CHAPTER – I

INTRODUCTION
CHAPTER - I

INTRODUCTION

The purpose of this thesis can be summarized as to give a deep understanding of factors that are essential for the development of Medical tourism in Chennai.

Chapter one introduces the background of the Study, statement of the problem. This chapter additionally provides a justification of the Study and also the methodology. Finally, the chapter limits the research theoretically.

1.1 General Introduction

The practice of traveling abroad to get medical and health care services is termed as medical tourism. The awareness of medical tourism is obtaining standard among individuals, like the lower value of the medical treatment and delight throughout the recovery period. Today, health care is fully grown as a brand new trend and plenty of American and European tourists like medical tourism for cosmetic and medical procedures. The countries that are lack in advanced medical treatments lead the individuals to urge applicable medical treatment in abroad.

The custom of traveling abroad could be a trend that developed from the traditional period and there's an extended history of individuals traveling to alternative countries for health purposes. In European country and every one through the Roman provinces, the traditional Romans made resorts with thermal health spas, and also the Ancient Greeks would take a visit to go to the sanctuary of the healing god, who disclosed remedies to them in their thoughts (Bookman and Bookman 2007).

From the fifteenth to seventeenth centuries, the poor hygienical conditions in Europe created interest among rich peoples to concentrate in medicinal spas, mineral springs and also the seacoast for health purposes. These well-off people would
additionally move to noted medical schools for medical help (Swarbrooke and Horner 2007).

The formation of the railways allowed increasing and various flows of individuals to a lot of distant sea-coast and coastal resorts that provided a particular atmosphere from urbanisation, and also the chance to follow a healthy interest of sun-seeking (Holden 2006 Swarbrooke and Horner 2007).

Spa tourism and sun-seeking persisted into the twentieth century. Therapeutic springs, spas, beaches and resorts, mainly in heat and dry climates, continuing to be thought of helpful through long exposures to the sun, fresh air and water (Swarbrooke and Horner 2007). Thus it's simple to know that the health tourism has developed from the traditional age with myths and beliefs.

Today, countries like India, the East Indies, South America and South East Asia tender medical facilities at par with international standards. The factors like high value of care in developed countries, extended schedule in government medical facilities and also the reduction of air fare are the major reasons that contributed for the growth of the medical tourism.

India is one among world's favorite holiday-maker destinations, it has several hospitals of international standards and English speaking staff makes less probabilities of barrier for the western patients.

India has different therapies like Yoga, Naturopathy, Siddha and Ayurveda medical practices. One among the recent surveys conducted in India on the health care indicates that the medical tourism in India can rise to American dollar of 125 to 250 million within the year 2012. (CII McKinsey Study). The low cost, high standard treatment and care are the reasons that accelerate the medical tourism in India.
1.1.1 Medical tourism in India

Medical tourism could be a budding sector in India. This sector is probably going to expertise an annual rate of growth of thirty percent, creating it a $2.3 billion industry by 2015. As medical treatment prices are high in developed countries, individuals are finding the prospect of international travel for treatment.

The developing idea of health tourism in India has gained terrific quality and is attracting individuals from everywhere the planet for his or her medical and recreation desires. The treatments unremarkably embrace knee transplant, cosmetic treatment, dental treatment and internal organ surgery (cardiac).

Today, India could be a favorable medical tourism destination as its infrastructure and technologies are at par with USA, UK and Europe, enabling it to supply treatments that are best within the world. India is promoting health business through representational process the "high-tech healing" of its personal health care sector. The Indian government is selling the concept of traveling to India for cheaper and foremost medical facilities to foreigners, with the aim of encouraging the medical tourism.

A Study conducted by Confederation of Indian Industry (CII), the sector is thus profitable that it has the potential to become a $2.3 billion business by 2015. Around 1, 50,000 overseas patients came to India for treatment throughout 2009 and since then, this range has exaggerated by fifteen percent each year.

In recent times, India has emerged as the "Global Health Destination" based on subsequent advantages:

- Medical services are provided at forty percent lower than the Western countries and are very cheap in South-east Asia.
India has specialist doctors and paramedical staff who have oral and verbal knowledge in English which removes the barrier of communication.

Indian doctors are experienced in numerous surgical procedures, including internal organ surgeries (cardiac), liver transplants, orthopedic surgeries, and alternative medical treatments.

Indian hospitals provide a high-quality treatment in joint replacements, cardiothoracic surgery, dental care, cosmetic treatments, and more.

1.1.2 Definitions

According to Goodrich & Goodrich (1987), medical tourism is to attract tourists by perpetually promoting its health care services and facilities, additionally to its traditional holidaymaker services.

