.90$). Hallem and Barth (2011) state in their research that patients before traveling to medical destination spend a lot of time to examine the skills of the doctors and medical staff. Moreover, patients pay great attention to the accreditation of hospitals and medical centers such as standards of hospital (ISO) (Gan and Frederick, 2011; Gill and Singh, 2011; Yu and Ko, 2012), in addition to, the quality of treatment offered (Connell, 2006). The medical institutions in Egypt are well-equipped with modern facilities and there are more than 240,000 registered medical professionals and well trained medical staff (Jagyasi, 2014). Though, Egypt reputation as medical destination is growing day by day.

There were various factors which contributed to the overall destination attractiveness for medical tourism. Among these two most important factors were good weather ($M=3.89$, $S.D.=1.12$) and popular tourists' attractions ($M=3.78$, $S.D.=1.01$). It is considered an added value for medical tourists to receive medical services in an attractive and popular destination. 'Many try to find a popular tourism country in which they could enjoy their trip during the treatment period' (Moghimehfar and Nasr-Esfahani, 2011, p. 1432). Weather conditions were amongst the factors that were discussed in relevant literature but lacks empirical support (Qu et al., 2011). Accordingly, medical tourists could receive medical services while enjoying Egypt tourists' attractions

Other factors cited by the respondents regarding perception of medical tourism were: safety ($M=3.59$, $S.D.=1.02$) in the eleventh rank, followed by easy access ($M=3.57$, $S.D.=1.19$), medical tourism packages (treatment, accommodations, tours) ($M=3.57$, $S.D.=1.03$), internationally certified medical centers (e.g., Joint Commission International (JCI), International Society for Quality in Health Care (ISQUA)) ($M=3.48$, $S.D.=0.85$), popularity of the country in medical treatment ($M=3.45$, $S.D.=0.88$), same language ($M=3.38$, $S.D.=1.15$), similar culture ($M=3.37$, $S.D.=1.20$), friendly staff and doctors ($M=3.19$, $S.D.=1.06$) and exotic or ethnic food ($M=3.13$, $S.D.=1.06$). Though, safety came at a latent position. This would be due to that medical tourists would be in critical health condition, where any life threatens situation would be the least they care about. However, this contradicts the current literature as the political environment or political stability is

identified as key factors for driving medical tourism (Smith et al., 2011). But it could be explained in the survey context as most of the respondents were from Arab countries where there is similar political situation. Yet, Egypt is situated in the center of the Middle East and could be easily accessed from Africa, Asia and Europe, mainly the targeted markets. Moreover, facilitation of entry visa for medical purpose must be considered. The medical tourism includes not only medical treatment but a wide range of services such as: flights, car rental, accommodation, transportation and recreational activities (khan and Allam, 2014). Medical tour operators must exist in advance to set all of these services together. As far as the destination selection for medical tourism, medical centers chosen must be certified by dependable, independent external bodies for example: JCI and ISQUA; as certification of health care providers is globally acknowledged (khan and Allam, 2014). However, the popularity of the country in medical treatment influences tourists' selection of a medical destination regardless of the number of certified or accredited medical centers and hospitals (khan and Allam, 2014). Thus, Egypt has a great opportunity to attract medical tourism by concentrating on the new hepatitis 'C' treatment. Fluency in patient's language of medical staff and culture similarities are referred to as a driver for medical tourism in previous researches (Fetscherin and Stephano, 2016; Lee and Davis, 2005; Lin and Guan, 2003). So, Egypt could attract many patients from neighboring Arabic-speaking countries. The literature has discussed most of the above mentioned factors, but some of them were sporadically discussed such as: friendliness of staff and doctors (Dwyer and Kim, 2003), and exotic or ethnic food; as they lack any empirical evidence.

Table 5: Analysis of factors influencing perception of medical tourism

Factors	Mean	S.D.	Rank
Costs	3.85	0.92	I
1. Low travel costs	4.04	0.86	1
2. Low medical treatment costs	3.87	0.86	6
3. Low accommodation costs	3.76	0.97	8
4. Low tours costs	3.72	0.98	10
Medical Facilities and services	3.72	0.97	II
5. Experience of Doctors	3.93	1.13	2
6. Pre- and post- medical care	3.93	1.07	3
7. High quality in treatments and supplies	3.91	0.96	4
8. Accredited medical centers (e.g., ISO, NCQA, ESQA)	3.73	0.90	9
9. Friendly staff and doctors	3.19	1.06	18
10. Internationally certified medical centers (e.g., JCI, ISQUA)	3.48	0.85	14
11. Popularity of the country in medical treatment	3.45	0.88	15
Destination Attractiveness	3.48	1.10	III
12. Good weather	3.89	1.12	5
13. Popular tourists attractions	3.78	1.01	7
14. Easy access	3.57	1.19	12
15. Medical tourism packages (treatment, accommodations, tours)	3.57	1.03	13
16. Same language	3.38	1.15	16
17. Similar culture	3.37	1.20	17
18. Safety	3.59	1.02	11
19. Exotic/ ethnic food	3.13	1.06	19

A Pearson's Correlation was conducted to examine the inter-relationships between the different study variables (Table 6). The results indicated a very strong positive correlation between all variables. The results also showed that costs had a significant impact on

medical facilities and services ($r=0.621$, $p=0.001$) and destination attractiveness ($r=0.521$, $p=0.0013$). Likewise, medical facilities and services had a significant impact on destination attractiveness ($r=0.365$, $p=0.021$). This suggests that costs are important factors influencing tourists' perception of medical tourism in Egypt.

