PATIENTS' PERCEPTION OF MEDICAL TOURISM SERVICES: A COMPARATIVE ANALYSIS OF DOMESTIC AND INBOUND PATIENTS IN DELHI- NCR

Thesis Submitted for the Award of the Degree of

DOCTOR OF PHILOSOPHY

in

Tourism management

By

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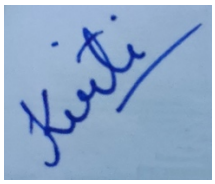
2022

DECLARATION

I, hereby declared that the presented work in the thesis entitled "Patients' Perception of Medical Tourism Services: A Comparative Analysis of Domestic and Inbound Patients in Delhi-NCR" in fulfilment of degree of **Doctor of Philosophy (Ph. D.)** is outcome of research work carried out by me under the supervision Dr. Hafizullah Dar working as Assistant Professor, in the school of hotel management and tourism of Lovely Professional University, Punjab, India. In keeping with general practice of reporting scientific observations, due acknowledgements have been made whenever work described here has been based on findings of other investigator. This work has not been submitted in part or full to any other University or Institute for the award of any degree.



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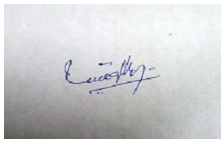
CERTIFICATE

This is to certify that the work reported in the Ph. D. thesis entitled "Patients' Perception of Medical Tourism Services: A Comparative Analysis of Domestic and Inbound Patients in Delhi-NCR" submitted in fulfillment of the requirement for the reward of degree of **Doctor of Philosophy (Ph.D.)** in the School of hotel management and tourism, is a research work carried out by Kirti Kashyap (Registration No. 11919155), is bonafide record of her original work carried out under my supervision and that no part of thesis has been submitted for any other degree, diploma or equivalent course.



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Kirti Kashyap

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LIST OF ABBREVIATIONS

ABMS	American Board of Medical Specialties
ACHSI	Australian Council on Healthcare Standards International
AVE	Average Variance Extracted
AYUSH	Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy
BC	Before Christ
CFA	Confirmatory Factor Analysis
CR	Composite Reliability
EFA	Exploratory Factor Analysis
FICCI	Federation of Indian Chambers Of Commerce & Industry
FMTA	Foreign Medical Tourist Arrivals
FTA	Foreign Tourist Arrivals
GDP	Gross Domestic Product
GOI	Government of India
IBEF	India Brand Equity Foundation
IGRT	Image-Guided Radiation Therapy
IMRT	Intensity-Modulated Radiation Therapy
ISQUA	International Society for Quality in Health Care
JCI	Joint Commission International
KMO-MSA	Kaiser-Meyer-Olkin Measure of Sampling
MC	Medical Cost
ML	Maximum Likelihood
MT	Medical Team
MTI	Medical Tourism Index
NABH	National Accreditation Board for Hospitals and Healthcare Providers
NCR	National Capital Region
NCRB	National Capital Region Public Board

NCT	National Capital Territory
OECD	Organization for Economic Co-Operation and Development
OS	Overall Satisfaction
Per	Perception
RRI	Revisiting & Recommending Intention
SEM	Structural Equation Modelling
SIC	Squared Inter-Construct Correlation
SMC	Squared Mean Correlation
SQ	Service Quality
TS	Touristic Services
UEMS	European Union of Medical Specialties
UKAF	United Kingdom Akkreditering Forum
UNWTO	United Nations of World Tourism Organization
UK	United Kingdom
UP	Uttar Pradesh
USD	United States Dollar
WT	Waiting Time
WTTC	World Travel And Tourism Council

ABSTRACT

Background: Medical tourism is a notion that is as old as medicine itself. It is one of the fastest emerging domains in tourism and India possesses its high rank in this field. In India, Delhi-NCR is hot medical tourism destination as it provide medical services along with other related services and facilities. The concept of medical tourism is a worldwide phenomenon, mainly focusing on the inbound medical tourists who travelled to other country for seeking medical care with some relaxation after or before their treatment. However, the domestic medical tourism was recently introduced. The scope and demand of domestic medical tourists is very high. Therefore, there is need to study the views of domestic medical tourists and to compare it with the inbound medical tourists'.

Research Gap: On the basis of extensive literature, the following research gap is identified. The previous literature has extensively focused on inbound patients' perception. Several authors conducted research to know the medical travel motivations, perception, satisfaction and loyalty of inbound medical tourists across the world. In India, inbound patients are getting more attention and medical services and facilities are provided in accordance to their needs and demand. Domestic medical tourism is widely ignored and considered as neglected dimension in social science research. At the Indian and global levels, there are only a few studies on domestic medical tourism Hence, the current study adds to the existing health tourism literature by highlighting a new dimension of domestic medical tourism, which is also in high demand.

Research Objectives

The following objectives were set for this study in order to achieve the goal.

1. To investigate the factors of medical tourism services influencing motivation of domestic and inbound patients for medical travel to Delhi- NCR.

2. To analyse the perception of domestic and inbound patients towards medical tourism service quality.

3. To examine the influence of patients' medical travel motivations on their perception.

4. To assess the overall satisfaction of domestic and inbound patients with medical tourism services.

5. To examine the domestic and international patients' revisiting and recommending intentions.

6. To examine the relationship between patients' perception, OS and RRI.

Hypothesis

H_1: *Patients' perception is significant as per their nationality.*

H_2: *Medical travel motivations have a positive impact on patients' perception.*

H_2a: Medical cost have a positive impact on patients' perception.

H_2b: Medical team have a positive impact on patients' perception.

H_2c: Quality of care has a positive impact on patients' perception.

H_2d: Waiting time has a positive impact on patients' perception.

H_2e: Hospital infrastructure has a positive impact on patients' perception.

H_2f: Touristic services have a positive impact on patients' perception.

H_3: *Patients' satisfaction is positively influenced by patients' perception of medical service quality.*

H_4: *Patients' overall satisfaction is significant as per their nationality.*

H_5: *Patients' revisiting and recommending intentions are positively influenced by patient's overall satisfaction of medical tourism services.*

H_6: *Patients' revisiting and recommending intention is significant as per their nationality.*

H_7: *There is positive relationship between patients' perception and overall satisfaction with regard to medical services.*

H_8: *There is positive relationship between patients' overall satisfaction and revisiting and recommending intentions with regard to medical tourism services.*

H_9: *There is positive relationship between patients' revisiting and recommending intentions and perception with regard to medical tourism services.*

H_{10}: *Nationality moderates the relationship between patients' motivations and perception with regard to medical tourism services.*

H_{11}: *Nationality moderates the relationship between patients' perception and overall satisfaction with regard to medical tourism services.*

H_{12}: *Nationality moderates the relationship between patients' overall satisfaction and revisiting and recommending intentions.*

Methodology: The present study follows the deductive and quantitative research approach. In the present study, inbound and domestic medical tourists visiting Delhi-NCR are accounting the total population. The population for present study is unknown. As a result, the current study follows Structural Equation Modeling (SEM) approach. Therefore, 410 is the final sample size of the study to be surveyed in 11 selected hospitals in the study area. The hospitals were selected under purposive sampling method and patients were selected under simple random sampling method. The self-structured study questionnaire was positioned during survey phases for main data collection. However, respondents' responses were measured on a five-point Likert scale. Before a research design is approved, a pilot study is conducted to support in determining the research question or to evaluate the reliability, feasibility and validity of the questionnaire distributed. The researcher was able to complete the data collection process in two different phases. A total of 372 responses were found valid for final analysis which indicates 90.73% response rate. The quantitative methodology i.e. normality, descriptive analysis, EFA, CFA, independent t-test and SEM technique is used for analysing the study results.

Results: The present study is aimed at doing a comparative analysis of domestic and inbound patients' perception of medical tourism services in Delhi NCR. The study identified travel motivational factors that influence patients travel decision making and perception. The study determined that the *medical team, hospital infrastructure, touristic services, service quality, waiting time and medical cost* are

significantly essential medical travel motivations for medical tourists visiting Delhi NCR. The study also investigated the significant relationship among four constructs of casual model. The results indicated that there is significant difference between perception, satisfaction and RRI of domestic and inbound patients. In addition, nationality moderates the relationship between patients' perception & OS, and OS & RRI. However, nationality failed to moderate the relationship between motivations and perception of medical tourism services. Collectively, the present study results have supported the conceptual model of the study successfully.

Conclusion: The medical tourism stakeholders need to concentrate on improving the perception and satisfaction of medical tourists, especially domestic medical tourists. Medical tourists' perception and satisfaction on various parameters, such as, medical cost, medical team, service quality, waiting time, hospital infrastructure and tourism services should be understood by hospitals and should focus on improving these facilities and services for improved satisfaction of medical tourists. In addition, entrepreneurs need to develop and improve their marketing efforts for their services in order to meet the expectations of domestic and inbound medical tourists' positively.

CHAPTER: 1
INTRODUCTION

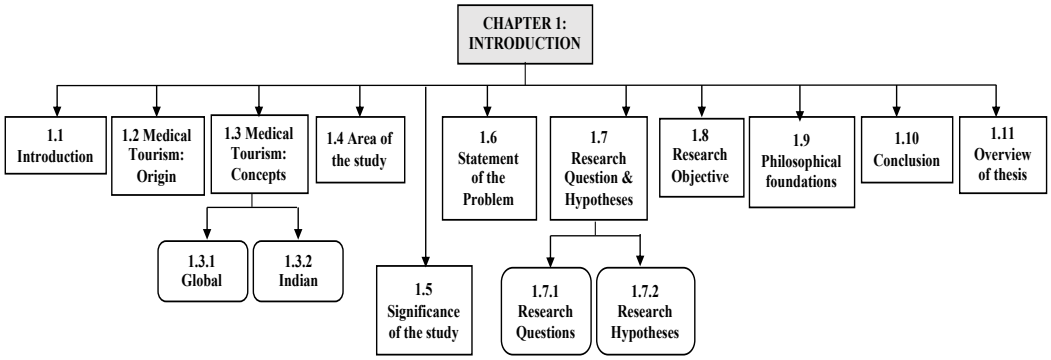
"The greatest challenge to any thinker is stating the problem in a way that will allow a solution." - Bertrand Russell

INTRODUCTION

1.1 Introduction

The first chapter describes the historical backdrop, concepts and various other aspects of medical tourism (see figure 1.1 for the overview of the chapter). Besides, the chapter provides global overview of medical tourism industry followed by the medical tourism scenario in India and Delhi-NCR. The current research scope along with the theoretical background, purpose, importance and other associated facets are also articulated in this prolong part of the research work.

Figure 1.1: Overview of Chapter 1



1.2 Medical Tourism: Origin & Evolution

Medical tourism has a long and successful history dating back to ancient times. Here is a very brief summary of medical tourism's illustrious past. Thousands of years ago, early civilizations demonstrated a strong link in both worship and healthcare (Jagyasi, 2012). Most ancient civilizations knew that mineral thermal waters and holy temple baths had medicinal properties. Sumerians (4000 BC) were among the first civilizations to build wellness facilities centered on hot springs. With the prominence of Yoga and Herbal treatments in India, medical tourism began to take off in 3000 BC, with steady flows of medical tourists. Other healing temples arose under the Greek rule by 300 BC. The Epidaurus, which included a dream temple (God of medicine, Asclepias) and hot springs, was the most well-known of the facilities (Kazemi, 2007).

After the fall of the Roman Empire, Asia remained a popular medical tourism destination for medical tourists. In 12th century, Japanese hot mineral springs become famous among warriors due to their healing properties. In Europe

and the United Kingdom, the Renaissance Period (14th to 17th centuries) saw not only a resurgence of culture and art, but also a rise in medical tourism. Europeans and Americans decided to travel to remote locations with baths and wellness retreats in the 18th and 19th centuries, hoping to heal ailments such as tuberculosis (Mestrovik, 2018).

