FACTORS AFFECTING ON MEDICAL TOURISM DESTINATION WITH REFERENCE TO PRIVATE HOSPITALS IN HYDERABAD - A STUDY

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ABSTRACT

The medical tourism industry has witnessed a steady global growth in the recent years and India is establishing its footprints in this sector India has become one of the premiere medical tourism destinations in the world for many good reasons. The study aims to assess the factors for medical tourism destination selection from medical tourist's perspective and to determine the satisfaction level of medical tourists in Hyderabad. Field survey was conducted with the structured questionnaire to medical tourists admitted at six private hospitals in Hyderabad city during April and May, 2019. A non-probability convenience sampling technique was used and 146 responses were collected. The mean scores were calculated of all the 15 variables of the factors that influence the choice of medical tourism destination. Regression analysis and ANOVA test was conducted to study the significant of variables. Factor analysis was done, to know the influence of major factors on the choice of medical tourism destination selection. It was found that Lower medical cost ,Suitable accommodation, Health system infrastructure, highly competent medical professionals, Quality of medical services, Comprehensive service coverage, Ease of visa and immigration procedures are the key influencing factors for the selection of Hyderabad as the Medical tourism destination.. One of the limitations of current research is the sample size, which is very small and also limited to tourists visiting Hyderabad. The present research was conducted to find out the factors, which are very much important to attract medical tourists to Hyderabad and their satisfaction level to improve the performance level in future

Keyword: Medical tourism, quality, Private hospitals, Hyderabad.

INTRODUCTION

Medical tourism is one sector which has gained tremendous momentum in recent years in India. There is a potential impact of medical tourism on the health workforce and health system in India. Besides the definite cost advantage, the presence of a well-trained and English speaking

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work force, a mix of modern and indigenous systems of medicine, and super specialty centres which boast of the best technologies available in the world are some of the factors in favour of India. Issuing medical visas for tourists seeking treatment in India, capacity building of staff, ensuring good working conditions to retain them in the public health sector, improving the quality of care delivered in government hospitals and sharing of resources, in the form of money, manpower, infrastructure or technology, is some other steps to improve the public health infrastructure in India. Hyderabad being the preferred destination due to its rich heritage, social receivabiliy, favorable climatic conditions and the presence of major corporate hospitals equipped with latest medical equipments has made it a preferred destination for Medical tourists visiting across India and abroad.

LITERATURE REVIEW

William Bies and Lefteris Zacharia (2007) was of the view that Medical tourism offers the prospect of greatly reduced expenses for healthcare as well as other advantages such as reduced waiting times, but there are risks associated with seeking healthcare overseas. Laszlo Puezko and Marin Bachvarov (2006) classifies health services are those used for relaxation, form of stress release and for curing well definable illnesses. Leigh Turner (2007) found that medical tourists include patients trying to avoid treatment delays and obtain timely access to healthcare. However attracting patients to countries such as India and Thailand could increase regional economic inequalities and undermine health equity. S.Rajagopalan (2006) identified certain risks in health tourism like commercializing doctors' profession, issue of recuperation after treatment, insurance cover will available only if when the standard of services is the same Louise Chang (2006) found that dismayed by high surgical costs in the U.S, increasing numbers of American packing their bags to have necessary surgery performed in countries such as India, Thailand and Singapore. Anna Gracia-Altes (2005) identified that the challenges faced by health tourism sector are regarding regulations, commercial strategy, quality of care, professional licensing, technologies, taxes, labour, infrastructure, easy arrival procedures etc. Borman (2004) identified that long waiting lists, high costs, lack of insurance and under instrument are causing some to go abroad to seek medical care due to a problem in some national health care systems. John Connell (2006) opines that medical tourism where patients travel overseas for operations has grown rapidly in the past decade, especially for cosmetic surgery. High costs and long waiting lists at home, new technology and skills in destination countries alongside reduced transport

costs and Internet marketing has all played a role. Prosenjit Datta and Gina Krishnan (2006) was of the view that developed nations benefit from medical tourism as costs or waiting time or both come down for a significant chunk of their population. David Gibert and Junaida Abdullah (2004) ascertain whether the activity of holiday taking has any impact on the life satisfaction or subjective well being of those taking vacations. Xinran Y Lehto (2006) concluded that yoga tourism has emerged and grown with the travel and provided empirical evidences that an individual's involvement level with yoga, physical health as well as mental well being positively contribute to the propensity to travel for yoga. Gina S Krishnan (2006) found that certification of service standards is becoming an imperative for hospitals vying in the growing medical tourism market. Jon A. Chilingerian and Grant T. Savage (2005) found that three themes, to underscore the significance of international health care management are: the problem of global blindness; global health care challenges and opportunities; and learning from international health care management. Dr. C. Rajkrishnan (2007) opined that out of all the specialties, it is dental speciality that can be coupled with tourism very well as dental procedures are less complex and do not need much follow up. Dr. Roshan (2007) concluded that medical tourism carries risks as the Lack of immunity and non – compliance on post operative treatment regimen amidst holiday excitement can lead to problems. Swathi Soni and Markar and Upadhaya (2006) studied that medical tourism has risen from the rapid growth of an industry where people from all around the world are travelling to other countries to obtain medical, dental and surgical care. V. Selvam (2006) pointed that the biggest challenge in medical tourism industry is to position India as a favorable healthcare destination by setting high standards and work in association with the government and the medical council to see to it that all hospitals keep up to those standards.

