MEDICAL TOURISM IN NATIONAL CAPITAL REGION INDIA: PERSPECTIVES OF MEDICAL SERVICE PROVIDERS

Manjula Chaudhary Arpita Agrawal

ABSTRACT

Medical tourism is emerging as an important segment of tourism and healthcare across the world and oriental countries are positioning it as a low cost- high quality offer. India is emerging as a popular destination for medical tourism and helping India improve its balance of payments by generating foreign exchange. Few pockets in the country around big cities have come up with good hospitals offering medical tourism on their portfolio and one such region is of the capital Delhi known as National Capital Region (NCR). This paper analyses state of medical tourism in NCR from the perspective of doctors and hospitals based on their experiences and opinions. The results suggest that there are four main factors which have led to growth of medical tourism in India. These are low cost, less waiting time, high quality and availability of treatment. These factors are the strengths of medical tourism industry in NCR and hence should be mapped to the opportunities in the medical tourism market. The study also shows that India is currently receiving patients from African and Middle East countries where the patients want best quality treatment at low prices as most of the time the treatment is not available in their own country. This creates space and opportunities for the country and the hospitals to make relevant strategies.

Keywords: Medical tourism, medical travel, health tourism, foreign patients in India

Introduction

Globalization is influenced by a number of forces such as technological developments, political influences, and economic pressures, changing ideas, and increasing social and environmental concerns. (Woodward, Drager, Beaglehole& Lipson, 2001). Globalization by itself may have various impacts on an economy. On one hand it may create benefits such as trade liberalization and technology transfer which increases efficiency, welfare and health of the economy. But premature, rapid and unconditional globalization may worsen the condition of an already weak economy (Cornia, 2001). The impact of globalization on health sector can be positive when the potential gains like advance technology or monetary benefits are transferred to health system and individuals' healthcare.

The information technology, advent of internet, better communication systems, easier travel and transportation can be considered as both means and end results of globalization. All these are making it convenient for people to travel to new places and explore new and better options for their requirements including those of health services. Medical tourism is covered under Mode 2 of General Agreement on Trade in Services and regulated by WTO rules depending upon the commitments made by the member countries.

This search for best value for money has led to emergence of India as a medical tourism destination on the global scene (Hazarika, 2010). Medical tourism is included in export of services and hence brings the valuable foreign exchange in the country. A few pockets in the country have particularly developed as hubs for medical tourists namely;

National Capital Region that includes areas and cities around Delhi; and other big cities of Bangalore, Chennai, Calcutta and Mumbai. Stakeholders in medical tourism have different business and social perspectives for medical tourism in these cities. Understanding of their views is important to develop medical tourism in these pockets as a win-win case by synergising the different forces. This may also lead to developments of unique attributes in each pocket.

This research paper explores the perspectives of medical service providers namely doctors and hospitals in the NCR and tries to identify the differentiators.

Literature Review

Health tourism is defined as "the organized travel outside one's local environment for the maintenance. enhancement or restoration of an individual's wellbeing in mind and body" (Carrera & Bridges, 2006). A subset of this is medical tourism, which is "the organized travel outside one's natural healthcare jurisdiction for the enhancement or restoration of the individual's health through medical intervention". It a process of leaving home and traveling domestically or abroad for the purpose of obtaining specialized treatment elsewhere. Though these terms are often used synonymously with each other there is a slight difference as explained in terms of specific medical intervention in medical tourism and the outcomes being substantial and long term (Connell, 2006).

When and where the term "medical tourism" originated is unknown (Connell, 2011) but it has gained popularity since 2000. Now it has become a big business. The global medical tourism market was valued at USD 10.5 billion in 2012 and is estimated to reach a market worth USD 32.5 billion in 2019 at a CAGR of 17.9% from 2013 to 2019 (TMR, 2013). This is generating revenues for service providers. Nations have focused on medical tourism as a strategy for economic growth where revenue from international patients is used for creating more jobs and improvement in public health care systems (Bookman & Bookman, 2007).

People travel to avail medical facilities for many

reasons. Earlier the patients travelled from less developed nations to developed countries to obtain better and advance medical careas facilities in the home country were not available or were not good. But now people travel to developing countries to get treatment due to various other reasons discussed below. This has led to rise of countries such as Thailand, Singapore, India, Malaysia, Puerto-Rico, Turkey, Argentina, Cuba, South Africa and so forth medical tourism destinations.

