



Globalization and Medical Tourism: A Spatial Study

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Abstract

Recent years have witnessed how healthcare has become an area where patients are enjoying advantage of globalization. Globalization along with its powerful weapon of internet has boosted the phenomena of medical tourism and created the new healthcare environment where healthcare delivery is no longer a specialized local service. De - territorisation of health products, services and standards have enabled the growth of medical tourism on a global scale, especially in third world countries.

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Introduction

Medical tourist is a relatively new term (previously it was known as health tourism) which stands for a group of special interest tourists travelling with a specific purpose i.e. to upgrade their health condition. Medical tourism is nothing but an act of travelling far from the place of residence with the intent of accessing the opportunity of better medical care. The following are responsible for increased consumption of health care beyond borders of nations and continents:

- desire of healthy life
- advanced technology
- increased availability of information and communication to consumers worldwide

One of the first recorded instances of medical tourism dates back thousands of years to when pilgrims from Mediterranean region travelled to a small territory in the Saronic Gulf called Epidaurus to visit sanctuary of Asklepios, the healing God. While tending to their health requirements they also relaxed in the waters, enjoyed the wines of the regions and travelled within the area. In fact, Western Europe has a long tradition of medical travel to the water cures of the spas (ESCAP, 2009) in

the UK, Vichi water of France etc are excellent example of it. In India also, the hot springs like Rajgir or Bakreshwar draws visitor since time immemorial.

Since the late 1970s health tourism has been widely accepted as an international phenomenon (of) for individuals travelling, in which patients travel foreign countries. Selection of destination includes individual's preference varying from lower cost, rapid access to, and high quality of care in host countries

Such medically motivated transnational mobility of patients taking place on a global scale via various routes for example many low and middle income developing nations of global south, such as India, Thailand, Mexico, Brazil, Malaysia etc have created advanced medical infrastructure that are attracting Northerners from the USA, Canada and Western Europe in terms of costs, variety and quality of health services. Northerners are also travelling to southern countries for procedures such as dental care, cosmetic procedures, assisted reproduction and stem cell therapy that may not be available in their home country or may not be covered by their public or private health insurance providers (Horowitz, 2007). The South North flow on the other hand encompasses the affluent

patients from many low income southern nations seeking health services in North. For them the USA and the Western Europe are desirable destinations.

Sometimes, patients from global south seek care in neighbouring nations. Such movement of patients is a forced movement because lack of proper health infrastructure force them to access health care services in foreign nations. Such type of medical travel is often regional. For example Jordan is a popular destination among Middle Easterners and North Africans. In 2007, approximately 100, 000 foreigners visited Tunisia for health purpose, maximum of them are from neighbouring Libya (OSHD, 2009).

In the Latin American and Caribbean Region, Cuba is favourite destination while in South America, Chile presents another alternative for Bolivia, Peru and Ecuador (Cortez, 2008). India is healthcare hub for Bangladesh, Bhutan, Nepal and Afghanistan. However, the North-South route of medical travel i.e. from northern developed nations to southern developing or comparatively less developed countries has attracted attention of experts.

Dramatically rising health care costs in the United States, long waiting lists in the Europe and Canada and simultaneously similar or comparable better and affordable quality health care services have encouraged many consumers to look south. Further, globalization and its tools have played a crucial role that have increased the scope to obtain health care abroad as a result in 2003 approximately 350,000 patients from more developed North travelled to the various less developed countries for health care (Horowitz, 2007). The focal theme of the present study is therefore to identify the major factors associated with the impact of globalization, responsible for the growth and development of medical tourism in recent years with special reference to Indian scenario.

Materials and Methods

Extensive literature review has been conducted to understand the present trend of medical tourism on a global scale. Reports prepared by Deloitte Centre for Health Solutions (2008), ESCAP (2009), Centre for Medical Tourism Research (2010) and Deloitte Access Economics (2011) are worth mentioning in this respect. A multistage purposive cum random sampling technique was used to collect the data from Google Keyword Tool.

Based on select keywords, at first local (i.e. searches made in a specified country in all or specified languages) and global monthly search volume (i.e. searches for done anywhere in any language) have been collected. Similar keywords are further grouped into themes based on various medical tourism products or healthcare services. With the help of various statistical and cartographic techniques collected data have been analysed and interpreted.