The Europe and U.S.A. were the center of the healthcare services in the 20th century. Various bodies and associations were formed to manage and enhance healthcare across the America and Europe such as the *American Board of Medical Specialties* (ABMS) was founded in 1933, the *European Union of Medical Specialties* (UEMS) was established in 1958. Southeast Asian countries, such as Thailand, began to market themselves as medical tourism destinations immediately after the Asian economic crisis in 1977. In general, medical travel was restricted to the rich and privileged who travelled to the America and Europe to receive significant healthcare services. As the expense of healthcare in the United States increased in the 1980s and 1990s, patients began to seek offshore solutions, such as dental services in Central America; and later on, they also started seeking medical care in Asia and Latin America in the beginning of 21st century (Hall, 2013).

With the emergence of healthcare service providers across the globe, the Joint Commission International was established in 1997 to inspect and probe international healthcare institutions for compliance with international standards. Because of JCI accreditation, Asian countries including, Thailand, India and Singapore have become recognized medical tourism destinations. Earlier it was assumed that rich people from developing countries travel to developed countries for medical treatment which was not available in their own country. However, the scenario has been changed. Nowadays, people from developed countries travelled to developing countries for the purpose of medical treatment which is not only available but also highly affordable with excellent quality and standards.

1.3 Medical Tourism: Concepts

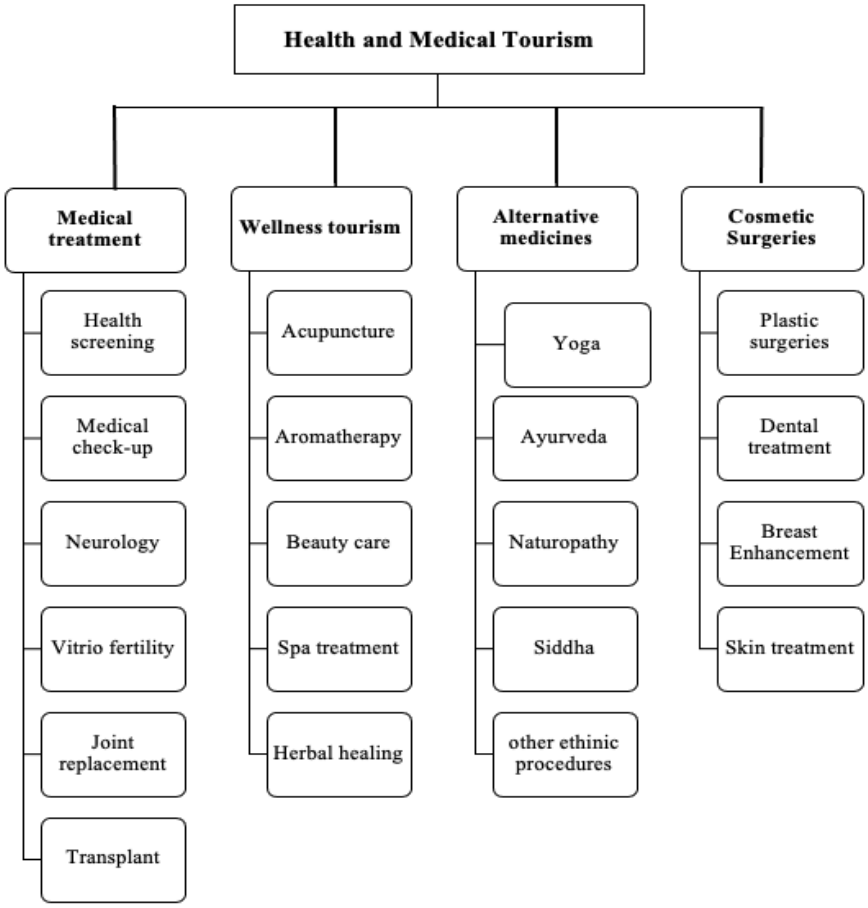
The concept of medical tourism is as old as medicine itself. People travel for self-care to improve their quality of life by removing physical hardships and suffering (Dar, 2020). When a patient makes the decision to travel for medical treatment in an effort to improve their health, this is referred to as medical tourism (Hudson & Li, 2012). Typically, medical tourists travel to other locations because

the treatments they need are not readily available where they are from (Marlowe & Sullivan, 2007). However, in addition to travelling for medical treatment, medical tourists are also eager to engage in leisure, relaxation, fun, and other activities while they are there, which has a significant impact on the patients' choice of travel destination (Heung, Kucukusta, & Song, 2010). As a result, one can draw the conclusion that the medical and tourism industries are in synergy, and both must collaborate to provide facilities to medical tourists. The amalgamation of medical services and tourism services can be termed as medical tourism (Sarwar et al., 2012). Moreover, the concept of tourism combined with seeking for medical treatment refers to medical tourism.

Medical tourism is also known as health tourism (Hashemi et al., 2017) and sometimes *medical tourism*, *wellness tourism*, and *health tourism* are all interchangeably used (Alsharif et al., 2010; Reddy et al., 2010). Consistently, Hall and James (2011) discovered some of the interrelations between various sectors of health and medical tourism, including wellness tourism. However, medical and health tourism are two relatable but distinct concepts (Carrera & Bridges, 2006), where health and wellness tourism refer to travel for spas, alternative therapies, and restorative treatments. Bio-medical procedures combined with travel and tourism are primarily what medical tourism entails (Whittaker, 2008).

More specifically, health tourism refers to a coordinated effort by a tourism facility (e.g., accessibility, accommodation) or a destination (e.g., Delhi, India) to attract visitors by marketing health-care facilities or services along with the standard tourist amenities (Goodrich & Goodrich,1987). Whereas, wellness tourism encompasses all of the interactions and phenomena that arise as a result of individuals travelling and staying in places where their primary goal is to maintain or improve their health (Muller & Kaufmann, 2001). A report of UNWTO (2018) stated that health tourism is an umbrella word for two subtypes: medical and wellness tourism. However, the scope of healthcare and medical tourism is depicted in the diagram below (figure 1.2).

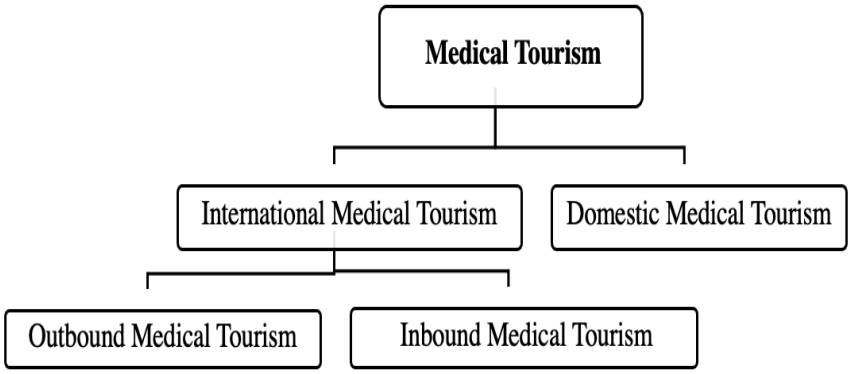
Figure 1.2: Concept of Health and Medical Tourism



Source: Tourism Research and Marketing (2006). Medical Tourism: A Global Analysis. London: ATLAS

The medical tourism is basically divided into two categories (Deloitte, 2008) namely, international medical tourism and domestic medical tourism (figure 1.3). International medical tourism is a process when patients travel to some other country with the motive of receiving medical attention that is preferable than what they'd obtain in their home nation, and they travel for medical care as it is more cost effective, leading to higher levels of care quality or better access to care. It is further divided into inbound and outbound medical tourism. When a medical tourists leaves his home country and travel to host country with the reason of receiving medical care and services, then the phenomenon is considered as Inbound medical tourism for the host country. It will be considered as outbound medical tourism for the home country (Thompson, 2011). Domestic medical tourism refers to medical tourists who travel within their own country, from one state to another in order to get better medical attention because of accessibility, quality treatment, medical care (Bakshi & Verma, 2013).

Figure 1.3: Types of Medical Tourism



1.3.1 Global Perspective of Medical Tourism

The global medical tourism market is expanding rapidly. Many Asian nations, including India, Singapore, Thailand, and others, have plans to develop medical tourism in order to expand their markets and gain other benefits (Heung, Kucukusta, & Song, 2010). Countries are making significant investments in the medical tourism sector to enhance quality of care and build brand recognition. Serving more foreign patients indicates a location's level of success in the industry, and keeping and luring domestic patients gives the medical tourism industry a boost because, in comparison, the number of domestic patients is still quite high (Bakshi & Verma, 2013).

Medical tourism is a multi-billion dollar global industry (Gupta et al., 2015). According to the report of Tourism Research and Marketing, every year 37 million people travel for healthcare related services (TRAM, 2006). Medical tourism generates as much as USD 55 billion per year across the world (Ahmad Al Adwan, 2020). People are increasingly travelling for searching quality of life and more cost effective healthcare options as a result of the growth of globalisation and consumerism. Expensive medical treatment in developed regions, achieving international standards of quality, availability of cutting-edge healthcare equipment, excellent service quality, flexibility in medical insurance, and medical tourism marketing and advertising are all factors contributing to the rise of medical tourism and the influx of foreign patients (Khademian & Farshid, 2015).

Cosmetic procedures, cardiology, orthopaedic surgery, cancer, dental care, fertility treatment, weight loss, screening tests, transplant, urology, wellness, and alternative therapies are among the most common treatments sought by

medical travellers. In comparison to developed economies, developing countries offer high-quality healthcare care at a much reduced cost (Collins et al., 2019). While patient cross-border flows occur in all directions, one of the most popular and contentious is the north (developed) to south (developing) nation flow. The majority of medical tourists originate in the Western Europe, Canada and United States of America with key developing country destinations in Asia, Latin America the Mideast (Alsharif et al., 2010).

India, Thailand, South Korea, Costa Rica, Mexico and Singapore are some of the more well-known healthcare destinations for outgoing American patients (Burns, 2015; Turner, 2010). According to Alsharif et al. (2010) and Kaur (2016), medical tourists prefer traveling China, India, Thailand, Cuba, United Arab Emirates (UAE) and Jordan for the purpose of medical tourism. There are several medical tourism destinations all around globe, but Asia is one of the most popular. The Asia-Pacific region dominating the medical travel market is expected to do so for a few more years (Kim et al., 2019). Furthermore, countries such as Malaysia, Singapore, Brunei, Columbia, Hong Kong, Hungary, Mexico, Argentina, Costa Rica, Greece, Dominican Republic, South Africa, and the United States are working to promote medical tourism (Garg et al., 2020; Chandra et al., 2019). Nearly 130 countries competing for a piece of this international business (Gupta et al., 2010).

Medical tourism is evolving into healthcare value travel, which includes focusing a medical tourist's healthcare-seeking behaviour and also the broader impact on the nation's economic that host them. The rapid growth of outgoing health tourism has been a significant factor in the global expansion of inbound medical tourism. Inbound medical tourism emerges in other countries due to the medical tourists who leave their home nation for getting medical care abroad (Thompson 2012). According to a recent report released by the World Travel and Tourism Council (WTTC), Americans have the highest number of outbound medical tourists around the world, with USD 2.32 billion spent in 2019. Kuwait and Nigeria, on the other hand, are in second and third place, with USD 1.57 billion and USD 784 million spent, respectively. The above mentioned figure emphasises the high cost of medical services in the America that drives medical tourists to seek medical treatment elsewhere.

According to the Medical Tourism Index (MTI) report (2021), the leading medical tourism destinations by total worldwide rating included Canada (overall MTI score: 76.47), Singapore (overall MTI score: 76.43), Japan (overall MTI score: 74.23), Spain (overall MTI score: 72.93) and United Kingdom (overall MTI score: 71.92). The foremost medical tourism mega-destinations with their treatment specialization are mentioned below in table 1.1.

