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# MEASURING THE ROLE OF CLINICAL AND SERVICE ATTRIBUTES FOR MEDICAL TOURISM IN RAJASTHAN

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#### **ABSTRACT**

Medical Tourism has turned out to be a fast growing multibillion-dollar industry around the world. It is an economic activity that entails trade in services and represents the mixing of two of the largest world industries: health care and tourism. In India, it has emerged as the fastest growing segment of the tourism industry despite the global economic downturn. India is offering very low-cost treatments not only to Indians but also to the foreigners. The current paper studied various clinical and service aspects driving medical tourism to Rajasthan. The Results of the current study indicated that visitors seem to be satisfied with Accreditation of Hospital, nursing care, pharmacy/ medicine availability and Counselling as clinical attributes and Accommodation, Security service and Country food availability as service attributes. Further, the hospitals should extend their facility and accreditation so that they can be part of the new mode of tourism called medical tourism. Thus the present study is very helpful for the overall development of the state.

KEYWORDS: Medical Tourism, Rajasthan, Clinical Attributes and Service Attributes

## INTRODUCTION

It is a truism that tourism is supposed to be about relaxation, pleasure and an increase in well being and even health. Even with the rise in cultural tourism and notions of tourism also being a learning experience, such learning too is expected to be relaxing and quite different from classroom memories. In India tourism have a lot of scope with its diverge culture, scenic beauty, high mountains, vast deserts, beaches, historical monuments, The medical tourism can also be tied up with it. Medical tourism as an activity refers to people traveling to a country other than their own to obtain medical treatment. In the past, this usually referred to those who traveled from less-developed countries to major medical centers in highly developed countries for treatment unavailable at home. There are numerous studies on medical tourism but there is a lack of empirical studies on medical tourism on the development of Rajasthan, especially in those places where these medical centers are situated. The present study also tries to find out the factors which are responsible for the development of medical tourism in Rajasthan.

#### **Objectives**

To know the tourist's satisfaction on the role of clinical and service attributes attached to medical tourism in Rajasthan.

#### **Current State of Medical Tourists in India**

Medical tourism is a growing sector in India. In October 2015, India's medical tourism sector was estimated to be worth US\$3 billion. It is projected to grow to \$7–8 billion by 2020. According to the Confederation of Indian Industries (CII), the primary reason that attracts medical value travel to India is cost-effectiveness and treatment from accredited facilities at par with developed countries at much lower cost. The Medical Tourism Market Report: 2015 found that India was "one of the lowest cost and highest quality of all medical tourism destinations, it offers a wide variety of procedures at about one-tenth the cost of similar procedures in the United States (*Medgadge*, 2016).

Foreign patients traveling to India to seek medical treatment in 2012, 2013 and 2014 numbered 171,021, 236,898, and 184,298 respectively (*Press Information Bureau*, (2016). Traditionally, the United States and the United Kingdom have been the largest source countries for medical tourism to India. However, according to a CII-Grant Thornton report released in October 2015, Bangladeshis and Afghans accounted for 34% of foreign patients, the maximum share, primarily due to their close proximity with India and poor healthcare infrastructure. Russia and the Commonwealth of Independent States (CIS) accounted for 30% share of foreign medical tourist arrivals. Other major sources of patients include Africa and the Middle East, particularly the Persian Gulf countries (*The Economic Times*, 2016). In 2015, India became the top destination for Russians seeking medical treatment (*Rbth*, 2016). Chennai, Kolkata, Mumbai, Hyderabad, Bangalore and the National Capital Region received the highest number of foreign patients primarily from South Eastern countries.

## Medical Tourism in Rajasthan

The medical tourism industry is growing and estimates to be the US \$ 40 billion. As per SIHFW: An ISO:9001:2008 Certified Institution medical tourism in Asia will worth for US \$4 billion out of which the share of India will be the US \$2.2 billion by 2012. The availability of subcentres in Rajasthan is adequate as per the table-1.7. The Availability of Sub Centres providing medical aid in the year 2016 is shown in table-1 as under:

Number of **Number of Sub** Number of Number of CHCs Number of Sub PHCs -**Divisional District** Name of Centres - (As on (As on 31st - (As on 31st Hospital -Hospital the District 31st March, 2016) March, 2016) March, (As on 31st (As on 31st March, 2016) 2016) March, 2016) 400 20 Ajmer 63 3 Bharatpur 417 67 17 0 Chittaurgarh 398 47 21 1 1 54 0 Ganganagar 439 17 1 Jaipur 678 119 30 1 1 677 82 24 0 Jodhpur 2 216 40 13 0 Kota 1 27 676 96 1 1 Udaipur 2080 571 Total 14408 19 34

Table 1: Availability of Sub Centres Providing the Medical Aid (2016) in Major Cities

Source: Government of India (GoI)https://data.gov.rin/catalog/rural-health-statistics-2016& DMHS 2011 & CBHI

#### **Total Manpower Status**

It is clear from the figure 1.1 that the number of doctors registered in the Rajasthan is regularly growing from the year 2000 to 2010 and has increased from 20,000 to 30,000 with 50% growth in the 10 years.