According to Laws (1996), medical tourism could be a travel from home to an alternative destination to enhance one's health condition. This includes obtaining original and different medical services, and the other variety of tourism undertaken with the aim of addressing a health concern.

Connell (2006) have outlined medical tourism as a well-liked culture wherever individuals trip overseas countries to get health care services and facilities like medical, dental, and surgical care, at a similar time as having the chance to go to the holidaymaker spots of that country.

Carrera and Bridges (2006) describe medical tourism as travel that is consistently planned to keep up one's physical and psychological condition.

According to the GATS (General Agreement on Trade and Services), medical tourism is the second mode of trade health services. During this mode, patients leave their home country to get health care services with high quality and cheap costs.
According to Monica (2007), medical tourism is one in which international patients travel across boundaries for his or her health care and medical desires. It is often outlined as the provision of cost effective personal treatment unitedly with the tourism industry for patients needing surgical and alternative kinds of specialized treatment.

Bookman (2007) outlined medical tourism as travel with the aim of improving ones health, and also an economic activity that entails trade services and represents two sectors: medicine and tourism.

According to Dhaene (2009), Medical tourism is desire for accessible quality combined with value effective and low cost health services whereas providing an identical level of safety to the patient.

The terms "medical tourism" and "medical tourist" are used interchangeably, and medical tourism can embrace in-patient and out-patient care, not withstanding money payer. As a result of medical tourists travel for care, medical tourism includes a "tourism" side, that is, the consumption of "services connected with travel, like transport, lodging, and hospitality" (Stackpole & Associates, 2010).

Medical tourism could be a term involving people who make a trip to alternative places to receive treatment for a disease, sickness, or state of affairs, and who are desire for lower cost, higher quality of care, superior access to care, or special care than they might receive at home (Global Spa Summit, 2011).

In line with Global Spa Summit (2011), wellness tourism involves people who travel to other places proactively pursue activities that maintain or enhance their personal health and luxury, and who are seeking distinctive, genuine, or location-based experiences that don't seem to be accessible at home.
Figure: 1.1

The health care tourism structure

1.1.3 Medical Tourism in Tamilnadu

The Tamilnadu Government has been terribly positive with the medical tourism industry and in appealing medical tourists. Tamilnadu, a state within the southern most tip of India, may be a leader in providing medical aid at par with the international standard and has enforced several policies for reasonable medical tourism. It has wealthy corporate hospitals notably in Chennai, the capital. There are many world class institutions and hospitals in Chennai, Madurai, Coimbatore and different cities in Tamilnadu.

CMC at Vellore is documented everywhere the globe. India’s initial heart valve replacement was conducted in CMC Vellore in 1961. In 1971; the country’s initial urinary organ transplant was performed at the CMC Vellore. In 1996, the primary transeptal carotid-stenting in the world was performed in the CMC, Vellore. India’s initial stem cell research centre was established in this hospital in 2005.

Tamilnadu leads the sphere as so much as eye care is concerned. Shankara Nethralaya and Arvind Hospitals at Madurai are distinguished. Arvind Hospital at Madurai conducts the best range of cataract surgeries within the world.

Tamilnadu has several hospitals like the Apollo Hospitals at Chennai and Madurai, Ramachandra Hospitals, Lifeline Hospitals, St.Isabella's Hospital, Madras Medical Mission, Miot Hospitals, and Shankara Nethralaya at Madras, Arvind Hospitals at Madurai and Coimbatore, and PSG Hospital at Coimbatore.

1.1.4 Tamilnadu Tourism Development Corporation (TTDC)

TTDC was incorporated during the year 1971 under the companies Act 1956. It was shaped with the target of promoting tourism in Tamilnadu by providing infrastructure facilities of transport and accommodation.
Tamilnadu’s tourism business is the second largest in India; with an annual growth rate of sixteen percent. Around 1,753,000 foreign and 50,647,000 domestic tourists visited the state in 2013.

Tamilnadu is the land of the Tamils and it has a history that dates back to many thousand years. It has a land where civilization and culture mix still board harmony. The state abounds in monuments and temples that are ancient and has its own story of spiritual, creative and cultural triumph.

It is a tourist's paradise. A rich culture and a nature’s blissfulness of blue beaches and clear skies create a modern state. TTDC takes initiative to show the bumper charms of Tamilnadu to guests from India and abroad. It highlights the special tourist spots in Tamilnadu that create the state thus extremely popular with guests.

For this TTDC offers varied packages to travellers including sightseeing tours, inter-state tours, LTC (leave travel concession) tours and Train tours. Tamilnadu tourism Development Corporation additionally operates varied hotels, youth hostels, restaurants, boat houses and telescope houses for the benefit of travelers.