Table 1.1: Region-wise Medical Tourism Destinations

Region	Countries	Treatments
America	Canada, Brazil, Colombia, Jamaica, Mexico, Argentina, etc.	Dentistry And Cosmetic Surgery
Europe	France, Great Britain, Germany, Poland, Italy, Russia, Spain,	Cancer, Cardiology and Orthopaedic Diseases
Arab & Middle East	Egypt, Morocco, Iran, Lebanon, Jordan, Kuwait, Saudi Arabia, Qatar, Turkey, etc.	Oncological, Fertility treatment, Plastic procedure and Lasik surgery
Africa	South Africa and Republic	Oncological Diseases, fertility, Cosmetic and Plastic Surgery
Asia	India, Thailand, China, Japan, Korea, Singapore	Alternative treatment, Cancer Treatment, Radical and Cosmetic procedure

Source: Horowitz et al. (2007)

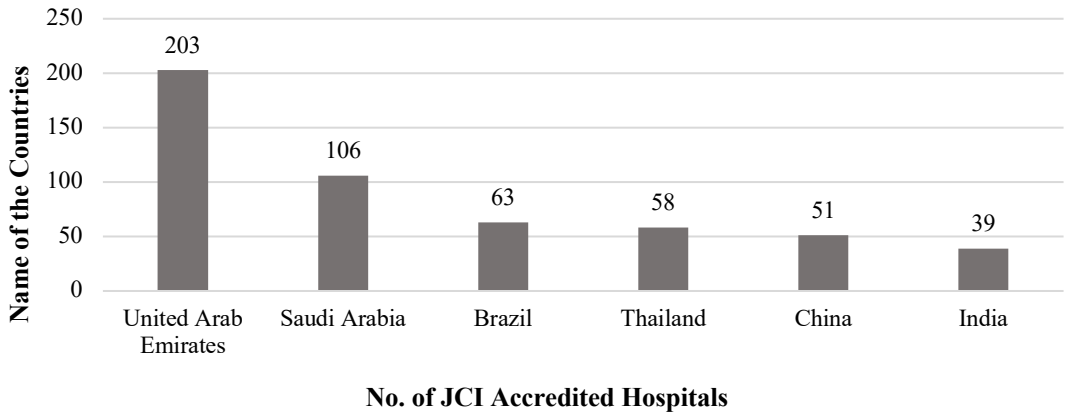
1.3.3.1 Accreditation

With the other factors responsible for medical travel, accreditation of the chosen hospital is the utmost important factor in medical treatment destination selection. Accreditation is a crucial external evaluation that helps to build trust and confidence (Scrivens, 1995). Despite the fact that some countries conduct their own hospital accreditation, there are three major international accreditation schemes: *Joint Commission International* (JCI); *Australian Council on Healthcare Standards International* (ACHSI) and *Accreditation Canada*. These all organization accredited by the *International Society for Quality in Health Care* (ISQua) and the *United Kingdom Akkreditering Forum* (UKAF), both regarded as 'the accreditor of accreditors'. They ensure that accreditation is not a one-time certification process but a continuous quality enhancement program through the accrediting agencies (Chuang et al., 2019). Both ISQua and UKAF are international organizations, which assess the accreditation agencies and

develop benchmark in health care safety and patient care for hospitals and other related patient care institutes.

With 958 JCI accreditations in 75 countries, JCI is the world expert on worldwide health care practises and considered as world's leading hospital accreditation in healthcare (Al Shawan, 2021). In figure 1.4, a few of the top countries with JCI accreditation are listed. Accreditation Canada has accredited over 1500 locations in 38 countries, according to their website, whereas the ACHSI has accredited 475 healthcare institutions and has over 1450 healthcare organisations as members (Krishnan & Chandrasekhar, 2020).

Figure 1.4: Top Countries Having JCI Accredited Hospitals



Source: Joint Commission International (2022)

1.3.2 Medical Tourism in India

India is making progress in the realm of medical tourism. Medical tourism in India is highly competitive and affordable for medical tourists since it provides the best services with a variety of options to visitors (Keerthana & Babu, 2020). As per a FICCI-EY report, India has established itself as "The World's Pharmacy" and strives to become "The World's Provider" by providing high-quality services at a minimal price. Due to the significantly lower medical costs, people are considering going overseas to access the best medical services for a fraction of the price they would spend in their own countries. For foreign medical tourists, India is one of the most well-known and desired destinations (Jindal & Yashika, 2019). India's medical tourism services are superior than those of other South Asian countries. India can provide world-class medical treatment at considerably reduced pricing due to low infrastructure costs and an ever-lower doctor-patient

proportion. Table 1.2 shows the availability and costs of major surgical procedures in popular medical tourism locations around the globe.

Table 1.2: Treatment Cost Comparison

Treatments	US ($)	India ($)	Mexico ($)	Thailand ($)	Malaysia ($)	Costa Rica($)
Coronary bypass	145,000	5,100	27,000	15,121	11,430	25,000
Angioplasty	57,000	3,300	12,500	3,788	5,430	13,000
Cardiac Valve Replacement	170,000	5,500	18,000	21,212	10,580	30,000
Hip Replacement	50,000	7,000	13,000	7,879	7,500	12,500
Knee Replacement	50,000	6,200	12,000	12,297	7,000	11,500
Resurfacing of Hip	50,000	7,000	15,000	15,152	12,350	12,500
Spinal Fusion	100,000	6,500	12,000	9,091	6,000	11,500
Breast Enhancement	10,000	3,500	3,500	2,727	N/A	3,800
Dental Implant	2,800	1,000	1,800	3,636	345	900
Lap Band	30,000	3,000	6,500	11,515	N/A	8,500
Gastroplasty	32,972	5,000	10,950	16,667	9,450	12,500
Face Lift	15,000	4,000	4,900	3,697	3,440	6,000
Gastric Sleeve	28,700	5,000	9,995	13,636	N/A	10,500
Tummy Tuck	9,750	3,000	4,025	5,000	N/A	5,300
Liposuction	9,000	2,800	2,800	2,303	2,299	3,900
Lasik treatment	4,400	500	1,995	1,818	477	1,800

Source: Medicaltourism.com (2021)

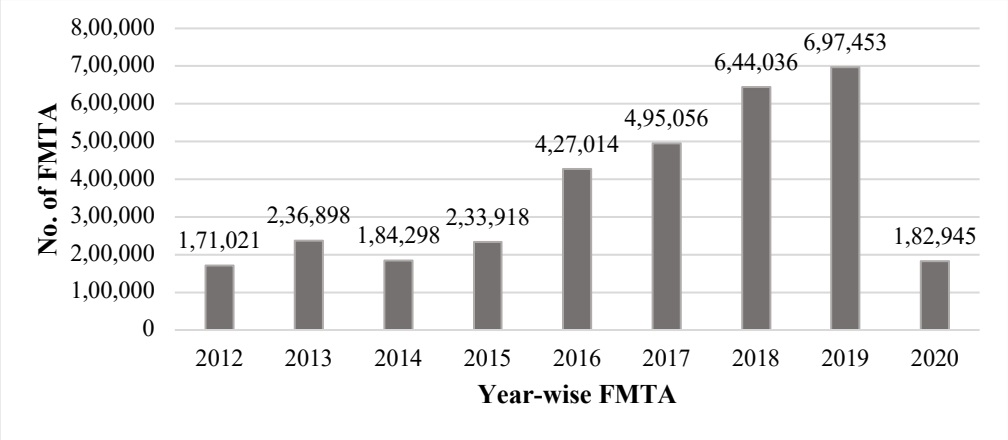
India is among the fastest-growing and the most price-effective medical tourism destinations in the world (Wong, 2014). Patients from the Maldives, South Africa, Oman, Sudan, Nigeria, Tanzania, Kenya, Yemen, Uzbekistan, Maldives, Iraq, and Saudi Arabia flock to India for medical treatment. In curative care, medical tourists prefer India for cardiac, orthopaedics, organ transplantation, neurosurgery, eye surgery, and cancer. The reason for the steady rise in the number of medical tourists visiting India for health and wellness options is that India boasts not only top quality healthcare practitioners but also state-of-the-art services at a satisfactory cost as compared to few other medical tourism destinations (Rukmini Shrinivasan, 2018). Altogether, advance technology, competent medical specialists, accredited hospitals are the most important determinants for medical travellers to India.

Chennai, Delhi, Bangalore, Hyderabad, Kolkata, Mumbai, and Jaipur are the top medical tourism destinations in India. Thus, Chennai is the most popular

medical tourism destination, whereas Mumbai is the most leading domestic medical tourism destination (Gupta et al., 2015). Additionally, metro cities such as Delhi, Mumbai and Chennai attract most of the inbound patients, with accounting for 75%+ of medical tourists from abroad (Desai & Vora, 2021). Medical tourists have come from all over the world to visit Indian hospitals such as Apollo Hospitals, Fortis Hospital, BLK super speciality Hospital, Columbia Asia, Fortis Hospitals, and Manipal Hospital (Gupta et al., 2017; Jindal & Yashika, 2019). In recent years, India's health-care sector has experienced significant expansion.

According to the annual report of Indraprastha Apollo, Delhi (2020), they have provided services to around total of 475,000 patients in the financial year 2019-20. Similarly, Max healthcare chain in India performed approximately 0.35 million inpatient and day care procedures in the last Fiscal 2020 and 0.23 million inpatient and day care procedures during the nine months ended on December 31, 2020 (Max healthcare, 2021). In 2017, medical value travel income of India was US$3 billion, while in 2018, it was US$6 billion (FICCI and IMS Health, 2019). Overall, medical tourists are expected to increase in India before 2019 (figure 1.5). However, the COVID-19 has temporarily limited the medical tourism.

Figure 1.5: Foreign Medical Tourist Arrivals (FMTA) in India

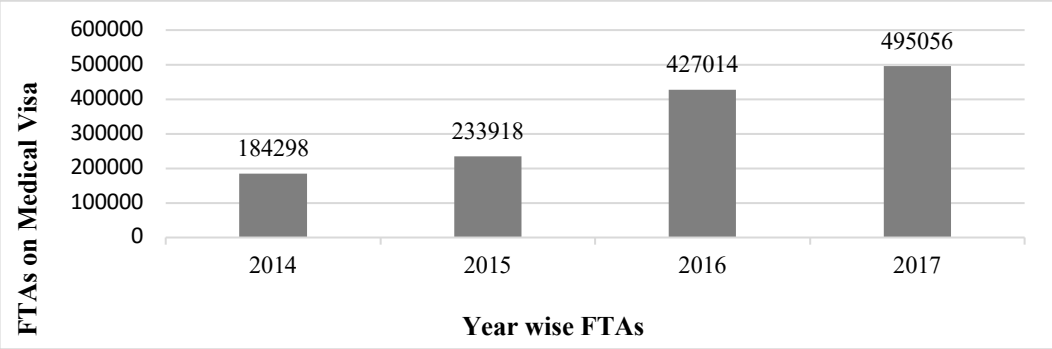


Source: Ministry of Tourism, Government of India (2020)

The Indian government is also promoting medical tourism in a variety of ways, such as the establishment of the National Medical and Wellness Tourism Promotion Board for considering the issues such as accreditation, regulatory affairs, and market research that drive demand for Indian medical tourism abroad.

According to the Ministry of Tourism's Annual Report (2019-2020), there are 166 countries who can enter India with e-Visa applicant through 28 authorised international airports and exit through 34 airports. In 2017, the Maldives, Bangladesh, Iraq, Afghanistan, and Oman had the highest number of foreign tourists arriving on medical visas. Over the years, the number of international visitors arriving on medical visas (figure 1.6) has increased dramatically (Oberoi & Kansra, 2019).

