Cluster Mapping of Medical Tourism in Turkey and Regional Clustering for Health Tourism

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Abstract

As the world population is aging, Health tourism has become vitally important and will be increased day by day. Because of the availability of quality health services and more favorable prices as well as to shorten the waiting list for medical services regionally and internationally. There are some aspects of managing and doing marketing activities in order for medical tourism to be feasible, in a region called as clustering in a region with main stakeholders groups includes Health providers, Tourism cluster, etc. There are some related and affecting factors to be considered for the feasibility of medical tourism within this study such as competitiveness, clustering, Entrepreneurship, SMEs. One of the growth phenomenon is Health tourism in the city of Izmir and Turkey. The model of five competitive forces of Porter and The Diamond model that is an economical model that shows the four main factors that affect the competitiveness of a nation and its industries in this study. The short literature of medical tourism and regional clustering have been mentioned.

Keywords: Medical tourism, healthcare tourism, regional clustering for health tourism, competitiveness, business clusters, industry clusters, Small and Medium size Enterprises (SMEs), entrepreneurship.

1. Introduction & Literature Review

1. 1 General Description about Health Tourism

In todays' world, people travel to many geographic regions for many reasons, such as vacation, holidays or adventure, work, pilgrimage, entertainment, sports, relaxation and culture. In recent years, health care has been added to this list. Thus, this recently emerging international trend is for health and medical reasons called "Medical Tourism". One of the foremost reasons for health tourism is the formidable cost of health care in the person's native countries. According to Iordache, Ciochina, and Roxana (2013), medical tourism has become vitally important and has increased rapidly.

The medical tourism has become important for many reasons:(i) disappointments with medical treatments at home; (ii) lack of access to health care at reasonable cost, in reasonable time or in a sympathetic context; (iii) inadequate insurance and income to pay for local health care; (iv) the rise of high quality medical care in 'developing' countries; (v) uneven legal and ethical responses to complex health issues; (vi) greater mobility; and (vii) perhaps, above all, a growing demand for cosmetic surgery (Connell, 2011).

Other authors state that medical tourism is a new niche in the health tourism industry (Connell, 2006). Indeed, according to Connell, historically health tourism is the oldest kind of health related tourism since "tourism has always been associated with seeking improvement in health and well-being" wherever it can be found (Connell, 2006).

According to Iordache, Ciochina, and Roxana (2013), there are primarily three sub-branches of health tourism referred to as "General Medical Tourism". These are "Wellness Tourism", "Healthcare Tourism" and "Medical Tourism" henceforth referred to health tourısm in this document. As a result of rising healthcare costs in developed countries and availability of high quality medical services at lower prices in developing countries a rapid growth and expansion of health tourism has occurred globally.

1. 2 Global Trends in Health Tourism

In the beginning of 19th century, other than commercial and industrial developments in the world, the major developments in the health care industry have also occurred. However, health travels in those times were considered a concept to be benefited by wealthy people only (Cukurova Development Agency, 2012).

The American Board of Medical Specialties was established in 1933 and led for the certification of medical specialties as well as world health standards in the USA. And these standards have been adopted globally. Furthermore, the European Union of Medical Specialists was founded in 1958. This council consists of different medical specialists. Thus quality of health care was assured internationally.

In 1994, The Joint Commission International (JCI) was established to set international standards and established mechanisms to measure these standards and provide accreditation to health care institutions that complied with the standards. . As there have been many health care centers operating around the world, JCI was founded to follow up if health care facilities adhered to the standards set forth by JCI. Therefore, JCI was a leader organization to close the gap quality care set by the health industry in terms of the compatibility of health services and research of it internationally. There are 59 countries listed with "Joint Commission International Accreditation". United Arab Emirates is ranked 1st country in this list has 86 JCI Accredited and certified organization; Saudi Arabia is ranked as 2nd in the list with number of 64 JCI organization and Turkey is ranked as 3rd in the world with the 50 numbered JCI accredited hospitals as of May, 2014 (JCI, 2014).

