

**A POTENTIAL SOURCE FOR DEVELOPMENT OF MEDICAL TOURISM OF INDIA:
“ROLE OF TRADITIONAL HOLISTIC MEDICINE IN CARDIOVASCULAR
REHABILITATION”**

Mohammad H. Haddadzadeh

PhD, Research fellow, Dept. of Physiotherapy, Manipal University

mhadadzadeh@gmail.com

Zahra Mohebbi

PhD, Dept. of History, University of Pune

zahramohebbi@gmail.com

Arun G Maiya

PhD, Prof. & Head, Dept. of Physiotherapy, Manipal University

ajmaiya@yahoo.com

ABSTRACT

Medical tourism as a term of tourism has risen rapidly in recent decades. One of the major reasons for medical tourism is to get low cost and world-class medical treatment in countries like India, Thailand, South America, Singapore, and Malaysia. Health and medical tourism is perceived as one of the fastest growing segments in marketing ‘Destination India’ today. In recent years, availability of latest medical facilities and technological advancement in developing countries like India making these countries as the hot zones for medical tourism. As a rule of thumb in medical tourism, people are not only aspiring better treatments for their ailments but are also looking at the holistic well-being. They want to recover, relax, rejuvenate, rejoice and more over get away from the routine. Thus, Medical Tourism offers a synergy of healthcare, tourism and hospitality, proving to be an attractive and energetic health package for the people. India offers World Class medical facilities, comparable with any of the western countries. India has state of the art hospitals and the best qualified doctors, despite the lowest cost in all kind of medical interventions compared with other developing countries. Other advantages of Medical Tourism in India include no waiting list, & less chance of resisted infections compared to UK or other western countries. Since Cardiovascular Disease is the leading cause of death worldwide, medical tourism in Cardiovascular Disease treatments has a huge potential to attract health tourist from all over the world. Although medical tourism in surgical interventions in cardiovascular medicine has started recently in India, but Cardiovascular Rehabilitation is a forgotten horizon and is undermined. Cardiac Rehabilitation with its multi-disciplinary team approach including Cardiology, Physical therapy, Psychological and Nutritional management and life style changes can play a significant role in improving healthcare tourism prospects.

India has the huge potential of being a hot zone for cardiovascular medicine and Cardiac Rehabilitation because of the availability of all facilities and required technological equipment, up to date team for cardiac rehabilitations, and lower cost. Since psychological management and stress reduction is one the most important parts in cardiac rehabilitation, India with its large number of resorts and spa’s and opportunities for Safaris at a very low cost has a tremendous capability of such intervention. In summary, according to the components of cardiac rehabilitation, India with its particular native holistic treatments like Homeopathy, Ayurveda, Yuga, Meditations and Vegetarian diet has a huge potential to contribute and expand in Cardiac Rehabilitation specifically and become a leading country for such intervention which is underestimated in current practice of medical tourism of India.

KEYWORDS

Medical Tourism, Cardiovascular Rehabilitation, Holistic Medicine, Cardiovascular Medicine.

1. INTRODUCTION & LITERATURE REVIEW

Since the days of human civilization, travelling has contributed to the development of human race. Man in search of excellence or better opportunities focused his vision on different horizons. This attitude of human race is even apparent in the modern era. The quest for the best continues... The result of one such quest is the phenomenon known as Medical Tourism. People are exploring the better options in medical care outside their home lands. The idea of moving away from homes for wellness also has a psychological value attached, which can speed up the recovery. In the early days the differences in the standards of living across the world were huge, whereas now the standards of living in few sectors across the world are of the same quality. The existence of these global standards across different nations in the world irrespective of their economies gave fillip to a niche in the hospitality industry in the name of 'Medical Tourism'.