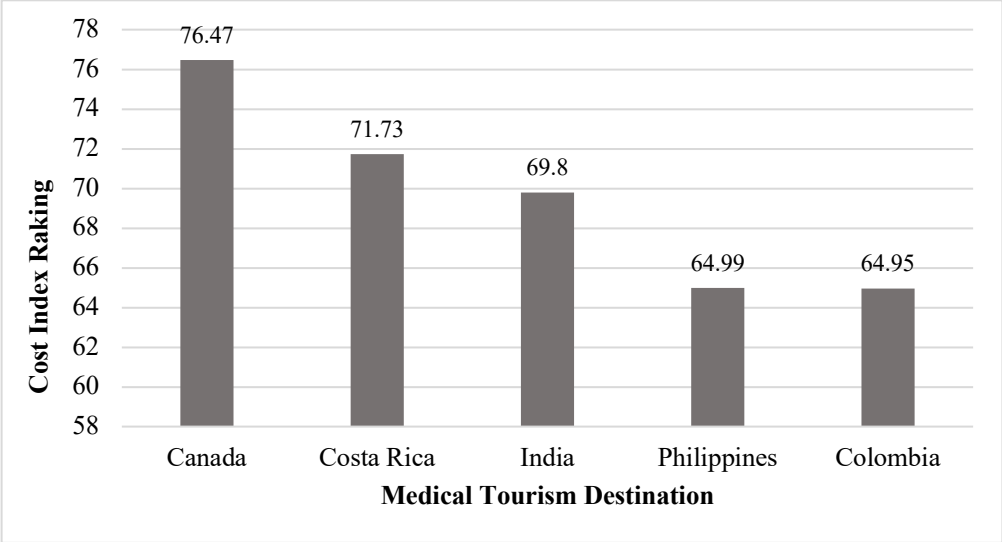
Figure 1.6: FTAs (Foreign Tourist Arrivals) on Medical Visa in India



Source: FICCI (2018)

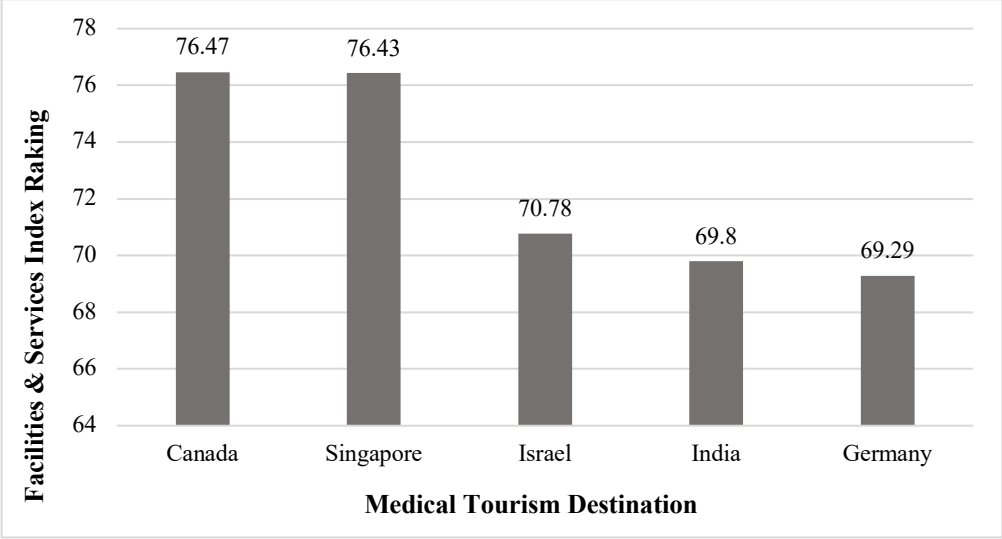
India is leading as a popular medical tourism destination that is helping India improve its balance of payments by generating foreign exchange (Chaudhary & Agrawal, 2014). India positioned to be the third most preferred destination for medical tourism amongst 184 countries of the world and the GDP growing by 7.9 percent per annum (India Brand Equity Foundation, 2018). In the international medical value travel sector, India has also emerged as a front-runner. India is positioned to be the 3rd most preferred destination for medical tourism amongst 184 countries of the world (India Brand Equity Foundation (IBEF, 2018). According to the "FICCI-EY Knowledge Paper on India: Building Best Practices in Healthcare Services Globally, 2019" report, India is also the 5th best medical tourism travel destination. Known for medical tourism and entertain patients from across the world, India ranked second in Asia and predominantly 6th medical tourism destinations among top 46 countries in the world, according to “Medical Tourism Index” (Mehta & Iqbal, 2019). However, in terms of Medical Index ranking of medical tourism destinations, India positioned itself among top 5 medical destinations of the world in category of *Cost* and *Facilities & Services* Index ranking (figure. 1.7 & 1.8) and it also ranked 21st in *Destination Environment* category.

Figure 1.7: Medical Tourism Cost Index Raking of Medical Tourism Destinations



Source: Medical Tourism Index report (2022)

Figure 1.8: Medical Tourism Facilities & Services Index Raking of Medical Tourism Destinations



Source: Medical Tourism Index report (2022)

India is a world-renowned medical tourism destination with the largest pool of doctors and paramedical workers, including more than 1.2 million Homeopathic doctors, 0.17 million dentists, 2 million surgeons, and 0.8 million Ayurveda doctors (Vij, 2021). There were 393 Ayurveda government colleges and 221 homoeopathic government colleges in India. Therefore, Ayurveda therapies are also available in India, and the AYUSH brand is heavily promoted

to promote wellness tourism. As of April 2020, India has 33,987 primary health care centers (IBEF, 2021). The Quality Council of India has established a constituent board, the National Accreditation Board for Hospitals and Healthcare Providers (NABH). In India, there are 619 NABH-accredited hospitals, with an emphasis on patient benefits and privileges, patient safety, infection prevention and control, and healthcare preventative measures. There are 39 Joint Commission International (JCI)-accredited hospitals in India, the majority of which are in cities like Delhi and Mumbai. In terms of the number of JCI-accredited hospitals, India came in sixth rank (figure1.3). India is the country where foreign patients can get treatment for less money than in other developed nations. Additionally, the Indian state and union governments provides medical services to both Indian citizens and NRIs (Gunaseelan & Kesavan, 2020).

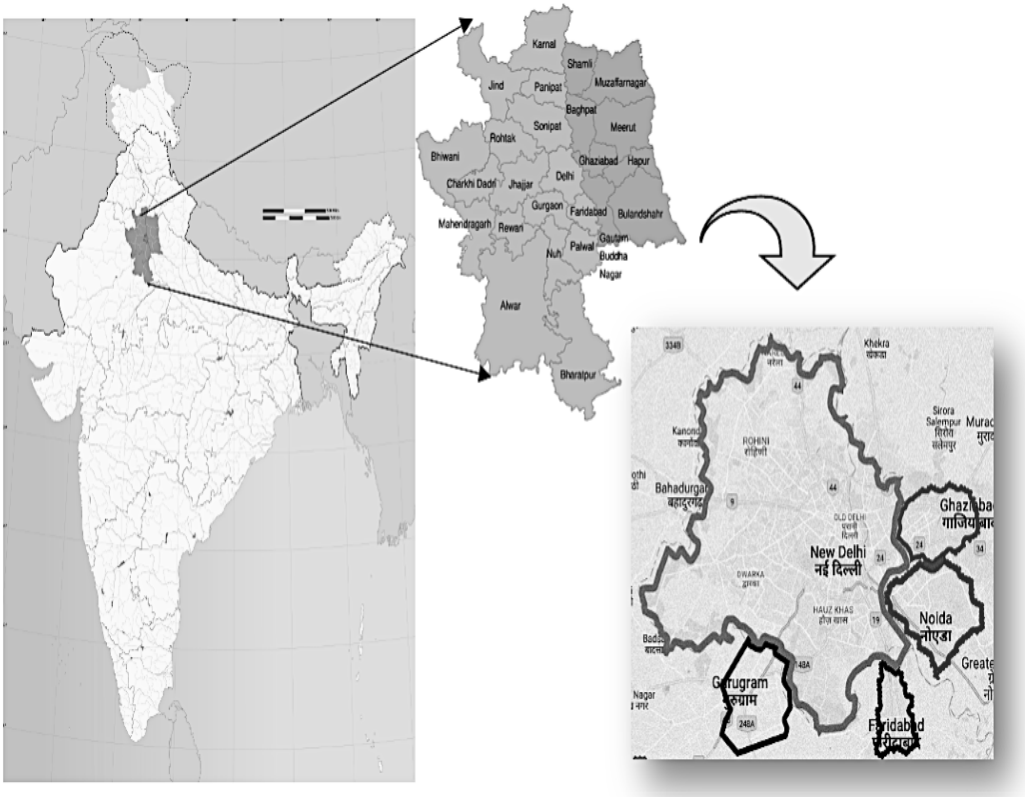
1.4 Area of the study

The present study area is the Delhi National Capital Region (Delhi-NCR) as it is a perfect destination for medical tourism (Dhodi et al., 2014). The NCR includes the National Capital Territory of Delhi (NCT-Delhi) as well as the urban areas in the neighboring states of Uttar Pradesh (UP), Rajasthan and Haryana. Delhi, Gurugram, Ghaziabad, Noida, and Faridabad are the major cities (figure 1.9) (NCRPB, 2022). The area's infrastructure and connectivity have been improved by new developments such as roads, airports, hotels, and hospitals. Delhi, India's capital, sits at the heart of the NCR and is easily accessible from all corners of the globe. By rail, road, and air, Delhi is well connected (Delhi Tourism, 2022). In terms of hospitals, Delhi NCR houses 8 JCI and 111 NABH accredited private hospitals (table 1.3), as well as 37 government hospitals (table 1.4).

Delhi is placed among top 5 popular medical tourism destinations in India, having vast number of world class private hospitals with great potential of becoming medical hub of world (Chandra, 2019). Many super specialty hospitals, such as Medanta, Apollo, Fortis, Max, Artemis, and Rockland, have diversified into medical tourism to cater to the international as well as domestic population. All such hospitals are said to offer world-class amenities, the most highly skilled teams of physicians and other healthcare professionals and cutting-edge specialized treatments all at a decent price (Gupta et al., 2015). The Delhi-NCR

offers variety of treatment packages, including packages for plastic surgery, eye surgery, heart care, and neurosurgery (Datta, 2020).

Figure 1.9: Delhi NCR on Map



Source: Modified Google Images

Delhi NCR has prominently considered as the country's biggest major destination for medical tourism because other related facilities are available including hotels, tourism attractions and shopping facilities. In Delhi NCR, there are about 6000 hotels, including Taj Palace Hotel, Hotel Hyatt Regency, and many more (Delhi Tourism, 2022). In addition, it also provides opportunities to refresh the mind by exploring some of the illustrious landmarks of India such as Jama Masjid, Lotus Temple, and other historical landmarks (Delhi Tourism, 2022). Delhi-NCR is a shopping hub for tourists. The shopping markets such as Sarojini, Saket, etc. is one of the attractions for domestic as well international tourists in Delhi NCR. Hence, the Delhi NCR is preferred for medical tourism as it provide medical services along with other services.

Table 1.3: List of the JCI and NABH accredited Private Hospitals in Delhi NCR

S.No.	Name of Hospital	Location	JCI	NABH
1.	Fortis Memorial Research Institute	Gurugram	√	√
2.	Artemis Health Institute	Gurugram	√	√
3.	Medanta – The Medicity	Gurugram	√	√
4.	B. L.K.M. Hospital	New Delhi	√	√
5.	Moolchand Hospital	N.D.	√	√
6.	Indraprastha Apollo Hospital	N.D.	√	√
7.	Max SS Hospital (Max Healthcare Institute)	N.D.	√	√
8.	Max SS Hospital (Devki Devi Foundation)	N.D.	√	√
9.	Fortis Escorts (Heart Institute)	N.D.		√
10.	Maharaja Agrasen Hospital, Punjabi Bagh	N.D.		√
11.	Escorts Heart Institute & Research Centre	N.D.		√
12.	Sir Ganga Ram Hospital	N.D.		√
13.	Dharamshila Cancer Foundation	N.D.		√
14.	Chacha Nehru Bal Chikitsalaya	N.D.		√
15.	Fortis Flt. Lt. Rajan Dhall Hospital	N.D.		√
16.	Rockland Hospital, Qutub Institutional Area	N.D.		√
17.	Batra Hospital & Medical Research Centre	N.D.		√
18.	Jeewan Nursing Home & Hospital	N.D.		√
19.	Primus Super Speciality Hospital	N.D.		√
20.	National Heart Institute	N.D.		√
21.	Metro Hospital & Cancer Institute	N.D.		√
22.	Jeewan Mala Hospital Pvt. Ltd.	N.D.		√
23.	Delhi Heart and Lung Institute	N.D.		√
24.	Park Hospital	N.D.		√
25.	Sri Balaji Action Medical Institute	N.D.		√
26.	Institute of liver & Biliary Sciences	N.D.		√
27.	RLKC Hospital- Metro Heart Institute	N.D.		√
28.	Metro Hospital & Heart Institute	N.D.		√
29.	Max Smart Super Speciality Hospital	N.D.		√
30.	Khandelwal Hospital & Urology Centre	N.D.		√
31.	Rajiv Gandhi Cancer Institute	N.D.		√
32.	Fortis Hospital, Shalimar Bagh	N.D.		√
33.	Pushpawati Singhania Research Institute	N.D.		√
34.	Action Cancer Hospital	N.D.		√
35.	Saroj Super Speciality Hospital	N.D.		√
36.	Max Super Specialty Hospital, Shalimal Bagh	N.D.		√
37.	Bhatia Global Hospital	N.D.		√
38.	Bhagwati Hospital, New Delhi	N.D.		√
39.	Holy Family Hospital	N.D.		√
40.	Goyal Hospital & Urology Centre	N.D.		√
41.	Tirath Ram Shah Charitable Hospital	N.D.		√
42.	Jain Hospital	N.D.		√
43.	Bhagat Chandra Hospital	N.D.		√
44.	Deepak Memorial Hospital & Medical Centre	N.D.		√
45.	Maharaja Agarsen Hospital	N.D.		√
46.	M.G.S. Hospital	N.D.		√
47.	Sitaram Bhartia Institute	N.D.		√
48.	Shanti Mukund Hospital	N.D.		√
49.	Mata Chanan Devi Hospital	N.D.		√

