Chapter V

RESEARCH METHODOLOGY

This chapter deals with different stages of research adopted in this study and discuss the research design, including justifications for the use of descriptive research. The Sampling issue, Sample size, tools used for the data analysis are included. This section also discusses the validity and reliability issue and steps taken to minimize the related errors.

5.1 Stages of Research

5.1.1 Preliminary Action

After dealing with research objectives and formulation of hypothesis and sub objectives in earlier chapter. This chapter discusses the research design i.e. Exploratory research method and triangulation research design. The Sampling issues, analysis tools are outlined. It also discusses the reliability and validity and the steps taken to minimize any related errors.

5.1.2 Define The Problem

The problem statement is developed, Objectives are set and hypothesis and Sub objectives are formulated.

5.1.3 Research Objectives

The research Objectives and Hypothesis are developed.

5.1.4 Development of Hypothesis As Per The Problem

5.2 Research Planning And Designing Stage

5.2.1 Exploratory Design

Exploratory studies are a valuable means of finding out what is happening, to seek new insights, to ask questions and to assess phenomenon in a new light. They are particularly useful if you wish to clarify your understanding of the problem. There are three ways of conducting exploratory research.
1. A search of literature.
2. Discussing with the experts on the subject.
3. Conducting focus group interviews.

The study which seeks to explore any new subject area is called exploratory research. An exploratory study may not use a rigorous methodology. There is no separate methodology for doing exploratory studies.

In this exploratory study the research design is triangulation design which is very flexible in nature, the sampling design which is used in this research is convenience–purposive sampling, and statistical analysis is not preplanned but as per the data collected and objectives designed, the data collection is through Expert unstructured Interviews, questioners for hospitals, Travel agents and Medical tourism customers.

The important aspect of any research study is to define research Problem i.e. Research Design.

There are two approaches of research study, Qualitative and Quantitative. Qualitative study is an unstructured, primarily exploratory design, Sample size is also small, intended to provide insight and understanding. Quantitative study is a research technique to quantify the data and for data analysis is done by using statistical techniques.

5.2.2 Triangulation Method

It is very difficult to decide research method in this research study. In general a combination of research method may be effective. When subject area is unknown like Study of Medical Tourism in Madhya Pradesh. Qualitative Research can be used to build. This theory can be tested by Quantitative research surveys or experiments. “Mixing of this qualitative research and quantitative research two research techniques is called as triangulation of research techniques”.

By combining multiple observers, theories, methods, and empirical materials, researchers can hope to overcome the weakness or intrinsic biases and the problems that come from single method, single-observer and single-theory studies.
In the study qualitative techniques are used to, survey of experts, and SWOT Analysis and quantitative techniques are used to collect data and Analyze of hospitals and Travel Agencies Ex. Factor Analysis, Population parity Method. So it is clear that the Research method used in this study is Triangulation.


In the study Information of Medical Tourism is collected from more than one source 1. Hospitals 2. Travel Agents 3. Hospitals for cross confirmation. More than 1 method is used for data collection.

The purpose of triangulation in qualitative research is to increase the credibility and validity of the results. Several scholars have aimed to define triangulation throughout the years.

5.2.3 Cross Sectional Design

A. Hospital
B. Customer
C. Agents

5.3 Designing The Questionnaires

5.3.1 Potential Source of Error

Sampling Error

5.3.2 Designing of Questionnaire

Self Designed Questionnaire is used to assess the opinion of Hospitals, Travel Agents, and Customer regarding study of Medical tourism in Madhya Pradesh. Thus the study uses survey research method.

5.3.3 Deciding Type of Scale

Lickerdrt scale is used in the study. This is a ordinal Scale which contains a set of objects ordered from least to the most of a particular attribute. ( range is from 1 for Fully disagree and 5 for fully Agree)
All these questions are in form opinions expressed by respondents. A Yes No Questions were asked & 5 point lickerdt scale was used to judge the expressed attitude of the respondents. Some are open ended questions.

**Five point Lickerdt Scale**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully disagree</td>
<td>Disagree</td>
<td>Not Agree</td>
<td>Partly Agree</td>
<td>Fully Agree</td>
</tr>
</tbody>
</table>

Changes are made to correct this questionnaire. Then retested and after these changes were done accordingly.

**5.3.4 Pilot Testing of Questionnaire**

The prepared questions are pre tested by administrators of Hospitals, doctors, travel agents and expert for their approval on the questionnaire. The reactions of the respondents are noted and then necessary corrections were made.

**5.4. Data Collection Stage**

**5.4.1 Data Collection Primary**

This is collected with the help of three self designed questioners, 1.Hospitals 2.Travel Agents, 3.Medical tourism Tourist. The lickerdt scale is used to interpret the items .The Experts from Wokhardt and Apollo health City who are practicing medical tourism in India successfully guided us to design Hospital questionnaire and then the data is collected.

**Questionnaire**

Questionnaire was used to collect data from Hospitals and Travel Agents and Medical Tourist in Madhya Pradesh. Before designing of the questionnaire, there was a long discussion with the experts from Nagpur, Hyderabad, Delhi and Pune, from the sector of Medical Tourism, who is part of Medical Tourism profession. As per the discussions with these experts on the required information different questions were framed.

Different Questionnaire is designed for
1. Hospitals
2. Travel Agencies
3. Medical Tourism Consumers

In this Question, Awareness, Capacity, Infrastructure, Quality Certification, Medical Tourism cases, Government’s Role, specialization, and Opinion About current scenario of Medical Tourism was included.

**Reliability Test**

This is a Reliability test used for internal consistency; this scale is of coefficient of reliability. Chron All data whose reliability coefficient is or more that .70 is acceptable in all social sciences.)SPSS is used to calculate the coefficient alpha calculation for all samples.