Results and Discussion

Medical tourism: Opportunity for South

In 2007, an estimated 750,000 Americans travelled abroad for medical care, this number is estimated to increase to 15.7 million by 2017 (Deloitte, 2008). The 2002 - 2010 International Passengers Survey indicates that in 2010, the annual number of travellers leaving the UK for health care abroad was more than 60, 000 (Pollard 2012). According to Deloitte Centre's Report, in the USA outbound medical tourism represented \$2.1 billion spent overseas for care in 2008. The projected increase in the number of outbound medical tourists from 750, 000 in 2007 to 15.75 million in 2017 represents a potential \$30.3 to \$79.5 billion spent overseas for medical care, while on another side Thailand has treated about 1.2 million inbound medical tourists in 2006. Over 450,000 medical tourists travelled to India in 2007 alone (Deloitte, 2008) bringing earnings of \$333 million. Singapore medical tourism arrivals are expected to be more than 1 million by 2015 (Renub Research, 2012). Each year more than 50, 000 Americans cross borders to Mexico to dental work alone (Deloitte, 2008). Among several reasons for the increase in medical tourism in recent years followings are noteworthy:

Ability to Afford

The most important component of this movement is the high cost of medical care in source countries (Fig. 1, CMTR 2010). India can offer medical services estimated at around one-fifth of the cost of those offered by industrial countries. Surgery in Thailand and South Africa costs about one-tenth of what it would cost in the United States and Western Europe or other developed northern countries. A heart valve replacement that would cost \$170, 000 or more in the United States, for example costs \$5, 500 in India (Medical Tourism Association, 2010); a knee replacement in Thailand with Six days of Physical therapy costs about one-fifth of what it would be in the U.S. Similarly Lasik eye surgery worth \$4, 400 in the U.S costs only \$500 in India (Bookman and Bookman, 2007) as shown in table (Table 1).

Medical Insurance is also crucial in this regard. In 2003, an estimated 43 million people are without health insurance coverage and 120 million without dental coverage in the U.S (US Census Bureau News, 2004), both the numbers that are likely to grow, will boost outbound medical tourism in USA. It is noticeable here that most health insurance in the United States of America covers critical care, not cosmetic care and beauty treatments. The demand for surgical procedures such as facelifts, hair transplants, dental treatment and liposuction as well as non-surgical procedures such as Botox and hair removal has increased over the globe; the relatively high costs of those uninsured procedures are driving many individuals to fly across for more affordable alternatives

in developing world.

Accessibility

The changing demographics of the developed nations are playing a significant role in demand for health care abroad. Increased proportion of ageing population and increased life expectancy in Japan, the USA, the UK, and Canada and in many other European nations, significantly have given strain on national health care systems. The result is long waiting lists for even urgent surgeries or treatment (Table 2). Such a long waiting list of National Healthcare System further forces patients to have a trip to Thailand or India where customers can have surgeries within 48 hours of their arrival and can return back to their home in just 15 days after enjoying post-operative recovery.

Safe and Quality Healthcare Services

'Receiving safe and quality care is a primary issue for consumers considering outbound medical tourism as a treatment option' (Deloitte, 2008). Increasing numbers of international accreditation to many private health care institutions of these developing nations is no doubt reassuring their consumers regarding professional competence, patient safety and quality of health care at lower cost. The Joint Commission International (JCI) was launched by the Joint Commission in 1999 after a growing demand for a resource to effectively evaluate quality and safety. There are over 320 hospitals worldwide those are accredited through the JCI (JCI, 2013). Several other organizations such as the International Society for Quality in Health Care (ISQUA), the National Committee for Quality Assurance (NCQA), and International Organization for Standardization (ISO) and the European Society for Quality in Healthcare (ESQH), have taken steps to ensure that medical tourism facilities (provide) the highest quality clinical care (Deloitte, 2008). Such international accreditation to hospitals helps consumers to make informed decisions based on maintenance of certain standards, medical ethics and quality as it gives a level of confidence to consumers that the services they will receive are comparable to those available in the US.

More Specialized Service Available

'The provision of niche medical services is another important driver of medical tourism' (ESCAP, 2009). Patients in need of specialized treatment are more likely to visit a destination that is well known for that speciality. For example, Thailand has established a niche for itself for cosmetic surgery and dental procedures, some Indian hospitals specialize in hip resurfacing technology and robot assisted joint replacement, which are yet not approved in the USA, but are less invasive procedure with a quicker rehabilitation time. Patients often travel to medical tourism destinations for stem cell therapy unobtainable by many patients in industrialized nations.

Some traditional means of healing system such as Ayurveda, Sidha, Kairali, Acupuncture, Yoga and Naturapathy are localized speciality of some destinations. They draw huge volume of international patients across the globe. Besides, these medical tourism destinations provide privacy and confidentiality for patients undergoing plastic surgery, sex reassignment and drug rehabilitation of course which is not possible in the industrialized nations (Horowitz, 2007).

