CHAPTER VI

MEDICAL TOURIST’S PERCEPTION TOWARDS DESTINATION CHOICE AS CHENNAI

6.1 INTRODUCTION

This Chapter analyses the perception of medical tourists towards various destination factors related to Chennai for medical tourism and the scope for medical tourism in Chennai. Further, an attempt has been made to identify the important factors which influenced destination choice as Chennai. For this purpose, the following 33 statements were identified as the perception of medical tourists for the analysis.

1. I feel excessive cost of treatment at my home destination
2. I feel that health treatment is very important for me
3. I feel that cleanliness is required at destination
4. My home place is lacks of appropriate medical facility
5. There is a hygiene level of food
6. There are various ranges of products available at destination
7. Cleanliness and hygienic food services available at the destination
8. Satisfied with personal and public safety at destination

9. Wi – Fi / Internet facility at destination

10. There is proper language skill of doctors, nurses and receptionists.

11. Destination is governed by liberal Government’s health policies.

12. Met expectation, with infrastructure and Transportation services, at destination.

13. Met expectation, with cleanliness and proper hygienic food services, at destination.

14. Satisfied with accommodation services at destination.

15. There are post medical treatment services at destination.

16. Destination is offering a competitive treatment prices for medical tourists.

17. There is booking and reservation for treatment at destination.

18. There is accessibility and comfort of transport services.

19. Low cost of medical treatments available at destination.

20. To meet the friends/relatives at destination place of choice.

21. There is no waiting line for medical treatment at destination place of choice.

22. My home place lacks special quality care in critical surgery
23. Could collect information from Brochures, travel magazines, newspapers for destination choice decision.

24. Relatives, and friends, personal experience helped in destination decision making.

25. Internet was very useful for destination decision.

26. There is facility for kids/family members.

27. Pleasant experience with doctors, nurses and other staff members at destination.

28. Hospitality and customer care services of local people at destination was satisfactory.

29. Destination is equipped with cutting edge technology.

30. Met expectation with destination image and attributes.

31. Satisfied with transport services at destination

32. Could visit historical places, ancient ruins, temples after the medical treatment.

33. To visit historical places, ancient ruins, temples after medical treatment

Likert type, five point scale was designed by the Researcher and used to identify the important factors of perception by medical tourists towards destination choice as Chennai. The statements provided for five responses,
namely, Highly influenced (HI), Influenced (I), Not at all Influenced (NOT), Negatively influenced (NI) and Highly negatively influenced (HNI). The scores assigned for these five responses were 5,4,3,2 and 1 respectively. Factor Analysis is a multivariate tool, assisting the Researcher to reduce the numerous variables into manageable number of factors. Finally, it was reduced to 33 statements to indicate the perception of medical tourists towards destination choice as Chennai.

6.2 ANALYTICAL FRAMEWORK

The factor analysis identifies the smallest number of common factors that could best explain or account for the correlation among the indicators and also identifies a set of dimensions that are latent (not easily observed) in a large number of variables. In short, it is a method of combining or condensing a large number of variables, with varying levels, into distinctly different number of groups. It is especially useful in multiple regression analysis when multicollinearity is believed to exist as the number of independent variables is reduced by using
factors, and thereby minimizing or avoiding multicollinearity. In fact, factors are used in lieu of original variables in the regression equation.\textsuperscript{95}

In the factor analysis, each variable is expressed as a combination of underlying factors. A factor is an underlying dimension that accounts for several observed variables. Factor loading could explain how closely the variables are related to each one of the factors discovered. Communality shows how much of each variable is accounted for by the underlying factors taken together. Rotation in the context of factor analysis is something like staining a microscope slide. Like different stains, it reveals different structures in the issues and different stains on it reveal different structures in the data.\textsuperscript{96}

The factor analysis model, in matrix rotation, is given by:

$$X = Af + e$$

Where

$$X = (x_1, x_2, x_3, \ldots, x_p)$$

$$f = (f_1, f_2, f_3, \ldots, f_m)$$


\[ e = (e_1, e_2, e_3, \ldots, e_m) \]

\[ m = \text{number of factors and} \]

\[ p = \text{number of variables and matrix} \]

\[
\begin{bmatrix}
  a_{11}, a_{12}, \ldots, \ldots, a_{1m} \\
  a_{21}, a_{22}, \ldots, \ldots, a_{2m} \\
  \vdots \\
  a_{p1}, a_{p2}, \ldots, \ldots, a_{pm}
\end{bmatrix}
\]

Where \( a_{ij} \) is factor loading, it gives correlation between the variables \( x_i \) and factor \( f_j \) (where \( i = 1, 2, \ldots, p \) and \( j = 1, 2, 3 \ldots \)). It is assumed that the error variable \( e \) is distributed independently of \( f \) and \( p \) and \( e \) as multivariate normal distribution.

The principal factor analysis method is mathematically suitable for the solution to a factor problem. Its major solution features the extraction of a maximum amount of variation as each factor is calculated.\(^97\) Most of the analysis methods produce results in a form that is difficult or impossible to interpret. Thurstone argued that it is necessary to rotate factor matrices to interpret them adequately\(^98\). He pointed out that original factor matrices are arbitrary in the sense that an infinite number of reference frames (axes) can be found to


reproduce given ‘R’ matrix.\textsuperscript{99} In order to move the axes from the arbitrary location determinate by the methods of extraction to some portion useful for interpretation of the factors for comparison with other studies, the axes are rotated. A major goal of rotation is to obtain meaningful factors that are as consistent as possible from analysis to analysis. There are several methods available for factor analysis\textsuperscript{100}. But the principal factor method is the widely used one. Further, varimax rotation maintains the independent factors, that is, the angle between the axes are kept at 90 degrees. One of the final outcomes of factor analysis is called rotated factor matrix, a table of coefficient that expresses the ratios between the variables and the factors. The sum of the sequences of the factor loading of variables is called communalities (h2).

The communality of a factor is its common factor variance. The factors with factor loading of 0.50 or greater, are considered as significant factors and the factors with less than 50 per cent common variation with the rotated factor pattern, are too weak to report\textsuperscript{101}. In the present study, the principal factor

\textsuperscript{99} Ibid., p.93.

analysis method, with orthogonal Varimax Rotation was used to identify the significant set of influencing factors.

6.3 COMPUTED RESULTS OF FACTOR ANALYSIS FOR DOMESTIC MEDICAL TOURIST

The analysis of 33 variables through factor analysis, revealed that six latent factors influenced the perception towards destination choice. But the state of influence of each variable is different from one another. Further, the influence of each variable, on the latent factor, has been analysed through rotation factor matrix. The results of rotated factor matrix are presented in Table 6.1.

The suitability of the data for factor analysis was analysed through Kaiser-Mayer-Olkin (KMO) measures of adequacy and Bartlett’s sphericity tests\textsuperscript{102}. The findings of the test are:

| TABLE 6.1 |

\textsuperscript{102} Marjorte A.Pett, Nancy R.Lacky and John. J. Sullivan, Marketing Sense of Factor Analysis, Sage Publications, New Delhi,2003,pp.73-78.
Kaiser-Meyer-Olkin (KMO) test indicates the proportion of variance in the variables might be caused by the underlying factors. The result of the test recorded a high value (0.7462). This indicates that the factor analysis was best suited for this study.

Bartlett’s test of sphericity indicates whether the correlation matrix is an identify matrix. Since the resulting significance level is less than 0.05, it can be concluded that there was significant relationship among the variables identified. Hence it shows that factor analysis could be suitably employed for identifying the factors responsible for the perception towards destination choice.