Table 6: Pearson Correlations of study variables

Variables	Costs		Medical Facilities and services		Destination Attractiveness	
	r	p	r	p	r	p
Costs	-	-				
Medical Facilities and services	0.621	0.001*	-	-		
Destination Attractiveness	0.521	0.0013*	0.365	0.021*	-	-

The Multi Variant Analysis is represented in table 7. The results for surgery were the only statistically significant. Thus, other medical services that were not significant were removed from the table. According to the results the most influencing factor that affect perception of medical tourism were costs (R Square=0.50, T=4.01, Sig.= 0.0044), followed by medical facilities and services (R Square=0.49, T=3.61, Sig.= 0.0052) and destination attractiveness (R Square=0.44, T=2.98, Sig.= 0.013). It could be realized that medical tourism is cost sensitive especially when it is related to light treatments such as; minor surgery, which is confirmed by earlier researches such as the study of Yu and Ko (2012).

Table 7: Multi Variant analysis of factors influencing medical tourism in Egypt

Variables	B	R ²	T	P	Rank
Constant	2.01	0.65	6.98	0.001*	
Type of medical service (Surgery)	0.61	0.56	4.22	0.003*	1
Costs	0.41	0.50	4.01	0.0044*	2
Medical Facilities and services	0.27	0.49	3.61	0.0052*	3
Destination Attractiveness	0.32	0.44	2.98	0.013*	4

Conclusion

The importance of this study lies in its contribution to the contemporary growth of medical tourism, in addition to; it provides better understanding of medical tourists' characteristics and factors influencing their perception of medical tourism, as well as, useful insights to increase future international medical tourism flow in Egypt. According to this survey, most of the respondents were middle aged male who completed their college degree. The types of medical services mostly accessed were surgery either major or minor and cosmetic or plastic surgery. Most of the respondents were from Arab and Muslim countries. They participated during their stay in other types of tourism, such as sightseeing, recreation and business. The research results indicated also the factors that influence respondents' perception of medical tourism in Egypt which include: low travel costs, experience of doctors, pre- and post- medical care, high quality in treatments and supplies, good weather, low medical treatment costs, popular tourists' attractions, low accommodation costs, accredited medical centers and low tours costs.

The findings of this study are found to be in line with previous empirical studies. The goal is to identify the factors that influence tourists' perception of medial tourism in Egypt in order to enhance their choice of Egypt as a medical destination. Despite, the great importance given to the low costs in Egypt, but medical tourists would not accept poor quality services. This explains the importance given to other factors such as: experience of doctors, pre- and post- medical care, high quality in treatments and accredited medical centers. Thus, it is crucial for all medical entities to receive accreditation and certification

programs to boost their medical reputation. The findings helped also to identify target markets. Therefore, promoters should consider countries with culture and religious similarities, in addition to, countries that provide large number of inbound tourists.

Egypt has all the potential to become a medical tourism destination. It has international standards medical facilities, in addition to, skilled doctors and staff. All combined with popular tourists' attractions and good weather. Thus, it is necessary to establish agreements with medical insurance companies in Arab and European countries to treat their clients in Egypt. Moreover, there are many key players in the medical tourism industry such as; from the government: Ministry of Tourism, Ministry of Health and Population and Ministry of Foreign Affairs, while from the private sector: hospitals, hotels, tour operators and travel agents. Therefore, collaboration between all parties to offer medical tourism packages is a must. The medical tourism is expanding globally and competition is becoming harder; creating the new niche of medical tourism. Though, Egypt has a great opportunity.

Study Limitations and Future Research

The study had a couple of limitations. First, many hospitals from the public and private sectors refused to release any information regarding medical tourists' number and services provided; due to organizational policy, which restricts them from disclosing such information. Consequently, it was referred to unofficial sources for some information, but this does not alter the credibility of the study. Second, the small sample size and number of hospitals participated in the study, since; there is no official data about the actual size of the medical tourism industry in Egypt. Thus, future researches may be conducted on a larger sample size to validate the results of this research. Moreover, researches should be conducted to gather information from potential medical tourists to determine the basic needs of these tourists, as well as, medical centers managers in order to know if they are aware of these needs. In depth comparisons researches among Egypt's main competitors would also be valuable in examining the medical tourism phenomenon more thoroughly.

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