Other factors - Combined with cost, quality and availability, inexpensive air travel, flexible rules and regulations for medical tourists, low cost telecommunications, digitised patient records, widespread access to information through the internet and an increasingly sophisticated medical travel industry to manage all these processes on the patients' behalf, made patients travelling much easier than before. Such a huge shift of global health market, no doubt presents a perfect example of how the forces of globalization are reshaping a relatively stable and localized service, medical treatment into a global market.

Globalization and Medical Tourism

Globalization, a closer integration of the countries has played a crucial role in both creation and perpetuation of medical tourism especially through its powerful weapon the internet. It is a truly global platform to share information, advertisement and medical information beyond the borders of nations (Rutherford, 2009). Globalization has led to the opening up of the developing economy to the inflow of huge amount of foreign investment, superior medical equipment implants and pharmaceuticals from overseas. It has also brought improvement in quality standards with the establishment of the competitive benchmarking system and sharing some of the best clinical practices. Under following heads we can have better idea how globalization facilitates a modern medical tourism trend.

Internet: Driving Shaft to Medical Tourism

The internet has changed the way people deal with health issues. E-patients are creating a new healthcare environment where empowered patients can access large amounts of medical information, advice and support online and act as partners with their doctors in making healthcare decisions for themselves and their loved ones. Pew Internet Survey states that about 94 million Americans have used the internet for health or medical purposes. In fact around 70 % of middle aged and 57 % of younger and older Americans look online for information related to treatments or procedures (Pew Internet, 2005). According to a survey more than 75 % of medical tourists have used internet as a major source to research medical tourism countries, facilities and providers (Fig. 2, CMTR, 2010). Not only the Americans

but also people from all around the world widely use internet as a major tool to answer their health related investigations.

Information collected from Google keyword tool stated that from more than 30 countries across the globe, approximately 400, 000 queries made on Google related to healthcare treatments or procedures available only in India. By using exact phrase '*medical tourism in India*' the total searches made on Google per month was 3300 outside India, where the USA, the UK, Canada and Australia are top searchers. It is to be noted that cosmetic and dental surgery, dermatology, ayurveda, eye and cancer treatments are major interested medical tourism products (Fig. 3, Google 2013). Service providers have also become increasingly active in advertising medical tourism online. A simple internet search for medical tourism and its related terms yields millions of results that include hundreds of websites of hospitals, clinics, travel agents, medical tourism brokers and many other sites trying to entice international patients market in just a second (Table - 3).

Most sites advertise the treatment they offer, their success rates, the technologies they use, the number of physicians they employ, those who were trained or board certified in western countries and the ratio of registered nurses to each foreign patient. Not only this but they also, either list the prices they charge or provide free quotes on request, bringing unprecedented price transparency to the health service industry.

Email communication and electronic processing of bookings have also significantly reduced the run-up time for medical procedure abroad. For example, in Thailand it is even possible to apply for visa extensions via a teleconference system, instead of going to the Immigration Bureau. The Apollo, the Wockhardt hospital groups and in many others in India now widely(using) use Telemedicine, that offer a unique opportunity for medical service providers to stay connected with their patients separated by geographical distance (ESCAP, 2009).

Standardised Healthcare Services

Globalization has enabled developing countries to entice foreign patients as they can offer health care professionals, facilities and technology that rival the best in the United States. Developing countries have improved quality in both key areas of medical professionals as well as technology and facilities. Medical professionals in developing world increasingly meet western standards. Many Countries are adapting their medical curricula to North American and Western European standards that are offered in English to negotiate a higher level of recognition worldwide (Segouin, 2005). In fact, International Medical Graduates make up a quarter (25.86%) of the US physician work force (Krupa, 2012). Within the IMG

physician population, nearly 20.70% certified by the Educational Commission for Foreign Medical Graduates in 2009 to practice in U.S. came from medical schools of India (AMA, 2010). Many of these graduates become board certified in the US and practiced here for years, now coming back to their home country. For example, in Bumrungrad Hospital in Thailand, the majority of its 600 Thai medical professionals has overseas training and certification, mainly in the United States of America, but preferred to return to work in Thailand (ESCAP, 2009). Doctors and nursing without borders have paved the way for patients without borders, where patients leave the USA and still find physician who are intimately familiar with US medicine (Cortez, 2008).