Medical tourism also known as medical travel, health tourism or global healthcare, is a term initially coined by travel agencies and the mass media to describe the rapidly-growing practice of travelling across international borders to obtain health care. It also refers pejoratively to the practice of healthcare providers travelling internationally to deliver healthcare.^{1,2} For most people needing medical care, the last thing on their mind is travel but a growing number of medical tourists are setting out for India, Thailand and Latin America for everything from dental work to breast implants to major heart surgery. These tourists are usually surprised to find brand new facilities and equipment as hospitals and medical tourism hubs around the world join in the fierce competition for this fast growing market. While price is the major factor that first leads patients to look overseas for health care, there are a number of other benefits that often escape notice, though the price difference remains the prime motivator for most people. Medical tourism has its perils, however, and the aspiring tourist should be familiar with possible problems and have a good idea about which hub is right for them long before planning the details of a trip.³

Medical tourism is actually thousands of years old. In ancient Greece, pilgrims and patients came from all over the Mediterranean to the sanctuary of the healing God, Asklepios, at Epidaurus. In Roman Britain, patients took the waters at a "Shrine Bath", a practice that continued for 2,000 years. From the 18th century wealthy Europeans travelled to spas from Germany to the Nile. In the 21st century, relatively low-cost jet travel has taken the industry beyond the wealthy and desperate.⁴ Countries that actively promote medical tourism include Cuba, Costa Rica, Hungary, India, Israel, Jordan, Lithuania, Malaysia and Thailand. Belgium,

Poland and Singapore are now entering the field. South Africa specializes in medical safaris-visit the country for a safari, with a stopover for plastic surgery, a nose job and a chance to see lions and elephants.

In the preset paper, authors first tried to focus on Medical Tourism & its status in India followed by defining cardiovascular disease & its Rehabilitation and explaining the impact of Cardiovascular Rehabilitation in development of Medical Tourism of India. Secondly, authors tried to find out why India could be a suitable for cardiovascular surgeries & Rehabilitation. The important role of Indian Holistic Medicine as a potential component in Cardiovascular Rehabilitation is also shown.

2. METHODOLOGY

Medical Tourism in India

India is hoping to expand its tourist industry to include visitors with heart conditions and cataracts. Indeed, medical tourism, where foreigners travel abroad in search of low cost, world-class medical treatment, is gaining popularity in countries like India. The field has such lucrative potential that Indian finance minister Jaswant Singh called for India to become a “global health destination.” And, with prices at a fraction of those in the US or Britain, the concept will likely have broad consumer appeal – if people can overcome their prejudices about health care in developing countries.⁵ Health and medical tourism is perceived as one of the fastest growing segments in marketing ‘Destination India’ today. While this area has so far been relatively unexplored, we now find that not only the ministry of tourism, government of India, but also the various state tourism boards and even the private sector consisting of travel agents, tour operators, hotel companies and other accommodation providers are all eyeing health and medical tourism as a segment with tremendous potential for future growth.⁶

India is considered the leading country promoting medical tourism-and now it is moving into a new area of "medical outsourcing," where subcontractors provide services to the overburdened medical care systems in western countries. India's National Health Policy declares that treatment of foreign patients is legally an "export" and deemed "eligible for all fiscal incentives extended to export earnings." Government and private sector studies in India estimate that medical tourism could bring between \$1 billion to \$2 billion US into the country by 2012. The reports estimate that medical tourism to India is growing by 30 per cent a year.⁷

According to the study conducted by the Confederation of Indian Industry and McKinsey consultants, last year some 150,000 foreigners visited India for treatment, with the number rising by 15 per cent a year.⁸ Medical tourism is on the rise with more people from the United States, Europe and the Middle East seeking Indian hospitals as a safe alternative but low cost.

Cardiovascular disease & Rehabilitation: It’s potentials for medical tourism in India:

Cardiovascular disease (CVD) death accounts for 24% of total deaths and it is the leading cause of death worldwide.⁹⁻¹¹ It has a wide spectrum including Coronary artery disease, Hypertension, Cardiac Valve disease, peripheral vascular disease, heart failure, myocardial infarction and congenital heart disease. The predominance of cardiovascular aetiology was well recognized in developed countries since 70s, representing about 49% of the global mortality, despite important country-to-country variations and a strong tendency to an age-adjusted rate decline in CVD mortality.^{10,12-14} There is a sharp increase in CVD deaths in Eastern Europe, giving them a mortality rate of 4-5 times greater than that seen in other European countries (such as France, Spain and Italy), which contributes 15% of total world mortality.¹⁰ Most Middle Eastern countries such as Iran are joining the global obesity pandemic and its consequences (such as CVD) and the problem becomes more significant when we consider the trend of westernization can potentially put the population of these countries at higher risk of CVD and its risk factors more than western countries.¹⁶ In recent years medical facility and technological advancement in developing countries like India provides the latest technological approaches as western countries. And medical tourism in cardiovascular disease treatments has a huge potential to attract and absorb health tourist from all over the world.