KEY OBJECTIVE

1. To study the factors influencing the selection of Medical Tourism destination in Hyderabad.

Hypothesis Testing

Ho: There is no significant influence of factors on the selection of Medical Tourism destination.

H1: There is a significant influence of factors on the selection of Medical Tourism destination.

METHODOLOGY

The study was conducted during the month of April and May 2019.Convenience sampling technique was adopted for data collection in the present study. A total of 150 self-structured

questionnaires were distributed to medical tourists visiting private Hospitals in Hyderabad out of which 146 were usable. The Sample of six Private Hospitals choosen for study was Aware Global Hospital, Yasoda, Kamineni, Apollo, Lotus, Maxcure and Sunshine. A total of 15 different variables were taken in the administered questionnaire. Each item in the questionnaire constitutes a five point scale and the respondents were asked to rate the items on their best possible choice. Data analysis was done by the means of SPSS Version 23.0. Reliability and validity test were made taking 9 different items by Cronbach's alpha and Bartlett Test of Sphericity. Kaiser- Meyer-Olkin test was conducted to find the adequacy of sample. In order to draw meaningful inference from the study factor analysis technique was used. Factor analysis is used for data reduction so as to identify most influential factors which have significance in the study.

ANALYSIS AND INTERPRETATION

Table 1: Descriptive Statistics of the variables of choosing the Medical Tourism Destination

S. No	Variables	Mean	Standard deviation	Standard Error of Mean	Ratings	Ratings based on mean score
1	Suitable climatic conditions	3.18	.293	.033	15	Neutral
2	Secure and crime free environment	3.26	.310	.055	12	Neutral
3	Health system infrastructure	3.84	.322	.063	4	Influential
4	Highly competent medical professionals	3.73	.353	.044	7	Influential
5	Comprehensive medical service coverage	3.82	.315	.032	5	Influential
6	Tourist attractions	3.21	.265	.061	13	Neutral
7	Ease of visa and immigration procedures	3.93	.344	.076	2	Influential
8	Surgeries done almost immediately	3.62	.311	.081	9	Influential
9	Suitable accommodation	3.88	.388	.086	3	Influential
10	Ayurvedic therapies	3.52	.391	.080	10	Influential
11	Quality of medical services	3.75	.386	.082	6	Influential
12	Lower Medical Cost	3.94	.375	.061	1	Influential
13	Proper health care	3.63	.343	.047	8	Influential
14	Marketing of tourism destination	3.34	.323	.013	11	Neutral
15	Social and cultural background	3.12	.318	.010	14	Neutral

Source: SPSS 23.0 Primary Data

From the above table, it is clear that there are top seven variables that have been given high mean scores such as Lower medical cost Suitable accommodation, Health system infrastructure, highly

competent medical professionals, Quality of medical services, Comprehensive service coverage, Ease of visa and immigration procedures. The ratings have been that on the bases of five point likert scale from 1 to 5. 1- Not at all influential, 2-not influential, 3-neutral, 4-influencial, 5-very influential

Ratings above 4.5 and below 5.0 is Highly influential, ratings above 3.5 but below 4.5 is influential, rating above 2.5 but below 3.5 is neutral, rating above 1.5 but below 2.5 is not influential, rating below 1.5 is not at all influential

Regression analysis:

Table 2 Regression Model:

Regression Model	R	R^2	Adjusted R^2	Standard error of the Estimate
1	.754[a]	.678	.721	.3
a. Predictors: (Constant), Lower medical cost, Suitable accommodation, Health system infrastructure, highly competent medical professionals, Quality of medical services, Comprehensive service coverage, Ease of visa and immigration procedures, Surgeries done almost immediately, Proper health care, Ayurvedic therapies, Tourist attractions, Suitable climate conditions, Marketing of tourism destination, Social background and Secure and crime free environment			

Source: SPSS 23.0

The results of the multiple regression models indicate that the influencing factors explain the variance in Choice of Medical Tourism Destination. The Value of R^2 (R square) is an acceptable value for explaining variability in Choice of Medical Tourism Destination .The adjusted R-square in the Table no 2 shows that the dependent variable (choice of Medical tourism destination) is affected by 72.1 % by the independent variables Lower medical cost, Suitable accommodation, Health system infrastructure, highly competent medical professionals, Quality of medical services, Comprehensive service coverage, Ease of visa and immigration procedures, Surgeries done almost immediately, Proper health care, Ayurvedic therapies, Tourist attractions, Suitable climate conditions, Marketing of tourism destination, Social background and Secure and crime free environment.This shows that all the independent variables are factors influencing the Choice of Medical Tourism destination.