**TABLE 6.2**
## Identifying Important Factors for Destination Choice as a Chennai–Domestic Tourists - Rotated Component Matrix

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Variables</th>
<th>F₁</th>
<th>F₂</th>
<th>F₃</th>
<th>F₄</th>
<th>F₅</th>
<th>F₆</th>
<th>F₇</th>
<th>F₈</th>
<th>h²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Low cost of medical treatment available at destination</td>
<td>0.7168</td>
<td>0.0067</td>
<td>0.0172</td>
<td>0.1012</td>
<td>0.2016</td>
<td>0.0211</td>
<td>0.3112</td>
<td>0.1741</td>
<td>0.71</td>
</tr>
<tr>
<td>2.</td>
<td>I feel that health treatment is very important for me</td>
<td>0.6811</td>
<td>0.0069</td>
<td>0.1012</td>
<td>0.0761</td>
<td>0.1014</td>
<td>0.0016</td>
<td>0.1431</td>
<td>0.2141</td>
<td>0.57</td>
</tr>
<tr>
<td>3.</td>
<td>To meet the friends/relatives at destination place of choice</td>
<td>0.5716</td>
<td>0.0176</td>
<td>0.1671</td>
<td>0.2431</td>
<td>0.0171</td>
<td>0.3114</td>
<td>0.1716</td>
<td>0.3211</td>
<td>0.56</td>
</tr>
<tr>
<td>4.</td>
<td>There is no waiting time for medical treatment at destination place of choice</td>
<td>0.5528</td>
<td>0.1411</td>
<td>0.0179</td>
<td>0.2141</td>
<td>0.2112</td>
<td>0.3011</td>
<td>0.2612</td>
<td>0.2671</td>
<td>0.60</td>
</tr>
<tr>
<td>5.</td>
<td>To visit historical places, ancient ruins, temples after medical treatment</td>
<td>0.5136</td>
<td>0.1781</td>
<td>0.0168</td>
<td>0.2411</td>
<td>0.3514</td>
<td>0.1918</td>
<td>0.2141</td>
<td>0.3147</td>
<td>0.54</td>
</tr>
<tr>
<td>6.</td>
<td>Destination is equipped with cutting edge technology</td>
<td>0.1671</td>
<td>0.6912</td>
<td>0.0791</td>
<td>0.2711</td>
<td>0.3011</td>
<td>0.0141</td>
<td>0.0741</td>
<td>0.0069</td>
<td>0.70</td>
</tr>
<tr>
<td>7.</td>
<td>Destination governed liberal Government’s health policies</td>
<td>0.2112</td>
<td>0.5771</td>
<td>0.1671</td>
<td>0.0611</td>
<td>0.1014</td>
<td>0.2411</td>
<td>0.3012</td>
<td>0.2611</td>
<td>0.56</td>
</tr>
<tr>
<td>8.</td>
<td>There is proper language skill of doctors, nurses and receptionists</td>
<td>0.3112</td>
<td>0.5316</td>
<td>0.2911</td>
<td>0.3012</td>
<td>0.2714</td>
<td>0.1012</td>
<td>0.0781</td>
<td>0.0069</td>
<td>0.57</td>
</tr>
<tr>
<td>9.</td>
<td>My home place lacks appropriate medical facility</td>
<td>0.1211</td>
<td>0.2067</td>
<td>0.6812</td>
<td>0.1211</td>
<td>0.0069</td>
<td>0.0171</td>
<td>0.1211</td>
<td>0.0171</td>
<td>0.69</td>
</tr>
<tr>
<td>10.</td>
<td>I feel excessive cost of treatment at my home destination</td>
<td>0.0671</td>
<td>0.1912</td>
<td>0.6034</td>
<td>0.1011</td>
<td>0.0016</td>
<td>0.1672</td>
<td>0.1211</td>
<td>0.1127</td>
<td>0.52</td>
</tr>
<tr>
<td>11.</td>
<td>My home place lacks</td>
<td>0.0069</td>
<td>0.1432</td>
<td>0.5711</td>
<td>0.1411</td>
<td>0.0169</td>
<td>0.0017</td>
<td>0.1011</td>
<td>0.1261</td>
<td>0.53</td>
</tr>
<tr>
<td></td>
<td>special quality care in critical surgery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>There are various ranges of products available at destination</td>
<td>0.1671</td>
<td>0.1471</td>
<td>0.2012</td>
<td>0.6112</td>
<td>0.0176</td>
<td>0.0069</td>
<td>0.2711</td>
<td>0.0691</td>
<td>0.56</td>
</tr>
<tr>
<td>13</td>
<td>There are post medical treatment services at destination</td>
<td>0.3211</td>
<td>0.1679</td>
<td>0.2141</td>
<td>0.5972</td>
<td>0.1631</td>
<td>0.0069</td>
<td>0.9178</td>
<td>0.2772</td>
<td>0.68</td>
</tr>
<tr>
<td>14</td>
<td>Destination is offering a competitive treatment prices for medical tourist</td>
<td>0.0271</td>
<td>0.1817</td>
<td>0.2011</td>
<td>0.5014</td>
<td>0.2911</td>
<td>0.3412</td>
<td>0.3014</td>
<td>0.3141</td>
<td>0.60</td>
</tr>
<tr>
<td>15</td>
<td>Hospitality and customer care services of local people at destination</td>
<td>0.2711</td>
<td>0.0007</td>
<td>0.0069</td>
<td>0.0471</td>
<td>0.6314</td>
<td>0.1172</td>
<td>0.0711</td>
<td>0.1014</td>
<td>0.60</td>
</tr>
<tr>
<td>16</td>
<td>Pleasant experience with doctors, nurses and other staff members at destination</td>
<td>0.3112</td>
<td>0.2811</td>
<td>0.1711</td>
<td>0.0061</td>
<td>0.6071</td>
<td>0.1007</td>
<td>0.0161</td>
<td>0.2114</td>
<td>0.58</td>
</tr>
<tr>
<td>17</td>
<td>Satisfied with accommodation services at destination</td>
<td>0.1014</td>
<td>0.2761</td>
<td>0.1941</td>
<td>0.1631</td>
<td>0.5816</td>
<td>0.2711</td>
<td>0.0161</td>
<td>0.3845</td>
<td>0.51</td>
</tr>
<tr>
<td>18</td>
<td>Satisfied with personal and public safety at destination</td>
<td>0.2116</td>
<td>0.3011</td>
<td>0.1643</td>
<td>0.1012</td>
<td>0.5632</td>
<td>0.2714</td>
<td>0.1431</td>
<td>0.3211</td>
<td>0.54</td>
</tr>
<tr>
<td>19</td>
<td>Cleanliness and hygienic food services at destination</td>
<td>0.3067</td>
<td>0.2711</td>
<td>0.1961</td>
<td>0.2711</td>
<td>0.5416</td>
<td>0.2012</td>
<td>0.0012</td>
<td>0.2941</td>
<td>0.55</td>
</tr>
<tr>
<td>20</td>
<td>Satisfied with transport services at destination</td>
<td>0.3411</td>
<td>0.2912</td>
<td>0.1911</td>
<td>0.1071</td>
<td>0.5132</td>
<td>0.3021</td>
<td>0.2612</td>
<td>0.3411</td>
<td>0.53</td>
</tr>
<tr>
<td>21</td>
<td>Wi/Fi / Internet facility at destination</td>
<td>0.0102</td>
<td>0.0071</td>
<td>0.3011</td>
<td>0.2014</td>
<td>0.5071</td>
<td>0.1417</td>
<td>0.3621</td>
<td>0.3572</td>
<td>0.56</td>
</tr>
<tr>
<td>22</td>
<td>Relatives’ and friends’ personal experience is essential for destination decision making</td>
<td>0.1211</td>
<td>0.1141</td>
<td>0.3101</td>
<td>0.0067</td>
<td>0.0171</td>
<td>0.6512</td>
<td>0.2114</td>
<td>0.1147</td>
<td>0.65</td>
</tr>
<tr>
<td>23</td>
<td>Could collect information from Brochures, travel magazines, newspaper for</td>
<td>0.1321</td>
<td>0.0104</td>
<td>0.2067</td>
<td>0.3141</td>
<td>0.2714</td>
<td>0.5602</td>
<td>0.1916</td>
<td>0.2811</td>
<td>0.50</td>
</tr>
<tr>
<td>Destination Choice Decision</td>
<td>24. Internet is very useful for destination decision</td>
<td>25. There is booking and reservation for treatment at destination</td>
<td>26. There is accessibility and comfort of transport services</td>
<td>27. There is hygienic level of food</td>
<td>28. There is facility for kids / family members</td>
<td>29. I feel that there is cleanliness at destination</td>
<td>30. Met expectation with cleanliness and proper hygienic food services at destination</td>
<td>31. Met expectation with infrastructure and transportation services at destination</td>
<td>32. Met expectation with destination image and attributes</td>
<td>33. Could speak posture word of mouth to other as about destination</td>
</tr>
<tr>
<td>-----------------------------------------------------------------</td>
<td>------------------------------------------------------</td>
<td>-----------------------------------------------------------------</td>
<td>-------------------------------------------------------------</td>
<td>----------------------------------</td>
<td>-----------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>0.1142 0.3041 0.1981 0.2141 0.3741 0.5371 0.2911 0.1471 0.51</td>
<td>0.0671 0.1401 0.0671 0.2711 0.3241 0.0710 0.6616 0.1211 0.66</td>
<td>0.0067 0.0098 0.0111 0.1041 0.2694 0.3211 0.5811 0.0121 0.55</td>
<td>0.1231 0.3712 0.2461 0.2111 0.3012 0.1914 0.5512 0.1147 0.53</td>
<td>0.3211 0.2914 0.1211 0.1811 0.3614 0.2712 0.5327 0.3121 0.52</td>
<td>0.1611 0.0782 0.1471 0.3011 0.2712 0.3241 0.5012 0.3741 0.54</td>
<td>0.1011 0.0078 0.0171 0.1121 0.1127 0.2961 0.3112 0.6317 0.61</td>
<td>0.3011 0.2632 0.1781 0.3016 0.2912 0.3141 0.1211 0.5232 0.59</td>
<td>0.1261 0.3012 0.2716 0.1811 0.1927 0.3412 0.2912 0.5127 0.58</td>
<td>0.3121 0.2011 0.17.01 0.1121 0.1214 0.2716 3011 0.5021 0.53</td>
</tr>
<tr>
<td>Eigen value</td>
<td>7.16 6.68 6.52 5.92 5.16 4.78 4.31 3.88</td>
<td>Variance (%)</td>
<td>16.21 13.76 12.16 11.27 9.78 7.16 6.12 5.13</td>
<td>Cumulative variance (%)</td>
<td>16.21 29.97 42.13 53.40 63.18 70.34 76.46 81.49</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
It is revealed from table 6.1 that the 33 variables were grouped into ten factors, namely, \( F_1, F_2, F_3, F_4, F_5, F_6, F_7 \) and \( F_8 \). The variables under each category of factors were in a way closely related to one another. The different factors, so categorized, are named as below:

- \( F_1 \): Motivation
- \( F_2 \): Destination Choice
- \( F_3 \): Problem Recognition
- \( F_4 \): Marketing Mix
- \( F_5 \): Tourists Experience and Satisfaction
- \( F_6 \): Information Search
- \( F_7 \): Destination Image and Attributes
- \( F_8 \): Intention to Revisit and recommend to others

**Factor wise analysis**
The ‘Motivation’ factor included variables like “Low cost of medical treatment available”, “My health treatment is very important for me”, “Meet the friends/relatives at destination place”, “Visit historical places, ancient ruins, temples after medical treatment” and “There is no waiting time for medical treatment at destination place of choice”. These four variables recorded a higher factor loading in the rotated component matrix. The first factor “Motivation” could explain a higher variation of 16.21 percent in the total variable set.

The second factor, “Destination Choice” represents the variables “Destination is equipped with cutting edge technology”, Destination is governed by liberal Government’s health polices”, and “There is proper language communication skills of doctors, nurses and receptionists”. The destination choice factor also recorded a higher factor loading in the rotated component matrix. The destination choice factor explains higher variation of 13.76 percent in the total variable set. The third factor, “Problem Recognition”, included the variable, namely, “My home place lacks special quality care in critical surgery”. It recorded a higher factor loading in the rotated component matrix. The problem recognition factor could explain variation of 12.16 percent in the total variable set.
“Marketing Mix” is the fourth factor which included the variables like “there are various ranges of products available at destination”, “There is post medical treatment facility” and “destination is offering a competitive treatment prices”. This factor recorded the next higher factor loading in the rotated component matrix. This factor could explain higher variation of 11.27 per cent in the total variable set. The fifth factor, “Tourist Experience and Satisfaction”, included variables, “Hospitality and customer care service of local people”, “pleasant experience with doctors, nurses and other staff members”, “satisfied with accommodation services”, “satisfied with personal and public safety”, “cleanliness and hygienic food services”, “satisfied with transport services” and “Wi-Fi / internet facility”. This factor also recorded a higher factor loading in the rotated component matrix. This could explain a higher variation of 9.78 per cent in the total variable set.

“Information Search” is the sixth factor which included the variables, namely, “Relative and friends”, “Collected information from travel magazine, brochure and news paper and Internet”. These three variables together recorded a factor loading in the rotated component matrix. This factor could explain 7.16 per cent of variation in the variable set. “Destination Image and Attributes” is the
seventh factor, which included the variables, namely, “There is a booking and reservation for treatment”, “There is accessibility and comfort of transport services”, “There is facility for kids/family members”, and “I feel that cleanliness at the required level at destination”. This factor also recorded a higher factor loading in the rotated component matrix. This factor could explain variation of 6.12 per cent in the total variable set.

The eighth factor “Intention to Revisit and Recommend to Others”, included variables like “Met expectation with cleanliness and proper hygienic food services”, “Met expectation with infrastructural and transportation services”, “met expectation with destination image and attributes” and “speak positively in the word of mouth message to other about destination”. This factor recorded a factor loading of 5.13 per cent in the total variable set.

Analysis of eigen values of different factors indicated the degree of variability of the factors in the total set. The higher eigen value indicated higher intensity of the variables, explained in the factor. The intensity of influence, as evidenced through the eigen values of the factors such as “Motivation, Destination Choice, Problem Recognition, Marketing Mix, Tourists’ Experience and Satisfaction, Information Search, Destination Image and Attributes and
Intention to revisit and recommended to others” was recorded at 7.16, 6.68, 6.52, 5.92, 5.16, 4.78, 4.31 and 3.88 respectively.

It shows the intensity of the variables included in each of these factors. The intensity was higher in respect of motivation factor, followed by destination choice factor followed by problem recognition, which indicated that they were highly influential than other factors.