The main aim of the medical tourism is to provide the best facility which can be provided by the trained and welleducated manpower, thus the main tourism of medical purpose is in the 3 areas where the total availability of the manpower is shown in figure-1.

The total medical facilities in terms of hospitals are listed in table 2 as under:

Table 2: Total Medical Facility Available in Rajasthan

Total Medical Facility Available in Rajasthan	Number
Medical Colleges	10
District Hospitals	34
Sub Divisional Hospitals	12
Satellite Hospitals	6
CHC (Community Health Centre)	408
PHC (Primary Health Centre )	1517
Sub centres	11487

Source: State Institute of Health & Family Welfare, Rajasthan

### **REVIEWS OF LITERATURE**

Briassoulis (2017) revealed that the non-reductionist assemblage ontology/analytic is introduced to conceptualize tourism destinations as "multiplicities defined by assemblages" to more satisfactorily theorize and analyze their complex socio-ecological nature, unpredictable dynamics and motley identity, and guide planning or management decisions. Alternative conceptions of destinations—container, unitary whole, and relational place—are critically reviewed. The main tenets of Assemblage Thinking are presented and guide the ensuing analysis of destinations. The contribution of the assemblage ontology/analytic to destination studies and future research are summarized. The proposed conception calls for synthesizing complex systems and relational theoretical frameworks, employing methodological pluralism, and pursuing adaptive governance to foster the emergence of fittingly co-functioning tourism and non-tourism assemblages at destinations.

Backer & Ritchie (2017) revealed that the Rebuilding tourist arrivals after crises/disasters are important. However, tourism may have negative impacts in terms of interfering with the destination recovery efforts and adding distress to local residents. Therefore, consideration should be placed on timing tourism marketing as well as the market segments most suitable to target. This paper integrates both medical literature and tourism literature to consider whether Visiting Friends and Relatives (VFR) travel may be viable for destinations to consider after crises/disasters. The authors conclude that VFR travel offers both benefits and risks and recommends that only domestic VFR travelers are targeted to aid destination recovery. Future research avenues are also outlined.

Connell, J. (2016) revealed that the International medical travel has increased in the last 20 years, becoming more diverse and complex, although definitions and data on its growth and structure are inadequate. Many countries, especially in the Global South, have sought to develop medical tourism for both strategic and defensive reasons. Few have been successful. Standard descriptions and images of medical tourism suggest global markets, elite patient travelers and the dominance of cosmetic surgery, alongside the privatization and corporatization of hospital chains. Most international medical travel is, however, short-distance, diasporas, across adjacent and nearby borders, and of relatively poor patients seeking cheaper, more effective or available care in appropriate cultural contexts, for straightforward procedures, Social networks, rather than the internet, shape choices and decisions on destinations. Porous international borders are crucial to

medical travel and have resulted in the emergence of formal trans-border health regions in the North and spontaneous informal regions in the South, alongside some regional hubs and hierarchies. Globalization is less significant than the grassroots transnational's of borderland health care.

Bolton & Skountridaki (2017) revealed that the medical tourism has gained prominence in academic, policy and business arenas in describing the growth in the number of people traveling outside of their home country to receive planned medical treatment, with the emphasis on the combination of addressing pressing health concerns with a leisuretrip. This conceptual essay offers insights into how patients are being reconceptualized in a neoliberal setting as medical tourists. In so doing it offers two key contributions. First, it offers a deeper theorization of trends in international healthcare through a political economy of care framework. This framework is not only focused on human interaction and experience but also on the political, economic and social space in which human life is played out. Second, it offers new insights into the exploration of human relationships within a market economy so that the medical tourist is seen with new eyes as a relational being.