Hospitals in developing countries increasingly meet US Standards; JCI has accredited over 200 hospitals and health care facilities in Asia, South America, Africa and the Middle East (Table 4). Finally many developing nations have improved the medical technology they can offer, including procedures and technologies that have yet to be approved by the FDA (such as stem cell, sex reassignment, hip resurfacing, robot assisted joint replacements), but are very common practice in India, Thailand and Malaysia (Horowitz, 2007).

On the platform of globalization worldwide interest in quality has given rise to new professional bodies, scientific publications and institutions such as the Robert Wood Johnson Foundation, The Nuffield Trust and The Institute for Healthcare Improvement dedicated to sharing ideas and innovations in quality improvement (Peabody and et al., 2006). As a result many hospitals in developing countries are using cutting edge biotechnology once available in only American and European market. These hospitals now on a global scale are using their advances as a major marketing tool to tap international market.

Opportunities for Investment in Healthcare Sector

The third phenomena boosting medical tourism is the increased investments in healthcare sectors in developing nations. Currently the majority of health services are financed privately. For example, around 80 % of total spending on healthcare in India comes from the private sector. The lucrative opportunities of healthcare sectors in Third World, attract huge foreign investments, for example out of total inflows of FDI in India (between April 2000 to June 2012), about 6.63% (Million\$11578.62) have directly invested to healthcare delivery market through varies channels (Indian Chamber of Commerce, 2012). Now government is inviting more private sector participation in the related sectors of insurance and telemedicine to modernize their health sector.

The increasing share of 'for profit' healthcare across societies has led the commercialisation, corporatization and marketization of healthcare. More

foreign investors from industrialized world are establishing hospitals, clinics, diagnostic centres, nursing homes and treatment centres in developing countries (Baru, 2000). For example, Harvard Medicine, third oldest medical school in the U.S. has developed more than 50 programs in over thirty countries across 5 continents.

US based John Hopkins Hospital has signed a memorandum with the Apollo, the largest health care provider in India to develop health care sector and to attract more U.S. patients to India (Deloitte, 2008). It is interesting to note that India has the highest number of US FDA approved plants outside the US (CII and Grant Thornton, 2009). Such a major shift of health care sector where more privatisation of health services have been availing lucrative opportunities to investors simultaneously assures their patients about world-class-quality-care at lower cost.

Improved Industry Linkages

The fourth, which facilitates medical tourism, is the increased co-operation between the related health care industries. Hospitals are increasingly working with medical tourism facilitators and traditional travel agencies to tap international patient market. International hospital chains facilitates platform to medical tourism by providing value added service chain. For instances, The Parkway group and the Raffles Medical Group have acquired hospitals and established joint ventures with local health care providers in Malaysia, India, Sri Lanka and the United Kingdom. California based Adventist Health International runs a network of more than 500 Christian not-for-profit hospitals and clinics led by Penang Adventist Hospital in Malaysia, a major medical tourist destination (Cotrez, 2008). Siemens, GE, Philips, Toshiba, Hitachi and Boston Scientific emerged as a global supplier of medical equipments. Dr. Lal's Path lab, Metropolis Health Services, SRL Ranbaxy- some diagnostic chains located in India are catering to the end services for hospitals in the UK, the USA and West Asia (ASSOCHAM, 2009).

Although health insurance markets in developing countries are quite modest, companies from the USA and Europe are increasingly outsourcing insurance claims processing. For example, UK based BUPA International a leading international expatriate health insurer is offering health insurance to customers in 190 countries. Max BUPA is a newest venture of BUPA, commenced in India in 2010 in partnership with Max India (BUPA, 2013). In 2009, USA based CIGNA and CMC Life Insurance Company Limited, a joint venture between CIGNA and China Merchants Group announced the launch of its first comprehensive healthcare products in China (CIGNA, 2013). Besides, Apollo, Max, Fortis and Medanta have made agreements with insurance sector (TPAs) such as BUPA, Aetna, Kaiser, Blue Cross and Blue Shield.

Further globalization has enabled healthcare delivery to be 'de-territorised' via sharing of best clinical trials by many Americans and European companies (Mal, 2012). Thus market of globalized health products, services and standards has enabled the growth of medical tourism in third world countries.

Pull Factors of Indian Medical Tourists' Destinations

Over 4.5 lakh medical tourists travelled to India in 2007 alone bringing in earnings of \$333 million (Deloitte, 2008). The country currently ranks second in the world in medical tourism after Thailand (Times of India, 2009). Since 2000's the number of such travellers has been increasing by at least 25% every year. It is estimated that India could be hosting 2.4 million medical tourists by 2020, four times the number it catered in 2010 and this figure is projected to increase to 4.9 million tourists by 2025 (The Business Standards, 2012). A two year study by health care researchers Deloitte revealed that there's always been an inflow of patients from neighbouring countries and West Asia, but now there is a significant rise in patients from the USA, the UK and Europe (Deloitte, 2008).

