

An Empirical Study of Medical Tourism in India

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ABSTRACT

Medical Tourism in India is a developing concept whereby people from world over visit India for their medical and relaxation needs. Most common treatments are heart surgery, knee transplant, cosmetic surgery and dental care. The reason India is a favorable destination is because of it's infrastructure and technology in which is in par with those in USA, UK and Europe. India has some of the best hospitals and treatment centers in the world with the best facilities. Since it is also one of the most favorable tourist destinations in the world, Medication combines with tourism has come into effect, from which the concept of Medical Tourism is derived.

Following are the two basic objectives of my paper:

1. To examine the medical tourism in India and its future prospects.
2. To analyze the cost benefit medical services in India.

Key words:

Medical facility, Tourism, cost benefits, Treatment Centers, medicotourism packages

Introduction

Medical tourism can be broadly defined as provision of 'cost effective' private medical care in collaboration with the tourism industry for patients needing surgical and other forms of specialized treatment. This process is being facilitated by the corporate sector involved in medical care as well as the tourism industry both private and public. Medical or Health tourism has become a common form of vacationing, and covers a broad spectrum of medical services. It mixes leisure, fun and relaxation together with wellness and healthcare. The idea of the health holiday is to offer you an opportunity to get away from your daily routine and come into a different relaxing surrounding. Here you can enjoy being close to the beach and the mountains. At the same time you are able to receive an orientation that will help you improve your life in terms of your health and general well being. It is like rejuvenation and clean up process on all levels - physical, mental and emotional. Many people from the developed world come to India for the rejuvenation promised by yoga and Ayurvedic massage, but few consider it a destination for hip replacement or brain surgery. However, a nice blend of top-class medical expertise at attractive prices is helping a growing number of Indian corporate hospitals lure foreign patients, including from developed nations such as the UK and the US. As more and more patients from Europe, the US and other affluent nations with high medicare costs look for effective options, India is pitted against Thailand, Singapore and some other Asian countries, which have good hospitals, salubrious climate and tourist destinations. While Thailand and Singapore with their advanced medical facilities and built-in medical tourism options have been drawing foreign patients of the order of a couple of lakhs per annum, the rapidly expanding Indian corporate hospital sector has been able to get a few thousands for treatment. But, things are going to change drastically in favour of India, especially in view of the high quality expertise of medical professionals, backed by the fast improving equipment and nursing facilities, and above all, the cost-effectiveness of the package.

Research Methodology

It is a descriptive paper which is based on the secondary data. Data collected from the various sources like news papers, magazines, internet, books etc.

Medical Tourism Packages available for India

Several Medical Packages are available to suit patient needs. The medical package suitable for a patient depends on past treatment and current condition, based on which the most appropriate treatment will be made available.

Some of the medical Packages available are for :

- Dental Care
- Eye Care
- Heart Care
- Heart Surgery
- Health Check Up
- Cosmetic Treatment
- Orthopaedic Surgery

Medical Tourism in India for Dental Care

There are several Dental Care packages available. However, these will be based on the requirements of the person and his holiday needs.

Please find below a small cost comparison of dental treatment procedures between USA and India. There is a huge difference between the pricing (about 7/8 times when we speak of Top-end dentists).

<i>Dental procedure</i>	<i>Cost in USA (\$)</i>		<i>Cost in India (\$)</i>
	<i>General Dentist</i>	<i>Top End Dentist</i>	<i>Top End Dentist</i>
<i>Smile designing</i>	-	8,000	1,000*
<i>Metal Free Bridge</i>	-	5,500	500*
<i>Dental Implants</i>	-	3,500	800*
<i>Porcelain Metal Bridge</i>	1,800	3,000	300*
<i>Porcelain Metal Crown</i>	600	1,000	80*
<i>Tooth impactions</i>	500	2,000	100*
<i>Root canal Treatment</i>	600	1,000	100*
<i>Tooth whitening</i>	350	800	110*
<i>Tooth colored composite fillings</i>	200	500	25*
<i>Tooth cleaning</i>	100	300	75*

** These figures do not suggest the actual cost. Actual cost of treatment varies from case to case.*

Some of the facilities offered by the dental clinics are :

