



Tourism Industry in India: A Study of Medical Value Travel

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Abstract: *Medical Value Travel popularly known as Medical Tourism is an emergent phenomenon which not only entails economic benefits but also healthcare concerns. It involves patient leaving their home country to access cross border medical care abroad. The paper provides a brief review of Medical Tourism Industry, its service spectrum and consumer profile, growth in Healthcare sector, flow of Foreign Tourist arrivals for medical purposes, country-wise cost comparisons of medical treatment and factors that attract country as tourism destination. The paper covers wide collection of academic literature on medical tourism which emphasizes research on diverse disciplines. The paper recognizes various strengths of India's medical tourism industry and points out number of weaknesses which can reduce the growth opportunities of the industry. The paper aims to identify key threats and opportunities possessed by Indian Medical tourism sector which enable it to overcome various barriers to upgrade its services. Finally, the paper analyzes and concludes some key findings and suggestions.*

Keywords: *Medical Tourism, SWOT, Healthcare, Foreign Tourist Arrivals.*

I. INTRODUCTION

Medical Value Travel also commonly known as Medical Tourism is a developing concept in which people from all over world visit India for their medical and relaxation needs. It is niche tourism market which is growing rapidly. The medical tourism market is expected to grow at CAGR of 27 percent. Medical Tourism is growing as India is setting a mark to be a healthcare delivery destination as well as it is leading to development in other sectors which help in Medical travel like hospitality sector, tourism, transport etc.

Health care sector contributes approximately 4% to the GDP with a CAGR of 15%. It consists of Hospitals, Pharmaceuticals, Medical equipments and supplies, Medical Insurance and Diagnostics. Hospitals are the largest segment contributing to the Industry revenue. Factors which lead to growth of the sector mainly comprise of:

- Fast growing population
- Increase in lifestyle related diseases
- Improvement in Healthcare infrastructure and Medical Insurance incision
- Rising Medical Tourism

Even though India is a developing country, still it is emerging as a major Medical Tourism destination because of the cost effectiveness, five star medical facilities, highly qualified doctors as well as no language problems. Foreign Tourist Arrivals increased at a CAGR of 7.1% in 2015 and is expected to increase to 15.3 million by 2025 as per World Tourism Organization.

Thus, Medical Tourism is not only boosting healthcare sector but it is benefiting various other affiliated sectors. Government should assess various strengths and opportunities as well as weakness and threats of the sector and should frame policies to tap this sector.

The Service Spectrum

India offers a variety of services for overseas patients. The Table 1 below presents a classification of the service spectrum of Medical Tourism in India along with its competitive countries.

	Wellness Tourism	Alternative Systems of Medicine	Cosmetic Surgery	Advanced And Life Saving Healthcare
Services Offered	Spas, Stress- Relief, Rejuvenation Centers	Ayurvedics, Siddha, treatment for diseases e.g. arthritis	Dental Care, Plastic Surgery, Breast Enhancement, Tummy Reduction, Skin Treatment	Organ Transplants, Cardio- Vascular Surgery, Eye Treatment, Hip Replacement, In-Vitro Fertilization
Profit Margins	Low	Low	Medium	High
Key Competitors	Thailand, South Africa	NA	South Africa, Cuba, Thailand	Singapore, Jordan, Thailand, Malaysia
India's Strength	Low – Thailand has captured a significant share of the market	High – Kerala is popular for this service	Low – South Africa and Thailand lead in plastic surgeries. Cuba specializes in skin treatments	High – India has strong brand equity. Jordan has a strong presence in middle eastern market

Source: SINET Report

India offers a diverse basket of medical services and rejuvenation facilities to patients at reasonable prices. In addition to existence of modern medicine, indigenous or traditional medical practitioners continue to practice throughout the country. Popular indigenous healthcare traditions include Ayurveda, Yoga, Unani, Siddha and Homoeopathy (AYUSH)

People are increasingly realizing the importance of such alternative forms of treatments. There is dedicated **Department of AYUSH** in India to focus on the development of education and research in these fields.

Consumer Profile

Group	Description	Countries	Demand Driver
I	Non-Residential Indians	Numbering 20 million across the world	Low Cost Healthcare Combined with trip back home
II	Patients from Countries with Underdeveloped Facilities	Nepal, Burma, Bangladesh, African Countries, Middle East Countries, Latin America	Quality Healthcare at Affordable Prices
III	Patients from Developed Countries	U.S, U.K, Canada	Low Cost of Healthcare, Capacity Constraints for Services in Home Country

Source: SINET Report

The demand for Indian healthcare services primarily comes from three types of consumers. The Table 2 represents the profile of these consumer groups.