50.	Sant Parmanand Hospital	N.D.		√
51.	Rockland Hospital, Dwarka	N.D.		√
52.	Cygnus MLS Super Speciality Hospital	N.D.		√
53.	Santom Hospital	N.D.		√
54.	Venkateshwar Hospital	N.D.		√
55.	Maharaja Agrasen Hospital, Dwarka	N.D.		√
56.	Aakash Healthcare Super Speciality Hospital	N.D.		√
57.	Jeewan Hospital & Nursing Home Pvt. Ltd.	N.D.		√
58.	HCMCT Manipal Hospitals	N.D.		√
59.	Mata Roop Rani Maggo Mahindru Hospital	N.D.		√
60.	Kalra Hospital Srcnc Pvt. Ltd.	N.D.		√
61.	Fortis Hospital	Noida		√
62.	Kailash Hospital & Research Centre Ltd.	Noida		√
63.	Metro Hospital & Heart Institute	Noida		√
64.	Neo Hospital (Muskan Medical Centre)	Noida		√
65.	Prayag Hospital & Research Centre	Noida		√
66.	Apollo Hospitals	Noida		√
67.	Surbhi Hospital	Noida		√
68.	Bhardwaj Hospital	Noida		√
69.	Prakash Hospital Pvt. Ltd.	Noida		√
70.	Yatharth Wellness Super Specialty Hospital	Noida		√
71.	Vinayak Hospital	Noida		√
72.	Sumitra Maternity and Nursing Home	Noida		√
73.	Kailash Hospitals Ltd.	Noida		√
74.	Jaypee Hospital	Noida		√
75.	Yatharth Wellness Hospital & Trauma Centre	Noida		√
76.	Felix Hospital, Sector-137	Noida		√
77.	Sharda Hospital	Noida		√
78.	Navin Hospital	Noida		√
79.	Max Multisprecilaity Hospital	Noida		√
80.	Yashoda Super Speciality Hospital, Kaushambi	Ghaziabad		√
81.	Max Super Specialty Hospital, Vaisali	Ghaziabad		√
82.	Yashoda Super Speciality Hospital	Ghaziabad		√
83.	Shanti Gopal Hospital	Ghaziabad		√
84.	Columbia Asia Hospitals	Ghaziabad		√
85.	Narinder Mohan Hospital & Heart Centre	Ghaziabad		√
86.	Aarogya Hospital	Ghaziabad		√
87.	Family Health Care Hospital	Ghaziabad		√
88.	Metro Hospital & Heart Institute	Meerut		√
89.	Meerut Kidney Hospital	Meerut		√
90.	MIMHANS, Neurosciences Hospital	Meerut		√
91.	KMC Hospital & Research Centre	Meerut		√
92.	Paras Hospitals	Gurugram		√
93.	Max Hospital	Gurugram		√
94.	Columbia Asia Hospital	Gurugram		√
95.	Metro Hospital & Heart Institute	Gurugram		√
96.	The Signature hospital	Gurugram		√
97.	Park Hospital	Gurugram		√
98.	Mayom Hospital	Gurugram		√
99.	SGT Medical College Hospital	Gurugram		√

100.	W-Pratiksha Hospital	Gurugram		√
101.	Narayana super speciality Hospital	Gurugram		√
102.	Fortis Hospitals Limited, Neelam Bata Road	Faridabad		√
103.	Sarvodaya Hospital & Research Centre	Faridabad		√
104.	Asian Institute of Medical Sciences	Faridabad		√
105.	Metro Heart Institute	Faridabad		√
106.	RG Stone Urology and Laproscopy Hospital	Faridabad		√
107.	QRG Central Hospital & Research Centre Ltd.	Faridabad		√
108.	Park Hospital	Faridabad		√
109.	QRG Medicare Ltd.	Faridabad		√
110.	Pawan hospital	Faridabad		√
111.	SSB Heart And Multispecialty Hospital	Faridabad		√

Source: Joint Commissioner International; National accreditation board of healthcare (2022)

Table 1.4: List of Government Hospitals in Delhi NCR

S.No.	**Name of Hospital**	**Location**
1.	All India Instituteof Medical Science (AIIMS)	New Delhi
2.	Aruna Asaf Ali Govt. Hospital	Delhi
3.	Acharyaashree Bhikshu Hospital	New Delhi
4.	Attar Sain Jain Hospital	New Delhi
5.	Baba Saheb Ambedkar Hospital	New Delhi
6.	Bhagwan Mahavir Hospital	Delhi
7.	Babu Jagjivan Ram Hospital	New Delhi
8.	Central Jail Hospital	Delhi
9.	Chacha Nehru Bal Chikitsalaya	Delhi
10.	Dadadev Mother & Child Hospital	New Delhi
11.	Deen Dayal Upadhyay Hospital	New Delhi
12.	Deep Chand Bandhu Hospital	New Delhi
13.	Delhi State Cancer Institution	Delhi
14.	Dr. Hedgewar Arogya Sansthan	Delhi
15.	Dr. N.C. Joshi Hospital	New Delhi
16.	Govind Ballabh Pant Hospital (G.B.P.H.)	Delhi
17.	Guru Govind Singh Govt. Hospital	New Delhi
18.	Guru Nanak Eye Center	New Delhi
19.	Guru Teg Bahadur Hospital (G.T.B.H.)	Delhi
20.	Institute of Liver & Biliary Sciences (I.L.B.S.)	Delhi
21.	Institute of Human Behaviour and Allied Sciences	Delhi
22.	Janakpuri Super Speciality Hospital	Delhi
23.	Lal Bahadur Shastri Hospital (L.B.S.)	New Delhi
24.	Lok Nayak Hospital	Delhi
25.	Maharishi Balmiki Hospital	New Delhi
26.	Pt. Madan Mohan Malviya Hospital	New Delhi
27.	Maulana Azad Institute of Dental Sciences	New Delhi
28.	Poor House Hospital	Delhi
29.	Rajiv Gandhi Super Speciality Hospital	New Delhi
30.	Rao Tula Ram Memorial Hospital	New Delhi
31.	Sardar Vallabh Bhai Patel Hospital	New Delhi
32.	Satyawadi Raja Harish Chandra Hospital	Delhi
33.	Sanjay Gandhi Memorial Hospital	Delhi
34.	Jag Parvesh Chander Hospital	Delhi
35.	Ayurvedic & Unani Tibbia College & Hospital	New Delhi
36.	B R Sur Homeopathic Medical College	New Delhi
37.	Nehru Homeopathic Medical College	New Delhi

Source: Delhi Government (2022)

1.5 Significance of the study

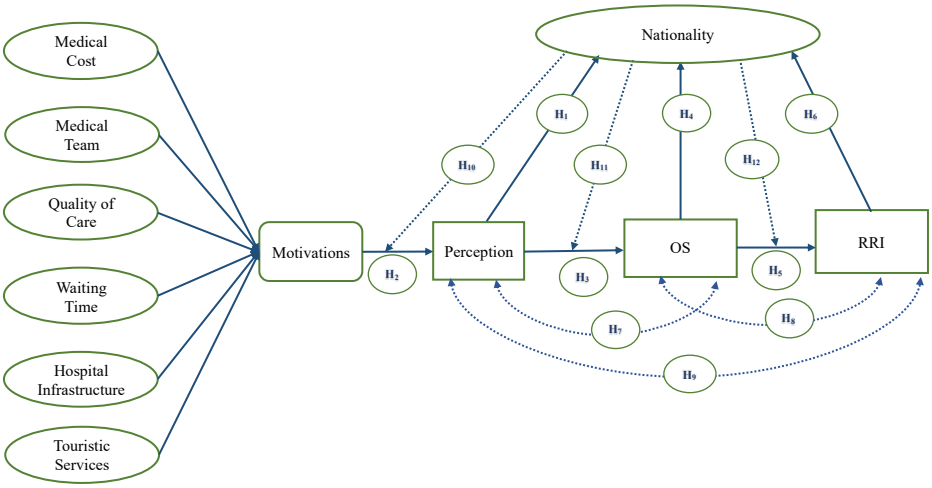
The present study is significant in several ways. The study's findings will deepen knowledge of domestic and international medical tourists' motivations, perception, overall satisfaction, and intentions for repeat visits and recommendation. The study makes an effort to integrate models of motivations, perception, overall satisfaction, revisit intentions, and recommendations in order to create a structural model for medical tourism. It informs medical tourism service providers about marketing strategies to compete in the domestic and international markets. The results can also help destinations to maintain market share and reputation, create quality services, and enhance patients satisfaction.

1.6 Statement of the Problem

During the literature review process, a dearth of literature was found in the domain of the existing research area. This issue was also raised by some researchers (Shukla et al., 2019; Subramanian et al., 2019) and suggested investigating empirical insights of patients in the present study area for bridging the research gap for diverse implications. Therefore, this research is an attempt to conduct a comparative study on domestic and inbound patients' views in Delhi-NCR entitled, "Patients' Perception of Medical Tourism Services: A Comparative Analysis of Domestic and Inbound Patients in Delhi-NCR".

The conceptual model shows (see Figure 1.10) the relationship among patients' medical travel motivations, perception, overall satisfaction (OS) and revisit & recommending intentions (RRI). Further, nationality is expected to moderate the relationship.

Figure 1.10: Conceptual model of the study



Source: Developed by author

1.7 Research Questions and Hypotheses

To examine the conceptual framework, the following six research questions and twelve research hypotheses were developed and explored with significant literature and data from the unit of analysis.

1.7.1 Research Questions

The following research questions will be addressed in this study based on the previous description.

1. Why patients flock to Delhi-NCR for treatment?
2. Do patients' travel motivators have impact on their perception?
3. How inbound and domestic patients perceive medical tourism of Delhi-NCR?
4. Are patients satisfied with the medical tourism of Delhi-NCR?
5. Does patients satisfaction assures revisit or recommendation behaviour from the patients?

1.7.2 Research Hypotheses

The following hypotheses will be proposed in response to these research question.

H_1: *Patients' perception is significant as per their nationality.*

H_2: *Medical travel motivations have a positive impact on patients' perception.*

H_2a: Medical cost have a positive impact on patients' perception.

H_2b: Medical team have a positive impact on patients' perception.

H_2c: Quality of care has a positive impact on patients' perception.

H_2d: Waiting time has a positive impact on patients' perception.

H_2e: Hospital infrastructure has a positive impact on patients' perception.

H_2f: Touristic services have a positive impact on patients' perception.