In fact an estimate says that India's share in the global medical tourism industry will reach around 3% by the end of 2013 (The Business Standards, 2012). India is particularly well known for its low cost advanced medical procedures ranging from heart surgery, joint replacement and hip resurfacing to cataract operations, cosmetic surgery, dentistry and gall stone removal. In addition to the attraction of affordable advanced medical procedures, tourists from abroad also visit India for alternative treatments like Ayurveda, Yoga and Kairali. India's main strength lies in its low wages thereby making it one of the cheapest medical tourism destinations in Asia combined with its high prevalence of English language and high quality of medical professionals (Deloitte, 2011). The medical profession in India has strong networks with the US with around 30,000 doctors working in the US originating from India (Singh, 2009). Medical tourists in India come from the USA, the Middle East, the UK, Canada and other developing countries and from Gulf.

Patients seek treatments here mainly to avoid high cost of treatment and the huge waiting period for many procedures. The Government of India has introduced incentives to encourage medical tourism in India, including depreciation rates to allow old equipments to be replaced by new one, and introduced 'M' and 'MX' visas for medical tourists (Deloitte, 2011). Medical tourism is viewed as an export industry. Hence lower import duties on specified medical equipments have been introduced to encourage the sector. Prime land has also been offered at subsidised rates to encourage the development of health infrastructure for medical tourists (Sengupta, 2008). The Government has also called for joint public-private efforts to promote

Indian hospitals and its infrastructure (Cotrez, 2008). This has resulted in increased investments in healthcare sector, insurance coverage and superior medical technology. Patients treated at some hospital in India are insured by United States of America private health insurers Blue Cross Shield and Blue Shield (ESCAP, 2009). To address quality and safety concerns on government recommendations CII has constituted the National Board for Hospitals and Healthcare providers (NABH) in 2006 for maintaining international standards in Indian Medical facilities (Kumar, 2008). At present 163 hospitals are NABH and 18 JCI accredited hospitals in India, providing platform of confidence and quality assurance to their domestic as well as international patients (NABH and JCI, 2013). As a result at present several geographical pockets across the country has been emerging as medical tourism hubs attracting patients from all over the world (Chart 1).

Conclusion

The present study reveals the impact of globalization in growth and development of medical tourism in third world southern nations. High cost of treatment, long waiting list even for urgent surgeries as against the standardized quality healthcare at much lower cost without any waiting list have created a North South divide in global health market. In one side highly developed Northerners avail a wide source region of these medical travellers, while on another side the southern nations, those that are comparatively less developed, are becoming promising destinations in medical tourism scenario. No doubt medical tourism industry is availing a great opportunity to south to reshape its economic structure by tapping northern healthcare market. As a flourishing spatial phenomenon and due to its impact on habitat, economy and society, medical tourism attracts the attention of new millennium geographers worldwide.

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Table – 1: Comparative Cost of Key Medical Tourism Products (US \$)

Treatments	Global North			Global South					
	USA	UK	France	Costa Rica	India	Thailand	Malaysia	Mexico	Jordan
Heart Bypass	144000	90000	33137	25000	5200	15121	11430	27000	14400
Angioplasty	57000	43000	33000	13000	3300	3788	5430	12500	5000
Heart Valve Replacement	170000	90000	33000	30000	5500	21212	10580	18000	14400
Hip Replacement	50000	13000	15000	12500	7000	7879	7500	13000	8000
Hip Resurfacing	50000	NA	NA	12500	7000	15152	12350	15000	10000
Knee Replacement	50000	52000	17000	11500	6200	12297	7000	12000	8000
Dental Implant	2800	NA	NA	900	1000	3636	354	1800	1000
Liposuction	9000	NA	NA	3900	2800	2303	2299	2800	4000
Tummy Tuck	9750	NA	NA	5300	3000	5000	NA	4025	4000
Lasik Eye Surgery	4400	NA	NA	1800	500	1818	477	1995	5000
IVF Treatment	14500	NA	NA	2800	3250	9091	3819	3950	2700

Source: www.medicaltourismassociation.com/magazine/june/2010

Table – 2: Average Waiting Time for Select Treatments in Canada and Europe

Treatments/Procedures	Average Waiting Time (days)	
	Canada*	Europe**
Joint Replacement (Hip)	182	70-224
Joint Replacement (Knee)	182	80-280
Radiation Therapy	28	NA
Cataract Surgery	112	28-364
Coronary Artery Bypass Grafts	182	21-84
Cancer Care (Radiation therapy)	14	NA

