



ORIGINAL RESEARCH PAPER

Tourism

FACTORS INFLUENCING THE MEDICAL TOURISM IN SOUTH INDIA

KEY WORDS:

Accommodation, Foreign Currency, Insurance, Medical Tourism, M-Visa

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ABSTRACT

Medical Tourism is the emerging service Industry in India. It is offered as a package of services consists of healthcare, hotel, travel, and tourism services, among them healthcare is the prime services based on that all the other services are designed under the combo. The successful design of medical tourism services will offer a win-win situation to all the stakeholders connected to this service. The sample 200 foreign medical tourists' respondents are included for collecting the primary data through structured questionnaire using convenience sampling technique from four different states located at the southern part of India. Factor analysis is used to explore the factors contributing directly to define the medical tourism services using the SPSS V.21 and based on the results the research findings, suggestions and conclusion are made. The entire study is based on describing the opinion of the respondents about the factors influencing the medical tourism in South India.

INTRODUCTION

Medical tourism is gaining novel importance in the present day tourism industry and health care industry. It is a platform will ensure the combined growth of multiple service sectors eventually by designing and offering the single package of services. This medical tourism services combo consists of various ranges of services being offered by different industry in a composite and adjustable way. The various part of services industries playing the role in designing the medical services combo are Health care industry, tourism industry, travel industry, hotel industry and local cultural developmental board. The Healthcare services are considered as prima facie elements among all the other services in the medical tourism services combo. Based on the convenience and days of requirement of health care, all the other service providers will adjust and plan their services delivery to the tourists and their accompanying persons. The Ministry of Tourism have developed many plans, organizes many events, promotes many schemes, encourage many special spatial and cultural program in along with medical services offering to the tourists arriving from the different part of the world.

Literature Reviews

The reviews pertaining to the field of medical tourism are collected, organized and arranged in the following manner.

Joseph and Ramesh (2011) imparting the technologies in Wellness centers may cause to increase follow up advice for patients, prevention of complications/side effects and post treatment care the most favorable factor to emerge as the Global Wellness Hub is its authenticity and rich Ayurvedic heritage with multifaceted attractions. They reveals that the provision for Telemedicine and E-Medicare in wellness centers could be an effective factor for attracting more international medical tourists as it may be highly advantageous by providing an increased access to health care expanded utilization of specialized expertise and rapid availability of patient records. Imparting these technologies in Wellness centers may cause to increase follow up advice for patients, prevention of complications/side effects and post treatment care the most favorable factor to emerge as the Global Wellness Hub is its authenticity and rich Ayurvedic heritage with multifaceted attractions.

Kumar Pradeep (2015) highlights the current scenario of yoga tourism in India. Yoga can be promoted with a supportive and concrete role of organic food; it is because organic, chemical free food is getting huge response from every individuals of a health consciousness market. Through yoga tourism the outer world of experiences may be woven together to create

'narratives' that metaphorically connect desires with understanding and the inner world of the spirit. This is the need of hour to capture the beginner and passive market segments by going beyond traditional yoga services with more innovative, exclusive and distinctive offering such as nutritional programs, exercise routines, spa services and wellness consultations on moderate price in conjunction to yoga offering.

Raghavendran and Frank (2015) enlighten the general information on medical tourism in India. Medical Tourism growth is dependent on quality of foreign healthcare, and not this should evaded as soon as it could be, medical tourism should also be the benefit to the locals or national citizen too for this happen, more information made offered through utilizing different types of media vehicles. Low cost, High Quality and long term growth and lengthening benefits are few expectations of the consumers.

Problem Statement

The reasons behind the medical tourism services emergence are attracting the foreign tourists to India and domestic tourists to different states other than their state of origin. It is crystal clear that, the arrival rate cannot be improved only by offering a single service. It is well-known that, our Indian healthcare professionals are highly talented and greatly offering their services, but at the same time that alone not enough to attract the patients. It is here needed to satisfy their needs and requirement which are raised suddenly to explore the world and other culture at different part of the country. To feed the needs, the emergences of combo package of services are started and it is very much required to attract, offer and retain and bring back the valid customer from foreign soil to India.

Research Objectives

The research is validated with the following objectives,

- To study the different factors attracting the medical tourist from foreign soil
- To check the sampling adequacy to perform the factor analysis
- To explore the exact factors contributing to design the medical tourism services

These objectives are used to identify the factors which are mainly used to attract the medical tourist from abroad and testing the exact factors to underline and design the combo package of medical tourism services which are readily available and offered to the needy people.

