Effect of medical traveller’s satisfaction on their intention to revisit for medical tourism in India

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Abstract---Aim of research is to investigate effect of medical traveller’s satisfaction on their Intention to revisit for Medical tourism. Research study is exploratory and descriptive in nature. 5 point Likert scale, strongly agree to strongly disagree was used in this study. A non-probability convenient sampling method was used to collect data from the respondents. Multiple regression model was developed with the help of SPSS software. A focus group was used to provide a basis for the survey. The survey contained effect of medical traveller’s satisfaction on their Intention to revisit for medical tourism and six hypothetical responses written according to the proposed medical traveller’s satisfaction on their Intention to revisit for medical tourism regression model development. A structured questionnaire was administered to the 500 respondents who were medical travellers at India. It was observed that regression analysis between independent variables like destination Image, destination attributes, marketing mix, medical traveller's destination choice and medical traveller's experience and dependent factor, medical traveller's satisfaction having positive relationship. This is the first time and unique research describing effect of medical traveller's satisfaction on their intention to revisit for medical tourism & developing multiple regression model on the tourism industry.

Keywords---Medical traveller, satisfaction, Intention to revisit for Medical tourism, multiple regression model, Healthcare tourism.
Introduction

The growth of medical tourism was estimated as 26% annually in Asia, in countries such as Philippines, India, Thailand, Malaysia and Singapore. In India, government does not levy tax on any investment made for hospitals. Government also provides health or medical visas for inbound medical travellers. Research concluded that improved quality of various healthcare services available at private multi-specialty and super specialty hospitals is considered a proper reason to support growth of international medical tourism. (International Medical tourism will grow further, 2013).

Theoretical Framework for research

Loudon, Bitta, (2008), Consumer Behaviour is defined as “the mental decision making process and physical activity of individuals in evaluating, acquiring, using of the goods and services”. The actual act of the purchase or destination choice decision involves one stage in a series of mental and physical activities. Some of these actions occur previous to the destination choice decision known as pre-purchase factors and some of actions after the decision choice known as post-purchase factors. Figure 1 shown, in India, private healthcare sector accounts for 72% of the country’s total healthcare expenditure.

Theoretical Framework

Consumer Behaviour is defined as “the mental decision making process and physical activity of individuals in evaluating, acquiring, using of the goods and services”, Loudon and Bitta, (2008). The actual act of the purchase or destination choice decision involves one stage in a series of mental and physical activities. Some of these activities happen before the decision known as pre purchase factors and some of activities after the decision choice known as post purchase factors. The main factors involve in pre purchase buying decision processes are problem recognition, Motivation, information search, evaluation of destination image and destination attributes, marketing mix, destination competitiveness. After that buyer can uses the services offered by the service provider. Post purchase factors like experiences of the buyer with the service provider and after using these services of the service provider either buyer is satisfied with his/her experiences or not. If consumer is satisfied with the services offered by the
destination service provider then he/she will be delighted and will recommend his/her choice to others and make intention to revisit destination again. Mathieson and Wall (1982) suggested a linear five-stage model of tourism buying behaviour, which is shown in below figure.

![Five-stage model of tourism buying behaviour](image)

Schmoll (1977) quoted in Cooper et al. (1993), developed a model which hypothesized that consumer decisions were a result of four elements as follows:

- Travel stimuli, including guide books, reports from other travelers and advertising and promotion
- Personal and social determinants of travel behaviour including motivators, desires and expectations
- External variables, including destination images, confidence in travel trade intermediaries and constraints such as cost and time
- Characteristics and features of the service destination such as the perceived link between cost and value and the range of attractions and amenities offered.

**Literature Review**

India was one of the first countries that covered at least 20% health tourism of Asia. In India, the numbers of medical travellers increased by 30% between the year 2009 and 2011, Dhillon A. (2003). Also, research found that millions of medical travellers will be expected to travel India for various healthcare treatments per annum. Medical travellers primarily visited India for various diseases such as orthopaedics, Heart replacement/curative surgery, cosmetic surgery and dental surgery etc. The research found that main reason for higher visit rate of medical travellers in India, were low price and ability and proficiency of the doctors as compared to other countries. Kunal (2010), found that Gujarat state become a preferred medical tourists destination. Some vital factors considered for the preferred medical tourists like world class well-being conveniences, nil waiting period and lower cost or prices of the health treatments. Study also concluded that more than 1,000 NRIs (Non-resident Indians) and foreign person come towards India.