Source: *www.waittimealliance.ca

**www.hope.be/05eventsandpublications/docpublications/72_waiting_lists/72_waitinglists.wp-2004.pdf

Table – 3: Average Search Yields on Google Worldwide

Terms	Results (0.10-0.25 seconds)	
	15th April 2009 *	15th December 2012 **
Medical tourism	19,700,00	7,20,00,000
Health tourism	36,600,00	29,00,00,000
Medical travel	73,300,00	75,70,00,000
Health travel	25,00,00,000	3,39,00,00,000

Source: * www.imtj.com/articles/2009/blog-war-of-words-medical-tourism-or-medical-travel-40144/

**www.google.co.in accessed on 15th Dec 2012.

Table - 4: JCI Accredited Hospitals in Third World

Countries	Numbers
Brazil	26
Costa Rica	2
India	18
Jordan	9
Malaysia	6
Mexico	7
Philippines	5
Singapore	14
South Korea	14
Thailand	22

Source: www.jointcommissioninternational.org accessed on 6th Feb 2013

Chart – 1: Indian Destinations and Pull Factors

Destination	Hosts Patients from	Treatments offered	Major Pull Factors
Kerala	Germany, UK, France, Spain, Italy, Saudi Arabia, UAE Expected to rise at 20–25% per annum	ayurveda for chronic health illness, dental care, cardiac care, general surgery, transplant surgery, neurosurgery, cosmetic surgery, orthopaedic treatment and infertility treatment	unique combination of traditional Indian healthcare system at low cost along with the international standards of treatment, dedicated medical personal and management, healthy and hygienic environment, and fluent english speaking staffs
Karnataka	the UK, the US, the European Union and from the South – East Asia	cardiology, neurology, neurosurgery, dentistry, oncology, infertility, gynaecology, homeopathy, ayurveda and naturopathy	Bangalore's global reputation as a technology hub and cosmopolitan city and availability of modern medical aids, professional experts, technological sophistication, fluent english staff and traditional therapy at a single location
Tamil Nadu	Nigeria, Kenya, Burundi, Oman, UAE, Congo, Bangladesh, Tanzania and Iraq	cardiology, ophthalmology, neurology, transplant surgery, orthopaedics	fully equipped modern hospitals and specialists and experienced nurses with international accreditation
Delhi	Western Europe, the US, Oman, Gulf nations, SAARC Nations	heart care and surgery, cancer care, orthopaedics, cosmetic treatment, eye care, bariatric treatment, health checkups, general surgery, neurosurgery	high quality of care at a lower cost, international accreditation, medical professional with international repute
Maharashtra	Nigeria, USA, UK, Oman, Iraq, Pakistan and Bangladesh	knee replacement surgery, hip replacement, open heart surgery, cosmetic surgery and cancer therapy	combine with Ajanta - Ellora, Mahabaleshwar & Konkan coast the hi-tech tertiary care hospitals having international accreditation
West Bengal	Bangladesh, Sri Lanka, Nepal and Pakistan and now from the Europe	knee and hip replacement, cardiac care, onco-surgery, neurosurgery, nephrology, dental care, maxillofacial surgery, cornea replacement to general health checkups	major healthcare hub in eastern india, poor healthcare infrastructure in neighbour countries and emergence of many centre of excellence.
Gujrat	Germany, Ireland, the UK, other Western European Nations	cardiac care and infertility treatment with surrogacy motherhood	world class treatment at lower cost, major healthcare hub for NRIS and NRGs