In the 1960's, as the New Age movement started, India has played an important part in health tourism. Wealthy people in USA and England headed to India to have yoga and ayurvedic medicine, thus this movement started a health tourism industry (Cukurova Development Agency, 2012). As a result of increasing cost for health services in 1980 and 1990, Americans also started to go to nearby Central American countries in order to obtain low priced dental treatments, as well as other services that were found to be attractive such as operations for eyes, heart and cosmetic surgery that were available for an affordable price.

As the Asian financial crisis started in 1997 and affected the whole worlds including USA and Europe; the governments of those countries placed an importance role on the tourism industry. The legal authorities started advertisement campaigns especially to develop health care tourism in the region. These efforts were profitable for countries like: Thailand, India were models for much lower priced services when compared to western countries; especially for plastics surgery.

Health tourism has progressed rapidly, and nowadays has become number one among the service industries. Some of the leading regional health tourism countries emerged in Malaysia, Singapore, Thailand, and India, for the Middle East (Dubai, Jordan, Israel, and Egypt). Eastern Europe (Turkey, Hungary, Poland, and the Czech Republic), and Western Europe (Germany, Austria, and Belgium). The health tourism industry is rapidly expanding and is anticipated to growth even more rapidly in the near future in Turkey, India, Singapore Thailand, Malaysia and Brazil to name just a few (Transparency Market Research, 2013).

As a result of the rapid advances in the information age, globalization of health care have become more accessible, medical tourism has also expanded provided important opportunities for Asian and Middle Eastern countries to offer health care services to patients from developed countries (like the U. S, Canada and European countries). Such services are available at equal quality with availability of high technological equipment and more favorable costs and shorter waiting periods.

According to the study by Deloitte (2010), the worldwide medical tourism market was expected to grow to $100 billion by 2010. This tremendous sum of money is shared by over 35 countries. This estimate is based on 22 billion patient services.

Not only does the host institution gain revenues, but also benefits from the international reputation that it gains for its quality health care services.

According to Ramirez De Arellano (2007), the country receives tangible benefits and intangible benefits through investing in the medical tourism industry. The tangible benefits lead to a raise of gross domestic products and therefore an increase in economic welfare, upgrade of services, generation of foreign exchange, creation of a more favorable balance-of-trade, boosting tourism through sharing of know-how and strategic partnership, as well as the contribution for transfer of technology and knowledge. As foreign patients are offered the best services and opportunities resulting in international competition that also creates better services for domestic patients.

Intangible benefits range from the sharing of social and cultural experiences, contributing to development of international relations, global marketing and medical trade, creating a positive image of heath care service, gaining a competitive advantage, strengthening the public-private partnership, as a result of patient satisfaction with services.

While medical tourism has many benefits, there are also some negative sides. As some health insurers do not cover the health services received abroad, patients have to "pay out of pocket" for their services. Patients can often return to their home countries a couple of days after the service/operation. However, if side effects, or complication occur from these services, the problem need to be solved in patient's own country. As many countries do not have adequate laws about medical malpractice, in case of malpractice, the support or restitution cannot be received from domestic courts (Ramirez De Arellano, 2007). Nowadays, many state and private insurers encourage the patient to obtain their health care services overseas at a favorable price. Medical tourists are happy to receive the best healthcare service and enjoy tourism at the same time. This also generates a major revenue for each economic stakeholder of health tourism in the region.

Eurostat surveys from all hospitals in Turkey with the Turkish Ministry of Health (Turkish Ministry of Health, 2011) revealed that India is the highest ranked country in the numbers of the most inbound medical patients globally, with Thailand and Singapore in second and third place.

1. 3 Health Tourism in Turkey

There are numerous factors that attract the movement of patients for health tourism across the world, such as specialization in medical services, geographic proximity, convenient prices, availability of health insurance reimbursement and the reputation of the destination health care services.

Since Turkey has a high standard of medical and dental services, it has become an increasingly attractive site for health tourism. Furthermore, Turkey has earned the international reputation as a very friendly hospitable country. Similar to other countries Turkey meets many of the criteria for this type of industry. The attractions for seeking health services in Turkey are varied and can be categorized into four county characteristics (Genc, 2007):

Countries with a large population of Turkish immigrants such Germany, Netherland, and Belgium;

Developing countries with shortages of services due to the lack of infrastructure and physicians (Balkan States, Central Asia, Turkish Republics),

Countries in which the health services are prohibitively expensive and there is a demand for services that are not covered by insurance (USA, Germany),

Countries that have long waiting demand exceeds supply (UK, Netherland and Canada).

