

# Dental Tourism Development in India: An Empirical Study

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## Abstract

Medical tourism in India has emerged as one of the fastest growing segments of the tourism industry despite the global economic downturn. High cost of treatments in the developed countries, particularly the USA and UK, have been forcing patients from such regions to look for alternative and cost-effective destinations to get their treatments done. The Indian medical tourism industry is presently at a nascent stage, but has enormous potential for future growth and development. As a significant component of the colossal medical tourism, Dental Tourism is emerging in the Third World countries, especially in India. Dental tourists are mainly generated from developed countries such as USA and European countries as they are looking for developing countries to get their dental treatment coupled with participating in tourism activities. The lower cost of treatment and availability of trained and experienced dental medical practitioners are the most significant reasons for choosing developing countries as dental tourism destinations. Dental tourism forms 10 percent of the total Indian medical tourism which is projected to grow at 30 percent to Rs 9,500 crore by 2015. India produces over 18,000 dentists annually from 283 dental colleges. The country has around 1,500 oral and maxillofacial surgeons. A few studies

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were carried out on various problems faced by the dental tourism industry in India. The dental tourists' perception towards Indian dental tourism industry and their satisfaction level after getting treatment are a few concerns. This research paper is prepared based on primary and secondary data collected from various sources. The primary data have been collected from Dentists, Staff and Dental Tourists from two famous internationally recognized dental hospitals located in Bangalore, Karnataka.

## Introduction

Medical tourism is a nascent health tourism concept in which a patient visits a country other than his domicile coupled with leisure and recreation leading to socio-economic development of the country through foreign exchange earnings and employment generation. Indian medical tourism sector, an emerging medical tourism destination that has created demand among Europeans and Americans as one of the most preferred medical tourism destinations in Asia, is expected to experience an annual growth rate of 30 percent. India has a potential to attract 1 million health tourists per annum which will contribute US\$ 5 billion to the economy. The medical tourists undergo health restorative treatments of a combination of ayurveda, yoga, dental care, acupuncture, herbal oil massage, nature therapies, and some ancient Indian healthcare methods –such as Vedic care, an alternate healthcare services (James and Joseph). Advantages for medical tourists include reduced costs, the availability of latest medical technologies and a growing compliance to international quality standards, as well as the fact that foreigners are not likely to face a language barrier in India. As per the new market research report "*Booming Medical Tourism in India*", India's share in the global medical tourism industry will climb to around 2.4% by the end of 2012.

## Dental Tourism in India

Dental tourism is a subset of the broad term medical tourism. The term dental tourism refers to the increasing tendency among people travelling from their home country where dental medical services are either very expensive or not available, to other countries in search for more affordable health options, often packaged with tourist attractions (Kumar A. 2008). Long waiting lists, non-availability of specialist doctors and medical facilities, unhygienic environment, adverse climatic and weather conditions, high cost of medical treatments, medical treatment complexities and health insurance problems. are some of the factors directing a wave of medical tourists to more affordable healthcare destinations. Most countries are tapping the health tourism market due to aggressive international marketing in conjunction with their tourism industry. In this rat race, India, Thailand, Malaysia, Jordan, Singapore, Hong Kong, Lithuania and South Africa have emerged as big healthcare destinations. India in particular, is a country whose dental tourism annual growth rate is estimated to increase by 30 percent, and by 2012 India's medical tourism will contribute with \$2 billion in annual revenue. According to Tom Glaister,

The cost of surgery in India, Thailand or South Africa can be one-tenth of what it is in the United States or Western Europe, and sometimes even less. A heart-valve replacement that would cost \$200,000 or more in the US, for example, goes for \$10,000 in India – and that includes round-trip airfare and a brief vacation package. Similarly, a metal-free dental bridge worth \$5,500 in the U.S. costs \$500 in India, a knee replacement in Thailand with six days of physical therapy costs about one-fifth of what it would in the States, and Lasik eye surgery worth \$3,700 in the US is available in many other countries for only \$730. Cosmetic surgery savings are even greater: A full facelift that would cost \$20,000 in the US runs about \$1,250 in South Africa. (2009)