II. REVIEW OF LITERATURE

Dawn & Pal (2011) in their article '*Medical Tourism in India: Issues, Opportunities and Designing strategies for Growth and Development*' analyzed the SWOT of Medical Tourism industry and concluded that India is in advantageous position to tap global opportunities with some recommended suggestions.

Sagar & Latha (2014) reviewed in their article '*Medical Tourism- An Emerging Industry in India*' Medical Tourism in India, its trends and prospects, SWOT Analysis, security threats and recommendations to overcome these threats.

Benur (2014) analyzed in article '*Medical Tourism: Can it be A New Supernova of Indian Economy*' the reasons for growth of medical tourism, its stakeholders and future prospect. The paper concluded that India has tremendous growth in the sector because of world class healthcare infrastructure, booming software industry etc.

KPMG & Federation of Indian Chambers of Commerce and Industry (2014) stated in FICCI Heal Conference their report '*Medical Value Travel in India*' which analyzed its opportunities, India's capability to be valuable destination for medical value travel as well as competition in Asian Countries. It concluded that India has cost advantage but there is a need for government to take necessary steps to improve like launching of digital campaigns etc.

Sangeeta (2015) reviewed the marketing practices in the article '*Marketing Practices of Indian Medical Tourism - A Review*' and concluded that hospitals need to maximize strengths and improve quality standards. The paper further stated that Indian medical tourism should be proactive and focus on integrated marketing practices.

Indian Brand Equity Foundation & Tech Sci Research (2015) released brief overview of the Healthcare sector and Tourism and Hospitality Sector. The report named '*Healthcare*' & '*Tourism & Hospitality*' respectively.

Deloitte (2015) provided a brief overview of healthcare sector in India under report named '*2015 Healthcare Outlook India*'

HDFC Bank Investment Advisory Group (2015) provides the hospital sector update under report '*Indian Healthcare Industry- Hospitals Sector*'

SINET, NIR, NetPEM, ViTO and CII under Asia Pro Eco Programme analyzed and reported sector overview, network overview and SWOT Analysis of Indian Medical Tourism Sector under the report '*Indian Medical/Health Tourism Service Sector Network Report*'.

III. OBJECTIVE OF THE STUDY

The paper uses an exploratory research technique based on past literature from respective journals, reports, newspapers and magazines covering wide collection of academic literature on medical tourism. The objectives of the paper are:

- To study the growth of Healthcare Sector
- To look at the flow of Foreign Tourist Arrivals in India
- To examine India as a Tourist Destination
- SWOT Analysis of Indian Medical Tourism Industry

IV. HYPOTHESES OF THE STUDY

According to the objective, the study is based on the assumptions (Null Hypotheses) that:

- There is no growth in healthcare sector
- Foreign Tourist arrivals flow is not increasing
- There are no opportunities for expansion in Medical Tourism Industry

V. HEALTHCARE SECTOR

Indian healthcare sector is one of the fastest growing sectors. It is expected to advance at a CAGR of 22.87% during 2015-20 to reach USD 280 billion. India is expected to rank amongst the top three healthcare markets in terms of incremental growth by 2020. India was the sixth largest market globally in terms of size in 2014.