Seow et.al, (2017) conducted a study with the aim to examine the extended model of Theory of Planned Behavior in predicting tourists' intention in seeking medical tourism in Malaysia. The additional variables in this model are perceived risks, perceived benefits and resource availability whereby it is predicted to have influences to the model of Theory of Planned Behavior. A sample is drawn using a quota sampling technique. A total of 380 completed questionnaires are collected. The partial least squares approach is employed so as to conduct a comprehensive and vigorous structural equation modeling analysis. The results show that perceived benefits and perceived costs are significantly related to attitude; resource availability is significantly related to perceived behavioral control; and attitude and subjective norm are significantly related to intention for medical tourism in Malaysia; however, the perceived behavioral control is found to be insignificant to intention. Attitude and subjective norm are also significantly related to intention for medical tourism in Malaysia. However, they found an insignificant relation between perceived behavioral control with intention. The findings of this study can serve as the blueprint for future research in the similar area with reasonable modification on the model construction in order to enhance and improve the theoretical extension model of Theory of Planned Behavior.

Eissler & Casken (2013) analyses the Six themes reflecting the experiences of Alaska medical tourists emerged: "my motivation," "I did the research," "the medical care I need," "follow-up care," "the advice I give," and "in the future." Subthemes further categorized data for the increased understanding of the phenomenon. The thematic analysis provides insight into the experience and reflects a modern approach to health-seeking behavior through international medical tourism. The results of this study provide an increased understanding of the experience of obtaining health care internationally from the patient perspective. Improved understanding of medical tourism provides additional information about a contemporary approach to health-seeking behavior.

Turner (2012) explained that the Contemporary scholarship examining clinical outcomes in medical travel for cosmetic surgery identifies cases in which patients traveled abroad for medical procedures and subsequently returned home with infections and other surgical complications. Drawing upon news media reports extending from 1993 to 2011, this article identifies and describes twenty-six reported cases of deaths of individuals who traveled abroad for cosmetic surgery or bariatric surgery. Over half of the reported deaths occurred in two countries. Analysis of these news reports cannot be used to make causal claims about why the patients died. In addition, cases identified in news media accounts do not

provide a basis for establishing the relative risk of traveling abroad for care instead of seeking elective cosmetic surgery at domestic health care facilities. By accepting these limitations, the case reports suggest the possibility that contemporary peer-reviewed scholarship is underreporting patient mortality in medical travel. The paper makes a strong case for promoting normative analyses and empirical studies of medical travel. In particular, the paper argues that empirically informed ethical analysis of 'medical tourism' will benefit from rigorous studies tracking global flows of medical travelers and the clinical outcomes they experience. The paper contains practical recommendations intended to promote debate concerning how to promote patient safety and quality of care in medical travel.

Bubna (2013) revealed that medical tourism is an upcoming industry and has got a vast potential, but out of global revenue from medical tourism, India has got only 8% of the market share which is too major. So there is a need to plan short term and long term strategies at the regional level and at the national level, to make India the destination for medical value tourism, as per the international standards, Indian doctors are the best constituting about 38% of doctors in the U.S. and 23% in the U.K. However in order to leverage the vast future potential, India has to go a long way. There is a need to focus on getting great facilities, combining health care with tourism, making India as the first choice destination and also to bridge the biggest barrier in the form of infrastructure and super specialty hospitals. There is a need to encourage investments in healthcare sectors. Patients are now seeking higher quality healthcare services and standards, more affordable medical treatment as well as shorter waiting times. To fulfill these expectations, patients are willing to travel across the world to receive treatments that can give them "value for money". The process of "leaving home" for treatments abroad is an emerging phenomenon in the healthcare services industry that has the potential to generate multiplier effects on the economy.

Mishra (2014) reported that India has the potential to comeup as a popular tourist destination. What is required is proper planning to market the country. Branding of the nation needs to be done. In present scenario, not just a hillock, a heritage site of a forest is the mode of attraction for the tourist. And in this race "Medical Tourism" is emerging as a major area attracting tourist not just from different parts of the country but internationally as well. With the experience of so many years in rendering brilliant medical services, India started attracting more and more people from all around the world and is slowly growing into the global medical center. Medical tourism is quickly becoming a way out to mix leisure with healthcare. And the factors which are attracting tourists towards India is the low-cost treatment as compared to many of the western countries. Many of the research showed the medical treatment cost is low by an average of 40 to 60%, of when compared to western standards. This is the cost of full package which includes accommodation, cost of treatment and travel (international). As the popular slogan that goes around in the industry says, India offers "First World treatment at Third World prices."