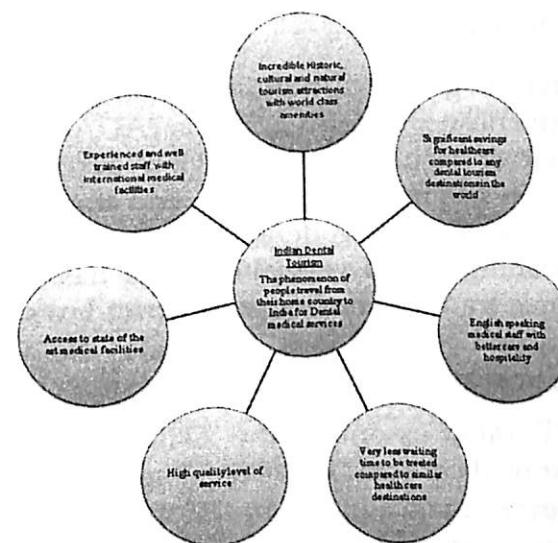
The main reason for going abroad for medical services is access to world-class dental care Percy K (2008). Furthermore, the favourable price level makes dental care of the highest international standards available to everyone. However, price should not be considered the main factor in deciding to have surgery abroad. Having dental surgery abroad is without a doubt a big decision and therefore, the quality of care should be the most important factor to consider.

A hotspot for dental tourism in Asia, India, offers dental treatments of the highest standards, with top technology and modern facilities. India is already famed for its yoga and meditation, and now it is catering to tourists' smiles, having recently become a hub of dental care. The most common and sought after dental treatments include root canals, veneers, fillings, crowns, dental bridges, dental implants and tooth whitening, all of which cost much less in India than they do in the US and the UK. UK patients may have to wait for cosmetic dentistry to be done under their National Health Service, with many patients choosing a trip abroad for a quick-fix smile.

1. India is emerging as one of the preferred destinations for dental tourism in the world. Indian Dentistry is fast catching up as a medical tourists aim due to its affordability, accessibility and much cheaper rates. India has come up as one of the most promising countries for all sorts of medical and dental treatments for the high-class professional work at much affordable prices.
2. The difference in charge of a Dentist from US to India is worth a thought. That is why India has recently become a major tourist hub of Dental Care Solutions. A patient can have his tooth fixed and make his holidays memorable at the same time or simply, enjoy the different hues of Mystic India and get the Dental treatments in India done without getting a hole in the pocket.
3. Indian doctors and assistants regularly update their skills and knowledge with continuing education lectures and credentialing at recognized international universities and

conferences providing nothing less than what their patients want for their dental treatment.

Figure 1. Dental Tourism Pull Factors



### Dental Surgeries Offered in India

India is well equipped with quality hospitals and experienced dentists that assure reliable treatment. Many dental tourism providers in India offer you worthwhile dental packages. Most of them include the following treatment options: intra mouth dental scanning, extraction of normal/fractured teeth under local anaesthesia, extraction of implanted wisdom teeth, ceramic caps without gold under microscopic control, maxillary surgery, dental bridges, porcelain/ceramic crowns, bleaching, Prosthesis on the implants/ Dental implants, vertical and horizontal bone grafting, gum grafting/ gum treatment, palatal orthodontics, fluoride treatments for children, cosmetic dentistry, smile designing, root canal, teeth whitening, tooth contouring and reshaping, dental filling

### Why India for Dental Tourism?

For the individuals who wish to have world class dental treatment, India has become an internationally recognized centre for high quality dental care. Here are a few reasons why one should consider India for their dental tourism needs:

1. Prestigious group of Indian Dental Association (IDA) and American Dental Association (ADA) affiliated dental specialists all of them with very active professional careers in major dental schools and important hospitals of the country. Indian dentists and facility qualifications are meaningful and verifiable. India has a long medical academic tradition having very strict laws that regulate training and qualifications of dentists who perform dental procedures and surgery.
2. India is rated as one of the Asian countries with the highest medical standard. Dental surgery is real surgery: it requires up-to-date education, sterile techniques, modern equipment, and products meeting international standards. Indian dentists work in modern facilities which are designed for comfort and efficiency, using the latest technology and equipment to provide expert dentistry and cosmetic dentistry.
3. The dental and medical personnel involved in health tourism speak good English.
4. Excellent price-benefit ratio due to a high US\$ vs. local currency exchange rate which benefits foreign currency tenders. Bargain dental treatment can be costly, whether it is done in India or anywhere in the world, dental treatment abroad has been attracting people based on very low prices, sacrificing quality, sanitary conditions and duly certified specialists' work.
5. The lower cost is not due to any lack in quality, quite the contrary. The reason for lower costs is related to the lower cost of infrastructure and insurance. This fact, combined with the much higher costs for trained staff and medical facilities in foreign countries, combine to make India much more competitive.
6. India is a convenient country to visit: nice weather, warm people, beautiful tropical environments or city-urban accommodation. All-inclusive packages are very attractive.
7. India provides convenient appointments at short notice for overseas patients.
8. Cost-effective and tailor-made dental packages.
9. Arrangement for quality dental treatment in top dental clinics and hospitals offering special and personalized treatment for foreign patients.
10. Immediate check-up after arrival at hospitals/clinics without being subjected to long waiting hours.
11. Flights, visa arrangement and accommodation facility provided to all international patients.
12. Special arrangement for holidaying after recuperation.



Table 1. Cost Comparison of Various Dental Procedures between India and USA

Dental Procedure	Cost in USA (\$)		Cost in India(\$)	Percentage Difference
	General Dentists	Top End Dentists	Top End Dentists	
Smile Designing	6,500	8,000	1,000	87%
Metal Free Bridge	3,000	5,500	500	90%
Dental Implants	2,100	3,500	800	77%
Porcelain Metal Bridge	1,800	3,000	300	90%
Porcelain Metal Crown	600	1,000	80	92%
Tooth Impactions	500	2,000	100	95%
Root Canal Treatment	600	1,000	100	90%
Tooth Whitening	350	800	110	86%
Tooth Colored Composite Fillings	200	500	25	95%
Tooth Cleaning	100	300	75	75%

Source: Health Care Service

Table 2. Cost of Dental Procedures in Selected Countries

Dental Procedures	Cost of Procedures in Selected Countries (in \$)					
	United States	Mexico	Hungary	Poland	India	Thailand
Implants, with Crown	2,990 to 5,000	990	1000	900	600	1700
Veneers	800 to 1,200	369	360	450	220	240
Root Canal	699 to 1,300	299 to 329	60	150 to 200	80	90 to 200
Crowns	750 to 1000	299	285	280 to 800	80	210 to 390
Bonding	150 to 300	70	70	60	25 to 30	80

Source: Health Care Service

### International Healthcare Accreditation Organizations

International healthcare accreditation is the process of certifying a level of quality for healthcare providers and programmes across multiple countries. International healthcare accreditation organizations certify a wide range of healthcare programmes such as hospitals, primary care centres, medical transport, and ambulatory care services. Accreditation has been defined as "a self-assessment and external peer assessment process used by healthcare organizations to accurately assess their level of performance in relation to established standards and to implement ways to continuously improve." At the heart of these schemes is a list of standards which, ideally, serve to assess and evaluate in a systematic and comprehensive way the standards of professional performance in a hospital. This includes not only hand-on patient care but also training and education of staff, credentials, clinical governance and audit, research activity, and ethical standards. The standards can also be used internally by hospitals to develop and improve their quality standards and quality management.