Reliability Analysis: Scale (Alpha)

Cornbach Alpha -.9297 Standardized item Alpha =.9026

For Factor Analysis:

Kaiser-Mayer-Olkin and Bartlett’s Test for Sampling Adequacy: 0890

**5.4.2 Data Collection Secondary**

To collect information on the Medical Tourism, this information is collected from Google and Scholar Search, Wikipedia, Pub med, Ebsco .Devi Aahilya University library and Pioneer Institute Library were also used for collecting secondary data. Secondary data source were tourism, healthcare magazines, Research Journals, Daily Newspaper, Tata Dairy, Website, Google Alerts, in India, Tourism Ministry Office Madhya Pradesh, Hospitals in Andhra Pradesh, Hospitals in Nagpur, Data Publications www.Government tourism data.com, Tourism Office Delhi.

**5.4.3 Target Participants**

Hospital Administrator
Agency Manager
Customer
5.4.4 Obtaining the Details of Participants

Prior appointment was taken and when Respondents from Hospitals and Travel Agency then in detail questions are asked.

5.4.5 Survey Focus

A semi-structured interview is used to collect data. Certain areas of Medical Tourism are noted first and then items comprising the interview schedule were written and semi-structured to encourage respondents to focus on particular topics on process-issues such as: selecting priority areas of research, issues related to quantitative versus qualitative research. Processes of enhancing different types of research, and issues on selecting appropriate methodology of research to study Medical Tourism. The interview schedules also included open-ended questions, so respondents could elaborate on points of interest.

5.5 The Sample

5.5.1 Sample Population: Indore, Bhopal, Gwalior, Jabalpur of Madhya Pradesh.

5.5.2 Sample Unit

This study is using triangulation study method, of Medical tourism in Madhya Pradesh, as the subject area is new. Whether the hospitals or Travel Agents in Madhya Pradesh are superficially aware about the Medical/Tourism, and whether hospitals in Madhya Pradesh are competent to cater Medical Tourism Tourist. If the concept of Medical Tourism can be practiced in Madhya Pradesh or not. The purpose of the study is also to find out government’s role in development of Medical tourism in Madhya Pradesh.

This research study is conducted on Three sets of Medical Tourism Sector, first is Hospitals and the second is Travel Agents, and third is Customers. Government Sector tourism offices, and last but not the least all the experts who are at present practicing Medical Tourism as a profession.

Sample Unit: Hospitals, Travel Agents, Customer

5.5.3 Sample Size

Sample Size: 102 no. Hospitals
Sample Size: 45 no. Agencies
Sample Size: 30 no. Customers
The Sample is representative to the research subject. Only big hospitals are included so 100 no. size for hospitals and 50 no. for travel Agencies.

All the respondents are comfortable with English language. The questioners are personally filled after interaction with respondents after visiting hospitals and travel agencies in Indore, Bhopal, Gwalior, and Jabalpur.

5.5.4 Sampling Technique

Under non probability sampling method convenience sampling technique is used to collect the primary data in the study.

Sample Distribution: The sample distribution of the respondent is given in the following tables from table 5.1 to table 5.5 of the Hospitals and Travel Agents.

5.5.5 Sampling Method:

- Method of sampling is Convenience purposive Sampling.

5.5.6 Criteria of Sample Unit

Sample Hospitals

Hospitals who are having facility to treat Foreign Medical Tourist.

Sample Travel Agency

A travel agency is a private retailer or public service that provides travel and related services to the public on behalf of suppliers such as airlines, car rentals, hotels, railway, cruise lines and package tours. Travel Agencies in Madhya Pradesh typically from Indore, Bhopal Gwalior, Jabalpur cities all are included in sample size. All these cities have representation of Madhya Pradesh.

5.5.7 Sample Distribution

- Hospital
- Agencies
- Customer

5.5.8 Sample Frame: M.P Hospitals, Madhya Pradesh Travel Agents. Medical Tourism Customer.
5.5.9 Sample Control

Respondents Related to Medical Tourism

5.6. The Tools of Data Collection And Analysis

- Survey
- Questionnaires

5.6.1 The Tools for Data Analysis

A multistage Data Analysis by Appropriate Statistical Tools is used.

5.6.2 Qualitative Analysis

Qualitative analysis for Comparison of expert Opinions of Medical Tourism Concept with Madhya-Pradesh hospitals opinion. One glance SWOT Analysis Of Medical Tourism Madhya Pradesh prepared and compared with SWOT Analysis of Medical Tourism India to judge the applicability of Medical Tourism in Madhya Pradesh.

5.6.3 Quantitative Analysis

- All data is analyzed by using a statistical packaged (SPSS) i.e. Factor Analysis, Regression Analysis, Trend Analysis, Population probability range except Chi Square. Factor analysis to study competence & capability of Hospitals, trend analysis, and regression to study potential of Medical Tourism in Madhya Pradesh. The population probability range is used to study role of government in development of Medical Tourism with by SPSS. Chi Square is calculated manually. Qualitative Analysis is done by percentage graphs and a SWOT of Medical Tourism Madhya Pradesh prepared and analyze.

- Results are interpreted and findings and implications Suggestions are listed.

- Limitations of the study listed.
5.7 Ethical Issues in Research

5.7.1. Treatment of Participants: The Participants are treated with care, sensitivity and respect. So that the respondents feel relax and confident to express their views. A prior appointment of the respondents is taken on telephone one day earlier.

5.7.2. Easy in Filling Questionnaire: The information useful to fulfill the responses is given in questionnaire.

5.7.3. Informed Prior Appointment: Respondents are made fully aware of the nature of research and people within it.

5.7.4. Anonymity:

Respondent are assured about anonymity and confidentiality of the respondents and contact number of the researcher is provided to respondents so that they are eager to know the results of the study.