Research Methodology

Research methodology is narrating the way in execution of

the research study. In this study, the descriptive research design is used. The population of the study consists of the foreign medical tourists those arriving to South India to explore the medical tourism services. There are 200 tourists are approached at four different states of South India to collect the sample viz-a-viz from Tamil Nadu, Kerala, Karnataka and Andhra Pradesh. From each state 50 samples are included in the study under disproportionate to the population method. To collect the responses the convenience sampling method is adopted, because when the tourists feel comfortable, only by the time they are ready to reveal their opinions. The primary data for the research is collected through structured questionnaire and the secondary data for the study is obtained from various journals, magazines and published resources. Appropriate statistical tool, Factor analysis is used to explore the factors which are quite obviously attracting the medical tourists through Principal components method. The sampling adequacy for performing the factor analysis was confirmed through KMO and Bartlett test.

Research Limitations

This particular research is having the following major limitations,

- It is limited only to the context of medical tourism services offered in South India
- The respondents are only from foreign nations, no domestic tourists are included in the study
- It is applicable only the geographical parlance of four states located at southern part of India

Factor Exploration

The very important and ever green technique used in data reduction is Factor Analysis. There are different methods under factor analysis are available like confirmatory factor analysis, exploratory factor analysis using various techniques like principle components method, maximum likelihood method and so on. In this study, in order to reduce the number of attracting factors from the great range of 12 different attracting factors to appropriate handling numbers. To do that, principal components analysis and confirmatory factor analysis was employed using the Varimax rotation and the maximum number of rotation threshold fixed for 25 iterations.

The factor analysis is loaded with as many twelve attracting factors as it is required under the medical tourism industry as the predominant factors, they are Basic infrastructure and financial support extended by the medical centres, Food and hospitality arrangement at the medical centres, Affordable and appropriate costs of health services being offered, Establishing relationship and arrangements with international tourism and travel agencies, Online accessibility of physicians and surgeons for consultations and appointment in respective health centers, Availability of foreign speakers to be guided during admitting and hospitalizing and the other steps of treatment is very effective in attracting medical tourism, Offering health insurance services to foreigners is an effective factor to attract the medical tourism, Foreign currency conversion and payment services, Transparency is medical treatment procedures and proper document with explanations for each treatment history, Ensuring easy entry and exit from the country is effective in attracting the medical tourism, Validating the patient's visa in accordance to the time span time for certain treatment, and Simplifying the visa processes for medical issues rapidly causes in satisfaction of the medical tourism.

It is assumed as important under factor analysis that, it is always grouping the factors from among the manifest variables based on the range of correlation exist between the variables, in order to evaluate the correlation between

variables, the sample size should be adequate enough. To check and confirm the sampling adequacy KMO and Bartlett's Test is performed before initiating the actual factor analysis.

Table - 1 - KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.879	
Bartlett's Test of Sphericity	Approx. Chi-Square	115.483
	df	66
	Sig.	.000

The result of the KMO and Bartlett's Test reveals that, the present study includes as many as 200 sample data. The statistical results of Bartlett's Test of Sphericity also expressing significant value as p=.000, and Kaiser-Meyer-Olkin Measure of Sampling Adequacy test result is 0.879, it ranges between 0 and 1, and values closer to 1 are observed as better. A value of 0.6 is suggested as minimum requirement, so the sampling adequacy permits to perform factor analysis for factors attracting medical tourism services in south India.

Table -2 - Communalities

	Initial	Extraction
Basic infrastructure and financial support extended by the medical centres	1.000	.593
Food and hospitality arrangement at the medical centres	1.000	.695
Affordable and appropriate costs of health services being offered	1.000	.636
Establishing relationship and arrangements with international tourism and travel agencies	1.000	.753
Online accessibility of physicians and surgeons for consultations and appointment in respective health centers	1.000	.652
Availability of foreign speakers to be guided during admitting and hospitalizing and the other steps of treatment is very effective in attracting medical tourism	1.000	.807
Offering health insurance services to foreigners is an effective factor to attract the medical tourism	1.000	.683
Foreign currency conversion and payment services	1.000	.627
Transparency is medical treatment procedures and proper document with explanations for each treatment history	1.000	.621
Ensuring easy entry and exit from the country is effective in attracting the medical tourism	1.000	.746
Validating the patient's visa in accordance to the time span time for certain treatment	1.000	.513
Simplifying the visa processes for medical issues rapidly causes in satisfaction of the medical tourism	1.000	.567

Extraction Method: Principal Component Analysis.