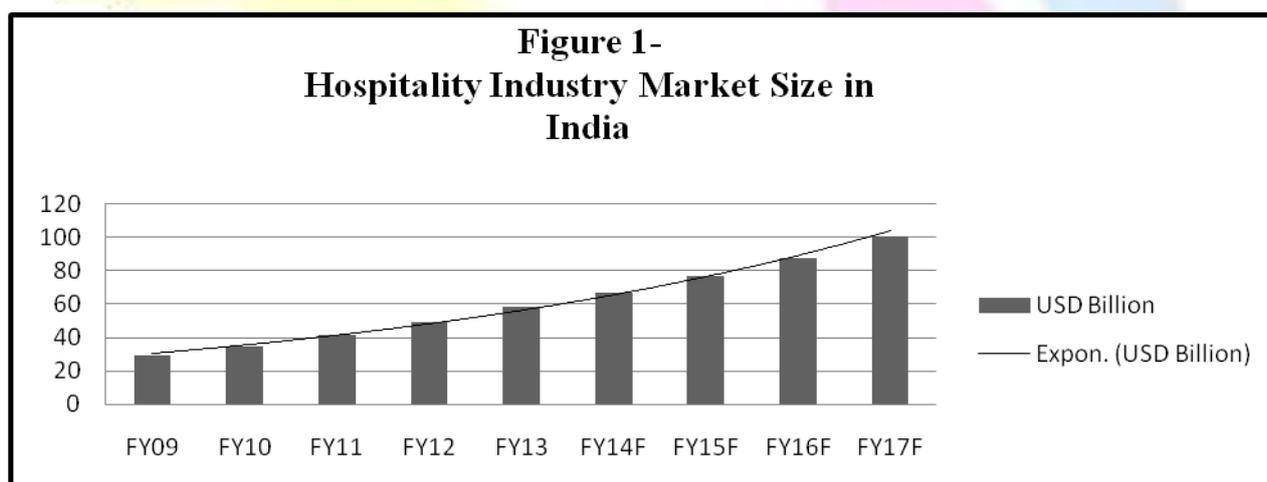
From primarily knit social sector in early 90's healthcare has emerged as a large sector with dynamic private sector activity. The sector has received the large pool of investments (by means of venture and equity capital). The major key players in hospitals market are:

Apollo Hospitals	Fortis Healthcare
Manipal Health Systems	Narayana Health
Medanta Medicity	Lilavati Hospital
Jaslok Hospital	Bombay Hospital
Hinduja Hospital	Wockhardt Hospital
Max Hospitals	

Table 3:- Hospitality Industry Market Size in India	
Year	USD Billion
FY09	29.3
FY10	34.9
FY11	41.5
FY12	49.3
FY13	58.1
FY14F	66.7
FY15F	76.6
FY16F	88
FY17F	101.1

Source: KPMG 'Medical Travel Value in India', FICCI Heal Conference, (Pg-26)

Traditional healthcare models have evolved in the last decade and India has seen growth in terms of hospital market as well as medical devices market. Table 3 provides the growth of Hospitality Industry Market size growth over the years. It shows that financial year 2014 & 2015 have highest growth and projected growth of 12% (approx.). Figure 1 represents the chart depicting the growth of market size.



Source: KPMG 'Medical Travel Value in India', FICCI Heal Conference, (Pg-26)

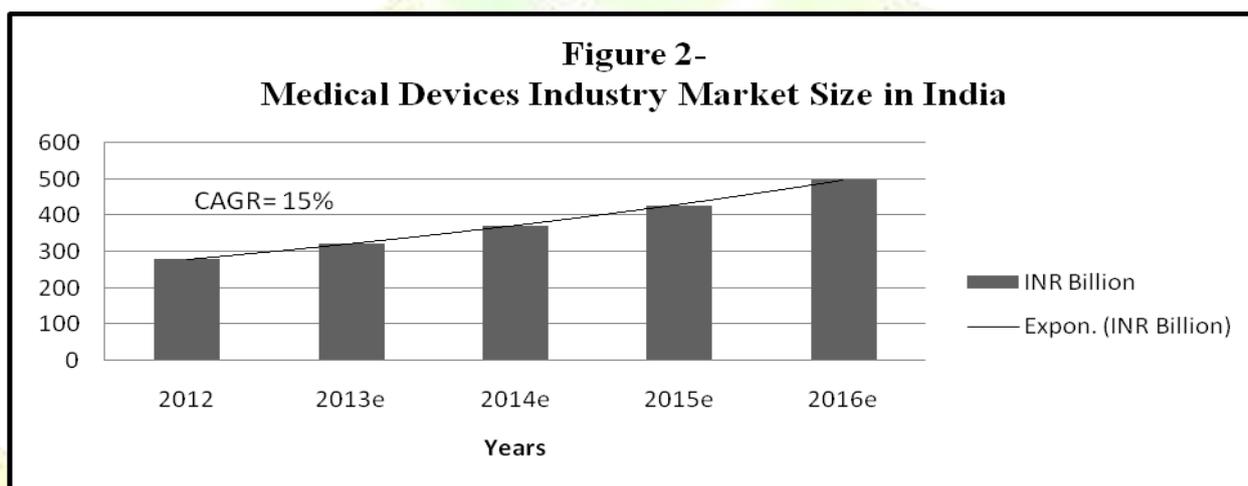
The domestic manufacturing companies are evolving from producing devices in low to medium technology segment. They are expanding operations and making use of technology to produce cost efficient and high quality medical devices. The major key players in field of medical device manufacturing are:

Philips	Siemens
Opto Circuits	GE
Hindustan Syringes & Medical Devices	Medtronic
Covidien	J&J
Becton Dickinson	Toshiba
Boston Scientific	Varian

Year	INR Billion
2012	280
2013e	322
2014e	370.9
2015e	427.5
2016e	498.1

Source: KPMG 'Medical Travel Value in India', FICCI Heal Conference, (Pg-26)

Table 4 describes the growth of Medical Devices Industry Market size in India with corresponding Figure 2 reproducing the data in form of chart. As per table, the medical devices industry has seen the highest growth in the year 2016, i.e. 14% (approx,)



Source: KPMG 'Medical Value Travel in India', FICCI Heal Conference (Pg-26)

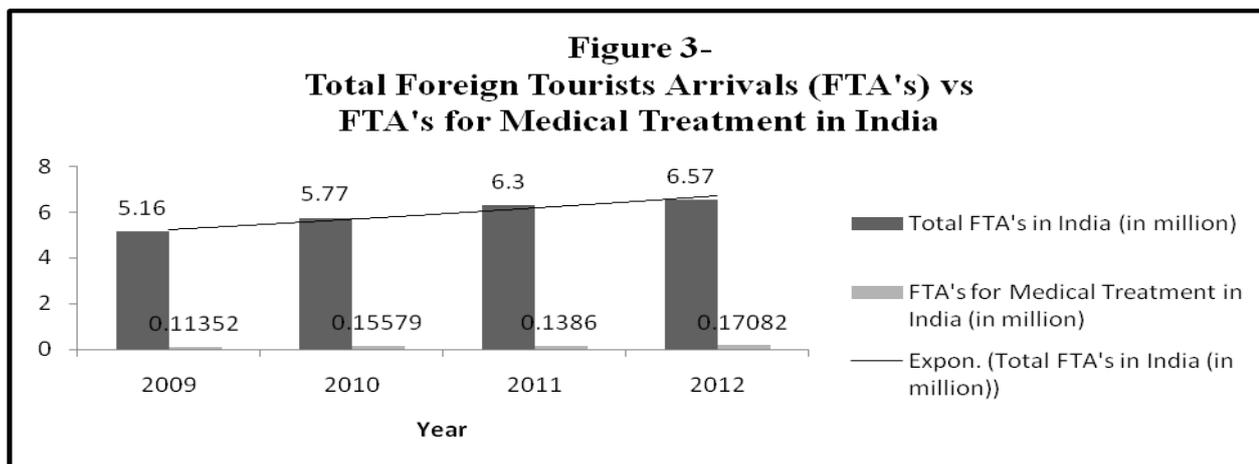
Year	Total FTA's in India (in million)	FTA's for Medical Treatment in India (in million)	FTA's for Medical Treatment in India (in %)
2009	5.16	0.11352	2.2
2010	5.77	0.15579	2.7
2011	6.3	0.1386	2.2
2012	6.57	0.17082	2.6

Source: Data analyzed by author taken from KPMG 'Medical Travel Value in India', FICCI Heal Conference, (Pg-18)

VI. FOREIGN TOURIST ARRIVALS IN INDIA

Foreign Tourist Arrivals (FTA) in India includes all the tourists from abroad travelling to India for purpose of tourism, medical purpose, personal purpose etc. Foreign tourist travelers traveling to India for medical treatments not only promote healthcare sector and medical facilities but also boost tourism.

Table 5 outlines the various FTA's in India as well as Tourist Arrivals in India for Medical treatment. Figure 3 is a pictorial representation of the same. As per Table, the highest number of arrivals in India for Medical purpose is 17, 08,200 in absolute terms (2012) and 2.7 in percentage (2010).