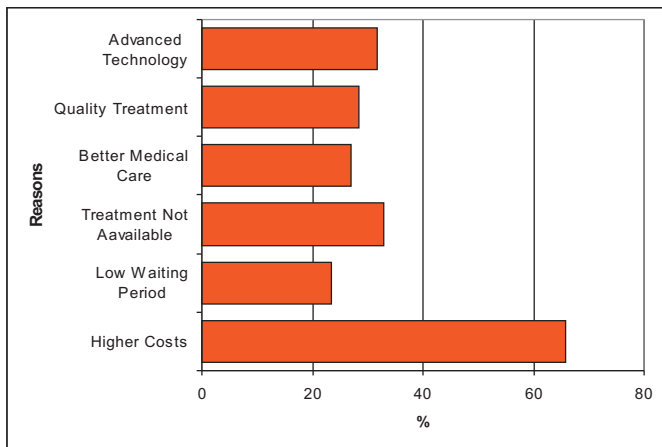


Fig. 1: Major Factors of Medical Tourism

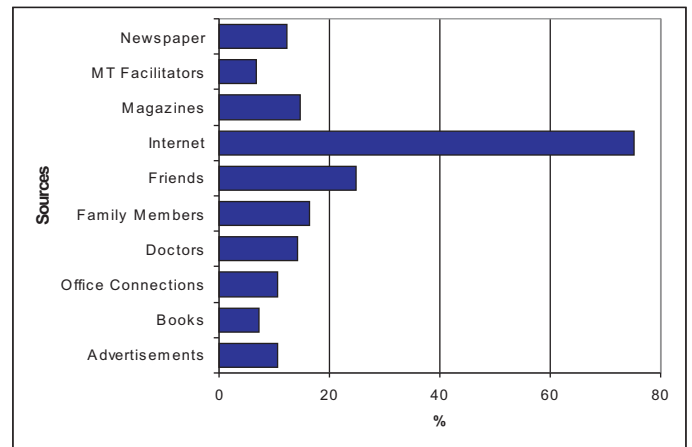


Fig. 2: Sources of Information for Medical Tourism

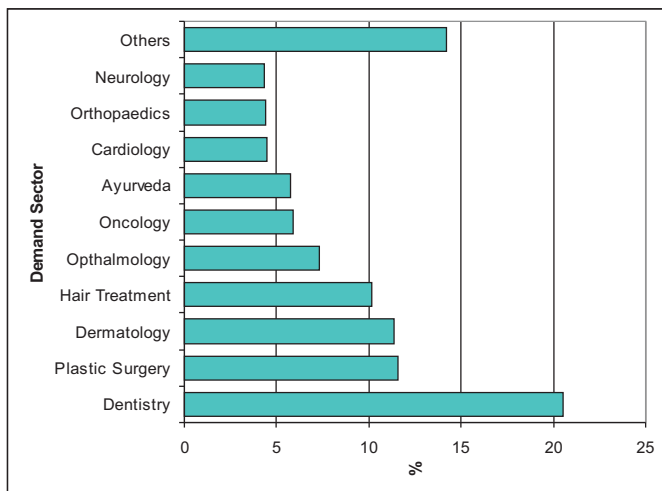


Fig. 3: Major Sectors of Demands in Medical Tourism