H_3: *Patients' satisfaction is positively influenced by patients' perception of medical tourism service quality.*

H_4: *Patients' OS is significant as per their nationality.*

H_5: *Patients' revisiting and recommending intentions are positively influenced by patient's OS of medical tourism services.*

H_6: *Patients' RRI is significant as per their nationality.*

H_7: *There is positive relationship between patients' perception and OS with regard to medical tourism services.*

H_8: *There is positive relationship between patients' OS and RRI with regard to medical tourism services.*

H_9: *There is positive relationship between patients' RRI and perception with regard to medical tourism services.*

H_{10}: *Nationality moderates the relationship between patients' motivations and perception with regard to medical tourism services.*

H_{11}: *Nationality moderates the relationship between patients' perception and OS with regard to medical tourism services.*

H_{12}: *Nationality moderates the relationship between patients' OS and RRI.*

1.8 Research Objectives

The purpose and aims of this study are based on the identification of gaps in the research area. The following objectives were set for this study in order to achieve the goal.

1. To investigate the factors of medical tourism services influencing motivation of domestic and inbound patients for medical travel to Delhi- NCR.
2. To analyse the perception of domestic and inbound patients towards medical tourism service quality.
3. To examine the influence of patients' medical travel motivations on their perception.
4. To assess the overall satisfaction of domestic and inbound patients with medical tourism services.
5. To examine the domestic and international patients' revisiting and recommending intentions.
6. To examine the relationship between patients' perception, OS and RRI.

1.9 Philosophical foundations of the study

The objective of this research was to compare the perception of domestic and inbound medical tourists in Delhi NCR about medical tourism services. This included a review of the previous researches to determine the several factors that influence medical tourists' choice to visit Delhi NCR. Following the review, an integrated framework was developed to guide the theoretical model's development. The quantitative technique was used because of the exploratory character of the present study and the requirement for a rich and in-depth knowledge of the perception of domestic and inbound medical tourists.

The questionnaire technique guided the collection of data, analyzation, and interpretation phases of the study. Domestic and international medical tourists treated in Delhi NCR hospitals were the study's main participants. On the

data, exploratory factor analysis (EFA) and SEM techniques were analysed to test the research model and propositions. In the research methodology chapter, the philosophical underpinnings and research procedures are detailed (Chapter 4).

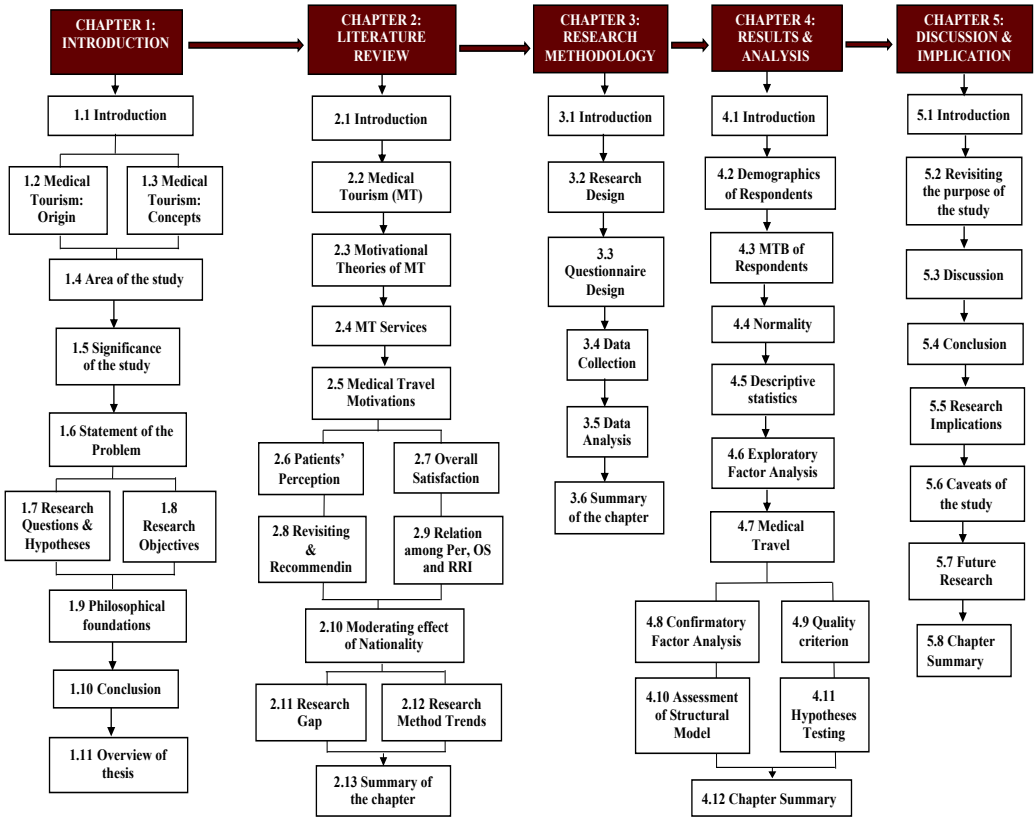
1.10 Conclusion

This introductory chapter presented a theatrical background of the thesis. The main concepts of the study including history of medical tourism, global and Indian perspective of medical tourism, research area of the study, problem of the statement are discussed. The succeeding chapter reviews the relevant literature and highlights research gaps and theoretical for the study.

1.11 Thesis Overview

The thesis will be organised logically, introducing both the course of the research and the conclusion of the study. This study makes an effort to give all the necessary details and a description of the procedures for achieving the goals of this thesis. As seen in Figure 1.11, the thesis will have five chapters that go into more detail.

Figure 1.11 Overview of Chapter 1



Source: Developed by the researcher

Chapter 1 includes the study's brief history and introduction, and also the problem statement, research objectives and questions.

Chapter 2 presents and analyses previous studies and literature on medical tourism and constructs related to the study in order to determine research gaps.

Chapter 3 explained the research methodology that is used in the current study. Information about the study's respondents, collection methods, research instruments, and statistical analysis of the data are all included.

Chapter 4 presents the finding from the research respondents, which include real-world contexts centred on interpretations and assessments of the unit of investigation and analysis. It summarises the results of data analysis and hypothesis testing.

Chapter 5 discusses the research questions and hypotheses. It also proposes research conceptual models based on the unit research methodology and analysis unit. Lastly, it describes the study problem and explains how the study's objective was met, and also possible new knowledge contributions. However, a few limitations remain, and future research recommendations are made.

CHAPTER: 2
LITERATURE REVIEW

"If you believe everything you read, you should not read." – Japanese proverb

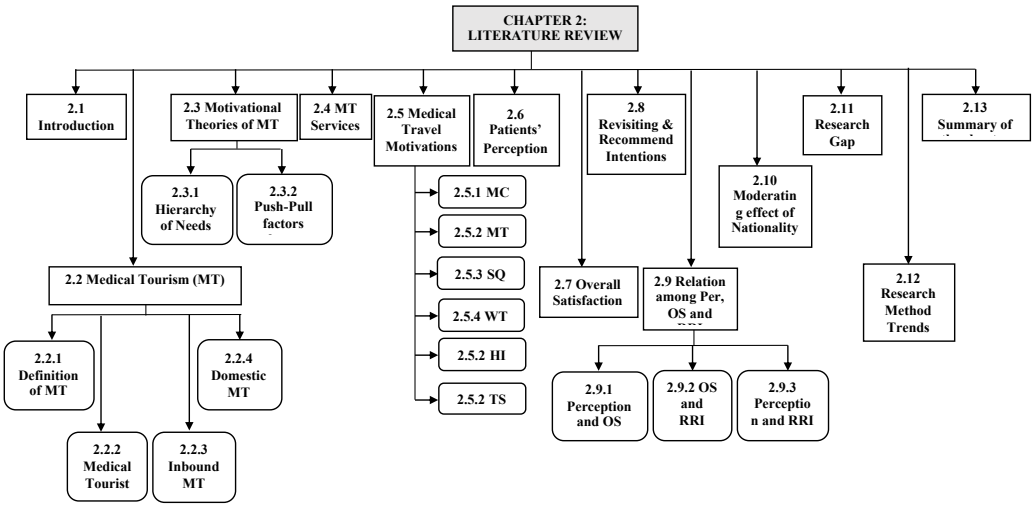
LITERATURE REVIEW

2.1 Introduction

The review of literature is a collective assessment and explanation of literature mainly which is both "general" and "specialised" in terms of its usefulness to the statistical research problem's specific area and topic. A literature review's goal is to illustrate and summarise existing knowledge in the area while making no new contributions. Therefore, researcher has adopted systematic literature review approach to structure research questions, identify research gap, appraise literature, extract data, analyse and synthesize and report the research results. During literature review, the researcher has searched literature of quality journals (generally indexed in Scopus, web of science, SCI, etc), thesis from various national and international institutes, reports of governments and various international bodies, JCI & NABH accredited hospital websites, and many other sources for real research problem and appropriate recommendations. The content analysis was framed generally on the basis of study variables in each section of the literature review chapter.

This chapter introduces the research framework, which includes several concepts of medical tourism which is relevant with the current study. In this chapter, the emphasis is on medical tourism services, medical travel motivators, patient perception, satisfaction, and intent to return (see figure 2.1 for the overview of the chapter). These aspects of the study allow for the exploration of research gaps and the theoretical defence of the study hypotheses. Accordingly, the present chapter reveals the research methodological patterns and trends in the field of medical tourism, allowing the researcher to employ appropriate techniques in the current study. The literature review will provide the reader with an overview of the research area and the questions it is attempting to answer.

Figure 2.1: Overview of Chapter 2



2.2 Medical Tourism

Medical tourism is a niche form of specialised tourism developing increasingly across the world (Whittaker, 2008). In terms of potential earnings and socio-economic development, medical tourism is a rhyming bird whose melody is pleasing to the ears (Mehta & Iqbal, 2019). Medical tourism industry has become increasingly popular in modern society, with patients travelling from all over the world to receive affordable health care and treatment (Chandra, 2019). The term "medical tourism" was developed by travel and tour operators along with the media to describe the rapidly growing phenomenon of people travelling overseas for high-tech medical services (Mohamad et al., 2012). Moreover, it is an economic activity involving the exchange of services that brings together two of the major industries: medicine and tourism (Dawn & Pal, 2011). Medical tourism includes both routinely covered procedures (e.g., joint replacement procedure) and elective plastic procedures (cosmetic), and also unique tourism opportunities (e.g., heritage sites) (Chaudhary & Agrawal, 2014).

2.2.1 Definition of Medical Tourism

There isn't a universally agreed-upon definition of medical tourism. Therefore, it is critical to comprehend what medical tourism entails. Medical tourism definition have been developed by several researchers. Medical tourism is a global industry where patients travel to another state or country to improve or restore their health (Amodeo, 2010). An effort made by a tourist attraction or destination to draw visitors by purposefully marketing its health-care services and facilities in addition to its pretty standard tourist hotspots, according to Goodrich and Goodrich (1987). Glinos and Baeten (2014) define medical tourism, as a patient's activity of travelling outside of their home country to seek healthcare services due to a perceived disadvantage in their home country's healthcare system. Singh and Gill (2011) define medical tourism as the proactive pursuit of activities that improve one's wellbeing and health by travelling from one's home to some other location.

Individuals travel long distances to foreign lands for dental, clinical, and surgical care thereby taking usual vacations. Mueller and Kaufmann (2001) defined this practise as medical tourism. Medical tourism, according to Loverseed H (1998), is a set of products and services intended to encourage patients to

preserve and enhance their wellbeing by integrating vacationing and different leisure activities in a destination other than their own country. A Lebanese mother, for example, travels to Amman with her child for elective laser surgery at a fraction of the cost she would expend in Lebanon and uncovers the Petra, a seven wonders of the world. Jordanian medical tourism is exemplified by the example above (Anshasi & Alsyouf, 2020).

In regardless of the fact that there are plenty of pertinent term used to define medical tourism in the literature, this research will use a definition that is more comprehensive. For the purposes of this study, individuals who journeys from their residential place to a destination at different country which involves more than one night's worth of medical treatment along with their travels (Tourism Research and Marketing, 2006).

Overall, medical tourism is an intriguing phenomenon that combines medical services with a fun vacation. Medical tourists travel to other countries to check on their health, maintain their health, or completely recover from a disease; they participate in other countries' healthcare systems; and, simultaneously, these patients can be attributed to the tourism sector because they go through almost all of the stages that every other tourist would go through, which include exposure to another nation's culture, exposure to a foreign language atmosphere, and reflection on the trip (Filistianova, 2017). Several definitions of medical tourism exist in the literature given by different researchers and organizations as shown below (table 2.1).