**Variable-wise Analysis**

The communality ($h^2$) represents the role of each variable, on the perception towards destination choice of domestic tourists. The communality was high in respect of the variable, low cost of medical treatment, with a value of 0.71, followed by equipped with cutting edge, with a communality value of 0.70. The variable appropriate medical facility, recorded the next highest communality value of 0.69, indicating its strength on the perception. It was followed by the variable, post medical treatment services, with a communality value of 0.68.
6.4 INFLUENCE OF FACTORS ON PERCEPTION TOWARDS DESTINATION CHOICE – MULTIPLE REGRESSION ANALYSIS

Analysis of the factors, through factor analysis, reveals that perception of domestic medical tourists was influenced by eight independent factors. In order to find out the extent of influence of these eight independent variables (factors) on the dependent variable, perception, analysis through multiple regression was attempted.

Log Linear Regression – Mathematical Model

The Log Linear Multiple Regression Equation was fitted with each of the latent factors, identified as responsible for perception towards destination choice. The mathematical form of the regression equation, used for the purpose, is presented below:

$$\log y = \log b_0 + b_1 \log X_1 + b_2 \log X_2 + \ldots + b_n \log X_n + e^u$$

Where,

- $Y =$ Dependent variable - Perception towards destination choice
- $X_1, X_2, X_3, X_4 \ldots X_n =$ Independent variables,
$B_0, b_1, b_2 \ldots b_n = \text{Parameters of independent variables to be estimated.}$

$B_0 : \text{regression constant}$

$e^u : \text{error term}$

Multiple log linear regression equation, depicting the relationship between eight independent variables and perception towards destination choice of domestic medical tourists estimated by was, the method of least squares and the results are:

\[
Y = 3.4781 + 0.2297* b_1 + 0.2341* b_2 + 0.1047 b_3 + 0.2672* b_4 + 0.0891 b_5 + 0.1108 b_6 + 0.3832* b_7 + 0.0914 b_8
\]

\[
R^2 = 0.8482
\]

* Indicates the value of co-efficient is statistically significant at 5 per cent level.

Where

$b_1 : \text{Motivation}$

$b_2 : \text{Destination choice}$

$b_3 : \text{Problem Recognition}$
Analysis of multiple log linear regression equation, depicting the relationship between the observed eight latent factors with the perception of domestic tourists, shows that as a whole, all the eight independent factors had contributed to the perception to the extent of 85 per cent, as evidenced through $R^2$ value. It shows that all these independent factors influenced the perception of domestic tourists towards destination choice, to the extent of 85 per cent. The other unidentified variables accounted for the rest of the portion of 15 per cent.

The regression coefficient of the factor, ‘destination image and attributes’ ($b_7$) recorded a higher influence, with the per cent change on the factor, ‘destination image and attributes ($b_7$)’. Keeping all other factors constant, it made a change of 0.3832 per cent of perception towards destination choice. Similarly,
the other factor, ‘marketing mix \((b_4)\)’ also made a significant impact on perception towards destination choice.

The factor ‘destination choice \((b_2)\)’ exercised positive influence on perception. Keeping all other factors constant, this factor makes created a change of 0.2341 per cent on perception towards destination choice. Out of eight independent variables, four variables, namely, motivation, destination choice, marketing mix and destination image and attributes were statistically significant.

### 6.5 COMPUTED RESULTS OF FACTOR ANALYSIS FOR FOREIGN MEDICAL TOURISTS

The suitability of the data for factor analysis was analysed through Kaiser-Mayer-Olkin (KMO) measures of adequacy and Bartlett’s sphericity tests. The results of the test are presented in Table 6.4.

#### TABLE 6.4

**KAISER – MAYER – OLKIN TEST FOR SAMPLING ADEQUACY**

<table>
<thead>
<tr>
<th>Measures</th>
<th>Estimated Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
KMO test indicates the proportion of variance in the variables which was caused by the underlying factors. The result of the test was a high value (0.7869). This indicates that the factor analysis can be used for the study. Hence the factor analysis may be taken as the best fit for identifying the factors influencing the perception towards destination choice.

The influence of the identified 33 variables on perception of foreign medical tourists was analysed through rotated factor matrix of factor analysis, and the latent factors were identified. The results are presented in Table 6.5.

**TABLE 6.6**

<table>
<thead>
<tr>
<th>Kaiser-Meyer Olkin (KMO)</th>
<th>0.7869</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bartlett’s Sphericity</strong></td>
<td></td>
</tr>
<tr>
<td>Approx. Chi-square</td>
<td>0.2761*</td>
</tr>
<tr>
<td>Degree of Freedom</td>
<td>528</td>
</tr>
<tr>
<td>Significance</td>
<td>0.000</td>
</tr>
</tbody>
</table>