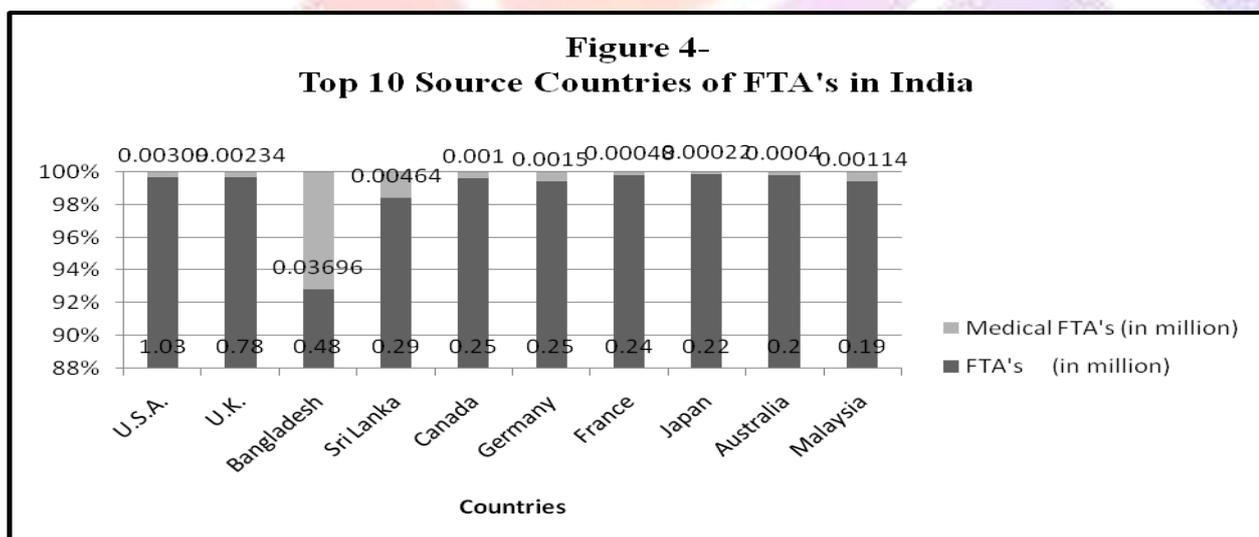
Source: Data analyzed by author taken from KPMG 'Medical Travel Value in India', FICCI Heal Conference, (Pg-18)

Table 6:- Top 10 Source Countries of FTA's in India

Countries	FTA's (in million)	Medical FTA's (in million)	Medical FTA's (in %)
U.S.A.	1.03	0.00309	0.3
U.K.	0.78	0.00234	0.3
Bangladesh	0.48	0.03696	7.7
Sri Lanka	0.29	0.00464	1.6
Canada	0.25	0.001	0.4
Germany	0.25	0.0015	0.6
France	0.24	0.00048	0.2
Japan	0.22	0.00022	0.1
Australia	0.2	0.0004	0.2
Malaysia	0.19	0.00114	0.6

Source: Data analyzed by author taken from KPMG 'Medical Travel Value in India', FICCI Heal Conference, (Pg-18)

India receives medical tourist from all over World, but developing and underdeveloped countries forms a major portion of it. Table 6 represents the Top 10 Source countries which provide FTA's in India and corresponding percentages of the travellers travelling for medical purposes only. Figure 4 illustrates the data in a graph. The highest flow of travellers is from Bangladesh due to lack of quality healthcare infrastructure and unavailability of skilled manpower there.



Source: Data analyzed by author taken from KPMG 'Medical Travel Value in India', FICCI Heal Conference, (Pg-18)