According to the World Tourism Organization's World Tourism Barometer (World Tourism Organization, 2014), international tourists arrivals were numbered at 1. 035 million in 2012, it grew by 5% in 2013, reaching a record 1. 087 million. Turkey rose to 6th place in the world with 35. 7 million international tourists arriving. However, in terms of international tourist revenue Turkey was not ranked in the top 10 global ranking of countries in 2012 (World Tourism Organization, 2013), thus there is considerable opportunity for additional developments in Turkish medical tourism to increase revenues.

According to the World Tourism Organization, Tourism Highlights (World Tourism Organization, 2014), although around 35 million foreign tourists arrived in Turkey in 2012, the country earned only $26 billion in tourism income. Turkey's per tourist income is far below the average among the top 10 countries. While the average spending per tourist was around $1, 100 in the top eight countries, it was just $743 in Turkey. Unfortunately, this situation has persisted in Turkey's for many years (World Tourism Organization, 2013). This shortfall in revenues can potentially be enhanced by health tourism to enrich the country as well as the city. Needless to say that a major benefit from medical tourism to the Turkish economy is the revenue brought to the country from the patients and their relatives.

As Turkey is a candidate to join the European Union (EU), Turkey offers affordable medical tourism opportunities as it has sufficient capable health personnel as well as advanced medical technology and can thus become a solution for European Countries in order to remedy their health services shortage. The Turkish government has declared its support for health tourism and offers financial incentives to investors. Turkey's Health Ministry also has plans to establish "free health zones" to attract medical tourists from abroad.

The most inbound health tourism numbers by cities in Turkey have been Istanbul, Antalya, Ankara, Kocaeli and Izmir in that order (Turkish Ministry of Health, 2013).

1. 4 Health Tourism in the Izmir and the Aegean Region

To date, Izmir has not reached its capacity for medical tourism. Given that there is considerable additional capacity for such services.

As the city of Izmir has a variety of high quality options for accommodations and offers historic as well as summer resort vacation packages that can provide tourism facilities and a variety of sources of medical services; Izmir becomes a prime candidate for expansion of medical tourism.

Izmir is the third biggest city of Turkey and has many advantageous for further development of health care tourism. Izmir has educated and well trained health care workforce and excellent tourism opportunities. These include geographical position, good climate, many type of health resorts availability of spas & wellness as well as hot spring centers, Elder and Disabled Tourism centers, affordable prices, numerous health institutions (State and Private) and thermal facilities, as such it is an ideal holiday destination and a hub for international flights as well as direct flights and features that could attract expanded health tourism for Izmir.

Because medical tourism involves diverse medical, political, social, cultural, economic factors (Connell, 2011). Empirical research is needed as to the best management and marketing models that can reach capacity in medical tourism offerings.

2. THEORETICAL FRAMEWORKS

Several business models about medical tourism research have potential relevance to this study: competitiveness, clustering, entrepreneurship and small and medium sized enterprises (SMEs) (Vera, et al. , 2008).

2. 1 Competitiveness in Health Tourism

"Competitiveness pertains to the ability and performance of a firm, sub-sector or country to sell and supply goods and services in a given market, in relation to the ability and performance of other firms, sub-sectors or countries in the same market" (Wikipedia, 2014).

The competitiveness represents "*the ability of companies, industries, regions, nations or supranational regions to generate, while being and remaining exposed to international competition, relatively high factor income and factor employment levels on a sustainable basis*" (OECD, 1996, p. 20). *"Competitiveness can be considered at different levels of aggregation: firm, industry, and country"* (Depperu & Cerrato, 2005).

The Global Competitiveness Index (GCI) is to measure the productive potential of nations.

"*GCI was developed by Xavier Sala-i-Martin and Elsa V. Artadi. Before that, the macroeconomic rankings were based on Jeffrey Sachs's Growth Development Index and the microeconomic rankings were based on Michael Porter's Business Competitiveness Index. The Global competitiveness Index integrates the macroeconomic and the micro/business aspects of competitiveness into a single index*" (Schwab, 2013).