Table 3 below reveals that the overall model was also significant, tested with the help of ANOVA.

Model		Sum of	Df	Mean Square	F	Sig.
1	Regression	50.321	15	15.449	162.634	.000[b]
	Residual	25.314	130	.103		
	Total	68.743	145			

Source: SPSS 23.0

a. Dependent Variable: Choice of Medical Tourism Destination.

b. **Predictors:**   (Constant), Lower medical cost, Suitable accommodation, Health system infrastructure, highly competent medical professionals, Quality of medical services, Comprehensive service coverage, Ease of visa and immigration procedures, Surgeries done almost immediately, Proper health care, Ayurvedic therapies, Tourist attractions, Suitable climate conditions, Marketing of tourism destination, Social background and Secure and crime free environment

From Table, it is observed that the multiple linear regression is significant F (15, 100) = 162.634, p-value <.0000). This means that at least one of the independent variables (Factors) is a significant predictor of Choice of Medical Tourism Destination.

Factor Analysis

The Influence of factors on the choice of Medical tourism destination was calculated and explored based on the responses. In this study, it is measured in fifteen response items on the questionnaire.

The Bartlett's Test of Sphericity gives a higher Chi-square value of 1525.716, indicating that the sample included in the study is statistically found to be adequate (p<0.001). Bartlett's test of sphericity is significant, thus, the hypothesis that the inter-correlation matrix involving these fifteen variables is an identity matrix is rejected. Thus, from the perspective of Bartlett's test, factor analysis is feasible. As Bartlett's test is almost always significant, a more discriminating index of factor analyzability is the KMO.

For the Influence of factors on the choice of Medical tourism destination, it is .783, so the KMO also supports factor analysis.

Table 4: KMO and Bartlett's Test for Influence of factors on the choice of Medical tourism destination

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.783
Bartlett's Test of Sphericity	Approx. Chi-Square	1525.716
	Df	54
	Sig.	.000

 Source: SPSS 23.0

The below table below presents the Communalities for Influence of factors on the selection of Medical Tourism destination

Table 5: Communalities for the Influence of factors on the choice of Medical Tourism destination

Communalities	Initial	Extraction
Lower medical cost	1.000	.682
Suitable accommodation	1.000	.691
Health system infrastructure	1.000	.722
Highly competent medical professionals	1.000	.695
Quality of medical services	1.000	.768
Comprehensive service coverage	1.000	.627
Ease of visa and immigration procedures	1.000	.788
Surgeries done almost immediately	1.000	.732
Proper health care	1.000	.743
Ayurvedic therapies	1.000	.643
Tourist attractions	1.000	.721
Suitable climatic conditions	1.000	.791
Marketing of tourism destination	1.000	.746
Social background	1.000	.718
Secure and crime free environment	1.000	.711

Source SPSS 23.0 Extraction Method: Principal Component Analysis.

*T*able below shows the total variance explained. The extracted constructs explains the opinion of the tourists that visited Hyderabad towards choosing Hyderabad as the medical tourism destination to the extent of 64.718 per cent. Factor analysis of fifteen variables relating to the Influence of factors on the choice of Medical tourism destination is extracted into three Constructs and the results are presented in Table below.

Table 6: Total Variance Explained for Influence of factors on the choice of Medical tourism destination.

Component	Initial Eigen values			Extraction Sum of Squared Loadings			Rotation Sum of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.348	28.985	29.985	4.338	28.985	29.985	4.148	27.650	27.650
2	3.587	23.913	53.898	1.597	23.913	53.898	3.899	25.993	53.643
3	1.623	10.82	64.718	1.623	10.82	64.718	1.661	11.075	64.718
4	0.982	6.546	71.264						
5	0.758	5.052	76.316						
6	0.714	4.77	81.086						
7	0.653	4.353	85.439						
8	0.546	3.64	89.079						

9	0.447	2.97	92.049					
10	0.356	2.374	94.423					
11	0.295	1.1437	143.39					
12	0.251	1.674	97.064					
13	0.167	1.114	98.178					
14	0.142	0.948	99.126					
15	0.131	0.874	100.00					

Source: SPSS 23.0 Extraction Method: Principal Component Analysis.

*T*able reports the rotated component matrix with item/factor correlations for this four factor analysis solution. A total of 15 items, forming three components (Factors) were thereby identified, each item had a minimum item/factor loading of 0.5, which was deemed to be adequate.