On this basis, while looking forward to expand and improve medical tourism, considering the epidemiology of each disease in each region of world and preparing the proper advertisement for such

disease is an important strategy. This means we should not only look to absorb health tourist from western countries but also we can expand the view to Middle Eastern countries as well as south Asia.

Currently, among all the cardiovascular treatments, mainly the heart surgeries are considered as well known sources of attracting medical tourist in India, despite during last 30 years, Cardiovascular Rehabilitation became one of the most important components of any heart and vascular surgeries and it has to be applicable to all Cardiovascular disease.¹⁵ Nowadays, Cardiovascular Preventive & Rehabilitation Medicine has become a growing field in medicine and became a separate department in some countries.

Rehabilitation can play a significant role in improving healthcare tourism prospects. German experience in providing rehabilitation services illustrates the huge potential this sector holds in developing health tourism.¹⁷ Among developing countries; Turkey is willing to become a pole of such programs with building a huge International Rehab Center in the Mediterranean resort town.¹⁸

What is Cardiovascular Rehabilitation?

Cardiovascular Rehabilitation is the process by which patients with cardiovascular disease, in partnership with a multi-disciplinary team of Health Professionals, are encouraged and supported to achieve and maintain optimal physical and psychosocial health (SIGN guidelines 2002).¹⁹ In fact, Cardiovascular Rehabilitation is a structured program of care designed to help heart and vascular patients recover quickly and improve their overall physical, mental and social functioning. The ultimate goal is to help patients to slow or even reverse the progression of disease through changes in lifestyle and appropriate use of their medication, thereby reducing the risk of heart disease or another cardiovascular episode. Many people are shaken when they realize that they have a life threatening illness and an equally important part of rehabilitation is to help patients overcome their fears and become fully active and integrated into society.

More than 48 randomized controlled trials have shown that: 1) people who attend cardiac rehabilitation are likely to live longer than those who do not. In fact for many patients cardiac rehabilitation is one of the most effective and cost effective treatments available. 2) A longer life is desired by most people, but a longer more miserable or restricted life is not. Cardiovascular Rehabilitation can improve peoples' lives through reducing symptoms, helping them regain the ability to take part in activities they enjoy, be less dependent on others and through knowing that they are fighting back against a frightening disease.

In other word, it reduces mortality by 20-25%, reduces hospital re-admission, reduces re-infarctions and improves quality of life.²⁰

The core components of Cardiovascular Rehabilitation as per American Heart Association position stand are: Exercise therapy, risk factor management, and psycho-social management, therapeutic life style changes including exercise, weight management, diet and smoking cessation, education and long term management strategy. According to these components and the definition of Cardiovascular Rehabilitation, it is a multi-disciplinary approach of minimum of 8-12 weeks.²¹ Thus, Cardiovascular Rehabilitation is one the most attractable interventions which is not considered for medical tourism yet despite its huge potential with proper advertisement.

Why India could be a suitable place for Cardiac Surgeries and its Rehabilitation?

As a rule of thumb, people are not only aspiring better treatments for their ailments but are also looking at the holistic well-being. They want to recover, relax, rejuvenate, rejoice and more over get away from the routine. Thus, Medical Tourism offers a synergy of healthcare, tourism and hospitality, proving to be an attractive and energetic health package for the people. Patients will come to India where they will undergo medical treatment and along with that we will show them the Indian tourist and pilgrim destinations, as and when advised by the Doctors. The whole thing would save them a lot of money and they will get to discover India at the same time.²² Some of main potentials which makes India a suitable place for Cardiac surgeries & Rehabilitation are summarized as follow:

- **World class treatment & Care:**

India offers World Class Medical Facilities, comparable with any of the western countries. India has state of the art hospitals and the best qualified doctors and in many corporate hospitals, there is scope for improvement, and the country may become a preferred medical destination. With good enough infrastructure, the world class possible Medical facilities, accompanied with the most competitive prices, you can get the treatment done in India at the lowest charges.²³