Cost saving, quality healthcare, treatments not covered under insurance, specialty treatments, shorter waiting periods, more inpatient friendliness and the lure of new and different are the main factors for growth of medical travel. But still there is lack of reliable data and information sources on the experiences of medical tourists (Woodman, 2008).

Hopkins, Labonté, Runnels & Packer (2010) supported Woodman by suggesting that driven by high health-care costs, long waiting periods, or lack of access to new therapies in developed countries, most medical tourists (largely from the United States, Canada, and Western Europe) seek care in Asia and Latin America. The authors highlight that individual patient risks may be offset by sophistication in (some) destination country facilities, lack of benefits to poorer citizens in developing countries offering medical tourism remains a generic equity issue.

The issue of equity has been explored by Gupta (2004) who pointed that the scarce resources available for health will go into subsidizing the medical tourism of corporate hospitalsthat getsubsidies from Government. These hospitals also woo specialist doctors from public sector thus raising serious concerns on the equity and cost of health services in developing countries that may indirectly subsidize healthcare of developed countries. This is a point of concern and debate.

Medical tourism in India

Across the globe Asia is emerging as the hub of medical tourism where medical tourist arrivals are expected to cross 10 million mark by 2015. Asia medical tourism market is expected to double by 2015 from its current market in 2011 and out of 7

countries (Thailand, India, Singapore, Malaysia, Philippines, South Korea and Taiwan), 3 countries (Thailand, India and Singapore) are expected to control more than 80% market share in 2015 (PR Newswire US, 2012). As mentioned by RNCOS chief executive Maheshwari there are over 3,371 hospitals and around 750,000 registered medical practitioners in India (Ellery & HuliHealth,2011). According to Government of India, the total foreign tourist arrival to India in 2011 was 6309222, out of 2.2 per cent were medical tourists (Indiastats.com). There is no organized data on number of medical tourists or doctors in Delhi NCR. Airport Authorities website shows 94 hospitals are there in the region.

Delhi, the capital of the country and its surrounding areas together known as National Capital Region, is a perfect destination for medical tourism (Dhodi, Uniyal& Sharma, 2013). The infrastructure and connectivity to the area has improved due to new developments such as roads, airports, hotels, hospitals etc. In particular many super speciality hospitals have come here such as Medanta, Apollo, Fortis, Nova, Artemis, Rockland, to cater to domestic population that have diversified in medical tourism too.

Objectives of the study

The study is planned with the following objectives.

- To analyze the perspectives of the medical service providersviz doctors and hospitals on medical tourism.
- 2. To explore the important factors influencing medical tourism in NCR.
- 3. To suggest wayforward for the promotion of medical tourism in NCR based on the analysis for objectives 1 and 2.

Research Methodology

The study is based on a survey of 52 doctors and 10 hospitals using twoseparate questionnaires. The questionnaires included both open and closed ended questions. The opinion of the respondents was measured on a 5 point Likert scale ranging from strongly agree (5) to strongly disagree (1). Various statistical tests like factor analysis to reduce the number of factors affecting medical tourism, KMO

and Bartlett's Test to test sample adequacy, ANOVA to test the significance, and chi squaretests are applied to the data to get the results.

The sample size is small compared to number of multi-speciality hospitals and doctors in the research area as hospitals and doctors were not willing to share information due to confidentiality issues.

Analysis of the data

To understand the perspective of medical tourism service providers on medical tourism in India, the two questionnaires were analysed and following results were obtained:

 Perspective of medical service providers on medical tourism in NCR

The information obtained from doctors and hospitals provides important insights on the source markets, treatment sought and quality control.

1.1 Source markets of medical tourists and treatments sought

The sampled hospitals are attracting an average of more than 300 patients per year from places such as Africa, Middle East, USA, UK, Afghanistan, Mauritius, Maldives, Russia, Sri Lanka and so on. Out of the total 60 per cent inflow in from African and Middle Eastern countries. The study shows that all the respondents are receiving more patients from these two regions. The doctors' responses also show that majority of the patients are from Middle East and African regions.