The International Society for Quality in Healthcare (ISQua) is an umbrella organisation for such organizations providing international

healthcare accreditation. Its offices are based in the Republic of Ireland. ISQua is a small non-profit, limited company with members in over 70 countries. ISQua works to provide services to guide health professionals, providers, researchers, agencies, policy makers and consumers, to achieve excellence in healthcare delivery to all people, and to continuously improve the quality and safety of care. ISQua does not actually survey or accredit hospitals or clinics itself.

### **National Accreditation Board for Hospitals and Healthcare (NABH)**

Quality Council of India QCI and its National Accreditation Board for Hospitals and Healthcare providers NABH have designed an exhaustive healthcare standard for hospitals and healthcare providers. This standard consists of stringent 500 plus objective elements for the hospital to achieve in order to get the NABH accreditation. These standards are divided between patient centered standards and organization centered standards.

### **QHA Trent Accreditation**

QHA Trent Accreditation is a United Kingdom-based independent holistic accreditation scheme for hospitals and clinics that functions worldwide. It represents an option for healthcare providers to international accreditation schemes such as Joint Commission International from the USA

### **Australian Council on Healthcare Standards International (ACHSI)**

### **The Joint Commission (TJC)**

The Joint Commission (TJC), formerly the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), is a United

States-based not-for-profit organization that accredits over 19,000 healthcare organizations and programmes in the United States. The declared mission of the organization is, "To continuously improve healthcare for the public, in collaboration with other stakeholders, by evaluating healthcare organizations and inspiring them to excel in providing safe and effective care of the highest quality and value".

### **Review of Literature**

The dental tourism, a subset of the broad spectrum of Medical Tourism, is a nascent concept in India having tremendous growth potential since most of the Europeans and Americans prefer India as a dental tourism destination. The recent devaluation of Indian Rupee against US Dollar would certainly boost up Indian medical tourism industry. Researches have been conducted on the most promising Indian Dental Tourism Industry. The researchers reviewed a few research papers and articles on Indian Medical and Dental Tourism for the present research work. (Singh 2005) India has been recognized as a world class dental care with affordable prices compared to that of European and American countries and having plenty of tourism resources to enjoy. He did a price comparison of USA and India and said that 75 percent less cost is incurred in India compared to USA for overall dental procedures. (Purukasharaj. 2011) best and popular destination for medical and dental tourism is India because of the competitive advantage of low cost and good quality dental care. He also identifies other reasons for considering India as a medical tourism destination such as experienced and English speaking medical staff, lodging and sightseeing comfort and conducive atmosphere for initial recovery. The author says that India is the fastest growing in the medical tourism sector compared to other destinations in the World and data evidence that Indian Medical Tourism sector is expected to reach \$2 Billion by 2012 and attracting 1,50,000 patients every year for procedures like Dentistry, Hip re-surface and eye surgery. (Nikhil Lamba.2010) dental tourism is grown in recent years and it is acceptable. It also adds that most

people travel abroad to avoid health insurance. They visit for couple of weeks or months for their dental treatment and benefit the cost savings from 50% up to 90% to Mexico, India, Thailand and other ancient countries. To attract the tourists, dentists started adapting the latest technologies such as dental implants and lasers at lower costs and made it attractive. (Samson, 2010) the cost benefit for dental treatment is the reason for tourists travelling to Asian countries to get dental treatment. (Dabral, 2010) affordability, experienced staff and cost effectiveness are the major motivators for choosing India as a preferred destination for medical and dental tourists. (Neely, 2010) economic recession in the developed countries caused a creation of medical tourism demand in India due to unaffordable cost at their own land leading to a fall of 20% and 40% in dental and alternative medical treatments respectively.

Most of the review of literature talks about the affordability and cost effectiveness and availability of experienced dental staff as the major reasons to choose India as a dental tourism destination. The problems of the dental tourism industry in India such as quality of service, customer satisfaction level, safety and security problems, marketability of the dental care products, necessity for accreditation and quality assurance are not studied in detail. After the review of literature, the researchers concluded that a survey among the dental tourists in India is necessary to obtain their feedback about the quality of service, satisfaction level and the reasons to choose India as a destination.