- Dental Scanning - Intra mouth
- Surgical Intervention under general anaesthesia
- Whitening of teeth
- Ceramic caps without gold under microscopic control
- Prosthesis on the implant
- Vertical and horizontal bone grafting
- Gum Grafting
- Palatal orthodontics
- Fluoride treatment for children
- Maxillary surgery
- Over denture
- Combined prostheses with milling

Medical Tourism in India for Eye Care

The cost different for most eye care procedures varies as high as 8-10 times from that of USA and UK. Some of the treatments available are :

Eye Lasik Refractive Packages

Lasik Eye Surgery

Eye Care Treatment

Lasik Treatment

Refractive Surgery India

Laser Refractive Surgery

Refractive Eye Correction Package

Natural Eye Care Treatment

Vision and Eye Care

Eye Refractive Care Packages

Medical Tourism Packages in India for Heart Care

India offers world-class healthcare that costs substantially less than those in developed countries, using the same technology delivered by competent Specialists attaining similar success rates. Hospitals in India use some of the best know-how and technology and the procedures include cardiothoracic, neurology, gastrointestinal, orthopaedic, renal, obstetric, ENT, ophthalmology, dental, plastic, cosmetic and tumour surgeries.

A heart care surgery which costs in the region of USD 30,000 in USA can cost as low as USD 8,000 in India. This clearly states the price difference that exists in India when compared to the west.

Conditions operated on include:

- Valvular diseases
- Arrhythmias

- Coronary artery disease
- Hypercholesterolemia
- Family history of coronary disease
- Hypercholesterolemia
- Heart disease symptoms

Some of the procedures available are:

- directional coronary atherectomy
- rotablation
- coronary artery stenting
- intravascular ultrasound
- balloon valvuloplasty
- Non-surgical closure of holes in the heart such as ASD, VSD and PDA.

Medical Tourism Packages in India for Heart Surgery

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Cardiac care has become a specialty in India with institutions like the Escorts Heart Institute and research Centre, All India Institute of Medical Sciences and Apollo Hospital becoming names to reckon with. They combine the latest innovations in medical electronics with unmatched expertise in leading cardiologists and cardo-thoracic surgeons. These centers have the distinction of providing comprehensive cardiac care spanning from basic facilities in preventive cardiology to the most sophisticated curative technology. The technology is contemporary and world class and the volumes handled match global benchmarks. They also specialize in offering surgery to high risk patients with the introduction of innovative techniques like minimally invasive and robotic surgery.

Renowned Indian hospitals like Apollo and Escorts Heart Institute are equipped to handle all phases of heart diseases from the elementary to the latest clinical procedures like interventional cardiac catheterisation and surgical cardiac transplants. Their success rate at an average of 98.50% is at par with leading cardiac centers around the world.

Leading heart centers like The Escorts Heart Institute have Cardiac Care Units with sophisticated equipment and investigative facilities like Echocardiography with coloured Doppler, Nuclear Scanning and Coronary Angiography. The Jayadeva Institute of Cardiology in Bangalore, the Cardiology Hospital in Kanpur, the Heart Hospital in Calicut and the Sree Sudhindra Medical Mission Hospital in Cochin are some hospitals in India devoted exclusively to cardiac treatment.

Surgical treatment packages are offered in following areas:

- » Cardiac Surgery And Cardiology
- » Open Heart Surgery
- » Angiographies
- » Angioplasties
- » Paediatric Cardiac Surgery
- » Paediatric Intervention
- » Cardiology Robotic Surgery

Some other procedures available are:

- » directional coronary atherectomy
- » rotablation
- » coronary artery stenting
- » intravascular ultrasound
- » balloon valvuloplasty
- » non-surgical closure of holes in the heart such as ASD, VSD and PDA.

Medical Tourism Packages in India for Health Check-ups

Many common and life-threatening conditions can be treated successfully if detected early. Many leading hospitals in India have health check-up programmes that screen every part of the body meticulously and professionally. A proper health check-up scans your bio-history, interprets signals and provides the opportunity for the proverbial "stitch in time". A heart check-up constituting echocardiography, consultation by a senior cardiologist, blood test, general test and haemogram can go a long way in ensuring a healthy heart. The test can be done at any of the leading cardiac hospitals or private clinics.