Table 1: Source markets for medical tourism

Countries	Percent (Hospitals)	Percent (Doctors)
USA	11.5	15
UK	6.6	12
African Countries	28.7	29
Middle East	32.8	29
Others	20.5	15

The patients visiting sampled hospitals came for treatments such as Heart surgery, neurology, nephrology, ophthalmology, orthopaedics including joint replacements, organ transplants, and paediatric and child birth etc.Out of these heart, joint replacement, kidney and

cosmetic surgeries cover more than 50 per cent share.

Table 2: Treatments sought by Medical tourists

Type of Treatment sought	Patients – per cent (number)
Heart	14(8)
Kidney	13(7)
Brain	11(6)
Joints	14(8)
Skin	5(3)
Eyes	5(3)
Cosmetic	14(8)
Pediatric	9(5)
Child birth	5(3)
Others	9(5)

1.2 Quality control in Hospitals

The hospitals catering to the foreign patients are quite conscious about the quality and hence 87% of the participating hospitals have either NABH or JCI accreditations. The rest 13 per cent have already applied for it. These help in improving general standards of the hospitals however hospitals show a mixed response in having separate staff and infrastructural facilities for foreign patients.

1.3 Channels of patient

Most of the patients are contacting the hospitals directly or through their doctors. But the hospitals are adopting several channels to get patients including medical tour operators, insurance companies and Government offices.

1.4 Medical Tourism issues in India-perspective of medical service providers

The open ended questions enquiring about the scope and future of medical tourism in India revealed that both doctors and hospitals view medical tourism positively. However they feel, this sector needs to be more organized. The hospitals opined that rather than being projected as a cheap medical tourism destination, India should be projected as a hub for Medical Treatment. Some hospitals suggest that India Medical Tourism should be centralized. Indian government should start giving the Visa on Arrival for the patients coming from all the countries and promote medical tourism in other countries.20% hospitals are of the view that promoting medical tourism may deprive Indians of better healthcare facilities.

The doctors opined that medical tourism is not affecting

the domestic patients in a negative way. However they were against higher prices charged by hospitalsfor foreign patients. They also mentioned that it is important to control malpractice and promote doctors along with hospitals.

2. Factors influencing medical tourism in NCR

The information collected from doctors and hospitals revealed that the most important factors for the growth –of medical tourism in NCR are related to quality and cost. The perspective of hospitals and doctors is analysed below:

2.1 Factors responsible for the growth of medical tourism-perspective of hospitals

The survey of 10 sampled hospitals based on the experiences of their administrators brought that quality of medical treatment is most important factor for the patients. The opinions of hospitals on the fourteen factors gives following results on a five point scale.

Table 3: Hospitals' perspective on factors important for growth of medical tourism

Factors foreign patients consider for destination for medical tourism	choosing a Mean	
Low cost of medical treatment	4.0	
Overall cost of travel and treatment	3.6	
Less wait time for securing appointment for treatment	3.6	
Place of treatment well connected to patient's home country	2.7	
Good quality of medical treatment	4.5	
Competent doctors and paramedical staff	4.4	
Good quality clinical infrastructure	4.2	
Good quality Non-clinical infrastructure	3.9	
Insurance cover in another country	3.2	
Easily available Visa	3.2	
Good help to finalize the patients' travel itinerary	3.5	
Simple documentation	2.8	
Attractive Terms of payment	3.0	
International Accreditation of hospitals	3.1	

The mean values are above 3 for most factors except for 2 factors:connectivity with the home country and simple documentation. The factors above or with mean value of 4.0 are good quality treatment and clinical infrastructure, competent doctors and paramedical staff and cost of treatment indicating these to be more important

2.2. Factors responsible for the growth of medical tourism-perspective of doctors

A survey of 52doctors was made to understand the reasons of medical tourism in India. The ten reasons were identified based on secondary data. These are Low cost of treatment, Cost including travel, Less waiting time, Connectivity of countries, Good quality of overall treatment, Competent doctors and paramedical staff, Good quality clinical infrastructure, Good quality of non-clinical infrastructure, Easily available visa and International accreditation of hospital. These were taken asvariables and responses were collected on five point. Likert scale ranging from very important represented through the score 5 to least important at 1. Factor analysis was used on the data obtained .The Cronbach alpha reliability analysis (Table 4) for the data was 0.704 which is considered to be acceptable for internal consistency.