### Research Problem

Dental tourism, a segment of medical tourism, is a recent concept and it is developing in India in leaps and bounds. India has emerged as an internationally recognized center for high quality dental care. Low cost of treatment, experienced medical practitioners, easy communication in English language, famous tourism spots, better climatic conditions, and time savings. are some of the reasons for choosing India as a dental tourism destination by many tourists.

But certain issues related to dental tourism in India are not addressed by the previous researchers. Those issues are summarized below.

1. What are the problems and prospects of dental tourism development in India?
2. What is the satisfaction level of the dental tourists in India?
3. How do hospitals market their dental tourism packages?
4. What is the role of the government in dental tourism promotion?
5. Is there any kind of standardization/accreditation criteria for dental hospitals?

The most common issue related to medical tourism is the quality of the medical institution itself. It can be difficult to check the qualifications of the doctors, anesthesiologists and other specialized staff at medical facilities which are privately-owned and operated. This is particularly true with cosmetic surgeons, who almost always have their own privately-run clinics. In competitive healthcare markets where patients have an increasing array of choices, quality is the most important differentiator for organizations striving for sustainability and both national and regional leadership. International accreditation has become a powerful indicator of a healthcare organization's commitment to high-quality care and patient safety.

### Scope of the Study

A few dentals hospitals of Bangalore which are famous for dental tourism have been selected for conducting the research. Bangalore is situated in the southern part of Karnataka acting as a hub for medical and dental tourism in India since it has good connectivity with many parts of the world. The city has good infrastructure and superstructure facilities which will help the tourist to stay comfortably. This city has many world class dental hospitals with

well-qualified and skilled doctors and provides good facilities and treatment to the tourists. For the research, Apollo Dental Care and Fortis Hospital have been selected since these two hospitals are very much advanced in technology and have several branches in India and abroad.

### Objectives of the Study

The main objective of the study is to collect first hand information from the dental tourists and doctors (dentists) about the problems and opportunities of dental tourism development in India, particularly in Karnataka. The major objectives are summarized below:

1. To study opportunities to develop dental tourism in India, particularly in Karnataka
2. To analyze the various issues related to dental tourism development such as accreditation, promotion, management, policies and strategies.
3. To understand the apprehensions of dentists and staff and opinion of the dental tourists who have already undergone/ are undergoing dental treatment.

### Research Methodology

Primary and secondary data have been used for conducting the research. Secondary data has been collected from various published sources such as books, journals, and internet. Primary data has been collected from doctors, staff and dental tourists of Apollo Dental Care, Bangalore and Fortis Hospital, Bangalore.

- Printed schedules and questionnaires were distributed to dental tourists and interpretations were made in simple percentage.
- Direct interview and observation method were used to collect information from the doctors and staff.

### Major Findings of the Study

1. The secondary data sources on performance of the Indian Dental tourism industry indicate that it remains a toddler compared to the other tourism segments like leisure, and adventure. Indian dental tourism grows annually by 23 percent but this growth rate is much lesser than that of Asian competitors such as Thailand (31%), Singapore (28%), Malaysia (43%), and Korea (48%)
2. Majority of the tourists (65%) have chosen India as their dental tourism destination because of its cost-effective prices. Patients pay less than they would do in Europe, even when they include the airfare and dentist expenses. Table no 2 shows that compared to its counterparts, India is the cheapest health care destination.
3. Many dental tourists have an apprehension that the technological advancement in the hospitals is not up to the level of international standards. They are using either out dated or substandard technological tools and methods for diagnosis and treatment.
4. Greater parts of the staff working in dental hospitals are aware of the concept of dental tourism and its socio-economic significance to the country. Some of the dentists and employees are not aware of the concept of dental tourism.
5. A few websites of the dental hospitals are very informative and convincing. But majority of the dental hospital websites are failed to giving adequate information about their services. Since websites are the major media for interface between the hospitals and the patients prior to the treatment, the websites should be able to create credibility and authenticity among the potential patients spread over the world. Most dental tourists have collected information about the hospital,



doctors, services and other requirements from the concerned websites.