**Destination Image for medical travellers**

According to Reilly, (1990) to capture the components of destination image such as feature, holistic, functional, emotional, general and unique – a combination of quantitative and qualitative technique should be used. Research concluded that an obvious perceptive of traveller’s destination image was vital to build-up unbeaten promotion strategy in advertising of a destination. Brad Hill (2003), research found that event media have significant effect on destination image and choice for travellers. Media event had also significant effect on the destination
extensive tenure intention to revisit. From above literature below hypothesis was developed for further research analysis.

H1: There is a significant impact of Destination Image on Medical traveller’s Satisfaction.

**Destination attributes for medical travellers**

Vesna, Eldin, Amra, et al. (2004) explored the attributes of traveller's destination image and perception of those attributes for destination, among tourists who visited Bosnia and Herzegovina. Research found that a difference in perception of destination's attributes, depending on the traveller’s nation of origin, but moreover depending on the either travellers visited B&H for the first time or not. Influence of other factors such as type of travellers, days of staying, trade, age and source of information were not significant. According to the evaluation of certain attributes, special attention needs to be given toward traveller’s information and sanitary conditions dimensions. From above literature below hypothesis was developed for further research analysis.

H2: There is a significant impact of Destination attributes on Medical traveller’s Satisfaction.

**Marketing Mix for medical travellers**

Dr. Ayed AM. (2012), research found that marketing mix components has impact on traveller satisfaction and reliability. Research concluded that medical travellers satisfied by the quality, cost and service delivery of healthcare tourism products of Jordan. From above literature below hypothesis was developed for further research analysis.

H3: There is a significant impact of Marketing Mix on Medical traveller’s Satisfaction.

**Medical traveller’s Destination Choice**

Crompton. (1993) studied medical treatment destination choice approaches for healthcare services. He found that attitude towards each alternative played most important role in determination and final selection of healthcare travel destination choice. Fuller D, Wilde SJ, Hanlan J, et al. (2007) understood the main variables effect on destination choice and afterward assessment of a tourism destination by travelers. The knowledge usually involved the use of both goods and services needed a comparatively high level of costs. From above literature below hypothesis was developed for further research analysis.

H4: There is a significant impact of Medical traveller’s Destination Choice on Medical traveller’s Satisfaction.

**Medical traveller’s Experience**

Foster D. (1999) studied tourist’s satisfaction with their involvements in particular journey’s end and concluded that the level of traveller’s happiness with a definite journey’s end depended on the facility delivered by different initiatives. From above literature below hypothesis was developed for further research analysis.
H5: There is a significant impact of Medical traveller’s Experience on Medical traveller’s Satisfaction.

**Medical traveller’s Satisfaction**

Marrakchi (2009) found that elements such as therapeutic medication, Healthcare amenities, Healthcare facts, comfort of healthcare services at terminus and diet restrained as an energetic element to health traveller’s happiness.

**Medical traveller’s Intention to Revisit**

Maryam Ansari (2021) in their research paper concluded that medical tourists’ witnessed validity of medical journey’s end has an impact on their destination image, and both of these elements affect their observed worth and happiness. In addition, medical tourists’ satisfaction of their journey leads to their revisit intention & word of mouth also played important role for intention to revisit. Tat-Huei (2021) concluded that country-specific factors (nation familiarity, security and safety, ease of access, and charge fairness) and social factors (word-of-mouth and communal broadcasting) are important forecasters of the image of Malaysia as a medical tourism destination, which in turn, affect observed value and aim to revisit. From above literature below hypothesis was developed for further research analysis.

H6: There is a significant impact of Medical traveller’s Satisfaction on Medical traveller’s Intention to Revisit.

**Method**

Objective of research is to investigate effect of medical traveller’s satisfaction on their Intention to revisit for Medical tourism. Malhotra N, dash S. (2011), an empirical and decisive descriptive research used i.e. data analysed by using quantifiable investigations the definite proposition. Methods used for exploratory research study:

1. Focus group or expert’s opinion and
2. Pilot Survey

Pilot study conducted in research and also takes an expert’s (doctors) opinion for the various variables, in pilot study total 44 variables used in structured questionnaire. After content analysis of research questionnaire, some variables were removed based on expert’s opinion. 44 Variables was reduced to 28 variables in final questionnaire for data collection. Also, expert’s personal interview was carried out to elicit more information regarding their intention to revisit by asking open ended questions. Conclusive descriptive research was used in study, i.e. data analyzed by using quantitative and tests the specific hypothesis. Single cross sectional research design means one sample of respondents selected from the target population and information was obtained from this sample once upon a time. A structured questionnaire was administered to the 500 respondents who were medical travellers at Gujarat state. A 5 point Likert scale, strongly agree to strongly disagree was used in this study. A non-probability convenient sampling method was used to collect data from the respondents. Target populations were sample, a subgroups of a population selected for the research. Sample element
would be medical travelers who come in India for taking a medical treatment, i.e. NRIs, Domestic and foreign travelers.