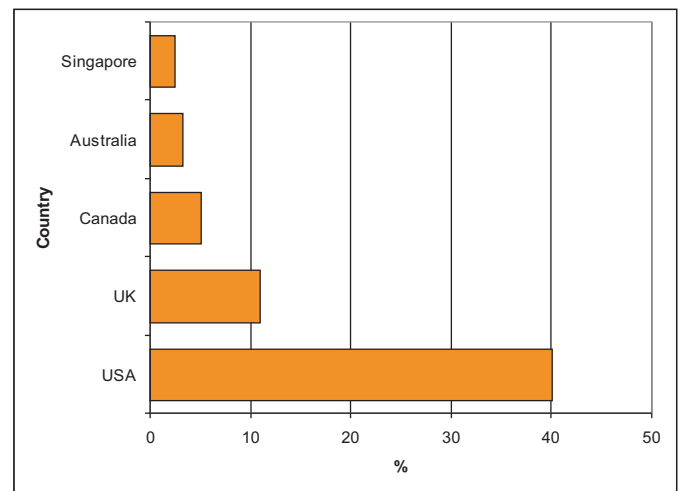


Fig. 4: The Top 5 Searches in Google

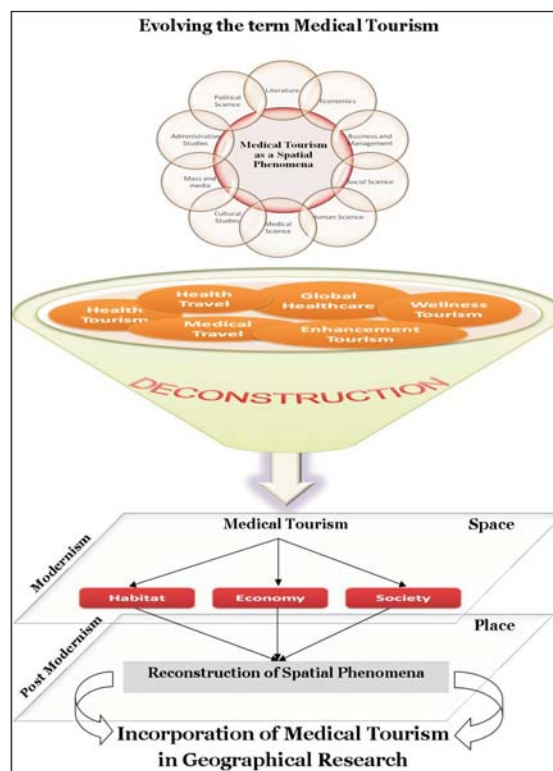
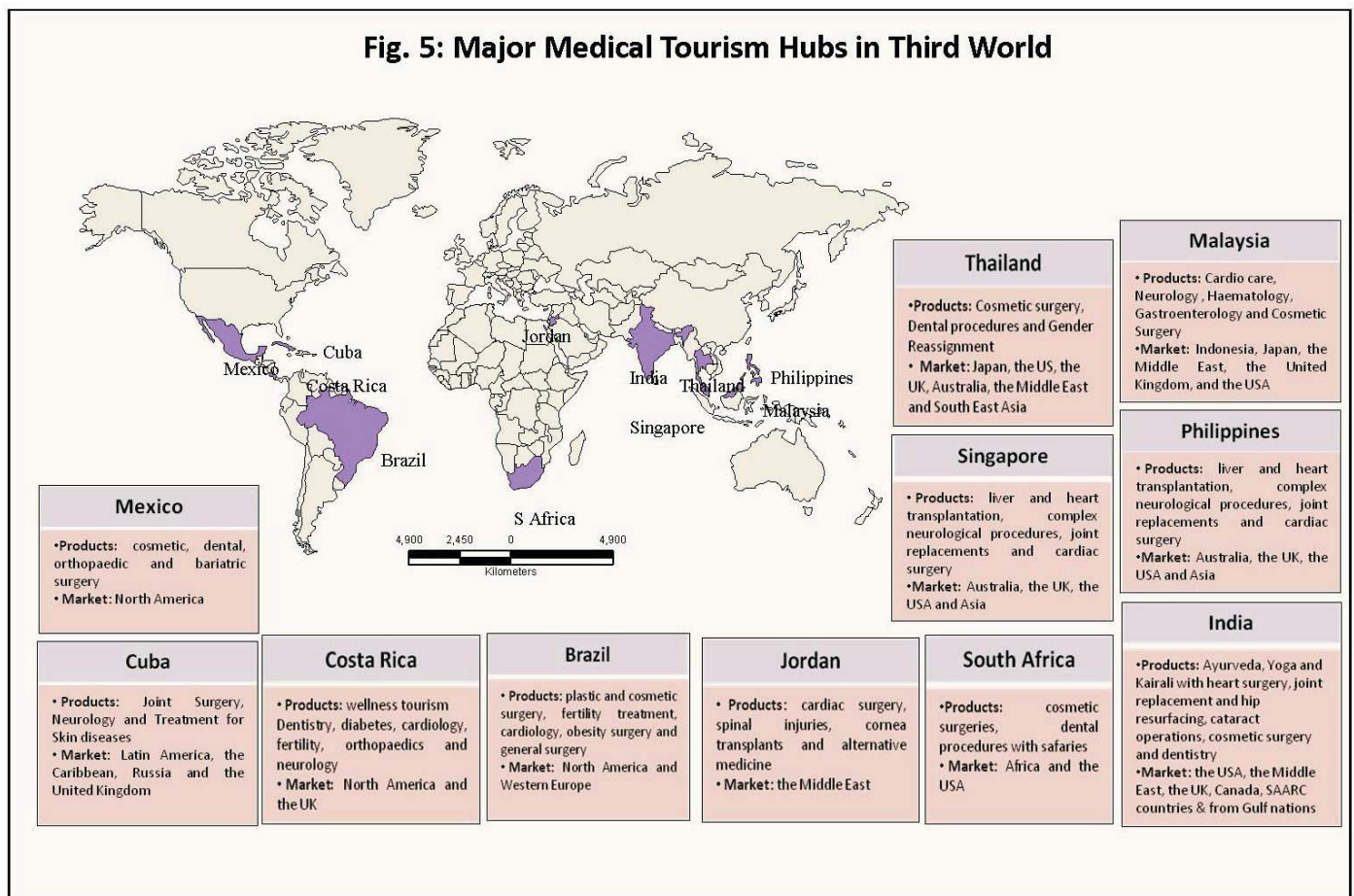


Chart - 1: Approaches to Medical Tourism

Fig. 5: Major Medical Tourism Hubs in Third World



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