- **Cost-effectiveness:**

Comparatively lower cost of treatment is the prime reason that has helped in enhancing the popularity of medical tourism of India. There is a significant cost difference exist between US, UK and even other developing countries with India when it comes to medical treatment. Medical procedures typically cost up to 75 percent less than those held in Europe or US. A comparison of prices of different treatments are given in table 1.²³⁻²⁵

Table 1. Cost comparison of different medical treatments in different countries²³⁻²⁵ (All costs are given in US \$)

PROCEDURE	USA	INDIA	THAILAND	SINGAPORE	MALAYSIA	SOUTH KOREA	MEXICO	COSTARICA	UAE
Heart Bypass	133,000	7,000	22,000	16,300	12,000	31,700	27,000	24,100	40,900
Heart valve replacement with bypass	140,000	9,500	25,000	22,000	13,400	42,000	30,000	30,000	50,600
Hip Replacement	57,000	7,020	12,700	1,200	7,500	10,600	13,900	11,400	46,000
Knee Replacement	53,000	9,200	11,500	9,600	12,000	11,800	14,900	10,700	40,200
Face Lift	16,000	4,800	5,000	7,500	6,400	6,600	11,300	4,900	n/a*
Lap. Gastric Bypass	52,000	9,300	13,000	16,500	12,700	9,300	11,000	n/a	n/a

* Not Available.

When we come into Cardiovascular Rehabilitation, because an effective Cardiovascular Rehabilitation protocol requires a minimum of 8-12 weeks program, cost of treatment puts a big burden on patient and insurance companies. India has the potential for developing the cardiac rehabilitation centers and services at a very lower cost in the available world standard hospitals within the country to absorb this huge potential of tourism market. In addition, there is an option of combining the surgeries with rehabilitation programs as package to offer.

- **Indian Holistic Medicine as a potential Cardiovascular Rehabilitation component:**

A unique advantage of India in context of Cardiovascular Rehabilitation is the nature of this country and all other available Indian holistic and traditional medicine with a potential to be as a component of Cardiovascular Rehabilitation. As discussed in components of cardiac rehabilitation elsewhere,²¹ other native treatments available in India like Homeopathy, Ayurveda treatments, Yoga and meditation (as aerobic exercise and stress reduction for psychological management), vegetarian diet etc., have the huge potential to contribute the components of Cardiovascular Rehabilitation practice and even become as an Indian Cardiovascular Rehabilitation Protocol.

- **No waiting list**

Another advantage in India is the very minimal or hardly any waitlist whereas it is common in European or American hospitals which range from 3 months to over months.²³ This is due to the outburst of the private sector which comprises of hospitals and clinics with the latest technology and best practitioners.

- **Less chance of Antibiotic resisted infections after surgeries:**

There is evidence that many patients in UK have tendency to do operations in other countries to avoid antibiotic resisted bugs in UK hospitals and prevent further infections.²⁵

3. CONCLUSION

Cardiovascular Rehabilitation is currently a forgotten horizon in the field of medical tourism in India, despite of huge potential of absorbing this market, and increasing business market, health profession and job opportunities. A more precise and systematic management in medical tourism may need a revision of all such possible potentials in this context in the country and forward it to the policy makers to improve and expand medical tourism in India.

BIBLIOGRAPHY

1. SHAYWITZ, D. A., AUSIELLO, D. A. (2002), "Global Health: A Chance for Western Physicians to Give - and Receive", *The American Journal of Medicine*, 113, 354-357.