Under the principal factor analysis factoring, the initial values on the diagonal of the correlation matrix are determined by the squared multiple correlation of each one of the variable with the other variables loaded in to the factor analysis. The extraction values indicate the proportion of each variable's variance that can be explained by the retained factors. Variables with high correlation values are well represented in the common factor space, while variables with low correlation values are not well represented. The following table explains the total variance explained for the factors determining the attraction of medical tourism in South India.

Table 3 - Total Variance Explained for Attraction factors of Medical tourism

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.307	10.894	10.894	1.307	10.894	10.894	1.178	9.814	9.814

2	1.221	10.173	21.068	1.221	10.173	21.068	1.162	9.681	19.495
3	1.187	9.895	30.963	1.187	9.895	30.963	1.161	9.676	29.172
4	1.086	9.048	40.011	1.086	9.048	40.011	1.135	9.461	38.632
5	1.057	8.809	48.820	1.057	8.809	48.820	1.127	9.391	48.023
6	1.027	8.559	57.379	1.027	8.559	57.379	1.106	9.217	57.240
7	1.010	8.413	65.792	1.010	8.413	65.792	1.026	8.552	65.792
8	.915	7.626	73.418						
9	.861	7.172	80.590						
10	.841	7.012	87.601						
11	.794	6.616	94.217						
12	.694	5.783	100.000						

Extraction Method: Principal Component Analysis.

From the total variance explained table it was observed that, the initial number of factors is the same as the number of variables used in the factor analysis that is twelve. However, not all the twelve factors will be retained after the analysis. Eigenvalues are explaining the variances of the factors used under the factor analysis, based on the correlation matrix the variables are standardized, which means that the each variable has a variance of 1, and the total variance is equal to the total number of variables used in the analysis. The total column indicates eigenvalues, as the first factor will always account for the most variance so it shows highest eigenvalue, and the subsequent factor will account for as much of the left over variance. Hence, each successive factor will account for less and less variance and it shows like descending order matrix.

Rotation Sums of Squared Loadings explains the values represent the distribution of the variance after the varimax rotation. From the Rotation Sums of Squared Loadings, it was finalized that totally seven factors extracted, among that the first group of factors explains only 9.814%, the second group of factors contribution is 9.681%, the third factor contribution is 9.676%, the fourth factor is contributed 9.461%, the fifth factors is contributed as 9.391%, the sixth factor contribution is 9.217% and the last and seventh group of factors contribution is 8.552%, and it is explaining 65.792% overall variance among the twelve variables.

The scree plot explains the consistency of twelve factors loaded in the study and its respective Eigen values. It was observed from that, the Eigen value for the factors is continuously diminishing; it further leads to dilution of the factors.

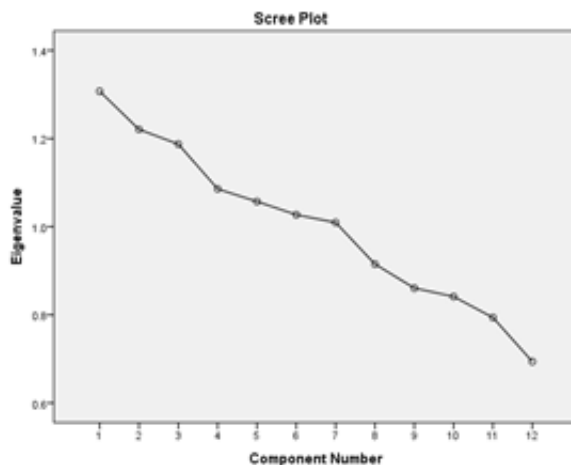


Figure 1 – Scree Plot

The following rotation component matrix table displays the grouping of variables made based on the variance between factors underlined using correlation matrix and seven factors are extracted by grouping all the twelve variables employed by converging rotation in ten iterations. Each factor is named after verifying the commonality of the features of variables, after performing the principal component analysis using varimax rotation with Kaiser Normalization principle.