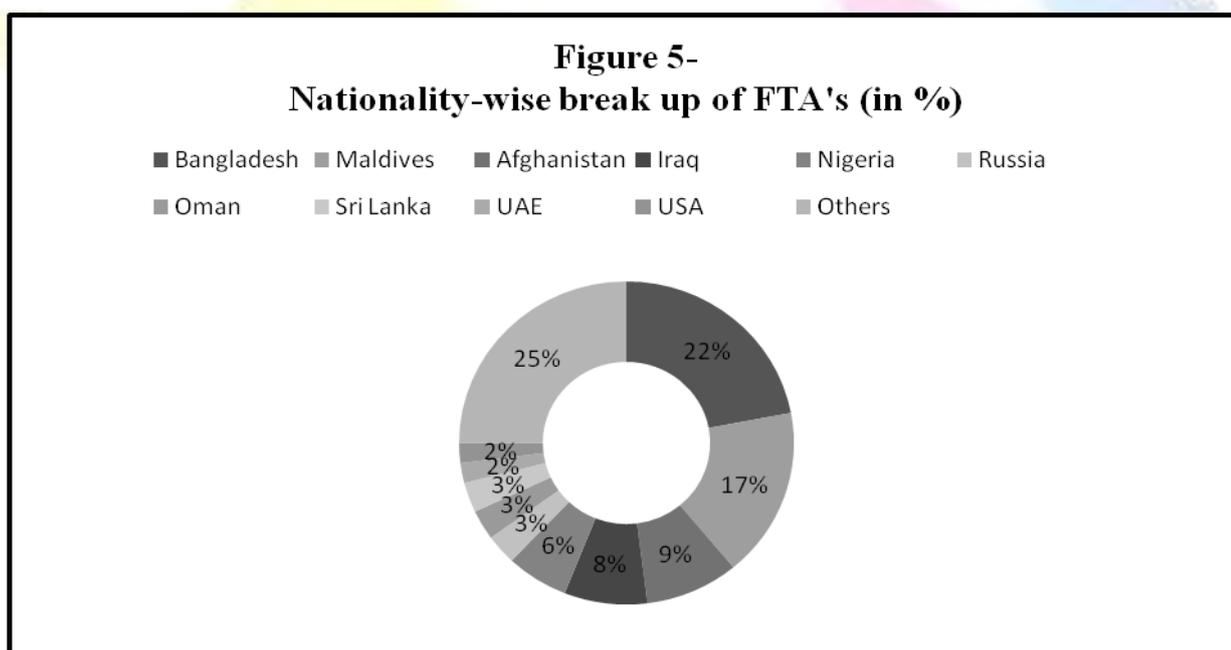
Table 7:- Nationality-wise break up of FTA's for Medical Treatment

Countries	Nationality-wise break up of FTA's (in %)
Bangladesh	22
Maldives	17
Afghanistan	9
Iraq	8
Nigeria	6
Russia	3
Oman	3
Sri Lanka	3
UAE	2
USA	2
Others	25

Source: Data analyzed by author taken from KPMG 'Medical Travel Value in India', FICCI Heal Conference, (Pg-18)

In 2012, US and UK accounted for highest number of FTA's in India. However, the FTA's for medical treatment from them were notably less (3.4% of total Medical FTA's). Bangladesh and other neighboring underdeveloped countries contributed approximately 50% of the total number of medical tourists. India is a suitable destination for Bangladesh as it's convenient in sense of physical proximity, similarity in food, culture and language.

Table 7 shows the nationality wise break up of FTA's for Medical treatment purposes in India. Figure 5 represents the pie chart of the nation wise break up of FTA's.



VII. COST COMPARISONS: INDIA vs. OTHER COUNTRIES

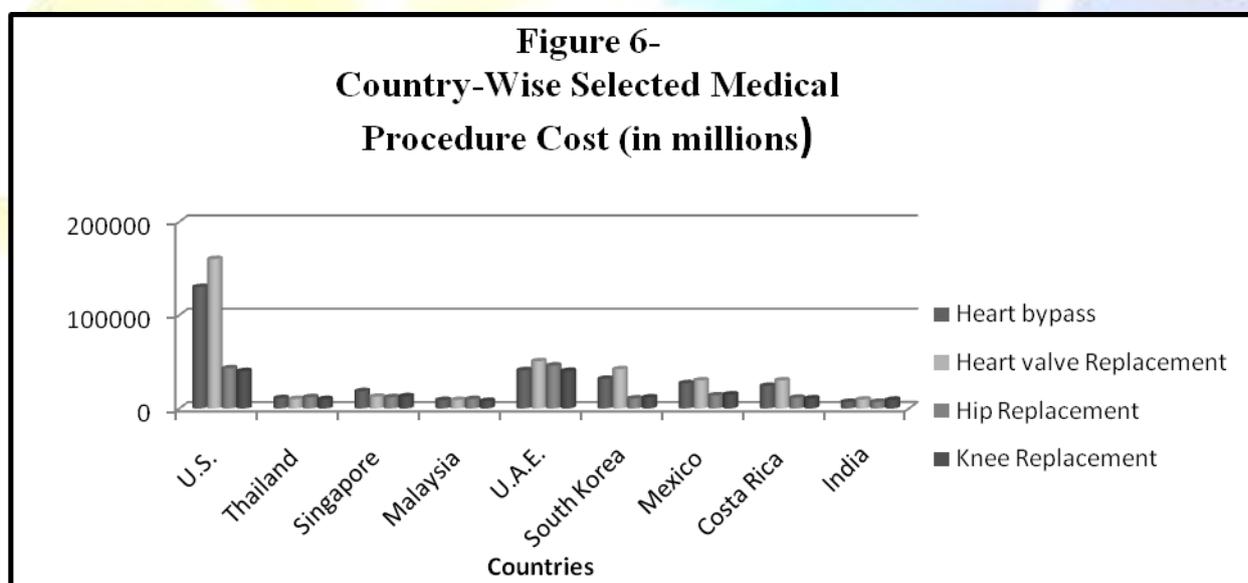
The main reason for emergence of India as a preferred destination for Medical tourism is the inherent advantage of healthcare sector. Today, Indian healthcare is perceived to be in par with the global health standards. Some top hospitals and doctors also have international reputation, i.e. their demand is world-wide. But the key competitive advantage India has in medical tourism is low cost advantage, i.e. cost effectiveness of medical treatments it offers to its patients. Majority of foreign patients visits India primarily to avail "First World Service at Third World Cost".