Rosy (2014) in her study, "Medical Tourism in India, SWOT Analysis" published in IRMJCR reported that medical Tourism is one of the major types of tourism industry. The development of science and technology and infrastructure facilities largely contributed to employment opportunities and the increase of national income. However, medical tourism has owned its weakness and threats hence precautionary measures are required to be taken to have sustainable growth in medical tourism. This paper attempted to analyze strength, weakness, opportunities, and threats of medical tourism in India. It was stated that India is one of the growing developing countries which has a number of destinations for medical tourism. The climatic condition together with the varieties of medical herbs and plants and

advancement in medical science added the scope for medical tourism. The alternative medical system in India, providing treatments like Ayurveda, Naturopathy and Homeopathy facilitate medical tourism. According to her, the major world medical tourism hubs are India, Cuba, Argentina, Malaysia, South Africa, Thailand, and Jordan. India is ranked number two in medical tourism industry in the world. Medical tourism is different from medical travel where the patient's journey from less developed nations to major medical centers in highly developed countries for medical treatment that is unavailable in their own countries. Medical Tourism is a growing sector in India. India's medical tourism sector is expected to experience annual growth of 30% making it a two billion US dollar industry by 2015.

Singh (2014) in his article "An Evaluation of Medical Tourism in India" published in African Journal of Hospitality, Tourism reported that medical tourism is a fast-growing multibillion-dollar industry around the world and it entails trade in services of two large major industries i.e. health care and tourism. India is currently promoting medical tourism aggressively. The study presented an overview of medical tourism in India and presented a SWOT analysis and concluded with some valuable suggestions to develop India as a global medical tourism destination. The research was descriptive in nature and the data used included interviews and discussions with various stakeholders as well as literature reviewed based on secondary sources. The research pointed out the key competitive advantages of India in the medical tourism arena.

Mochi et.al, (2014) concluded that in the present scenario tourism industry is gaining enormous economic benefits. It is not confined itself only to hotels, restaurants and viewing historical sight scenes, but has touched rural areas, health sector as well. The globalization of the health care sector and the massive demand for low cost-high quality treatment for health in recent times has caught the attention of many developing countries like India that have the adequate resources and potential to meet these demands. The developing concept of medical tourism in India has gained tremendous popularity and is attracting people from all over the world for their medical and relaxation needs. Now-a-days people from other countries are preferring India for their medical treatment like heart surgery, knee transplant, cosmetic surgery, hip replacement, and dental surgery. This study explained as for why India has emerged as a destination for medical tourism. It also explored the challenges and competitive advantages and future outlook of medical tourism in India.

## METHODOLOGY

The research methodology accounts for this research work includes the following points:

#### **Data Source**

The data for the current research paper was collected by using a questionnaire to obtain responses from the patients traveled in Rajasthan for medical treatments.

## Universe of Study

The total numbers of visitors traveled across the globe for medical treatment

## Sample Size

For the purpose of the current study a sample of 300 patients were selected on the basis of the convenient sampling method.

#### **Data Analysis Tools**

The statistical tools & techniques used during the study include multiple regressions for calculating the significant variables regarding perception of procedural steps related to their medical treatment.

Percent Criteria Values Criteria Values Percent 20 to 30 years 29.0 Udaipur 49.3 30 to 40 years 30.0 25.7 **Hospital Location** Jaipur Age 40 to 50 years 31.0 25.0 Bikaner 51 and above 10.0 15.6 Service School Education 10.3 Occupation Business 42.9 **Education** 40.7 41.6 Graduate Agriculture Post Graduate 49.0 1-2 LPA 28.6 Male 59.7 **Family Income** 2-5 LPA 31.2 Gender >5 LPA 40.3 40.3 Female

**Table 3: Demographic of Respondents** 

#### RESULT

From the above table, it can be seen that the majority of medical tourist belong to the age bracket of 30 to 50 years. Only 10 percent of tourists are more than 50 years of age. Large proportions of tourists are graduate and postgraduate. Udaipur is more preferred as a medical tourism destination as compared to other cities in Rajasthan. 60 percent of tourists are male as compared to 40 percent of female visitors. Business and agriculture are the major occupations of the medical tourist. 40 percent of visitors belong to more than >5LPA income group. 23.33 percent of visitors have self-financed their medical treatment. 29 percent of medical tourists have insurance covered for their disease. About 23 percent of tourists have financial support from charitable agencies and only 7 percent are able to get government support and sponsorships for the treatment. Majority of medical tourist visit Rajasthan for orthopaedic-related diseases and surgery. 38.67 percent of respondent agreed to visit for cardiac surgery. Another popular reason for visiting Rajasthan for medical treatment is related to the Neuro, ENT and Dental Care.