* Indicates the Significance at 5 per cent level.
<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Variables</th>
<th>$F_1$</th>
<th>$F_2$</th>
<th>$F_3$</th>
<th>$F_4$</th>
<th>$F_5$</th>
<th>$F_6$</th>
<th>$F_7$</th>
<th>$F_8$</th>
<th>$h^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>My home place lacks of appropriate medical facility</td>
<td>0.7114</td>
<td>0.1121</td>
<td>0.0069</td>
<td>0.2011</td>
<td>0.0171</td>
<td>0.1311</td>
<td>0.2101</td>
<td>0.1127</td>
<td>0.72</td>
</tr>
<tr>
<td>2.</td>
<td>My home place lacks special quality care in critical surgery</td>
<td>0.6231</td>
<td>0.3061</td>
<td>0.0072</td>
<td>0.1121</td>
<td>0.1061</td>
<td>0.0671</td>
<td>0.1921</td>
<td>0.2016</td>
<td>0.65</td>
</tr>
<tr>
<td>3.</td>
<td>I feel excessive the cost of treatment at my home destination</td>
<td>0.5916</td>
<td>0.2711</td>
<td>0.1411</td>
<td>0.0071</td>
<td>0.0111</td>
<td>0.0382</td>
<td>0.2011</td>
<td>0.1061</td>
<td>0.58</td>
</tr>
<tr>
<td>4.</td>
<td>I feel that health treatment is very important for me</td>
<td>0.1011</td>
<td>0.6914</td>
<td>0.2112</td>
<td>0.3431</td>
<td>0.0711</td>
<td>0.0012</td>
<td>0.1014</td>
<td>0.1214</td>
<td>0.69</td>
</tr>
<tr>
<td>5.</td>
<td>There is no waiting time for medical treatment at destination place of choice</td>
<td>0.0691</td>
<td>0.6071</td>
<td>0.3211</td>
<td>0.2911</td>
<td>0.1671</td>
<td>0.2231</td>
<td>0.1411</td>
<td>0.0761</td>
<td>0.55</td>
</tr>
<tr>
<td>6.</td>
<td>To visit historical places, ancient ruins, temples after medical treatment</td>
<td>0.0078</td>
<td>0.5814</td>
<td>0.3211</td>
<td>0.2612</td>
<td>0.2014</td>
<td>0.1437</td>
<td>0.1411</td>
<td>0.1231</td>
<td>0.54</td>
</tr>
<tr>
<td>7.</td>
<td>Low cost of medical treatment available at destination</td>
<td>0.0101</td>
<td>0.5561</td>
<td>0.3611</td>
<td>0.2016</td>
<td>0.1912</td>
<td>0.2716</td>
<td>0.1816</td>
<td>0.2911</td>
<td>0.65</td>
</tr>
<tr>
<td>8.</td>
<td>To meet the friends/relatives at destination place of choice</td>
<td>0.1211</td>
<td>0.5171</td>
<td>0.3941</td>
<td>0.1811</td>
<td>0.0471</td>
<td>0.2911</td>
<td>0.1411</td>
<td>0.2141</td>
<td>0.51</td>
</tr>
<tr>
<td>9.</td>
<td>There are various ranges of products available at destination</td>
<td>0.1231</td>
<td>0.2716</td>
<td>0.6731</td>
<td>0.1147</td>
<td>0.0076</td>
<td>0.0121</td>
<td>0.1011</td>
<td>0.2711</td>
<td>0.71</td>
</tr>
<tr>
<td>10.</td>
<td>There are post medical treatment services at destination</td>
<td>0.2011</td>
<td>0.1781</td>
<td>0.5941</td>
<td>0.0069</td>
<td>0.0796</td>
<td>0.1124</td>
<td>0.2141</td>
<td>0.2916</td>
<td>0.70</td>
</tr>
<tr>
<td>11.</td>
<td>Destination is offering a competitive treatment prices for medical tourist.</td>
<td>0.3912</td>
<td>0.2711</td>
<td>0.5172</td>
<td>0.0742</td>
<td>0.1041</td>
<td>0.2671</td>
<td>0.3941</td>
<td>0.1017</td>
<td>0.56</td>
</tr>
<tr>
<td>12.</td>
<td>Pleasant experience with doctors, nurses and other staff members at destination</td>
<td>0.3121</td>
<td>0.2016</td>
<td>1121</td>
<td>0.6561</td>
<td>0.1014</td>
<td>0.2012</td>
<td>0.0069</td>
<td>0.0101</td>
<td>0.68</td>
</tr>
<tr>
<td>13.</td>
<td>Wi-Fi / Internet facility at</td>
<td>0.1011</td>
<td>0.0069</td>
<td>0.0014</td>
<td>0.6172</td>
<td>0.2411</td>
<td>0.0071</td>
<td>0.1421</td>
<td>0.2411</td>
<td>0.53</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>14.</td>
<td>Hospitality and customer care services of local people at destination</td>
<td>0.1431</td>
<td>0.0171</td>
<td>0.0044</td>
<td>0.5741</td>
<td>0.3011</td>
<td>0.2121</td>
<td>0.1431</td>
<td>0.1032</td>
<td>0.58</td>
</tr>
<tr>
<td>15.</td>
<td>Cleanliness and hygienic food services at destination</td>
<td>0.1127</td>
<td>0.0172</td>
<td>0.3011</td>
<td>0.5672</td>
<td>0.2611</td>
<td>0.3012</td>
<td>0.1811</td>
<td>0.2142</td>
<td>0.60</td>
</tr>
<tr>
<td>16.</td>
<td>Satisfied with accommodation services at destination</td>
<td>0.1211</td>
<td>0.3011</td>
<td>0.2312</td>
<td>0.5461</td>
<td>0.1061</td>
<td>0.0311</td>
<td>0.1931</td>
<td>0.2042</td>
<td>0.59</td>
</tr>
<tr>
<td>17.</td>
<td>Satisfied with personal and public safety at destination</td>
<td>0.1671</td>
<td>0.3211</td>
<td>0.1891</td>
<td>0.5261</td>
<td>0.3711</td>
<td>0.2614</td>
<td>0.1631</td>
<td>0.0691</td>
<td>0.53</td>
</tr>
<tr>
<td>18.</td>
<td>Satisfied with transport services at destination</td>
<td>0.1927</td>
<td>0.2916</td>
<td>0.3121</td>
<td>0.5067</td>
<td>0.3241</td>
<td>0.1476</td>
<td>0.2711</td>
<td>0.1031</td>
<td>0.51</td>
</tr>
<tr>
<td>19.</td>
<td>Destination is equipped with cutting edge technology</td>
<td>0.0671</td>
<td>0.1141</td>
<td>0.3271</td>
<td>0.1671</td>
<td>0.6127</td>
<td>1211</td>
<td>0.2914</td>
<td>0.0711</td>
<td>0.52</td>
</tr>
<tr>
<td>20.</td>
<td>There is a proper language skill of doctors, nurses and receptionists</td>
<td>0.1611</td>
<td>0.2916</td>
<td>0.3216</td>
<td>0.3216</td>
<td>0.5211</td>
<td>0.1011</td>
<td>0.1972</td>
<td>0.2141</td>
<td>0.64</td>
</tr>
<tr>
<td>21.</td>
<td>Destination governed by liberal Government’s health policies</td>
<td>0.3142</td>
<td>0.1921</td>
<td>0.2912</td>
<td>0.3621</td>
<td>0.5073</td>
<td>0.2671</td>
<td>0.1431</td>
<td>0.3012</td>
<td>0.53</td>
</tr>
<tr>
<td>22.</td>
<td>Collected information from Brochures, travel magazines, newspaper for destination choice decision</td>
<td>0.1014</td>
<td>0.0061</td>
<td>0.0331</td>
<td>0.1071</td>
<td>0.2471</td>
<td>0.6671</td>
<td>0.3012</td>
<td>0.0069</td>
<td>0.55</td>
</tr>
<tr>
<td>23.</td>
<td>Internet is very useful for destination decision</td>
<td>0.3012</td>
<td>0.0761</td>
<td>0.2111</td>
<td>0.1431</td>
<td>0.1311</td>
<td>0.5712</td>
<td>0.1691</td>
<td>0.2717</td>
<td>0.67</td>
</tr>
<tr>
<td>24.</td>
<td>Relatives’ and friends’, personal experience is essential for destination decision making</td>
<td>0.2914</td>
<td>0.3012</td>
<td>0.2614</td>
<td>0.1914</td>
<td>0.1471</td>
<td>0.5114</td>
<td>0.3141</td>
<td>0.2912</td>
<td>0.53</td>
</tr>
<tr>
<td>25.</td>
<td>There is booking and reservation for treatment at destination</td>
<td>0.3011</td>
<td>0.0671</td>
<td>0.1671</td>
<td>0.1921</td>
<td>0.3211</td>
<td>0.2114</td>
<td>0.5971</td>
<td>0.1417</td>
<td>0.56</td>
</tr>
<tr>
<td>26.</td>
<td>There is accessibility and</td>
<td>0.2711</td>
<td>0.1231</td>
<td>0.1671</td>
<td>0.3011</td>
<td>0.2411</td>
<td>0.1918</td>
<td>0.5683</td>
<td>0.3211</td>
<td>0.55</td>
</tr>
<tr>
<td></td>
<td>comfort of transport services</td>
<td>There is hygienic food</td>
<td>0.3241</td>
<td>0.2912</td>
<td>0.1916</td>
<td>0.2411</td>
<td>0.3011</td>
<td>0.1414</td>
<td>0.5511</td>
<td>0.2916</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------</td>
<td>-----------------------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td>There is facility for kids / family members</td>
<td>0.2172</td>
<td>0.3012</td>
<td>0.1436</td>
<td>0.1124</td>
<td>0.0636</td>
<td>0.1041</td>
<td>0.5261</td>
<td>0.3241</td>
<td>0.59</td>
</tr>
<tr>
<td></td>
<td>I feel that cleanliness at the required level at destination</td>
<td>0.1061</td>
<td>0.1121</td>
<td>0.1941</td>
<td>0.2712</td>
<td>0.3012</td>
<td>0.2914</td>
<td>0.5073</td>
<td>0.3611</td>
<td>0.58</td>
</tr>
<tr>
<td></td>
<td>Met expectation with infrastructure and transportation services at destination</td>
<td>0.3012</td>
<td>0.1611</td>
<td>0.1968</td>
<td>0.2912</td>
<td>0.0101</td>
<td>0.0071</td>
<td>0.0069</td>
<td>0.6072</td>
<td>0.57</td>
</tr>
<tr>
<td></td>
<td>Met expectation with destination image and attributes</td>
<td>0.2711</td>
<td>0.1432</td>
<td>0.1811</td>
<td>0.1841</td>
<td>0.1471</td>
<td>0.0011</td>
<td>0.0761</td>
<td>0.5861</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>Met expectation with cleanliness and proper hygienic food services at destination</td>
<td>0.1411</td>
<td>0.1611</td>
<td>0.1968</td>
<td>0.2912</td>
<td>0.1471</td>
<td>0.1214</td>
<td>0.1287</td>
<td>0.5371</td>
<td>0.53</td>
</tr>
<tr>
<td></td>
<td>Speak positive word of mouth to other about destination</td>
<td>0.2561</td>
<td>0.2711</td>
<td>0.0178</td>
<td>0.1921</td>
<td>0.2012</td>
<td>0.3016</td>
<td>0.2712</td>
<td>0.5169</td>
<td>0.50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Eigen value</th>
<th>6.98</th>
<th>5.74</th>
<th>5.12</th>
<th>4.90</th>
<th>4.32</th>
<th>3.72</th>
<th>3.51</th>
<th>3.01</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Variance (%)</td>
<td>15.41</td>
<td>13.72</td>
<td>12.43</td>
<td>11.28</td>
<td>10.16</td>
<td>8.72</td>
<td>8.11</td>
<td>5.32</td>
</tr>
<tr>
<td></td>
<td>Cumulative variance (%)</td>
<td>15.41</td>
<td>29.13</td>
<td>41.56</td>
<td>52.84</td>
<td>63.0</td>
<td>71.72</td>
<td>79.83</td>
<td>85.15</td>
</tr>
</tbody>
</table>