3.1 Proposed regression model for medical traveller’s satisfaction on their Intention to revisit for medical tourism development

Research Hypotheses for testing

H1: There is a significant impact of Destination Image on Medical traveller's Satisfaction.

H2: There is a significant impact of Destination attributes on Medical traveller's Satisfaction.

H3: There is a significant impact of Marketing Mix on Medical traveller's Satisfaction.

H4: There is a significant impact of Medical traveller’s Destination Choice on Medical traveller’s Satisfaction.

H5: There is a significant impact of Medical traveller’s Experience on Medical traveller’s Satisfaction.

H6: There is a significant impact of Medical traveller’s Satisfaction on Medical traveller’s Intension to Revisit.
**Result**

**Reliability Test**

In this research 7 factors with 28 items are considered for the study. The overall reliability of all variables is 0.974, which was greater than 0.7, So, research data are reliable for further analysis.

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Dimensions</th>
<th>Cronbach’s Alpha</th>
<th>No. of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Destination Image</td>
<td>0.786</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Destination attributes</td>
<td>0.825</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Marketing Mix</td>
<td>0.939</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Medical traveller’s Destination Choice</td>
<td>0.812</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Medical traveller’s Experience</td>
<td>0.812</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>Medical traveller’s Satisfaction</td>
<td>0.870</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>Medical traveller’s Intension to Revisit</td>
<td>0.859</td>
<td>6</td>
</tr>
</tbody>
</table>

**Correlations Matrix**

The correlation table 2 explains the correlation between Medical traveller’s Intension to revisit and Destination Image, Destination attributes, Marketing Mix, Medical traveller’s Destination Choice, Medical traveller’s Experience, Medical traveller’s Satisfaction.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Destination Image</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Destination attributes</td>
<td>.711**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing Mix</td>
<td>.786**</td>
<td>.867**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical traveller’s Destination Choice</td>
<td>.718**</td>
<td>.878**</td>
<td>.897**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical traveller’s Experience</td>
<td>.681**</td>
<td>.876**</td>
<td>.882**</td>
<td>.926**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical traveller’s Satisfaction</td>
<td>.788**</td>
<td>.843**</td>
<td>.856**</td>
<td>.853**</td>
<td>.856**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Medical traveller’s Intension to Revisit</td>
<td>.706**</td>
<td>.848**</td>
<td>.894**</td>
<td>.879**</td>
<td>.873**</td>
<td>.812**</td>
<td>1</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed)**

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From the above Correlation Matrix table 2, research found that correlation between Medical traveller’s Intension to revisit and Destination Image, Destination attributes Marketing Mix, Medical traveller’s Destination Choice, Medical traveller’s Experience, Medical traveller’s Satisfaction high positive correlation.

**Testing of Hypotheses 1 to 5**

To test the hypotheses H1 to H5 multiple regression analysis was used.

Table 3: Regression Analysis between independent variables and Medical traveller’s satisfaction

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Standard error of Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.943</td>
<td>.889</td>
<td>.888</td>
<td>.44504</td>
</tr>
</tbody>
</table>

ANOVA

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>870.491</td>
<td>5</td>
<td>174.098</td>
<td>879.034</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>108.733</td>
<td>549</td>
<td>.198</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>979.224</td>
<td>554</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Coefficients

<table>
<thead>
<tr>
<th>(Constant)</th>
<th>B</th>
<th>Std. error</th>
<th>beta</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-0.016</td>
<td>.098</td>
<td>-.163</td>
<td>.871</td>
<td></td>
</tr>
<tr>
<td>Destination Image</td>
<td>-0.122</td>
<td>.025</td>
<td>-.121</td>
<td>-4.897</td>
<td>.000</td>
</tr>
<tr>
<td>Destination attributes</td>
<td>.211</td>
<td>.041</td>
<td>.171</td>
<td>5.141</td>
<td>.000</td>
</tr>
<tr>
<td>Marketing Mix</td>
<td>.173</td>
<td>.035</td>
<td>.191</td>
<td>4.967</td>
<td>.000</td>
</tr>
<tr>
<td>Medical traveller’s Destination Choice</td>
<td>.518</td>
<td>.037</td>
<td>.524</td>
<td>14.057</td>
<td>.000</td>
</tr>
<tr>
<td>Medical traveller’s Experience</td>
<td>.174</td>
<td>.029</td>
<td>.197</td>
<td>5.951</td>
<td>.000</td>
</tr>
</tbody>
</table>