6. Dental tourism has emerged due to lower international travel costs than ever before and the fact that dental treatment is so expensive in many countries.
7. Unlike other medical tourism treatments such as heart surgery, recovery from the dentist is quick, which means patients can enjoy their holiday to the full.
8. Patients now having dental treatments carried out in India are increasing due to high quality service and low prices.

#### **Important Suggestions and Recommendations**

1. The study strongly recommends conducting of thorough Market Research and feasibility studies in order to quantify the "How many", "From where", "To where", and most importantly the "How" of dental tourism so as to devise an appropriate strategy to project India as a major healthcare destination. Only then can we leverage and channelize all efforts in the right direction. In the absence of proper planning, formulation, implementation and evaluation of coherent strategies, the much created hype and all the efforts may just go in vain.
2. The website of the dental clinics/hospitals could provide a detailed description about the patients' testimonials so as to create credibility and authenticity among the dental tourism aspirants. This is best accomplished by scouring the internet, especially blog sites that provide firsthand experiences and advice from others who have already completed the procedure. With a bit of research reputable hospitals and clinics should be globally well-known and easy to distinguish from shady unqualified doctors.

3. To provide for brighter prospects for the industry, the hospitals can acquire international accreditation from various international organizations such as ACHSI, TJC, QHA, and NABH. to create credibility and authenticity among dental tourists and to brand the services internationally.
4. The protection laws in dental tourism generating countries are rarely enforceable in the host country. Patients who receive poor or damaging medical treatment usually have no legal recourse. Malpractice and negligence by either the individual doctor or the institution are very rarely covered, leaving medical tourists left to fend for themselves. So there is a necessity for framing laws and regulations with a global outlook to maintain quality service and to mitigate the possible grievances of the dental tourists.
5. An integrated approach with Total Quality Management is the best strategy to bring up the industry to international standards. Various service providers of dental tourism such as dental hospitals, tour Operators, hotel and accommodation centres, entertainment organizations, and documentation centres are integrated in such a way that end-to-end value added services are offered to the guests.
6. The issue of follow-up care is another thing to carefully research and consider before choosing an institution for the medical care. Most medical tourism packages provide very little, if any, follow-up care after the treatment. Once the tourist return to their home country, any complications that arise will be more difficult to deal with. So that the hospital should frame a follow-up care policy and adequate facilitation for follow-ups by using the latest information and communication technologies such as video conferencing, and internet consultation.
7. The hospitals have to take some measures to improve the technological advancement in the hospitals and it should implement modern technology in treatments.

8. The recovery vacation period so heavily promoted by medical tourism packages can also carry certain risks. Depending on the extent of the surgery, travelling soon after an operation greatly increases the potential for complications. Long air flights increase the chance of swelling, blood clots and infection. Even sunbathing on the beach will darken the scars. The tour packages and backward journey plan may be decided after thorough check up.
9. Dental tourism industry should be declared as Invisible Export Industry and all financial incentives applicable for export industries may be extended to it for support and promotion. The government has to create awareness about dental tourism
10. The government of India can also reinforce its support through quick visa processing, improved flight connectivity and infrastructure development.

### Conclusion

Dental Tourism Development is one of the most significant fiscal forces for socio-economic prosperity of India. A strategically planned dental tourism developmental approach can make the Indian subcontinent a most preferred dental tourism destination of the world, especially among its Asian counterparts by coordinating all the stakeholders who are actively and passively involved in it such as dentists, tour operators, travel agents, airlines, NGOs, and government organizations. There is a need to pool various dental tourism resources which are scattered throughout India to ensure total quality. International standardization by hospital accreditations, rigorous dental tourism awareness campaigns, efficient and effective promotional and marketing strategies, ensuring safety and security to the tourists, reducing the travel formalities and construction of world class hospitals and brilliant dental tourism packages shall make India a dental tourists' paradise.

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