Table 2.1: Definitions from various researchers

Authors	Definition
Carrera & Bridges (2006)	Medical tourism is defined as an organized trip from one's home country to host country for the reason of restoring one's wellbeing through medical assistance.
Connell (2006)	Medical tourism is a form of massive public culture in which people travel overseas for healthcare, dental, or surgery care while on vacation.
Deloitte (2008)	"The act of travelling to another nation in search of specialized or cost-effective medical care, well-being, and

	recovery of acceptable quality with the assistance of a support system" is defined as medical tourism.
McKinsey (2008)	Medical tourism is considered a patient travelling for sole reason of receiving medical treatment in a different nation, with the exception of emergency visitors, wellness visitors, emigrants seeking medical care in their home nation, and patients going to neighboring areas for the nearest available treatment.
Crooks et al. (2010)	Medical tourist is one who visit another country or state with the aim of receiving non-emergency medical care.
Voigt et al. (2011)	Wellness tourism encompasses all of the relationships formed as a result of a trip taken by people whose prime motive is to improve their quality of life and wellness and one must probably spend one night in any accommodation facility designed to facilitate and enhance people's physiological, mental, spiritual, and/or social health.
K. Pollard (2011)	A medical tourist is someone who journeys outside of country of residence for surgical procedure or elective medical treatment.
OECD (2011)	Medical tourism is the process when people choose to cross international boundaries for some particular medical treatment, such as wide range of medical facilities (dentistry, plastic and elective procedures, and fertility treatment).
Wongkit and McKercher (2013)	Medical tourism defined as people travelling to a given location for the main intention of receiving medical services and care.
UNWTO (2018)	Medical tourism includes the utilization of healthcare services and resources for healing that are based on scientific evidence (both invasive and non-invasive). Diagnosis, surgery, treatment, prevention, and rehabilitation are all possible options.

2.2.2 Definition of Medical Tourist

The UNWTO defines tourists as “any person travelling to a place other than that of his/her usual environment for less than 12 months and whose main purpose of the trip is other than the exercise of an activity remunerated from within the place visited”. When it comes to the concept of medical tourism, it's absolutely essential to find out who uses these services. These tourists—often referred to as "medical tourists"—were the pioneers of the growing "medical tourism" sector. Medical tourists are people who travel overseas for medical services or treatment and then engage in tourism activities after they have recovered, such as shopping, beach tours, or city tours (Tong, 2018). Medical tourists, according to Tourism Research and Marketing (2006), are people who spend at least one night away from their residential place travelling from their current residence to a desired location where medical and surgical intervention is provided or performed.

There are four types of Medical Tourists (Connell, 2011). To begin, a medical tourist is somebody who seeks medical assistance while on vacation in another country for injuries or health problems. Second, someone who travels to another country for medical care that is unrelated to their trip and decides on a procedure while there. A medical tourist, on the other hand, is someone who travels to another country primarily for medical attention but also to take advantage of vacation opportunities. Finally, a medical tourist is someone who only visits for medical reasons and does not participate in any vacation activities (Connel, 2011).

According to Deloitte (2008), outbound, inbound, and intra-bound or domestic tourists are the three category of medical tourists. Inbound medical tourists are foreigners travels to a specific country, whereas outbound medical tourists are locals who travel to another country. A Nigerian who travels to India for medical treatment, for example, is considered an inbound medical tourist by India but an outbound medical tourist by Nigeria. A domestic medical tourist is a resident of one country who seeks medical treatment within that country. Domestic medical tourists include South Indians who visit hospitals in the Delhi NCR.

2.2.3 Inbound Medical Tourism Perspectives

The notion of international medical travel is worldwide (Hadian et al., 2019). Inbound medical tourism is the process by which patients from their residential country travel to other country for the purpose of receiving medical treatment. According to a report on medical tourism by Deloitte (2008), inbound medical tourism is becoming more popular as a result of its inherent economic benefits. According to a study, the focus in Korea is primarily on the flow of foreign medical tourists (Lunt et al., 2014), which is consistent with a number of developments in other countries including Thailand, India, Singapore, Malaysia, and Turkey (Chee, 2007; Mudur, 2004; Reisman, 2010; Whittaker, 2008).

The main factor driving the explosive growth of international medical tourism is the high cost (Glatter, 2012). Some foreign countries' economic and population growth has resulted in a demand for medical facilities that their current policies and infrastructure are unable to meet (Thomas, 2010).Further to that, if a medical tourist's native place does not offer the medical service wanted, or if the medical tourist somehow doesn't genuinely think local care is comparable to that offered in the more advanced countries such as United States, that person may be more prepared to travel abroad for treatment than other citizens of that country (Keckley & Underwood, 2008).

In countries with worldwide healthcare systems, such as the United Kingdom and Canada, lengthy wait times for surgical intervention are a major driver of inbound medical tourism (Thomas, 2010). A significant number of medical patients in Norway, Sweden, Canada and Australia have waited for more than 4 months, seeking cosmetic procedures in 2010 (OECD, 2011). The most important factors to consider when determining the capability of a destination in attracting foreign patients includes institutional environments, hospital resources, and geographic attractiveness to foreigners (Al-Amin, Makarem, & Pradhan, 2011). India is very interested in promoting inbound tourism (attracting tourists from outside India) for the additional benefit of generating foreign exchange in addition to creating jobs. One particular segment of inbound tourism which attracts the interests of India and its hospitals is Medical Tourism, where people from one place visit another place for medical treatment.

2.2.4 Domestic Medical Tourism Perspectives

The past research (Deloitte, 2008; Lunt et al., 2014; Reisman, 2010) on health tourism has concentrated primarily on the import side of the industry, frequently, on citizens of developed countries travelling to developing economies for surgical therapy. However, patients who travel abroad for procedures or medical treatments may not be the only ones who fall under the definition of medical tourism. Additionally, there is a significant portion of patients who travel domestically for medical care. This practise is known as domestic or intercountry medical tourism (International Medical Travel Journal, 2010). The notion of domestic medical tourism, also renowned as intrabound trip, and its consequences on the economies of the USA were first introduced by Hudson and Li (2012).

However, travel for health is very important and it has a significant influence on the growth of nation's economic (Ehrbeck et al., 2008), although due to few reason, medical tourism studies haven't concentrated more on domestic tourists (Reddy et al., 2010). Domestic medical travel is the act of travelling within one's own country for medical attention from one city or state to another. As a result, several patients from remote and rural areas are forced to go to another region, main city, or state within the country in order to receive prompt medical treatment or surgery.

Domestic medical tourism, according to Glatter (2012), will become a future trend for seeking the optimal healthcare at the lowest cost. The focus will be on the quality of healthcare delivery rather than low cost when it comes to domestic medical tourism. According to Medhekar (2020), the process of patients travelling from rural and suburban areas to capital cities across the Australian continent is considered as domestic medical travel. Domestic medical tourists, according to the author, are interested in medical treatment or surgeries to enhance their health and wellbeing, such as diagnostics, orthopaedic surgery and cardiac care, radiotherapy, multiple surgeries, fertility or cancer treatment, neurosurgery, and so on.

Patients are also influenced to travel domestically for treatment by shorter distances compared to travel overseas, the removal of language, food, and cultural barriers, the lack of medical visa requirements, and the fact that hospitals are covered by insurance. Roy (2020) mentioned that domestic patients' expectations

of government hospitals have decreased due to a lack of post-treatment follow up by doctors and medical experts, biased medical policies, and a lack of nursing care and concern for medical tourists in India. The author also discovered that excellent healthcare infrastructure, qualified doctors, the similar culture and language, and easy access to local facilities are important factors that influence domestic tourists' decisions to travel to Jaipur hospitals for better medical treatment. However, Medhekar (2020) investigated why Australia's major private hospitals do not promote domestic medical tourism. Hence, he recommended that patients who would otherwise travel foreign for healthcare should be informed about accreditation, cost-effectiveness, short wait periods, world-class quality care, and the availability of highly specialised healthcare facilities at home.

Therefore, Hudson and Li (2012) have highlighted a fact that medical tourism research is focusing on international standpoint and the trend is still continue as domestic medical tourism research is not getting much attention from the researchers. There is need of robust research in domestic medical tourism domain because according to Dasthagir et al. (2015) and Dasthagir & Arul (2015), this domain is neglected area of social science research. Therefore, a wide research gap exists in the domain of domestic medical tourism which provides ample scope to conduct research in on different aspects in the field. Shukla, R. et al. (2019) and Subramanian, K. et al. (2020) has also felt the dearth of the realistic research in the present study area and strongly suggested conducting research on medical tourists' perception, overall satisfaction and revisiting and recommending intentions. Besides, maintaining both foreign and domestic medical tourism requires a delicate balance.

2.3 Motivational Theories of Medical Tourism

Using existing motivational theories such as the push-pull theory and Maslow's hierarchy of needs, various researchers have developed motivational theories in the context of health tourism. The researcher will discuss the two main theories for medical tourist motivation in this section.

2.3.1 Hierarchy of Needs for Health Care

Using Maslow's main theory of hierarchy of needs, Carrera and Vivien (2012) proposed the hierarchy of needs for health care. Individuals with varying levels of health-care needs will seek out healthcare providers with varying forms

and characteristics. When looking at the hierarchy of healthcare needs in conjunction with health tourism, there are four phases to consider.

Basic Healthcare: When a medical tourists seeking basic clinical care such as physicals, dental treatment, immunizations, and preventive screening. Patients who need this level of healthcare will primarily focus on tourism. They look for standard medical services at an affordable price, especially if there is indeed an advertising or special package, and they frequently pick medical providers who are located in the tourism area if there is indeed an advertising or special package.

Necessary Medical Treatment: medical tourists who must receive medical care, such as surgery, treatment for a variety of diseases. As a result, they will primarily preferred medical treatment and related services. In terms of sightseeing, they will most probably prefer short trip closer to selected medical destinations that are appropriate for recovery of patients.

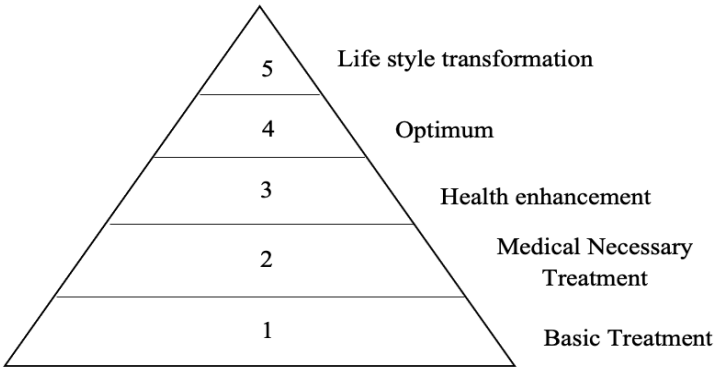
Enhancement of Health: an individual in need of additional medical care or attention. Whether to fill, modify, remove, or operate on certain organs or part of the body, such as cosmetic procedure, Laser operation, loss of weight, or fertility surgery. A medical tourist with this level of healthcare needs will primarily consider the prerequisites of medical services when planning their vacation to take place after their medical procedure.

Optimum Health: patients who are in excellent health, although who need to maintain their good health or improve their health. A wellness package including spa, acupuncture, massage, detoxification, traditional medicine and holistic healthcare services would appeal to this group of medical tourists. Medical tourists with this level of health care need are primarily interested in tourism and frequently use health care services in tourist areas.