Table 6.5 shows the factor loading of the 33 variables influencing the perception towards destination choice of foreign medical tourists. The factor analysis reduced the 33 variables into eight factors, namely, $F_1, F_2, F_3, F_4, F_5, F_6, F_7$ and $F_8$. The different factors so categorized are:
F₁ Problem Recognition

F₂ Motivation

F₃ Marketing mix

F₄ Tourists’ experience and satisfaction

F₅ Destination choice

F₆ Information search

F₇ Destination image and Attributes

F₈ Intention to revisit and recommend to others

**Factor wise analysis**

The F₁ factor, “Problem Recognition” included the variables, namely, “My home place lacks of appropriate medical facility”, “Lacks special quality care in critical surgery” and “Excessive cost of treatment at my home destination”. These three variables recorded higher factor loading in the rotated component matrix. Problem Recognition is the first factor which could explain a higher variation of 15.41 per cent in the total variable set.
The second factor, “Motivation”, represented the variables “My health treatment is very important for me”, “There is no waiting line for medical treatment”, “To visit historical places, ancient ruins, temples after medical treatment”, “Low cost of medical treatments available at destination” and “To meet the friends/relatives at destination place”. The motivation factor also recorded a higher factor loading in the rotated component matrix. The motivation factor could explain variation of 13.72 per cent in the total variable set.

The third factor, “Marketing Mix”, included the variables, namely, “There are various ranges of products available at destination”, “Post medical treatment services at destination”, and “Destination is offering a competitive treatment prices for medical treatment”. “Marketing mix” factor also recorded the high factor loading in the rotated component matrix. The marketing mix could explain variation of 12.43 per cent in the total variable set. “Tourists experience and satisfaction” is the fourth factor which included the variables, namely, ‘pleasant experience with doctors, nurses and other staff members at destination’ ‘Wi-Fi / Internet facility at destination’ ‘Hospitality and customer care services of local people at destination’ ‘Cleanliness and hygienic food services at destination’, ‘satisfied with accommodation services at destination’, ‘satisfied with personal and public safety at destination’ and ‘satisfied with transport services at
destination’. The tourists’ experience and satisfaction was the next higher factor loading in the rotated component matrix. The tourists’ experience and satisfaction factor could explain variation of 11.28 per cent in the total variable set.

The fifth factor, “Destination Choice” included the variables, namely, ‘destination is equipped with cutting edge technology’ ‘proper language skill of doctors, nurse, and receptionists’ and ‘Destination is governed by liberal Government’s health policies’. This factor recorded a higher variation of 10.16 per cent in the total variable set. “Information Search” is the sixth factors which included the variables, namely, ‘collected information from brochures, travel magazines, newspaper for destination choice decision’, ‘Internet is very useful for destination decision’ and ‘relatives’ and friends’ personal experience is essential for destination decision making’. The information search factor also recorded the next higher factor loading in rotated component matrix. The information search could explain a variation of 8.72 per cent in the variable set. The seventh factor, “Destination Image and Attributes” included the variables, namely, ‘there is a booking and reservation for treatment at destination’, ‘there is an accessibility and comfort of transport services’, ‘there is hygienic food’, ‘there is a facility for kids / family members’ and ‘I feel that cleanliness is at the required level at
destination’. The destination image and attributes factor recorded a higher factor loading in the rotated component matrix. This could explain a higher variation of 8.11 per cent in the total variable set. Finally, the “Intention to revisit and recommend to others” factor included a variation of 5.32 per cent in the total component matrix. The intention to revisit and recommend to others factor included variables such as ‘Met expectation with cleanliness and proper hygienic food services at destination’, ‘Met expectation with destination image and attributes’ and ‘speak positive word of mouth to others about destination’.

The eigen values of the factors indicated the degree of variability of the factors in the total set. Higher eigen value indicated higher intensity of the variables, explained in the factor. Analysis of eigen values for different factors, revealed the intensity of each factor, comprising 33 variables and their influence on the perception towards destination choice. The intensity of influence, as evidenced through eigen values of the factors such as “Problem recognition”, “Motivation”, “Marketing Mix”, “Tourist Experience and Satisfaction”, “Destination choice”, “Information search”, “Destination Image and Attributes” and “Intention to Revisit and Recommend to others” was 6.98, 5.74, 5.12, 4.90 4.32, 3.72, 3.51 and 3.01 respectively.
Variable-wise Analysis

The communality ($h^2$) represents the role of each variable on the perception towards destination choice by the foreign medical tourists. The communality was equally high in respect of the variables, “My home place lacks appropriate medical facility”, “There is post medical treatment at destination place”, “My health treatment is very important for me”, “Pleasant experience with doctors, nurses and other staff members”, at 0.72, 0.71, 0.70, 0.69 and 0.68 respectively.

Perception towards destination choice

Analysis of the latent factors, identified through factor analysis, reveals that the perception of foreign medical tourists was influenced by eight independent factors. In order to find out the influence of these independent variables (factors)
on the dependent variable, “Perception towards destination choice” multiple regression analysis was undertaken.

**Log Linear Regression – Mathematical Model**

The Log Linear Multiple Regression Equation was fitted with each of the latent factors, identified as important perception factors, for choosing destination as the dependent variable.

Multiple log linear regression equation depicting the relationship between eight independent variables and the perception towards destination choice, with respect to:

\[
Y = 2.9879 + 0.3467* b_1 + 0.1963* b_2 + 0.2891* b_3 + 0.1021 b_4 + 0.0921 b_5 \\
+ 0.1121 b_6 + 0.2112* b_7 + 0.0671 b_8
\]

\[R^2 = 0.8392\]

* Indicates the value of co-efficient is statistically significant at 5 per cent level.
Where

\[ b_1 \] : Problem Recognition

\[ b_2 \] : Motivation

\[ b_3 \] : Marketing Mix

\[ b_4 \] : Tourists Experience and Satisfaction

\[ b_5 \] : Destination Choice

\[ b_6 \] : Information Search

\[ b_7 \] : Destination Image and Attributes

\[ b_8 \] : Intention to revisit and recommend to others

Analysis of multiple regression equation, depicting the relationship between the observed eight latent factors with perception of foreign tourists, shows that as a whole, all the eight independent factors had contributed to the perception towards destination choice, to the extent of 84 per cent. It shows that all these independent factors had influenced the perception of foreign tourists to the extent of 84 per cent.
It is further clear from the equation that the regression coefficient of the factor ‘Problem Recognition’, shows that keeping all other factors constant, a percentage change on the factor Problem Recognition ($b_1$), makes a 0.3467 per cent change on the perception towards destination. Similarly, the other factor, ‘Marketing Mix ($b_3$)’ also made a significant impact on the perception towards destination choice.