The Competitiveness Index (CI) that was developed by the Institute for Strategy and Competitiveness at the Harvard Business School to assess country level competitiveness about the determinants of national competitiveness. CI evaluates both macro and micro factors (Gonzalez et al. , 2012).

There are some competitiveness measurement studies across the world. One of them is the Global Competitiveness Index (GCI) was first developed for the World Economic Forum (WEF) by Sala-i-Martin, and Artadi and is used in the Global Competitiveness Report (GCR, overall index) that measures 133 countries on the basis of 110 total criteria to assess the competitiveness level at over all. In this index, there are "overall index" and "Sub-indexes" includes basic requirements, efficiency enhancers and innovation sophistication factors for each country. In sub-indexes, there are also 12 pillars of competitiveness included Institutions, infrastructure, macroeconomic stability and health and primary education for basic requirements; higher education and training, goods market efficiency, labour market efficiency, financial market sophistication, technological readiness and market size for efficiency enhancers; business sophistication and Innovation for innovation and sophistication factors (Schwab, 2009).

Another competitiveness research is the World Competitiveness Scoreboard (WCS) which is published by International Institute for Management Development (IMD) as part of to evaluate the different facets of competitiveness, grouped into four factors (economic performance, government efficiency, business efficiency and infrastructure). Competitiveness Yearbook (WCY) that measures 57 countries on the basis of 329 criteria to ranks countries based on the Global Competitiveness Index (Garelli, 2009).

For example; Switzerland ranks 1st in GCI and for the sub-indexes; it is ranked 1st for innovation factors, Singapore is ranked 2nd in GCI and ranked 1st in sub-indexes for Basic requirements of Global Competitiveness Index. Finland is ranked 3rd in GCI and it is ranked as 1st for sub-indexes of innovation and sophistication factors. Germany and USA are ranked 1st in sub-indexes for efficiency enhancers (Schwab, 2013). Turkey is ranked 41st in the GCI (Schwab, 2013) and ranked 37th in overall efficiency in the WCY (Garelli, 2013). The best GCI score is the efficiency enhancers; and, the lowest score is the basic requirements for Turkey in 2013.

2. 2 Clustering in Health Tourism

As medical tourism development depends on a number of different areas of management and marketing such as health care management, tourism and regional clustering in the context of medical tourism are in need of scientific study. To manage health tourism and the stakeholders in a profitable way, many countries and cities have collaborated and made regional cluster to serve their customers with the best health care services and internationally compete.

"*A cluster is a geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities*. " (Porter, 1998a, 1998b).

"*A cluster is a very simply used to represent concentrations of firms that are able to produce synergy because of their geographical proximity and interdependence, even though their scale of employment may not be pronounced or prominent*. " (Rosenfeld, 1997).

"*Clusters are here defined as groups of firms within one industry based in one geographical area.* " (Swann & Prevezer, 1996).

"*A regional cluster in which member firms are in close proximity to each other*. " (Enright, 1996).

The cluster theory of Porter mentions that cluster is defined as a "*geographical concentration of companies, suppliers, service providers, and associated institutions in a particular field that not only to compete but also to cooperate"* (Porter, 2000).

Medical tourism has taken its place as one more component of the tourism industry, through its linkages with hotels, airlines and the whole infrastructure of tourism, and in the leisure activities of the tourists have not been systematically studied (Connell, 2011).

Building a health tourism cluster in Izmir and Turkey would consist of stakeholders in health institutions (State and Private), travel agencies, the tourism industry, intermediary and consulting firms, transport industry, Information and communications sector, construction sector (new investments), and the Finance sector.

The health workforce numbers of Turkey in December, 2013 includes in 109000 physicians, 145000 nurses and midwifery; 21160 dental personnel, and 26617 pharmaceutical personnel according to health workforce status report in Turkey of Ministry of Health (The Council of Higher Education in Turkey & Turkish Ministry of Health, 2014) however, according to this report, The total number physician of Izmir is only 7754, dentist 1522 and Pharmacist is 1869. Clearly in major shortfall if health tourism is to thrive.

The population of Turkey is almost 76 million and Izmir has a population of about 4 million.