1.1.5 Medical Tourism in Chennai

According to a Study by the Confederation of Indian Industries (CII), Chennai attracts about 45% of the country’s medical tourists and approximately six lakhs tourists visit the state each year. The flow of medical tourists to India has increased by twenty three percent, with Chennai continued to be the favorite destination.

The South Indian city of Chennai has become the hub of medical tourism in India. Patients from Africa (Nigeria, Kenya, and Congo), Bangladesh, and also from Middle East (Iran & Oman) visit the city for quality medical aid. The recovered
patients and their companions then go on sightseeing tours that provides a massive bonus to Tamilnadu tourism.

About one hundred fifty Maldivian patients reach the town on a daily basis for medical treatment, that resulted in Maldivian Airlines launching a thrice every week flight from Male to Chennai. Most leading hospitals, that receive a gentle stream of patients from different states of India and abroad on a daily basis, have separate wings for international patients.

Sri Ramachandra Medical Centre receives up to one hundred overseas patients a month. Fortis Malar Hospital receives fifteen to twenty foreign patients a month.

Hospitals like Madras Medical Missions have tie-ups with foreign governments and it receives fourteen foreign medical tourists each month, primarily from east African nations, primarily for cardiac surgeries and kidney ailments as well as urinary organ transplants.

Sankara Nethralaya receives nearly five hundred overseas patients a month and MIOT Hospitals receive nearly three hundred foreign patients each month.

1.2 Background to the Study

Today, the culture of travel abroad for cosmetic surgery has become common practice; but the mixture of surgery and tourism appears to be a comparatively new style of non-exclusive niche tourism that guarantees to possess vital growth over consecutive few years.

The expected increase in medical tourism is essentially due to the rise in price of medical aid in more developed counties, the long waiting lists for surgery and decreasing standards of care in several developed countries due to decreasing staff levels and increasing pressure on current health systems due to ageing populations.
Another reason for the magnified levels of medical tourism could also be the results of a natural progression or well being pursuits within health tourism; spa resorts, yoga and meditation camps.

Today, Chennai is the hub of medical tourism within the country, associate business that's expected to grow at thirty percent per annum that is predicted to become INR 95,000 million by 2015 as per the Associated Chambers of Commerce and industry of India

Health care in Chennai is provided by both government and private hospitals. Chennai attracts forty five percent of health tourists from abroad. City has been termed as India’s health capital. Factors behind the health tourer flow within the town embody lower prices, very little to no waiting time and facilities offered at the speciality hospitals within the city.

As of 2014, city receives up to two hundred foreign patients on a daily basis. Foreigners, particularly those from developing and underdeveloped countries like Federal Republic of Nigeria, Kenya, Brunei, Congo, Bangladesh, Sultanate of Oman and Iraq, come to the city for advanced medical aid.

1.3 Statement of the problem

Medical tourism in India has emerged by the quickest growing sector of tourism business despite the worldwide economic worsening. High price of treatments within the developed countries, notably in USA and Great Britain, has been forcing patients from such regions to appear for various and cost-efficient destinations to urge their treatments done.

The main reason for growing importance of medical tourism in India is that the price of medical treatment that is relatively forty percent less, than offered by the other developed countries.
The main reasons for the growing quality in medical tourism in India are:

- The long waiting lists within the developed countries.
- The low price of medical treatments in India than the developed countries.
- The cheap international air fares and favorable exchange rates.
- The internet, with the event of communications.
- The state-of-art technology, specialist doctors, nurses, para-medical employees and diagnostic centers in India.
- The medical education system additionally caters to the ever increasing demand for the delivery of the standard health care services.

Chennai, one of the Metropolitan Cities of India, is found on the south eastern coast of India. Around twentieth century originally established by British people as Chennai, it had been developed into a big metropolis and military service base within the later years.

The city has been endued with the wealth of arts and literature. Chennai has its own distinctive charm that sets it aside from the rest of the massive cities. It’s been endued with extreme treasure of tourer attractions.

Many Internationally global health care Hospitals like Apollo, MIOT, MMM, Frontier Lifeline (Dr.K.M. Cherian Heart Foundation) is here to serve patients round the world. It offers a chance to treat with various medicines like Ayurveda, Siddha, Naturopathy and Yoga.

Chennai has several professionally maintained health spas, well-being clinics, beauty parlors and fitness centres to stay health in fitness.
1.4 **Objectives of the Study**

Following are the objectives of the Study

- To Study the factors that influence people to engage in medical tourism.
- To find the information search of medical tourists.
- To identify the criteria that medical tourists use to evaluate medical tourism destinations.
- To identify the problems faced by medical tourists.
- To ascertain the level of satisfaction, perceived by medical tourist with service providers.