A Person coming to India for medical treatment can have savings from anywhere in the range of 30 to 70 percent. The overall expenditure on medical treatment of the person will be lower than treatment cost in US or UK or many other countries even if it includes ticket and accommodation expenses along with treatment cost.

Table 8 illustrates the country-wise cost comparison of selected medical procedures. Figure 6 depicts the illustrated data in bar chart. According to the table, the cost of medical procedures is approximately one tenth of the cost in US.

Procedure cost (US\$)	U.S.	Thailand	Singapore	Malaysia	U.A.E.	South Korea	Mexico	Costa Rica	India
Heart bypass	130000	11,000	18,500	9,000	40,900	31,700	27,000	24,100	7,000
Heart valve Replacement	160000	10,000	12,500	9,000	50,600	42,000	30,000	30,000	9,500
Hip Replacement	43,000	12,000	12,000	10,000	46,000	10,600	13,900	11,400	7,020
Knee Replacement	40,000	10,000	13,000	8,000	40,200	11,800	14,900	10,700	9,200

Source: KPMG 'Medical Travel Value in India', FICCI Heal Conference, (Pg-23)



Source: Data analyzed by author taken from KPMG 'Medical Travel Value in India', FICCI Heal Conference, (Pg-23)

Fluctuations in foreign exchange also have an impact on value proposition of medical value travel. Thus, sharp depreciation in Indian rupee is a boon for medical travelers coming to India since the medical services becomes more cost effective. According to KPMG Analysis, the fall of rupee against the dollar gave medical tourists a cost advantage of around 35 to 40 percent.

VIII. OTHER FACTORS ATTRACTING COUNTRY AS TOURISM DESTINATION

The attractiveness of the country as a tourist destination depends on many factors like safety, corruption, terrorism etc. It can be studied by various global indices. Table 9 states the position of India in various global indices.

Table 9:- Factors that attract country as Tourism Destination

Index	India	China	USA	Thailand	Malaysia	Indonesia	Singapore
CPI 2013 rank (0: very clean to 100: highly corrupt)	94	80	19	102	53	114	5
GPI 2014 rank (1: most peaceful to 162: least peaceful)	143	108	101	126	33	54	25
EPI rank (1: good quality to 178 most polluted)	174	176	38	145	55	112	15
GTI 2011 rank (1: highest impact of terrorism to 116: no impact of terrorism)	4	23	41	8	91	29	116
HDI rank 2013 (1: highest rank to 187: lowest rank)	135	91	5	89	62	108	9

Source: KPMG 'Medical Travel Value in India', FICCI Heal Conference, (Pg-30)

- Corruption Perception Index (CPI) ranks a country based on the perception of corruption in public sector of the country. India ranks high which indicates administrative and political corruption.
- Global Peace Index (GPI) ranks a country based on ongoing national and international conflict, societal safety and security and militarization. India ranks high due to Maoist movement, corruption, terrorism, regional conflicts and sporadic conflicts with its neighbors.
- Environmental Performance Index (EPI) ranks country based on air quality, household air quality and air pollution. India ranks high on this index indicating it to be a polluted country.
- Global Terrorism Index (GTI) ranks and compares 158 countries according to the impact of terrorism, India ranks low indicating high impact of terrorism.
- Human Development Index (HDI) is a measure derived from life expectancy, education levels and income. India ranks high indicating a high rate of child and maternal mortality, poor healthcare facility and large population below poverty line.