The scree plot representing the total variance explained based on the variance in the Eigen values of the fifteen components using principal component analysis is show in figure 1

Figure 1: Scree Plot of Influence of factors on the choice of Medical tourist destination.
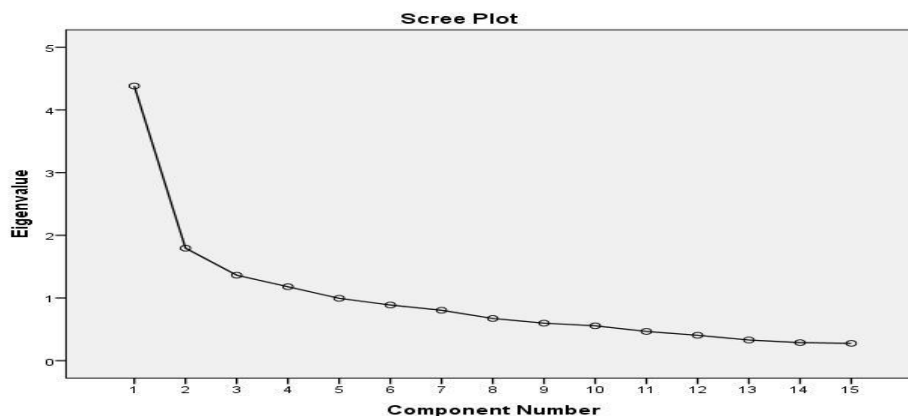
The below table presents the total variance explained after varimax rotation.

Table 7: Rotated Component Matrix for Influence of factors on the choice of Medical tourism destination

	1	2	3
Lower medical cost	.782		
Suitable accommodation	.766		
Health system infrastructure	.757		
Highly competent medical professionals	.748		
Quality of medical services	.737		
Ease of visa and immigration procedures	.721		
Ayurvedic therapies		.762	
Surgeries done almost immediately		.751	
Proper health care		.693	

Tourist attractions		.672	
Social background		.654	
Secure and crime free environment			.711
Marketing of tourism destination			.663
Suitable climatic conditions			.620
Social background			.614

Source SPSS 23.0 Extraction Method: Principal Component Analysis.

Table reports the rotated component matrix with item/factor correlations for this three-factor analysis solution. A total of 15 items, forming three components (factors), were thereby identified. Each item had a minimum item/factor loading of 0.5, which was deemed to be adequate.

Table 8: Exploratory factor analysis for the Influence of factors on the choice of Medical tourism destination

Variables	Factor Loading
Factor 1	
Lower medical cost	.782
Suitable accommodation	.766
Health system infrastructure	.757
Highly competent medical professionals	.748
Quality of medical services	.737
Ease of visa and immigration procedures	.721
% of Variance	**27.650**
Factor 2	
Ayurvedic therapies	.762
Surgeries done almost immediately	.751
Proper health care	.693
Tourist attractions	.672
Social background	.654
% of Variance	**25.993**
Factor 3	
Secure and crime free environment	.711
Marketing of tourism destination	.663
Suitable climatic conditions	.620
Social background	.614
% of Variance	**11.075**

Source: SPSS 23.0

RESULTS AND DISCUSSION

The results of the descriptive statistics depict five variables that have higher mean values showing their influence on the choice of medical tourism destination such as Lower medical cost

Suitable accommodation, Health system infrastructure, highly competent medical professionals, Quality of medical services, Comprehensive service coverage, Ease of visa and immigration procedures.

The results of the regression ANOVA showed that the independent variables as a whole have significant relationship with the choosing of medical tourism destination.

The results of the factor analysis yielded three-factors. The above three factors relating to were mainly extracted for Influence of factors on the choice of medical tourism destination accounts for a total variance of 64.718% of all items.

Factor 1 has six variables; they are Lower medical cost, Suitable accommodation, Health system infrastructure, highly competent medical professionals, Quality of medical services, Ease of visa and immigration procedures which showed 27.650% of the variance.

Factor 2 has five variables; they are Ayurvedic therapies, Surgeries done almost immediately Proper health care, Tourist attractions, Social background which explains 25.993 % of variance.

Factor 3 has four variables; they are Secure and crime free environment, marketing of tourism destination, Suitable climatic conditions, Social background which explains 11.075% of variance.

CONCLUSION

The present study was undertaken to know the influence of factors on the choice of Medical destination .The Feedback of 146 tourists who visited Hyderabad was collected and it was found that Lower medical cost ,Suitable accommodation, Health system infrastructure, highly competent medical professionals, Quality of medical services, Comprehensive service coverage, Ease of visa and immigration procedures are the key influencing factors for the selection of Hyderabad as the Medical tourism destination.

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