1.5 **Research methodology**

As noted above, the aim of this research was to spot the effective factors that influence the medical tourism in Chennai. In pursuit of this objective, a questionnaire was used to collect the information. The methodology is delineated as follows.

1.5.1 **Population for the Study**

It was set those persons eligible to be the participants during this analysis would be those who are traveling to Chennai for medical reasons.

1.5.2 **Preliminary assessments of survey instrument**

Before administering the survey, preliminary assessments of the reliability and validity of the planned questions in the survey were undertaken by;

- Seeking a review of the questionnaire by service providers in medical tourism in Chennai; and
- A pilot Study of thirty individuals was collected by convenience in Chennai.
In response to the feedback received from these preliminary assessments, some minor Changes were created to the questionnaire are listed below;

Questions: (Before pilot Study)
➢ How did you come to know about this hospital?
➢ Is such a treatment offered in your country?

Questions: (After pilot Study)
➢ How did you come to know about this hospital and its services and charges?
➢ Is such a treatment offered in your country of residence?

1.5.3 Data collection and sample

The questionnaire for the particular survey were distributed to eligible respondents with help from hospital authorities who didn't give the researcher with the names and/or contact details of potential respondents, the researcher was so unable to access these individuals directly.

In total, of 450 questionnaires issued, 336 completed questionnaires were collected; of those, thirty six incomplete cases within which respondents had not answered many elements of the questionnaires were excluded, finally 303 questionnaires were chosen.

The data was collected from ten hospitals (Apollo, Fortis Malar, Adyar cancer Institute, Miot, SRM, Frontier life line, Sankara Netralaya, St. Isabel’s, Madras Medical Mission and Ramachandra) those are medical tourist servicers in Chennai.

1.5.4 Data processing

After the data have been edited, the responses to individual questions are allotted numerical codes. Coding is the assignment of responses to classes and
involves identification of every response with variety related to that class. Scales were then reworked, as applicable, in accordance with the character of the items. Composite variables were then computed for analysis using SPSS software package.

Statistical techniques adopted in this Study are Descriptive analysis, Friedman test for k-related samples, One-sample t-test, Independent samples t-test, one way ANOVA, Chi-square analysis, Bi- variant correlation, Multiple regression analysis, Factor analysis, Structural equation modeling. Details of the applied statistical analyses employed in the Study are stated in Chapter - IV.

1.5.5 Hypotheses of the Study

After analyzing the data as stated above, the researcher is in a position to test the hypotheses, if any, formulated earlier. Do the facts support the hypotheses or they happen to be contrary? This is the usual question which should be answered while testing hypotheses. Various tests, such as Chi square test, t-test, F-test, have been developed by statisticians for the purpose. The hypotheses may be tested through the use of one or more of such tests, depending upon the nature and object of research inquiry. Hypothesis-testing will result in either accepting the hypothesis or in rejecting it. If the researcher had no hypotheses to start with, generalizations established on the basis of data may be stated as hypotheses to be tested by subsequent researches in times to come.

Some of the hypotheses used in this study are listed below

H1. All the factors of health consciousness play equal roles among the patients came to hospitals in Chennai for medical tourism.

H2. All the factors of overseas preferences play equal roles among the patients came to hospitals in Chennai for medical tourism.
H3. All the aspects of familiarity carry equal importance among the patients came to hospitals in Chennai for medical tourism.

H4. There is no significant influence of patients’ gender on (a) Hospital image (b) Cost (c) Safety and security d) Hygiene (e) Tourism (f) Travel (g) Entertainment in Chennai for medical tourism.

H5. There is no significant variation between expectation and satisfaction towards the services provided by the hospitals in Chennai for the patients came for medical tourism.

1.5.6 Research Design

1.5.6.1 Definition and types of research design

A research design may be a structure or blueprint that details the procedures to be followed during a research to get the specified information. (Davis, 2005, Maholtra, 1999)

Research designs may be classified into two types:

(i) Exploratory research (which aims to deal upon a new issue or attempt to begin a new research); and

(ii) Conclusive research (which aims to produce information that's helpful in reaching conclusion. (Maholtra, 1999)

The present Study clearly belongs to the conclusive research kind because it helps destination marketers in attracting medical tourer. Research design for such conclusive analysis may be divided into two subgroups:

(i) Descriptive research design (it gives data about the population or universe being studied); and
(ii) Casual research design (which aim to check if there's a cause and effect between variables). (Maholtra, 1999)

According to Maholtra (1999), descriptive research design involves 6Ws: Who, what, when, where, why, and way. Such descriptive research in a marketing context may be undertaken by two survey methods:

(i) Cross sectional surveys; and
(ii) Longitudinal surveys.