The factor, ‘Destination Image and Attributes($b_7$)’ exercised positive and significant influence on the perception of foreign tourists towards destination choice and also it shows that keeping all other factors constant, a percent change on these factors would make a 0.2891 percent and 0.2112 per cent changes respectively on the perception towards destination choice.

Out of eight independent variables, included in the regression model, only four factors, namely, problem recognition, motivation, marketing mix and destination image and attributes were found to be statistically significant at 5 percent level.

It is further clear from the result that the regression coefficient of the factor, ‘Motivation ($b_2$)’ shows that keeping all other factors constant, it exercised, 0.1963 per cent change on perception towards destination choice.
Other factors were positively related to the perception but they were not statistically significant.

6.9 SUMMARY

In this study, 33 variables (statements) were identified as influence variables on perception of medical tourists towards destination choice. The factor analysis employed in the study, shows the inter relationship among the variables and their influence on perception towards the choice. The 33 variables, identified as the statements influencing perception towards destination choice, were grouped into eight factors for domestic as well as foreign medical tourists.

It is found that among the medical tourists, the following eight factors could be extracted from 33 variables.
In the case of foreign tourists, the order of preference is as follows:

(i) Problem Recognition
(ii) Motivation
(iii) Marketing Mix
(iv) Tourist Experience and Satisfaction
(v) Destination Choice
(vi) Information Search
(vii) Destination Image and Attributes
(viii) Intention to revisit and recommend to others

The degree of influence of the latent factors, identified through factor analysis, was analysed through multiple log linear regression model. In the case of
domestic tourists, all eight latent factors had contributed to perception to the extent of 85 per cent. Among the independent variables, destination image and attributes exercised a higher positive influence on perception towards destination choice.

In the case of foreign medical tourists, it is found that all the eight independent latent factors had contributed to perception to the extent of 84 per cent. Among the significant factors, motivation exercised the highest positive influence on perception towards destination choice. It was followed by the factor, “Marketing Mix”.

CHAPTER VII

SUMMARY OF FINDINGS, CONCLUSION AND SUGGESTIONS

7.1 INTRODUCTION

Medical Tourism is becoming a popular option for tourists across the globe. It encompasses primarily bio-medical procedures, combined with travel and tourism. The term, Medical Tourism, has been coined by travel agencies and the
mass media to describe the rapidly growing practice of traveling across international borders to obtain hi-tech medical care. The advantages of India in Medical Tourism stem from the low cost advantage, strong reputation in the advanced health care segment, cardiovascular surgery, organ transplants etc., and the delivery of tourist destinations available in the country. Medical Tourism and Healthcare Tourism, are 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: Medicine and Tourism.

Medical and Health Tourism are suggested to be one of the fastest growing areas of academic research, both on tourism and in health studies. Within the Tourism Sector, the development of health tourism can significantly enhance number of guests, guest-rights and the actual spending of guests. Chennai City is an important tourist destination of India. Hence the present study proposed to analyse Medical Tourism at Chennai in India. The objects of the study are:

6) To undertake a comprehensive study on select medical tourist destination hospitals in Chennai.
7) To analyse and compare the trend and growth of medical tourist arrivals in India and Chennai.

8) To discuss the various demographic factors of the medical tourists, both foreign and domestic.

9) To examine the relationship between various demographic factors and destination choice as Chennai.

10) To study the perception of the medical tourists towards Chennai as a destination choice under Medical Tourism.

For this purpose, 300 sample medical tourists, 75 each from selected four hospitals, namely, Apollo, MIOT, Adayar Cancer Institute and Ramachandra Medical and Research Institute, Chennai, were randomly selected. The primary data were collected from 300 sample respondents, with a well designed schedule by personal interview menu. The survey was carried out during 2013-14. The secondary data were obtained from India Tourism Statistics 2012, website and journals.

In the foregoing chapters, medical tourist arrivals, demographic profile, expenditure portfolio and its determents and medical tourists’ perception
towards destination choice as Chennai were discussed. In this chapter, an attempt has been made to summarise the major findings of the study and offer the conclusion and suggestions.

7.2 SUMMARY OF FINDINGS

In Chapter IV, trends in medical tourist arrivals in India and Chennai and hotel accommodation at Chennai, were discussed.

It is inferred from the results that a fluctuation trend was found in arrivals of both domestic and foreign medical tourists in India over a period under study (2004-05 to 2013-14). In Chennai, there was a steady increase in medical tourist arrivals. The share of medical tourist arrivals in Chennai, ranged from 2.1 per cent to 2.7 per cent in total tourist arrivals. A high fluctuation was found in arrivals of foreign medical tourists compared to the domestic medical tourists in Chennai, as evidenced through values of co-efficient for variation during the period under study.
The analysis of seasonal variations in arrivals, revealed the fact that the seasonal variations within a year was found to be high. Further, it was observed that the peak season for arrivals was August to December. The climate of this period is quite conducive for both domestic and foreign tourists.

It is revealed from the analysis that the irregular fluctuations in the arrivals of domestic tourists were much higher than those of foreign tourists. This may be due to social ceremonies and religious festivals. The same trend was observed in cyclical variation during the period under study.

The secular trend analysis revealed that the arrivals were found to be positive and statistically significant over the study period, for both domestic and foreign tourists. The growth of tourist arrivals was estimated to be 5.85 per cent and 5.82 per cent, for foreign and domestic tourists respectively.

Regarding the hotel facilities at Chennai for medical tourists, the trend in growth of hotels was found high and significant during the period under study. The growth of hotels, namely. 5 star hotels, 3 and 4 star hotels and economy class
hotels was 6.19 per cent, 6.96 per cent and 8.22 per cent respectively. The overall growth was found to be 7.27 per cent.

The tariff rates of 5 star hotels, 3 and 4 star hotels and economy class varied from Rs.9,500 - 18,000, Rs.4,400 - 7,500 and Rs.1,200 - 3,300. Further, it is observed that majority of medical tourists (85 per cent), both domestic and foreign, looked for only hotel accommodation at Chennai. The growth of demand and supply of beds was 5.16 percent and 4.11 per cent respectively, during the period under study.

In Chapter V, demographic profile, expenditure portfolio and its determinates were discussed. It is revealed from the analysis that majority of medical tourists, both domestic and foreign, belonged to the age group 40 to 50 years, followed by 50 years and above and nearly 80 per cent of medical tourists were males and remaining were females. About 68 percent of domestic as well as foreign medical tourists were married, followed by widowed.
The analysis shows that majority of medical tourists, 46.63 per cent of domestic and 42.62 per cent foreign, were graduates, followed by post graduates.

Regarding occupation, 51.69 per cent of domestic and 31.14 per cent of foreign were salaried employees. Professionals were 15.73 percent and 25.41 percent for domestic and foreign tourists respectively. 38.20 per cent of domestic and 40.16 percent of foreign tourists earned upto Rs.1,00,000 and Rs.2,00,000 to 3,00,000 respectively.