Table 4: Reliability Statistics

Cronbach's Alpha N of Items
.704 10

As shown in table 5 Kaiser-Meyer-Olin measure of sampling adequacywas found to be equal to 0.528 that indicated goodness of sample being higher than 0.05. Bartlett's test of sphericity for the data provided a value of 0.00 less than 0.05 and supported the validity of the data for factor analysis.

Table 5: Sample adequacy test, KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure	.578		
Bartlett's Test of Sphericity	Approx.	260.808	
		Df	45
		Sig.	.000

Table 6 explains the total variance in the factors and it is clear that there are four factors with eigen value more than one. They are responsible for more than 79.526% of the total variation.

Table 6: Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	% of Cumulative		Cumulative		% of	Cumulative		% of	Cumulative
Component	Total	Variance	%	Total	Variance	%	Total	Variance	%
1	3.309	33.093	33.093	3.309	33.093	33.093	2.761	27.610	27.610
2	1.914	19.136	52.230	1.914	19.136	52.230	2.024	20.243	47.853
3	1.503	15.033	67.262	1.503	15.033	67.262	1.854	18.544	66.397
4	1.226	12.264	79.526	1.226	12.264	79.526	1.313	13.129	79.526
5	.676	6.758	86.284						
6	.524	5.241	91.525						
7	.388	3.884	95.409						
8	.266	2.665	98.073						
9	.115	1.155	99.228						
10	.077	.772	100.000						

Extraction Method: Principal Component Analysis.

Table 7 loads the four factors that emerge after exploratory factor analysis. The rotated component matrix shows the convergence of the ten factors into four.

Table 7: Doctors' perspective on factors important for growth of medical tourism- Rotated Component Matrix

Table 7: Doctors' perspective on factors important for growth of medical tourism
Rotated Component Matrix

	Component			
	1	2	3	4
Low cost of treatment	086	015	.765	.251
Cost including travel	163	.422	.738	.097
Less waiting time	.167	.018	.239	.825
Connectivity of countries	.487	.109	.239	598
Good quality of overall treatment	.451	.792	.130	293
Competent doctors and paramedical staff	.072	.917	067	.082
Good quality clinical infrastructure	.763	.402	083	.072
Good quality of non-clinical infrastructure	.896	.271	072	113
Easily available visa	.079	320	.755	297
International accreditation of hospital	.928	171	082	.063

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Rotation converged in 6 iterations.

The factor extraction (table 8) with variables for each factor further explains the important factors and corresponding variables. These factors are named according to the variables included in that factor.

Table 8: Factor Extraction Table which is shows the variables in each factor with corresponding loading and percentage of variance

Factors % of		Factor Variables Included in the factor		Loadings
	Variance	Interpretation		
		Quality of	International accreditation of hospital	.928
		Hospital	Good quality of nonclinical infrastructure	.896
		infrastructure	Good quality clinical infrastructure	.763
F1	27.610	e and connectivity	Connectivity of countries	.487
		Quality of	Competent doctors and paramedical staff	.917
F2	20.243	treatment	Good quality of overall treatment	.792
	18.544	Low cost	Low cost of treatment	.765
F3	10.544		Cost including travel	.738
		Less waiting	Less waiting time	.825
F4	13.129	time.	_	

The analysis reveals that that quality of hospital infrastructure and connectivity, Quality of treatment, Low cost and less waiting time are the main factors responsible for the growth of medical tourism in the country.

 $3.\,Conclusion\,and\,recommendations\,-\,Way\,forward\,for\,the\,promotion\,of\,medical\,tourism\,in\,NCR$

After analysing the objectives 1 and 2, it is proved that Medical tourism has become a popular concept and India is receiving patients from most part of the world. This study shows that most of the patients are from African or Middle East countries. Hence the service providers and the Government should allocate resources according to their requirement. Even after investing and making world class hospitals, India is not able to attract patients from developed nations. The main reasons as perceived by the service providers for growth of medical tourism are low cost, less waiting time, quality and availability of treatment. These could be the area of focus for planning purposes.