Cross sectional surveys collect data from one or a lot of samples at a given purpose in time, whereas longitudinal surveys collect data from one or a lot of samples at many points in time.

The present research design adopts a cross sectional approach because the opinions associated an expertise of a broad cluster of prospective medical tourists was desired, additionally to time and resource constraints.

1.5.6.2 Survey as major data collection method

Two data collection ways may be employed in descriptive research:

(i) Observation (it may be a primary technique of aggregation knowledge by human, mechanical, electrical or electronic means that the researcher could or might not have direct contact or communication with the individuals whose behaviour is being recorded); and

(ii) Survey (it involves aggregation of primary data regarding subjects, typically by choosing sample distribution of the population or universe under Study through the utilization of questionnaire) (Esterby et al., 1991, Neuman, 2006, Scanlan, 2002).
Given that the target of the present Study is to produce findings that may be utilized by policymakers to form higher strategic selections within the field of medical tourism, survey method represents the best data collection for this Study.

According to Neuman (2006), a survey obtains information by addressing relevant inquiries to associate applicable range of qualified respondents regarding their attitudes, intentions, and behavior. Such questions, request information relating to the attributes of the hypothesized constructs by utilizing applicable scaling techniques for the measuring of every variable.

For the needs of the present Study, the survey was thus designed to explore the attitudes, opinions, and intentions of prospective medical tourists relating to their deciding process in selecting Chennai and its key competitors as a medical tourism destination.

1.5.7 Survey design

A survey may be a research technique within which data are consistently collected directly from the individuals being studied by the questionnaire.

The questionnaires for the particular survey were distributed to medical tourer who are treated in hospitals like Apollo, Fortis Malar, Adyar Cancer Institute, MIOT, SRM, Frontier Life Line, Sankara Netralaya, St. Isabel’s, Madras Medical Mission and Ramachandra with the help of hospital authorities.

1.5.7.1 Types of variables

Different types of variables need totally different scaling techniques. By convention, four levels of measurement may be utilized:
i. **Nominal scales:**

It’s the foremost elementary technique of measurement that classifies persons, objects or events into variety of reciprocally exclusive classes on the premise of the straightforward presence or absence, pertinence or irrelevancy, possession or non-possession of bound property.

The only applied statistical techniques applicable to nominal scale data are counting techniques (Davis, 2005).

Three of the variables within the Study were appropriate for nominal scales:
(i) Availability of desired medical treatment in home country
(ii) Information search behavior; and
(iii) Consideration sets.

ii. **Ordinal scales:**

In these numerals, letters or totally different symbols are used to rank objects. Objects utilized in this scale are classified not alone on whether or not they share some characteristic with another object but to boot whether or not they need lots of or less of this characteristic than another subject on some characteristic.

Apart from counting techniques, statistical techniques based on percentile are applicable to ordinal scale data (Maholtra, 1999). None of the variables in this Study were acceptable for ordinal scales.

iii. **Interval scales:**

These enable variables to be compared in cases where known differences exist between the rankings of items belonging to different variables. A selection of statistical techniques could also be applied to interval scales (Maholtra, 1999). Ten of the variables among the gift Study were acceptable for interval scales:
iv. **Ratio scales:**

These possess all the qualities of the other scales, and associate absolute zero; all statistical techniques are applicable to the data from this sort of scale (Maholtra, 1999, Davis, 2005). None of the variables within the Study were appropriate for quantitative ratio scales.

1.5.7.2 **Validity and reliability of scales**

Reliability refers to “a scale or check is reliable to the extent that repeats measurements created by it below constant conditions offer constant result.

Validity is outlined because the best offered approximation to the best of a given proposition, inference, or conclusion.

Some degree of validity and reliability was assured for the scales planned for the current Study as a result most of the scales were adopted from previous research studies. Self developed scales were supported on a review of the literature and input.
from consultants within the field; pilot studies were conducted to assess their validity and reliability.