 Majority of domestic tourists (57.30 per cent) visited destination for medical purpose only. In the case of foreign tourists, majority (31.15 per cent) visited for both tour and medical purposes. About 22 per cent of foreign tourists visited destination for medical purpose only, followed by vacation combined with medical purpose.

The source of destination for majority (66.29 per cent) of medical tourists was friends / Relatives. In the case of majority of foreign tourist (52.46 per cent), the source was Internet. Regarding the reasons for choosing Chennai destination,
majority of medical tourists, both domestic and foreign, opined that specialization of treatment was the main reason for choosing Chennai as the tourist destination.

Regarding the choice of treatment, 39.89 per cent and 38.53 per cent of domestic and foreign tourists respectively visited Chennai for heart surgery / heart-related problems, followed by orthopaedic surgery, cancer, kidney and neuro.

According to the survey, out of 178 domestic medical tourists, 48.88 per cent, 21.10 per cent, 12.35 per cent and 16.85 per cent of them visited the hospital Appolo, MIOT, Adayar and Ramachandra respectively. In the case of foreign tourists, out of 122 respondents, 48.36 per cent, 21.31 per cent, 13.54 per cent and 16.39 per cent of them visited to Appolo, MIOT, Adayar Cancer Institute and Ramachandra Hospitals respectively.
It is revealed from the analysis that majority (40.44 per cent) of domestic tourists and 38.53 per cent of foreign tourists stayed between 11-14 nights followed by 8-10 nights and 4.7 nights.

In order to examine the association between demographic factors and sources for destination choice, chi-square test was employed. The results of chi-square tests revealed that there was no association between age, education, occupation and income and sources for destination choice, for both category of tourists. In the case of foreign tourists, there was association between sex and source for destination choice. It is also observed that there was relationship between marital status and sources for destination choice of domestic tourists.

The analysis of expenditure portfolio revealed that majority of domestic tourists (39.89 per cent) spent Rs.1,00,000 to 1,50,000 on medical expenses, followed by Rs.1,50,000 to 2,50,000. In the case of foreign tourists, majority of them (66.40 per cent) incurred expenses ranging from Rs.1,50,000 to 2,50,000. Regarding overall medical tour expenditure, out of 178 sample domestic tourists, 83.15 per cent spent Rs.1.5 lakhs to 3 lakhs. Out of 122 sample foreign tourists,
majority of them (72.95 per cent) spent Rs.2,00,000 to 3,00,000 under overall expenditure.

In order to identify the determinants of overall expenditure by medical tourists, Multiple Log Linear Regression Model was fitted. The estimated results revealed that all the independent variables, included in the model were positively related to overall expenditure. Out of nine variables, seven variables, namely, income, duration of stay, heart surgery / heart allied problems, orthopaedic, neuro, kidney and cancer were found to be statistically significant at 5 per cent level, for both domestic and foreign tourists. The heart surgery / heart allied problems exercised greater influence on overall expenditure.

In Chapter VI, medical tourists’ perception towards destination choice was discussed. There are several factors responsible for the destination choice. In the present study, 33 variables / statements were identified as responsible for perception of Chennai as the destination choice.
Factor analysis for the domestic tourists reduced the variables / statements into eight factors, namely, \( F_1, F_2, F_3, F_4, F_5, F_6, F_7 \) and \( F_8 \). Different factors, so categorized, are given below:

(i) Motivation
(ii) Destination choice
(iii) Problem Recognition
(iv) Marketing Mix
(v) Tourist Experience and Satisfaction
(vi) Information Search
(vii) Destination Image and Attributes
(viii) Intention to revisit and recommend to others

The intensity of response is evidenced through eigen value of the factors. The communality was equally high in respect of the variables like low cost of
medical treatment, equipped with cutting edge technology, lack of appropriate medical facility at home and post medical treatment services in Chennai.

Analysis of multiple log linear regression revealed that the eight independent factors had contributed to the extent of 85 per cent. The regression co-efficient of the factors, namely, motivation, destination choice, marketing mix, and destination image and attributes were statistically significant at 5 per cent level. Among the significant factors, destination image and attributes exerted greater influence on perception towards destination choice.

The factor loading of the 33 variables influencing on the perception towards destination choice among foreign tourists, reduced them into eight factors, namely $F_1, F_2, F_3, F_4, F_5, F_6, F_7$ and $F_8$. The different factors so categorized are:

(i) Problem Recognition

(ii) Motivation

(iii) Marketing Mix
(iv) Tourists Experience and Satisfaction

(v) Destination Choice

(vi) Information Search

(vii) Destination Image and Attributes

(viii) Intention to revisit and recommend to others

The intensity of influence of eight latent factors was 6.98, 5.74, 5.12, 4.90, 4.32, 3.72, 3.51 and 3.01 respectively.

Analysis of communality (h2) indicated the significance of 33 variables on perception towards the destination choice. The communality was high in respect of the variables, my home place lacks appropriate medical facility, there are several ranges of products available at destination, there are post medical treatment at destination place, my health treatment is very important for me, and pleasant experience with doctors, nurses and other staff.
The computed regression results showed that out of eight factors, problem recognition, motivation, marketing mix and destination image and attributes were found to be statistically significant at 5 per cent level. Among the significant factors, problem recognition exercised greater influence on perception of foreign tourists towards the destination choice.

7.3 CONCLUSION

The present research study has various implications for medical tourism. India has great opportunity and potential to develop medical tourism. Medical Tourism has great potential in India due to competitive cost and quality of medical service. Developing medical tourism would boost Indian economy. Medical Tourism is likely to increase over the next decade as more patients are able to access the internet and acquire information relevant to care offered in India at an affordable price. It brings its customers a number of benefits. Patients who receive medical tourism service, can save more time since medical tourism offers a shorter waiting time and this would attract the customers from other countries. Keeping these aspects in mind, Government should design appropriate policy for Medical Tourism.
7. 4 SUGGESTIONS

Based on the findings, the following suggestions are offered to promote Medical Tourism in India.

1. The cost effectiveness is the main reason why people choose to go offshore for medical treatment. For many procedures, it is more expensive to receive treatment at home than it is to purchase a plane ticket, book a hotel and pay for all medical expenses in a foreign country. This is especially true in popular medical tourism destinations like India. It is suggested that the Government of India could frame suitable policy to encourage medical tourists in India for earning foreign exchange. At present, Chennai is an important destination, with sophisticated hi-tech private hospital, with low cost treatment.

2. Hospitals should develop competitive advantage through innovations like new technologies and new methods of operation processes.

3. In view of the growing need for private hospitals for services amongst consumers, the Government should encourage more privatization to
reduce pressure on the national budget and achieve market efficiency by encouraging competition.

4. It is also suggested that Medical Tourism demands international standards to be followed in our hospitals. ISO certification would ensure that the hospital is well organized in terms of administration and opportunities.

5. If Chennai is to attract medical tourists, it must have a pool of medical specialists who are well known for their expertise. It should increase its pool of medical specialists, with internationally recognized qualifications so that it will gain patients’ confidence to come to the country and seek treatment.

6. It is suggested that specialized hospitals at Chennai could also work with the Government, to encourage doctors practicing in foreign countries, to practise in India.

7. In order to be a successful service-oriented hospital, private hospitals must focus both on customers as well as on employees. Attempts to realize growth goals always imply taking care of those who take care of patients.

7.5 FUTURE SCOPE FOR RESEARCH
Further research in the field of Medical Tourism can be taken forward in
the following areas.

1. Comparative medical tourism studies may be undertaken for different
countries.
2. Customer surveys may be carried out to expand customer expectations
   in the medical tourists industry.
3. Studies may be undertaken to explore the possibilities of more cost
   efficient treatment in order to promote Medical Tourism.