The healthcare sector is not developed in African countries like Nigeria and Tanzania and this makes either the treatment unavailable or very costly there. As these are not very rich countries and most of the patients are self-sponsored, cost becomes an important issue for them. Most of the patients want a quality treatment in minimum price. Availability of visa is also important because as a patient it is difficult for them to follow up with embassies. India is providing Medical visa or M Visa, which had made the things easier, but there are still some procedural complications.

The quality of treatment and the facilities and equipment at the hospital are also very important for any patient. The providers feel that any patient will consider these for medical tourism as the treatment is the main purpose for which the patient is coming and clinical and non-clinical infrastructure represent that.

Good doctors and paramedical staff is important for the patient. They are the ones who will take care of the patient and handle the treatment. Their knowledge and skill is perceived to be most important for medical tourism. Less waiting time is also important for patients when they are in pain or emergency situation. They consider a foreign country after checking all other options available and hence want an immediate treatment.

The doctors and hospital have a positive view about the growth of this industry and they feel it is not harming the public health system in any way. But this sector needs to more organized and structured. Pricing is another component which needs to be monitored as there is a differential pricing for domestic and foreign patients which doctors feel is unethical.

So to utilize the full potential of medical tourism in India, the stakeholders including the government will have to create a plan keeping the public health care system also in loop and creating a balance. If the resources are properly allocated and utilized, medical tourism may become a source of income for the betterment of public health care system.

References

- Airports Authority of India. Retrieved April 30, 2 0 1 4 from http://www.aai.aero/aai_employees/hospital_delhi.pdf
- Bookman, M. Z., & Bookman, K. R. (2007). Medical tourism in developing countries. New York: Palgrave Macmillan.
- Carrera, ParT. M., & Bridges, J. F. (2006). Globalization and healthcare: understanding health and medical tourism. Expert Review of Pharmacoeconomics and Outcomes Research, 6(4), 447-454.
- Connell, J. (2006). Medical tourism: Sea, sun, sand and... surgery. Tourism Management, 27(6), 1093-1100.
- ▶ Connell, J. (2011). Medical tourism. CABI.
- Cornia, G. A. (2001). Globalization and health: results and options. Bulletin of the World Health Organization, 79(9), 834-841.
- Dhodi, R. K., Uniyal, M., & Sharma, S (2013). Trends and Scope of Medical Tourism: Case

- Study of Delhi
- NCR, India. International Research Journal of Business and Management
- Ellery B. & HuliHealth (2011). Healthy Business: WillMedical Tourism Be India's Next Big Industry? Retrieved April 20, 2014 from http://knowledge.wharton.upenn.edu/india/article.cfm?articleid=4615.
- ▶ Gupta, A. (2004, May 09). Medical tourism and public health People's Democracy, XXVIII (19)
- ▶ Hazarika, I. (2010). Medical tourism: its potential impact on the health workforce and health systems in India. Health policy and planning, 25(3), 248-251.
- Hopkins, L., Labonté, R., Runnels, V., & Packer, C. (2010). Medical tourism today: What is the state of existing knowledge?.Journal of Public Health Policy, 31, 185-198
- Nationality-wise Classification of Foreign Tourist Arrivals (FTAs) According to Purpose of Visit in India(2011). Retrieved January 10, 2014 from Indiastats.com

- PR, N. (2012, October 22). Asia Medical Tourism Analysis and Forecast to 2015. PR Newswire US.
- Transparency Medical Research, 2013: Medical Tourism Market Global Industry Analysis, Size, Share, Growth, Trends and Forecast, 2013 2019 Retrieved February 10, 2014 from http://www.prweb.com/releases/2013/10/prweb11212872.htm
- Woodman, J. (2008). Patients beyond borders: Everybody's guide to affordable, world-class medical travel. (2 ed.). NC, USA: Healthy travel media
- Woodward, D., Drager, N., Beaglehole, R., & Lipson, D. (2001). Globalization and health: a framework for analysis and action. Bulletin of the World Health Organization, 79(9), 875-881.



Manjula Chaudhary : Senior Professor, Department of Tourism and Hotel Management, Kurukshetra University, Kurukshetra, Haryana

Arpita Agrawal: Assistant Professor, Department of Management Studies, Sikkim Manipal University, Bangalore Arpita.agrawal@smudde.edu.in 9632244021