**Reliability and validity check**

- **Reliability**

  Reliability of associate instrument refers to the degree of consistency between multiple measurements of variables. It’s the extent to that associate experiment tests or any activity procedures yield, constant result on repeated attempts. Reliability was estimated through internal consistency a way that is applied to measure the consistency among the variables in a summate scale. Within the Study, the Cronbachs Alpha constant of reliability was found based on primary data of the current Study and also the details are as follows:
Table 1.1
Reliability measures for the Study

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Factors</th>
<th>No. of items</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Health consciousness</td>
<td>10</td>
<td>0.83</td>
</tr>
<tr>
<td>2</td>
<td>Overseas Preferences</td>
<td>7</td>
<td>0.84</td>
</tr>
<tr>
<td>3</td>
<td>Familiarity</td>
<td>7</td>
<td>0.81</td>
</tr>
<tr>
<td>4</td>
<td>Risks</td>
<td>8</td>
<td>0.83</td>
</tr>
<tr>
<td>5</td>
<td>Information search</td>
<td>10</td>
<td>0.82</td>
</tr>
<tr>
<td></td>
<td><strong>Consideration of Chennai for medical tourism</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Hospitals image</td>
<td>6</td>
<td>0.85</td>
</tr>
<tr>
<td>7</td>
<td>Cost</td>
<td>5</td>
<td>0.90</td>
</tr>
<tr>
<td>8</td>
<td>Safety and security</td>
<td>5</td>
<td>0.87</td>
</tr>
<tr>
<td>9</td>
<td>Hygiene</td>
<td>5</td>
<td>0.91</td>
</tr>
<tr>
<td>10</td>
<td>Tourism</td>
<td>5</td>
<td>0.85</td>
</tr>
<tr>
<td>11</td>
<td>Travel</td>
<td>5</td>
<td>0.84</td>
</tr>
<tr>
<td>12</td>
<td>Entertainment</td>
<td>5</td>
<td>0.91</td>
</tr>
<tr>
<td></td>
<td><strong>Satisfaction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Infrastructure</td>
<td>8</td>
<td>0.86</td>
</tr>
<tr>
<td>14</td>
<td>Emergency service</td>
<td>7</td>
<td>0.81</td>
</tr>
<tr>
<td>15</td>
<td>Diagnostic services</td>
<td>6</td>
<td>0.87</td>
</tr>
<tr>
<td>16</td>
<td>Dietary services</td>
<td>6</td>
<td>0.89</td>
</tr>
<tr>
<td>17</td>
<td>Diagnosing</td>
<td>5</td>
<td>0.91</td>
</tr>
<tr>
<td>18</td>
<td>Nursing</td>
<td>4</td>
<td>0.92</td>
</tr>
<tr>
<td>19</td>
<td>Registration</td>
<td>4</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td><strong>Problems faced</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Hospital Problems</td>
<td>7</td>
<td>0.86</td>
</tr>
<tr>
<td>21</td>
<td>Payment Problems</td>
<td>7</td>
<td>0.85</td>
</tr>
<tr>
<td>22</td>
<td>Other problems</td>
<td>5</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td><strong>Overall reliability of the Study</strong></td>
<td>137</td>
<td>0.84</td>
</tr>
</tbody>
</table>

Source: Primary data
Implications:

From the above table it is found that all the factors secure 0.8 and above, which shows the reliability of the present Study.

➢ Validity

In this Study, both face and content validities were established. The face validity was done by the investigator and the content validity was done by the experts in the field of investigation. Face validity, it appears to measure whatever the author had in mind, namely, what he thought he was measuring. The underlying principle behind content validity is that to examine the extent to which a measuring instrument provides adequate coverage of the topic under Study.

➢ Pilot Study

To assist in the assessment of reliability and validity, a pre-test version of the questionnaire was pilot tested after ethical approval had been obtained. The proposed questionnaire was tested in writing with a judgment sample of 30 medical tourists. Appropriate adjustments to the questionnaire were then made in consultation with the supervisor.

Questions: (Before pilot Study)

➢ How did you come to know about this hospital?
➢ Is such a treatment available in your country?

Questions: (After pilot Study)

➢ How did you come to know about this hospital and its services and charges?
➢ Is such a treatment available in your country of residence?

1.5.8 Survey administration and sampling methods

A good sampling plan will include the following steps
Define the target population,
Select the data collection method,
Identify the sampling frames needed,
Select the appropriate sampling method,
Determine necessary sample sizes and overall contact rates,
Create an operating plan for selecting sampling units, and

Each of these is discussed in detail below.

1.5.8.1 Target population

The first step of any sampling plan is to define a target population. A population is an identifiable total group of elements that are of interest to the researcher and pertinent to the specified problem. A defined target population consists of the complete group of elements that are specifically identified for investigation according to the objectives of the research project (Maholtra, 1999, Neuman, 2006) (Zikmund, 2003, Maholtra, 1999).

Given that the primary objective of the present Study was to identify the factors that influence the medical tourism in Chennai, the criterion for inclusion in the target population was medical tourist who receives treatment in Chennai hospitals.

1.5.8.2 Data collection

Using the information of problem identification, the data requirements, and the established research objectives, the researcher must choose a method for collecting raw data from the target population elements.