To be competitive in the international market, the companies, the cities and the countries need to develop ways and models to match the demand/supply equation through clustering. *"In order to more effectively compete, regions need to understand their cluster strengths as compared to other areas"* (Delgado, 2013).

"Humphrey and Schmitz (1995) and Sonobe and Otsuka (2006) assert that cluster is a geographical concentration or localization of firms producing similar products or closely related products in a certain area" (Mawardi, 2011).

"Clusters may include government, nonprofit organizations, educational institutions, and other infrastructure and service providers whose presence is key to the strength of the cluster. The California wine cluster provides a good example of the complex nature of an industry cluster. The cluster includes 680 commercial wineries and several thousand independent grape growers; suppliers of grape stock, irrigation and harvesting equipment, barrels, and labels; specialized publishers, public relations firms, and advertising agencies; world-renowned programs at the University of California; the Wine Institute; and special committees of the California Senate and Assembly", all dedicated to cooperate (Munnich, 1999).

"There are globally recognized cluster examples such as Hollywood or Bollywood in the film industry, wine industry in California, information technology in Silicon Valley and Boston" (Boja, 2011).

2. 3 Entrepreneurship in Health Tourism

According to Lee (2006), there are many entrepreneurial opportunities associated with this emerging healthcare industry. As some of the countries have a competitive advantage in this industry because of the support and promotion of this industry by their governments and the capability of health stakeholders in region. "*As the costs of medical treatment and hospital queues gradually increase in western countries, the demands for medical services in developing countries are gradually increasing.* " (Lee, 2006). It is mentioned in most of the academic and professional journal that health tourism will certainly become more significant in the near future (Lee, 2006). Therefore, *"countries specializing in attracting medical tourists create new entrepreneurial activity that can lead to a profitable and sustainable tourism industry in the region.* " (Lee, 2006).

The Porter's Five Forces Model and significant entrepreneurship normative models can be used to develop an entrepreneurship conceptual framework in medical tourism (Danell, 2007, p. 13).

According to Amoros, Fernandez and Tapia (2011), the entrepreneurship is a key factor for countries to achieve their competitiveness-level towards their goals in the industries.

As Porter (1998c) states that the Cluster often presents a significant local market, and an entrepreneur might benefit from established relationships. Porter also finds that as the result of using some project and dataset; there is consists of significant evidence of the positive impact of clusters on entrepreneurship. "*A high level of entrepreneurship in a region-industry at a point in time may result in diminished near-term opportunities for entrepreneurship in that region-industry"* (Delgado, 2010).

"Entrepreneurship is a particularly important channel for cluster-driven agglomeration, and may therefore be crucial for the role of clusters in enhancing regional performance" (Delgado, 2010).

2. 4 SMEs in Health Tourism

Constantinides (2013) mentions that operating a free trade zone (FTZ) where is a medical cluster can be developed properly and does not necessarily require "millions of dollars" as *"the enterprise tends to be more effort- intensive rather than capital-intensive, i. e. , it requires multiple business pitches to, discussions with, and approvals from, multiple government departments and private partners"* (Picazo, 2013).

The cluster was used as a tool to create competitive advantages for especially small and medium enterprises (Phinaitrup, 2012). The important part of clustering is increasing the competitiveness level of SMEs. In order to increase the competitive advantage of SMEs in the market, there are two main elements to consider; productivity and innovation. Beside, clustering decrease the transaction cost.

SMEs and entrepreneurship play a particularly important role in the Turkish economy according to Organization for economic co-operation and development (OECD) (2004).

According to Delgado, Porter, and Stern (2012), "The findings suggest that clusters play a crucial role in the path of regional economic development" (as cited in Porter 1990a, 1990b, 1998a, 1998b and 2003 & Swann 1992). Business clustering offer mutual benefits to communities and business. The strong domestic clusters might also attract the foreign investments.

The five competitive forces (the bargaining power of suppliers, the bargaining power of buyers, threat of new competitors, threat of substitute products and existing competitive rivalry between suppliers) and the diamond models (Firm strategy, Structure and rivalry; demand conditions, related and supported industries, factor conditions, government and chance) developed by Porter are widely used to determine the competitiveness of a country and a sectoral cluster (Bilgen, 2010).

The five competitive forces are used to define the business model and industry analysis. The forces are; bargaining power of the buyers and power of suppliers, entry barriers, rivalry and substitutes (Grundy, 2006).