2. BEZRUCHKA, S. (2000), “Medical Tourism as Medical Harm to the Third World: Why? For Whom?”, *Wilderness and Environmental Medicine*, 11, 77-78.
3. RUNCKEL, C., *Why Should You be a Medical Tourist?*, http://www.business-in-asia.com/asia/medical_tourism.html.
4. GAHLINGER, P. M. (2008), *The Medical Tourism Travel Guide: Your Complete Reference to Top-Quality, Low-Cost Dental, Cosmetic, Medical Care & Surgery Overseas*, Sunrise River Press, USA.
5. MARCELO, R. (2003), “India Fosters Growing 'Medical Tourism' Sector”, *The Financial Times*, Yale Global.
6. CLARENCE, F. (2003), *Promoting Health and Medical Tourism In India*, Indian Express Group, Mumbai, India.
7. NAZIR, Z. (2006), "Just what the hospital ordered: Global accreditations", *Indian Express*, Sept 18.
8. MEDICAL TOURISM TO INDIA COULD BE WORTH RS 100 BN BY 2012 PTI, (2005), *The Press Trust of India Ltd*, February 01.
9. CARAMELLI, B., GIULIANO, L. (2005), “Adolescents of the world: move!!!” *Journal de pediatria*, 81 (6), 427-8.
10. MONPERE, C., “Cardiac rehabilitation-Guidelines and Recommendations. Sepyre- seccion De Cardiologia Preventiva”, *Cardiac rehabilitation Centre ToisGibert*, 1-37510, Ballan Mire, France.
11. MENDIS, S., ABEGUNDE, D., YUSUF, S. et al., (2005), “WHO study on prevention of recurrence of MI and Stroke (WHO PREMISE)”, *Bulletin of world health organization*, 83, 11.
12. RASTOGI, T., VAZ, M., SPIEGELMAN, D. et al., (2004), “Physical activity and risk of coronary heart disease in India”, *Int J Epidemiol*, 33, 759-767.
13. KELISHADI, R., SARRAFZADEGAN, N., NADERY, G. et al., (2002), “Atherosclerosis risk factors in children and adolescent with or without family history of premature coronary artery disease”, *Med SciMonit*, 8 (6), 425-429.
14. AHMED, N. BHOPAL, R. (2005), “Is coronary heart disease rising in India? A systematic review based on ECG defined coronary heart disease”, *Heart*, 91, 719-725.
15. BALADY, G. J., FLETCHER, B. J., FROELICHER, E. F. et al. (1994), “Cardiac rehabilitation programs: a statement for healthcare professionals from the American Heart Association”, *Circulation*, 90, 1602–1610.
16. BAHRAMI, H., SADATSAFAVI, M., POURSHAMS, A. et al. (2006), “Obesity and hypertension in an Iranian cohort study; Iranian women experience higher rates of obesity and hypertension”, *Public Health*, 6, 158-166.
17. HAIN, H., “Global Health Tourism with Qualified Rehabilitation”, *Healthcare Management*, http://www.asianhbm.com/healthcare_management/global_health_tourism.htm.
18. INTERNATIONAL REHAB CENTER TO BE BUILT IN SOUTHERN TURKEY, October 11, (2009), *Hürriyet Daily News*, <http://www.hurriyetdailynews.com/n.php?n=iran-heyetine-yunus-gosterisi>.
19. A national clinical guideline. Cardiac Rehabilitation: in Scottish Intercollegiate Guidelines Network (SIGN), 2002.
20. LEON, S., FRANKLIN, B. A., COSTA, F., BALADY, G. J., BERRA, K. A., STEWART, K. J. et.al, (2005), “Cardiac Rehabilitation and Secondary Prevention of Coronary Heart Disease. AHA Scientific Statement”, *Circulation*, 111, 369-376.

21. BALADY, G. J., WILLIAMS, M. A., ADES, P. A., BITTNER, V., COMOSS, P., FOODY, M., FRANKLIN, B., SANDERSON, B. et.al, (2007), “Core Components of Cardiac Rehabilitation/secondary prevention programs up date 2007. AHA/AACVPR Scientific Statement”, *JCPR*, 27, 121-129.
22. *Why Choose India as a medical tourist?*, <http://www.medicaltourismindia.com/india-medical-tours/why-medical-services-india.html>
23. *Cost comparison – India versus United States*, <http://www.medicaltourismindia.com/india-medical-tours/indian-medical-health-packages.html>
24. *Cost Comparison of medical treatments in different countries*, <http://www.saharamedicaltourism.com/>.
25. *Travel for Treatment. A world of medical opportunity: Special report on health tourism*, <http://www.treatmentabroad.com/medical-tourism/a-world-of-medical-opportunity/>.