The method of data collection guides the researcher in identifying and securing the necessary sampling frame for conducting the research.
In the present Study, the data were collected from ten hospitals such as Apollo, Fortis Malar, Adyar Cancer Institute, MIOT, SRM, Frontier Life Line, Sankara Netralaya, St. Isabel’s, Madras Medical Mission and Ramachandra those are medical tourism servicers in Chennai with the help of hospital authorities.

1.5.8.3 Sampling frame

The sampling frame contains the operational population from which the sample will be drawn. In an ideal situation, the operational population, the defined target population frame and the sampling frame are identical (Davis, 2005, Zikmund, 2003).

The selection of a sampling frame is thus crucial for any quantitative research project because the mismatch of the sampling frame and the actual population could result in unclear findings (Zikmund, 2003).

In the present Study, the sampling frame was selected on the basis of the fundamental Parameters noted above; who received treatment in Chennai hospitals.

Because there are visibly many other people in the world who would have met the basic criteria but were not included in the sampling frame, it is recognized that there is potential for the sampling frame to under represent some groups in the total population.

1.5.8.4 Sampling methods

The researcher must choose between two types of sampling orientations:

(i) Probability sampling is the one in which members of the population have a known chance of being included in the sample and

(ii) Non probability sampling is the one in which members of the population do not have a known chance of being selected.
The results obtained by the probability method can be generalised to the target population from which the sample is drawn (Zikmund, 2003, Sekaran, 2000). Examples of such methods include:

- **Simple random sampling:**

  In this sampling each unit of the universe has been known and has equal chance of being selected. The tools for selection are lots or random numbers.

  Despite its ability to yield the most accurate findings, simple random sampling requires a well developed sampling frame, which is very difficult to develop (Maholtra, 1999, Neuman, 2006).

- **Systematic sampling:**

  A type of probability sampling method in which sample members from a larger population are selected according to a random starting point and a fixed, periodic interval.

  This interval, called the sampling interval, is calculated by dividing the population size by the desired sample size. (Davis, 2005)

- **Stratified sampling:**

  A method of sampling that involves the division of a population into smaller groups known as strata. In stratified random sampling, the strata are formed based on members shared attributes or characteristics. A random sample from each stratum is taken in a number proportional to the stratum's size when compared to the population. These subsets of the strata are then pooled to form a random sample (Zikmund, 2003).
Cluster sampling:

Cluster sampling may be used when it is either impossible or impractical to compile an exhaustive list of the elements that make up the target population. Usually, the population elements are already grouped into sub-populations and lists of those sub-populations already exist or can be created (Neuman, 2006).

Non probability sampling methods include:

Judgmental sampling:

Judgmental sampling is a non-probability sampling technique where the researcher selects units to be sampled based on their knowledge and professional judgment. It is appropriate in cases in which the population is difficult to reach (such as a product launch or a new market development) (Neuman, 2006).

Convenience sampling:

Convenience sampling is a non-probability sampling technique where subjects are selected because of their convenient accessibility and proximity to the researcher (Zikmund, 2003).

Snowball sampling:

A form of non-probability sampling in which the researcher begins by identifying an individual perceived to be an appropriate respondent. This respondent is then asked to identify another potential respondent. The process is repeated until the researcher has collected sufficient data (Davis, 2005).

In the present Study, it was obviously impossible to ascertain the exact number of people who received medical treatments in Chennai. A finite number could
not therefore be achieved in the sampling frame. All probability sampling techniques were therefore inappropriate.

Moreover, convenience sampling and quota sampling techniques were not suitable, because the general populations of people conveniently available were unlikely to be those who have not treated; in addition, appropriate methods for determining a quota within the general population were not at all apparent. It was therefore decided that the most appropriate sampling method for the present Study was judgmental sampling, complemented by snowball sampling.

Having made this decision, written questionnaire are given to hospital authorities and indicated a preference to complete the survey via a paper version.

1.5.8.5 Sampling size

In this step of a sampling plan, the researcher must consider how precise the sample estimates must be and how much time and money are available to collect the required raw data. In determining the sample size, the three key considerations are:

(i) The variability of the population characteristic under investigation.
(ii) The level of confidence desired in the estimates, and
(iii) The degree of precision desired in estimating the population characteristic (Neuman, 2006).

In most cases these factors are positively correlated with sample size. Table 1.2 shows conventional sample sizes for different purposes in marketing research.
Table 1.2
Minimum and typical sample sizes for market research

<table>
<thead>
<tr>
<th>Research purpose</th>
<th>Minimum sample size</th>
<th>Typical sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem identification</td>
<td>500</td>
<td>1000-2500</td>
</tr>
<tr>
<td>Problem solving research</td>
<td>200</td>
<td>300-500</td>
</tr>
<tr>
<td>Product test</td>
<td>200</td>
<td>300 - 500</td>
</tr>
</tbody>
</table>

Source: (Maholtra, 1999)

The present Study is best represented by the category of problem solving research in Table 1.2. As such, it would be seen that a sample of 300-500 respondents would be appropriate. A desired sample size of 303 was therefore chosen.