The Diamond model is an economical model that developed by Michael Porter that shows the four main factors that affect the competitiveness of a nation and its industries. According to the Diamond for National Competitive Advantage model (Porter, 1990a, 1990b), there is a concept of "clusters", or groups of "interconnected firms, suppliers, related industries, and institutions in geographic locations such country or regions.

The competitive advantage of nations is the outcomes of the four interlinked advanced factors in and between firms in these clusters. The factors includes the firms strategy, structure and rivalry; demand conditions; related and supporting industries; factor conditions, the government also plays a role by *"acting as a catalyst and challenger; it is to encourage –or even push –companies to raise their aspirations and move to higher levels of competitive performance…*" according to Porter (1990a, 1990b).

Recognizing the benefits of clusters as a form of economic organization has influenced governments to implement policies (Sölvell et al, 2003), intended to launch initiatives to support existing clusters or to form new ones in regard to:

SMEs, regional industrial development attracting external funds and foreign investors, research and innovation at national or local level (Boja, 2011).

According to Ketels (2004), "*Clusters are not only a reality of economies across Europe; increasingly they are also an important policy lever on different geographic levels. At the level of the European Union, the European Commission is looking for its role in supporting cluster development across Europe. Providing better data on clusters, convening joint public private research groups for clusters to look at common border issues, and supporting regional cluster initiatives are emerging as the key roles of the Commission*".

Many regional and international cluster studies have been done. Most of them are in USA and Europe. In Europe, some of the countries have them to lead on the studies and policies about business clusters and regional competitiveness. The UK has in recently become very active in cluster policy and has provided significant budgets for cluster development. Ireland has had a very conscious competitiveness policy for many years, and has used the cluster concept within this context. Finland and more recently Sweden have also become very active in using clusters to set policy priorities (Ketels, 2004).

"One of the first regions worldwide to apply the cluster perspective in its economic policy was the Basque, Spain. In the midst of a deep economic crisis of its mainly traditional manufacturing companies in steel and ship building, public and private sector leaders in the region adopted the cluster approach to change their economic trajectory. A good decade later, the region is one of the richest regions in Spain and has achieved a GDP per capita level equal to the European average" (Ketels, 2004).

As Turkey is a candidate for EU membership, the Chamber of Industry and Commerce is the authority of the Regional Competitiveness Operational Programme (RCOP) in Turkey. RCOP has provided policy documents, the Instrument for Pre-Accession Assistance that was launched within the EU Enlargement Strategy adopted by European Council in December, 2004.

The instrument for Pre-Accession Assistance aims to prepare Turkey for better management of future structural funds. And thus supported Turkey in its membership negotiations in 2007-2013 through Clustering Analysis in RCOP Provinces in March, 2009.

Within this instrument, Turkey has fulfilled the requirements as a candidate country five components: institutional capacity building, cross-border cooperation, regional development, human resources development and rural development. RCOP is one of three sub-components in the Regional Development Component (Turkish Ministry of Economy, 2013).

A number of Competitiveness and Cluster Analysis have been completed in Turkey, there are also some clustering initiatives that have been operating since 2009 in Izmir such as INOVIZ (Izmir for Health) in biomedical technology and organic food clusters. However, in health tourism, the clustering initiatives have not yet been started in Turkey.

Some competitive studies for industrial clustering in Turkey have been done at Harvard University with Dr. Porter. Examples are: The Turkish Textiles and Apparel Cluster in 2012; the Turkish Automotive industry in 2011, Turkey & The Turkish Construction Services Cluster in 2007. However, the cluster study for health tourism have not yet been achieved by the model of Porter. Therefore, this would be the first analyzes for business clusters in health tourism domain in Turkey.

Oz (2002) studied Diamond analyse in some of the industries but not in Health tourism in Turkey. However, the health care study needs to add this research so that Diamond National Competitive Advantage needs to be analyzed for Turkey and Izmir city to identify the potential competitiveness of health tourism.

Turkey Medical tourism Cluster mapping has not been studied yet, therefore first time medical tourism cluster mapping study would be applied to all Turkey with this study for researchers and investors through this study according to literature above and expected outcomes.

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