**Table 4: Sources for Funds for Medical Treatment** 

Sources for funds	Percentage
Insurance Cover	87
Self Financed	70
Government Sponsored	20
Charitable Agency	23

**Table 5: Type of Treatment** 

Type of Treatment	Percent
Dental Care	51
Cardiology/cardiac surgery	24
Gynae	12
ENT	39
Neuro	7
Orthopedic surgery	116
Nephrology	5
Cosmetics surgery	4
Eye surgery	42

Multiple regression analysis is done to identify major factors that drive visitor satisfaction related to Clinical and service attributes. Ten and nine scale items are selected to measure to Clinical and service attributes related issues. Table 6 represents the details of scale items used for the study. Visitor satisfaction is measured as the dependent variable for the analysis. The Model is having good R<sup>2</sup> Value that specifies the factors identified can explain a healthy percent of the variance in training satisfaction. The result indicate that visitors seem to be satisfied with Accreditation of Hospital [NABH / JCI], Nursing care, Pharmacy/ medicine availability and Counselling as clinical attributes and Accommodation, Security service and Country food availability as service attributes.

For the purpose of data analysis and identifying the variables that can increase the satisfaction of the respondents, the following hypothesis is being developed:

 $H_1$ : The clinical and service attributes are having a significant impact over the satisfaction of the respondents. The above hypothesis is analyzed by multiple regression method and the results are as under:

**Table 6: Multiple Regressions (Dependent Variable: Satisfaction)** 

Descriptive Statistics						
		SPSS Code	Mean	Std. Deviation N		
		Satisfaction	2.7800	1.32821	300	
1.	Accreditation of Hospital [NABH / JCI]	C_A_1	2.8767	1.20816	300	
2.	Year of hospital establishment	C_A_2	2.2600	.50323	300	
3.	Brand Name	C_A_3	2.4433	.82201	300	
4.	Nursing care	C_A_4	2.2067	1.05562	300	
5.	Pharmacy/ medicine availability	C_A_5	2.6667	1.44540	300	
6.	Doctors experience/ Profile	C_A_6	4.0800	.71318	300	
7.	Counselling	C_A_7	3.3567	1.08013	300	
8.	Technology Used	C_A_8	2.3033	.78744	300	
9.	Equipments	C_A_9	2.6267	.96803	300	
10.	Quality of medical procedures	C_A_10	2.8833	1.47319	300	
1.	Sanitation	S_A_1	2.5833	1.33504	300	
2.	Accommodation	S_A_2	2.6333	1.24528	300	
3.	Security service	S_A_3	3.8567	1.05823	300	
4.	Entertainment	S_A_4	3.4167	1.42472	300	
5.	Connectivity to metros/ airport	S_A_5	3.8133	1.07191	300	
6.	Translators	S_A_6	3.9867	.98134	300	
7.	FOREX facilities	S_A_7	3.7800	1.14425	300	
8.	Transportation	S_A_8	3.8900	1.08712	300	
9.	Country food availability	S_A_9	3.4967	1.18378	300	

Table 7

Dimensions	Variable	Constant/ Beta VALUE	Adjusted r Square	ANOVA	Sig.
	(Constant)	1.470		38.909	.000
	C_A_5	.438			
Clinical Attributes	C_A_1	.350	.336		
	C_A_4	.226			
	C_A_7	.194			
	(Constant)	3.899		13.496	.000
Service Attributes	S_A_3	.232	.111		
bei vice Attributes	S_A_9	.184	13.470		.500
	S_A_2	.159			

## **CONCLUSIONS**

The medical tourism in India when tied up with leisure tourism will have a lot of scopes as India has diverged culture, scenic beauty, high mountains, vast deserts, beaches, historical monuments, religious places and so on. This also promotes foreign patients to visit India for medical along with leisure purposes. Health holiday provides a good opportunity to get away from daily routine and come into a different relaxing surrounding. Here the patients can enjoy by being close to nature and at the same time, they are able to receive an orientation that will help to impose their health. It is just like the rejuvenation and cleanup purpose on all levels-physical, mental and emotional. It can become fast-growing multibillion-dollar industry around the world. It is an economic activity that entails trade in services and represents the mixing of two of the largest world industries: health care and tourism. Medical tourism in India has emerged as the fastest growing segment of the tourism industry despite the global economic downturn. India is offering very low-cost treatments not only to Indians but also to the foreigners. The Results of the current study indicated that visitors seem to be satisfied with Accreditation of Hospital [NABH / JCI], Nursing care, Pharmacy/ medicine availability and Counselling as clinical attributes and Accommodation, Security service and Country food availability as service attributes. Further, the hospitals should extend their facility and accreditation so that they can be part of the new mode of tourism called medical tourism.

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