A comprehensive health check-up contains the following tests:

- Doctors consultation and full medical examination
- Blood tests
 - Complete Haemogram (hb, TLC, DLR, ESR, Haematocrit, Peripheral Smear)
- Blood group (ABO, RH)
- Blood Sugar
- Blood Urea
- Serum Uric Acid
- Serum Creatinine
- Serum Cholesterol
- Lipid Profile
- Urine and Faeces Examination
- X-Ray Chest PA
- ECG
- Exercise Stress Test (TMT)
- Stress Screening by Psychologist
- Eye Examination
- Gynaecologist Consultation and Pap Smear Test
- Post Check-up consultation
- Optional Test

Medical Tourism Packages for Cosmetic Surgery

A new dimension of the medical field taking off in India is cosmetic surgery which utilises some of the latest techniques in corrective procedures. Some disfigurations corrected include hair restoration (hair implants, hair flaps, and scalp reductions), rhinoplasties (reshaping or recontouring of the nose), stalling of the aging process (face life, cosmetic eyelid surgery, brow lift, sub-metal lipectomy for double chin), demabrasions (sanding of the face,) otoplasty for protruding ears, chin and cheek enlargement, lip reductions, various types of breast surgery and reconstruction and liposuction.

Non-invasive surgical procedures like stereotactic radiosurgery and radiotherapy for brain tumours are practised successfully.

Medical Tourism Packages in India for Orthopaedic Surgery

A number of orthopedic procedures are available such as hip and knee replacement, the Ilizarov technique, limb lengthening, Birmingham Hip resurfacing technique (which scores over conventional hip replacements and is still unavailable even in the US) etc.

Many hospitals specialize in latest techniques and treatments such as minimal invasive surgery, cartilage and bone transplantation, spine surgery and limb sparing surgery. All kinds of musculo-skeletal problems ranging from Arthritis to sports injuries, to complex broken bones, bone tumors and childhood conditions like scoliosis are treated most effectively.

A wide range of spinal surgeries including fixation, stabilization and fusion are regularly undertaken.

Bone Marrow Transplant

Major hospitals in India have oncology units comprising surgical oncology, medical and radiation therapy as well as the crucial Bone Marrow Transplantation (BMT). The BMT unit with high pressure hipa filters has helped achieve a very high success rate in the various types of transplantation.

Cord Blood Transplant and Mismatched Allogeneic Stem Cell Transplant have been performed successfully, a feat that is remarkable and significant, considering the fact that the treatment costs one-tenth of what it does in the west. Special surgeons are available for individual organs. Plastic surgeons of repute provide treatment for head and neck cancer, breast cancer and other malignancies. Facilities offered include tele-therapy which includes simulation work stations to ensure high precision and safety during treatment at the 18 MV linear accelerator or telecobalt machines, brachy therapy and 3-D planning systems. In orthopaedics, the Ilizarov technique is practised for the treatment of limb deformities, limb shortening and disfiguration.

Joint Replacement Surgery

Shoulder/hip replacement and bilateral knee replacement surgery using the most advanced keyhole or endoscopic surgery and arthroscopy is done at several hospitals in India including the Apollo Hospital, Sir Ganga Ram Hospital and Holy Family Hospital in Delhi, Bombay Hospital, Leelavati and Hinduja Hospital in Mumbai and the Madras Institute of Orthopaedics and Trauma Sciences. Some hospitals like Apollo in Delhi have Operation Theatres with Laminar Air Flow System which compares with the best in the USA and the UK. A knee joint replacement costs about 3000 pounds in India whereas in the UK, a similar surgery using the same implants and medical consumables costs around 10,000 pounds.

Hospitals in India

India offers world-class healthcare that costs substantially less than those in developed countries, using the same technology delivered by competent Specialists attaining similar success rates.

- AIIMS
- Apollo Hospital
- B.M.Birla Heart Research Centre
- Christian Medical College
- Tata Memorial Hospital
- Apollo Cancer Hospital

- Indraprastha Medical Corporation
- Institute Cardiovascular Diseases

Holiday Destinations in India

In a country as diverse and complex as India, it is not surprising to find that people here reflect the rich glories of the past, the culture, traditions and values relative to geographic locations and the numerous distinctive manners, habits and food that will always remain truly Indian.