Table 4 - Rotated Component Matrix^a

	Component						
	1	2	3	4	5	6	7
Foreign currency conversion and payment services	.784						
Basic infrastructure and financial support extended by the medical centres		.711					
Food and hospitality arrangement at the medical centres		.310					
Online accessibility of physicians and surgeons for consultations and appointment in respective health centers			.638				
Simplifying the visa processes for medical issues rapidly causes in satisfaction of the medical tourism			.660				
Establishing relationship and arrangements with international tourism and travel agencies				.843			
Transparency is medical treatment procedures and proper document with explanations for each treatment history					.699		
Offering health insurance services to foreigners is an effective factor to attract the medical tourism						.627	
Ensuring easy entry and exit from the country is effective in attracting the medical tourism						.788	
Affordable and appropriate costs of health services being offered							.334
Availability of foreign speakers to be guided during admitting and hospitalizing and the other steps of treatment is very effective in attracting medical tourism							.879
Validating the patient's visa in accordance to the time span time for certain treatment							.210

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 10 iterations.

Rotated Factor Matrix contains the rotated factor loadings, which represent both how the variables are weighted for each factor and also the correlation between the variables and the

factor ranges from -1 to +1. Based on the result of rotated component analysis, twelve variables are consolidated and grouped under seven factors loaded. The first factor consists

of only one variable that is Foreign currency conversion and payment services (.784) named as "Currency Conversion Factor". The second factor includes two variables, they are Basic infrastructure and financial support extended by the medical centres (.711), and Food and hospitality arrangement at the medical centres (.310) and it is named as "Food and Accommodation Factors". The third factor consists of two variables namely Online accessibility of physicians and surgeons for consultations and appointment in respective health centers (.638) and Simplifying the visa processes for medical issues rapidly causes in satisfaction of the medical tourism (.660) and it is viewed as "Online Service Factors".

The fourth factor consists of only one factor that is Establishing relationship and arrangements with international tourism and travel agencies (.843) and it is named as "Agency Plan Factor". The fifth factor also loaded with single component that is Transparency in medical treatment procedures and proper document with explanations for each treatment history (.699), it is named as "Transparency Factor". The sixth factor consists of Offering health insurance services to foreigners is an effective factor to attract the medical tourism (.627) and Ensuring easy entry and exit from the country is effective in attracting the medical tourism (.788) grouped and named as "Easy Accessibility factor" and the seventh factor is loaded with three different components, they are Affordable and appropriate costs of health services being offered (.334), Availability of foreign speakers to be guided during admitting and hospitalizing and the other steps of treatment is very effective in attracting medical tourism (.879) and Validating the patient's visa in accordance to the time span time for certain treatment (.210) and it is referred as "Basic Amenities Factors".

Findings

There are seven factors are mainly extracted and considered as the major influencing factors under the medical tourism industry, they are

- Currency Conversion Factor
- Food and Accommodation Factors
- Online Service Factors
- Agency Plan Factor
- Transparency Factor
- Easy Accessibility factor, and
- Basic Amenities Factors

If the medical tourism combo package pay attention to these factors primarily than other factors influencing the foreign medical tourists, it will be much beneficial to them. By concentrating these factors, it is highly possible to create a Win-Win situation to all the partnering service industry people and the medical tourists those who seeking services which is specially configures to meet their personal requirements.

Suggestions

The following are the suggestions are generally arrived after the study,

- More concentration required on the insurance schemes and the claim overseas operations
- Need more assistance for foreign currency conversion and processing services
- Need proper food, accommodation and safety stay for the patients and their companions
- Display of all the services availability and features and accessibility over internet
- Facilitates pre-booking and confirmation over mail
- Post-treatment services over the internet when it is required
- Visa clearance and Simplified M-Visa processes for both patients and companions
- Transparency in transactions and report
- Well-structured travel plan and informed to the tourists

well in advance

- Proper arrangement of Hotel and travel vehicle

It will definitely help to improve the medical tourism service offerings in South India.

CONCLUSION

The medical tourism services in a nut shell not only promoting the tourism but it indirectly supporting the nation to earn foreign currency flow, improved quality of life of people belongs to different community residing different destinations. Getting outreach medical records, successive surgeon's rate, state-of-art medical equipment will helps the patients to get complete delight over the services. By the way, the safety and security concern plays a vital role in designing the medical tourism services.

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