Note: (1) a. Predictors: (Constant), Destination Image, Destination attributes, Marketing Mix, Medical traveller’s Destination Choice and Medical traveller’s Experience (2) Dependent Variable: Medical traveller’s Satisfaction

From the above table 3, research found that regression analysis between independent variables like Destination Image, Destination attributes, Marketing mix, Medical traveller's destination choice and Medical traveller's experience and dependent factor, medical traveller’s satisfaction having positive relationship. The significant (P) values are 0.000 which was less than 0.05. So I accepted alternative hypothesis which shown positive relationship between independent and dependant variable. Regression model found significant because the significant (P) value is 0.000. Also, R square value is 0.888. This explained the 88.8% of the variance.
Testing of Hypotheses 6

H6: There is a significant impact of Medical traveller’s Satisfaction on Medical traveller’s Intension to Revisit.

### Table 4: Regression Analysis between Medical traveller’s Satisfaction and Medical traveller’s Intension to Revisit.

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Standard error of Estimate</th>
<th>ANOVA</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sum of Squares</td>
<td></td>
</tr>
<tr>
<td>Regression</td>
<td>.873</td>
<td>.761</td>
<td>.761</td>
<td>.51673</td>
<td>471.361</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>147.659</td>
<td>553</td>
<td>.267</td>
<td></td>
<td>1765.303</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>619.019</td>
<td>554</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coefficients</td>
<td>B</td>
<td>Std. error</td>
<td>beta</td>
<td>T</td>
<td>Sig.</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.142</td>
<td>.087</td>
<td>24.513</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical traveller’s Satisfaction</td>
<td>.694</td>
<td>.017</td>
<td>.873</td>
<td>42.016</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>

Note: (1) Predictors: (Constant), Medical traveller’s Satisfaction. (2) Dependent: Medical traveller’s Intension to Revisit

From the above table 4, research found that regression analysis between independent variables like Medical traveller’s Satisfaction and dependent factor, Medical traveller’s Intension to revisit having positive relationship. The significant (P) values are 0.000 which was less than 0.05. So I accepted alternative hypothesis which shown positive relationship between independent and dependant variable. Regression model found significant because the significant (P) value is 0.000. Also, R square value is 0.761. This explained the 76.1% of the variance.

**Discussion**

Independent variables like Destination Image, Destination attributes, Marketing mix, Medical traveller’s destination choice and Medical traveller’s experience with dependent factor, medical traveller’s satisfaction having positive relationship. Also, independent variables like Medical traveller’s Satisfaction and dependent factor, Medical traveller’s Intention to revisit having positive relationship. More satisfied medical traveller with respect to medical tourism service they’ve received from country may have positive intention to revisit medical tourism destination again and having positive word of mouth to other medical travellers to get medical treatments.

Medical tourism industry may also have focus on medical tourist satisfaction level to provide them better quality of medical treatment and Para-medical services to
get their positive word of mouth and also revisit medical tourism destination again and recommend to others for medical tourism. Policy makers also formulate proper marketing mix strategy to attract medical travellers and build a positive destination image in their mind. Healthcare industry also give focus on the quality, cost and service delivery of healthcare tourism products to satisfy their expectations. Moreover, they also need to improve service quality to improve medical travellers experience with para medical staff and doctors of hospitals at medical tourism destination like India.

**Conclusion**

Research found that variables such as service quality, positive word of mouth with others regarding treatment and facility available, highly qualified & trained doctors and paramedical staff, security, paramedical staff behavior, good infrastructure facility, accreditation of hospitals, various medical products offered, food & hygienic conditions, communication languages, ease of visa process, destination image and government initiatives, affordable low cost, exhibition & trade fair at other countries &/or states, proper air connectivity and proper insurance coverage of medical tourists at destination considered very important variables for the hospitals or healthcare service providers to promote medical tourism in India. Also, Healthcare service provider should give more focus on above variables to promote India as a destination choice for medical travelers. Multiple regression model of pre and post destination choice developed to predict or forecast destination choice as dependent variables. If we can changed the values of the independent values like X1 and X2, X3 .....So on. The value of dependent factors also changed and it would very beneficial to the destination marketers and academician for future intention to revisit of destination as India again for medical tourism.

**Acknowledgments**

We would also like to express our gratitude to all the contributors, namely the authors, reviewers, and editors, who have made this issue possible.

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