Beaches in India

Thousands of sun-deprived tourists visit India because it incredibly has the most diverse varieties of beaches anywhere in the world. Placid backwaters and lagoons, bays and rough lava-rocked seas, marine estuaries with fish, crashing surf, powdery golden sand or palm fringed shores - Incredible India has them all.

The West Coast with the Arabian Sea and the East Coast with the Bay of Bengal offer many a verdant vistas to the traveller. The coasts of India have their own seafood cuisine, relaxing spas, diving and water sports and great places to stay for a balmy holiday.

Hill Stations and Retreats

India offers several Hill Stations with excellent tourist attractions and facilities.

Royal Retreats

Having had a glorious past ranging from old civilizations to the more recent kingdoms, India offers royal retreats which are nowhere to be seen elsewhere. Staying at beautiful palaces with lush green fields, huge borders etc., make some of these retreats a memory of a lifetime.

Some of the Holiday destinations covered by us are :

- Agra
- Rajasthan
- Kerela
- Goa

- Delhi
- Mumbai (Bombay)
- Karnataka

Analysis and interpretation

Cost Comparison - India vs United Kingdom (UK)

Significant cost differences exist between U.K. and India when it comes to medical treatment. Accompanied with the cost are waiting times which exist in U.K. for patients which range from 3 months to over months.

India is not only cheaper but the waiting time is almost nil. This is due to the outburst of the private sector which comprises of hospitals and clinics with the latest technology and best practitioners.

Nature of Treatment	Approximate Cost in India (\$)*	Cost in other Major Healthcare Destination (\$)*	Approximate Waiting Periods in USA / UK (in months)
Open heart Surgery	4,500	> 18,000	11-Sep
Cranio-facial Surgery and skull base	4,300	> 13,000	8-Jun
Neuro-surgery with Hypothermia	6,500	> 21,000	14-Dec

Complex spine surgery with implants	4,300	> 13,000	11-Sep
Simple Spine surgery	2,100	> 6,500	11-Sep
Simple Brain Tumor			8-Jun
-Biopsy	1,000	> 4,300	
-Surgery	4,300	> 10,000	
Parkinsons			11-Sep
-Lesion	2,100	> 6,500	
-DBS	17,000	> 26,000	
Hip Replacement	4,300	> 13,000	11-Sep

Cost Comparison - India vs United States of America (USA)

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Procedure Charges in India & US (US \$):

<i>Procedure</i>	<i>Cost (US\$)</i>	
	United States	India
Bone Marrow	2,50,000	69,000

Transplant		
Liver Transplant	3,00,000	69,000
Heart Surgery	30,000	8,000
Orthopedic Surgery	20,000	6,000
Cataract Surgery	2,000	1,250

Here's a brief comparison of the cost of few of the Dental treatment procedures between USA and India

<i>Dental procedure</i>	<i>Cost in US (\$)*</i>		<i>Cost in India (\$)*</i>
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Root canal Treatment	600	1,000	100
Tooth whitening	350	800	110
Tooth colored composite fillings	200	500	25
Tooth cleaning	100	300	75

Conclusion

Medical tourism is likely to be the next major foreign exchange earner for India as an increasing number of patients, unwilling to accept long queues in Europe or high costs in the US, are travelling to the country to undergo surgery, according to a media report. Medical tourism is on the rise with more people from the United States, Europe and the Middle East seeking Indian hospitals as a cheap and safe alternative, says an article in an upcoming issue of Bloomberg Markets magazine. The report says Indian doctors are setting up what could be a medical renaissance in their country and the next great boom for the Indian economy. Many Indian hospitals are coming together to improve the quality of health care, boost first impressions and aiming for \$2.3 billion in annual revenue by 2012, it says. Instead of paying \$2,00,000 for a mitral valve surgery in the US, a patient could travel to India and receive the same treatment for \$6,700. Similarly, rather than paying 15,000 pounds Sterling for hip resurfacing in the UK, a patient can get the same procedure for 5,000 pounds in India, including surgery, airfare and hotel stay, the magazine says.

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