In this regard it is noteworthy that regarding sample size, 100 is considered poor, 200 is considered fair, and 300 is considered good. It would be thus seen that a sample size of 303 respondents was appropriate for this Study (Manning and Munro, 2007).

1.5.8.6 Sampling units

In this step, the researcher wants to clearly lay out, in detail, the actual procedures to use each of the probable respondents who were drawn into the sample.

In this regard the samples were collected from the medical tourists who are treated in Chennai hospitals by means of questionnaire.

1.5.8.7 Operational plan

In this step, data has to be collected from the probable respondents by maintaining consistency and control.

Questionnaires were distributed to the probable medical tourists with the help of hospital authorities and thereby data were collected for this Study.
1.5.9 Survey administration

It refers to collection of information employing a survey instrument to get data relevant to the research question from a huge range of respondents (Davis, 2005) (De Vaus, 1995). Once selecting a survey administration technique, the subsequent problems were faced by the researcher.

- The major drawback faced in conducting this analysis was obtaining the contact of patients.
- Getting the appointment of hospital authorities was troublesome, since hospitals work on 24*7 timings that caused major issue in interacting due to time shifts.
- Some details weren't provided by hospitals, due to confidential in nature.
- Secondary information was restricted since the subject is completely new and understanding some medical terms was troublesome as it concerned with scientific and biological terms.

1.5.10 Significance of the Study

Medical tourism is increasing and has become a major supply of foreign revenue for developing countries; the relative newness of the development means the quantity of studies on the subject remains limited.

The implication of this Study of medical tourism within the Chennai context therefore rests on two main reasons:

(i) The potential economic significance of medical tourism for Chennai; and
(ii) The general lack of research on destination alternative in medical tourism.
1.5.11 Limitations of the Study

Like all other research, this Study has bound sensible limitations that have to be taken under consideration in deciphering the findings.

- First, as a result of the analysis concentrated on Chennai, respondents are restricted to those who have received treatments in Chennai hospitals.

- Secondly, the survey questions are framed with a spotlight on Chennai city alone. It ought to thus be noted that prospective medical tourists might felt constraint in creating observations concerning different destinations of that they're aware.

- Thirdly, the analysis may be a descriptive Study within which actual alternative behavior isn't determined. The Study thus doesn't explore the influence of situational factors that may influence selections concerning alternative destination and intention to visit.

- The fourth limitation issues on access to respondents, provided that the Study uses a survey, the Study will claim to achieve solely a fraction of potential respondents with the required parameters. That is, not all prospective medical tourists are assessed.

- Finally, the above mentioned limitations have implications for the event of Variable measuring scales. The scales for measurement were self developed specifically for the distinctive circumstances of this Study, which could have crystal rectifier to some dimensions of the ideas being unknowingly unmarked.
1.5.12 Chapterisation

In general terms, the structure of this thesis reflects the Study’s objective of addressing the analysis question through the testing of the hypotheses. The thesis is thus structured into five chapters:

(i) Introduction and design of the Study,
(ii) Review of the literature,
(iii) History of Medical tourism,
(iv) Analysis and Interpretation,
(v) Summary of findings, suggestions and conclusion.

The present chapter has introduced the thesis by providing the background of the analysis, justification for the analysis, Significance for the Study, methodology, and limitations of the Study.

Chapter II discusses the idea of medical tourism, which is the context of this analysis, followed by thought of the two key theoretical concepts: destination choice and destination image.

Chapter III discusses the history of medical tourism taking into thought of how the medical tourism elicited in varied countries perspective.

Chapter IV discusses information analysis and interpretation. This chapter describes how the data are prepared, modified, and analysed in statistical terms. The results of the testing of the hypotheses also are reported in this chapter.

The final chapter stated the results of findings, suggestions and conclusion of the Study.
1.6 Summary

This chapter has provided the background for this Study by discussing:

- The significance of tourism generally and medical tourism especially for the Chennai economy.
- The need for information concerning the behavior of medical tourists with reference to alternative destination.
- Justification for the analysis has conjointly been provided, and therefore the objectives of the Study are declared.
- An outline of the most important ideas within the theoretical framework of the Study has been provided. The methodology of the Study has been stated and therefore the limitations of the analysis methodology are noted.
- Finally, the chapter has delineated and bestowed the structure of the complete thesis.