These poor ranks of India affect country's image and creates perception which negatively affect the medical tourism industry.

IX. KEY FINDINGS AND SUGGESTIONS

The key findings from the exploratory study are:

- Hospitality and Medical Devices Industry market are growing at 12% and 14% (approximately) respectively indicating growth in healthcare sector.
- Foreign tourist arrivals in India have grown by 4% (approximately) while travelers travelling especially for medical treatment in India have grown by 18% (approximately). The largest number of travelers from foreign comes from U.S.A. but the highest for medical purposes comes from Bangladesh.
- The key competitive advantage with the Indian Medical tourism is the cost effectiveness of medical procedures which are almost one tenth the cost abroad. India ranks poor on Global Indices in Table 9 which negatively affect the industry.

The Table 10 provides SWOT Analysis of the Medical Tourism Industry. It can be deduced that potential of industry is positive as Strengths and Opportunities outweigh Weaknesses and Threats.

Table 10: SWOT Analysis of Indian Medical Tourism Industry

Strengths	Weaknesses
<ul style="list-style-type: none"> ● Quality Services At Affordable Prices ● Less Waiting Time ● World Class Infrastructure ● Strong Presence In Advanced Healthcare e.g., cardiovascular, organ transplants – high success rate in operations ● Vast Pool Of Highly Qualified Medical Fraternity ● World Class Medical Equipments and Facilities ● World Class Post Operative Care ● International Reputation of Hospitals and Doctors 	<ul style="list-style-type: none"> ● Less Government Support/ Initiatives to Promote Medical Tourism ● Low Coordination Between the Various Players in the Industry – airline operators, hotels and hospitals ● Customer Perception as an Unhygienic Country ● No Proper Accreditation and Regulation System for Hospitals ● Lack of Uniform Pricing policies Across Hospitals ● Low in various Global Indices like Global Corruption Index etc



<ul style="list-style-type: none"> • No Language Barriers – English Speaking Personnel • Diversity of Tourism Destinations and Experiences • High Confidence Level In Doctors • Introduction of separate category of visa- m-visa for tourists travelling for medical purposes 	
<p>Opportunities</p> <ul style="list-style-type: none"> • Increased Demand for Healthcare Services from Countries with aging population (US,UK) • Fast paced Lifestyle increases demand for wellness tourism and alternatives cost • Shortage of Supply in National Health Systems in Countries like UK, Canada • Demand from Countries with Underdeveloped Healthcare Facilities • Demand For Retirement Homes for Elderly People specially Japanese • Reduced Competitive Cost of International Travel 	<p>Threats</p> <ul style="list-style-type: none"> • Strong Competition from Countries like Thailand, Malaysia, Singapore • Lack of International accreditation – A Major Inhibitor • Under Investment in Health Infrastructure

The following suggestions will help India in becoming the leader in the field of Medical Tourism. The suggestions are drawn from evaluation of data available as well as observing the other countries medical tourism conditions.

- Government should promote India as a Medical Tourism destination in international market via digital media. It should promote the ‘cost effectiveness’ and ‘existence of alternative treatment’ in India. It should build relationships with other countries to help in medical travel of patients. There should be establishment of single government agency solely for the work related to the sector like the accreditation of hospitals, uniform pricing etc.
- New hospitals especially multi specialty hospitals with more number of specialists are needed. There is an urgent need to improve logistics infrastructure for medical tourists.
- The complicated laws and regulations in context of visa and stringent law of surrogacy should be lessened.
- India lacks in various Global Indices provided in Table 9, there is a need to improve the condition as it poses a threat to the sector as well as overall image of the country in International Markets.

X. CONCLUSION

India is in an advantageous position as it has sufficient base, infrastructure and cost effectiveness required to build up a strong brand value amongst the international community as a top class healthcare destination. If coordination is synchronized properly India can tap this sector well. Many private healthcare providers and facilities have already acquired international quality accreditations to attract tourists. Convenience for tourists to travel in India facilitated major portion of FTA’s although there is need to improve infrastructure at least in popular medical hubs. Yoga, Meditation, Ayurveda and other traditional methods of treatment are major service offering that attract tourists from European nation and Middle East to India thus there is a need to launch focused digital campaigns by Government for them. Government should act as a regulator and facilitator of private investment in healthcare sector.

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