Carrera and Vivien's (2012) Hierarchy of Medical Tourism Health Care Needs has been modified by Kanittinsuttitong, N (2018). From the optimum level of treatment, the *lifestyle transformation* level expands. This type of medical tourists wants to enhance their way of life by living in harmony with nature on both a physical and mental level. Weight loss through lifestyle changes, synchronisation of the bodies, minds, and nature, body detoxification, and emotional detoxification are some of the services offered. It takes about 5-7 days to complete the treatment. They frequently go sightseeing near the healthcare facility. The variety of facilities or services, image, and a referral from a

recognised person are all important attributes for this category of medical tourist. The final model of Hierarchy of Medical Tourism Health Care Needs is illustrated in figure 2.2

Figure 2.2: Hierarchy of Medical Tourism Health Care Needs



Source: Carrera and Vivien, (2012); Kanittinsuttitong, (2018)

2.3.2 Push-Pull factors theory

According to the push-pull theory of migration (Lee, 1966), individuals are typically influenced by factors that push them away from their home country, driving them to leave, and factors that pull or attract them to a new country (The Levin Institute, 2012).

The push-pull theory has an impact on tourism growth (Weaver and Oppermann, 2000). *Push factors* in tourism include factors such as a strong economy in the home country, a society that is obsessed with tourism or values it, changes in demographic including nuclear family that make it comfortable to travel along with, technological advancements, particularly communication technology such as the internet, and countries that allow their citizens to travel abroad. *Pull* factor in tourism include factors such as, destination image, attractive geographical locations, good infrastructure, quality of care, reasonable cost, stability & peace, and support from government's policy.

Crooks et al. (2010) found that both push and pull factors influenced patient decision-making when considering travel for medical treatment in their scoping review of health tourists' experiences. Costs were a *push factor*, as were wait times for procedures due to a lack of insurance or underinsurance (Crooks et al., 2010). Quality of service, physical facility, physician credentials, speaking the health travellers' language, and the country's political climate were all noted as *pull factors*. Lengthy waiting times, high costs, unavailability of variety of treatments such as in vivo fertility surgery, and a lack of confidence are *all push*

factors identified by Runnels & Carrera (2012). On the other hand, the *pull factors* include the country's image in both medical services and tourism, the variety of medical and tourism services available, and the affordable/reasonable cost.

Fetscherin and Stephano (2016) discovered that patients' medical travel motivation is influenced by two types of factors. The first are country-specific push factors, such as the health system of a country where possible medical tourists reside, expected long waiting times for health care services, medical insurance, or the individual's personal preference. The second type of factor that captivates potential medical tourists is health-related factors, including cost-cutting potential and cultural factors. Dasthagir and Jalil (2015) emphasized that domestic medical tourism *push factors* include, the lack of hospitals, medical equipment, social supports, treatment references, and the non-availability of medical ambulances. Standard treatment, advanced medical care, and the reputation of the medical institution are attracting health seekers in the study area, according *to pull factors*.

2.4 Medical Tourism Services

The American Marketing Association was one of the first to define services, defining them as "activities, benefits, or satisfactions offered for sale, or provided in connection with the sale of goods" in 1960. According to this definition, services are only offered in conjunction with the sale of products or goods. Furthermore, in 1963, Regan proposed a new definition, stating that "services represent either intangibles yielding direct satisfactions (transportation, housing, etc.) or intangibles yielding joint satisfactions (credit, delivery, etc.) when purchased either with commodities or other services." Initially, services were viewed as pure intangibles which delivers customer satisfaction and marketed in the same way that tangible products are. Similarly, Stanton defined service in 1974, which he defined as "separately identifiable, intangible activities which provide want satisfaction when marketed to consumers and/or commercial users and are not necessarily tied to the sale of a product or another service." Hence, service can be understand as the activity or set of activities instead of a tangible thing that requires interaction between both the service provider and the client but it does not transfer ownership.

Medical tourism refers to all of the services that various health and related agencies provide to a person. Medical tourism services are those that use a variety

of resources to meet patients' health-related needs. These are provided by the healthcare system, which includes the management and organisational structure of the health sector. Medical tourism services include: (1) tele-consultation with a doctor and decision to conduct a medical treatment, (2) medical treatments by reputed health professionals, (3) medical care and services and (4) payment of the medical price of the treatment and other services by the medical tourists (Vikuk & Dryglas, 2019). Preventive, curative, and rehabilitative components should all be included in medical tourism services. A network of different health centres provides these services. The vast majority of healthcare facilities are offered by the private sector.

2.5 Medical Travel Motivations

Motivation is defined as a "psychological state in which an individual is focussed toward and aspires for a sense of fulfilment" (Jang & Wu, 2006). It is thought to be one of the most major factors determining travel behaviour. Tourist motivation is a key element in understanding behaviour of tourists in terms of needs, wants, and interests, as well as destination choice (Chan & Baum, 2007). Medical tourism differs from leisure tourism in that patients travel specifically for the purpose of getting treatment (Khan et al., 2017). Medical tourists all over the world travel with different motivations in their thoughts (Hadian et al., 2019). Medical tourism's growth in the healthcare sector is being fuelled by a number of factors.

In 2013, Singh conducted research that disclosed four major motivators for medical tourists. These are recommendations from local doctors, healthcare services and facilities, general tourism supply, hotel stays, food and beverage, and governmental policies at the international destination. Similarly, Oberoi and Kansra (2019) identified the following motivating factors: availability of doctors and physicians, affordable healthcare, hospital accreditation, certification, and shorter wait times for medical care. Medical tourists' travel motivations were classified as cost-related, travel-related, or procedure-related (Crooks et al., 2010).

According to Bakshi and Verma, 15% of domestic medical travels were for medical purposes to other states (2013). The author made the argument that people moving to urban hospitals for better healthcare is primarily due to a lack of adequate health infrastructure. In addition, a special trinity of elements—high-

quality medical services or facilities, skilled, qualified healthcare professionals, and attractions—is a significant contributor to the growth of domestic medical tourism. Similar to this, according to Medhekar (2020), the rise of domestic medical travel in Australia has contributed by few factors. These factors include a lack of medical facilities, the inaccessibility of surgery and treatment, long wait times in government hospitals, advanced technology, and the quality of service in urban areas. Based on reviewed literature, the following *medical tourist motivational factors* are identified:

2.5.1 Medical Cost (MC)

The most significant medical travel motivational factor is cost, which includes all costs associated with treatment, travel, lodging, and insurance (Crooks et al., 2010). Patients consider cost as an essential aspect when planning to travel for medical (Jindal & Yashika, 2019). Cost is also a major motivator for patients to receive medical services or facilities outside of their own country. The effective pricing of quality medical services and facilities is a reason that boosts medical tourists for medical travel. Medical tourists visiting other countries for healthcare because of many pull factors including low cost (Kim et al., 2019).

According to Rai et al. (2014), high treatment costs encourage patients to seek out cheaper options to receive the same health related services elsewhere. According to Turner (2007), the high costs of medical procedures and health insurance in the US are the main reasons for medical travel. Furthermore, the author has discovered that cost is a major factor in why patients in the United States prefer medical tourism. Similarly, Noree et al., (2014) found that the majority of patients from the UK travel for relatively low-cost procedures, which is likely to be a major factor. Consumers with discretionary medical needs from developed markets, particularly the United States, seek lower costs (Ehrbeck et al., 2008).

However, there is a possibility of receiving a massive number of medical tourists from France, Canada, Germany, the United Kingdom, and the United States, where demand is high for outbound medical tourism due to expensive treatments (Rai et al., 2014). Surgery costs 30% to 70% less in developing medical tourism countries than in the United States (Sarwar, A et al., 2012). The most frequently quoted statement in the media is that medical treatment costs, including travelling costs, are a fraction of those incurred by medical tourists in

their residential countries (Golikeri, 2009). Increased disposable income in developed countries, according to Oyewole (2001), allows the purchase of medical travel services in developing nations, who offer pocket friendly treatments.

The most important attribute of medical tourism for developing nations is that they offer high-quality medical services at cheaper costs, considered as a major motivator for medical tourists who travelling foreign for medical treatment. In their study, Chaudhary and Agrawal (2014) discovered that the main reasons for the growth of medical tourism, as perceived by service providers, are low costs. People from both poor and wealthy countries seek affordable and high-quality medical services in other countries due to high costs in their home countries or a desire to obtain high-quality services at a lower cost (Goodrich & Goodrich, 1987).

Connell (2006) claims that Thailand, Malaysia, and India attract a large number of medical tourists due to the lower cost of medical treatment and procedures, which are 20% to 25% less in cost than those offered in many other developed regions. The development of the private healthcare sector in emerging nations like India, Singapore, Thailand, and some Latin American countries attracts foreign patients seeking relatively less expensive care: the uninsured and underinsured (Dawn & Pal, 2011). The medical treatment cost in their own country was a major motivation for medical travellers to India and China seeking overseas medical care (Alsharif et al., 2010).

India is providing health and medical services at international standards at an affordable cost (Ahire et al., 2020) and has effectively closed the door to the rest of the world seeking cost-effective treatment in India (Vitthal et al., 2015). The cost of treatment in India is widely assumed to be affordable (Subramanian et al., 2020). India was "one of the lowest cost of all medical tourism destinations, offering a wide variety of procedures at about one-tenth the cost of similar procedures in the United States," according to the Medical Tourism Market Report: 2015 (Rao & Choudhury, 2017). According to Gupta et al. (2015), 91 percent of patients stated that they travelled to India for cost effective medical procedures, and 87 percent said the cost of travel and stay was affordable.

2.5.2 Medical Team (MT)

Medical tourists place a high value on the nurse and staff's professionalism and demeanour toward them, so "administrative working excellence" is a key factor in medical tourism (Shukla et al.,2019). The most common challenge is the lack of continuous care in medical tourism, as medical tourists typically return home after a brief recovery period of one or two weeks (Kim et al., 2019). Prakash et al. (2011) identified four medical tourism concerns at the procedure stage: doctors' competence, staff's competence, hospital management's professionalism, and the ease and care available during this stage. Another study by Nazem and Mohamed (2016) found that there was effective communication between the staff and the medical tourists, but that more one-on-one time with their doctors was recommended.

India possesses a significant reputation among medical tourists thanks to its well-trained workforce and the presence of experienced doctors whose names have been added to the Padma-Shri awardees list in recognition of their achievements in the field of medicine. One of the benefits of seeking treatment in India is the acceptance of the language as a result of increased education. The physicians, the nurses and paramedical staff, all have good communication skills with fluent English speaking (Garg et al., 2020). According to Kumar and Raj (2015), Indian hospitals have a large pool of good English-speaking physicians, paramedical, and other hospital staff, as well as guides.

According to Chaudhary & Agrawal (2014), one of the main reasons for rise of India as a major healthcare spot is the presence of internationally renowned Indian doctors. In the United States alone, there are over 35,000 specialty doctors of Indian descent. Indian nurses are in high demand, and their compassionate approach to treatment is well known. According to Mehta and Iqbal (2019), the Indian medical tourism industry benefits from highly professional and trained experts, which sets it apart from other competitive countries. According to Ahire et al. (2020), India also excels in reputed health care professionalism and quality nursing facilities. It is rightly said that in India “To Cure with care is a tradition”

2.5.3 Quality of care (QC)

Quality of care is defined as "a global judgement or attitude relating to the overall excellence or superiority of the service" (Zain et al., 2017). Patients are primarily concerned with the excellent treatment received, as well as the ease with

which they can obtain it (Prakash et al., 2011). Non-clinical and clinical aspects of treatment work together to ensure treatment quality. Patients value both when deciding where to receive treatment, according to all medical travel providers (Agrawal & Chaudhary, 2014). In a study published in 2014, Markovic et al found that patients give priority to the neatness and cleanliness of the equipment, as well as the reliability of service delivery.

Another important factor for patients considering medical tourism is the assurance of privacy and confidentiality during treatment (Lunt et al., 2011). According to a 2015 study by Loncaric et al., medical rehabilitation services improved patient mobility, reduced medication addiction and physical pain, ability to carry out daily work and increased energy levels. Another study discovered that, when compared to other services, healthcare quality of care is extremely complex. The paper provides a fresh perspective on how the concept of quality of service has been adopted in the healthcare sector (Al-Damen, 2017).

Medical tourism selection is influenced by the types and availability of various treatments, which improves the quality of medical services. Consumer trust and likely facility selection are influenced by the general reputation of the hospital providing health services in terms of quality of care, safety, cleanliness, and other amenities (Subramanian et al, 2020). Because of the high quality of medical care, people from developed countries are travelling to developing countries (Nazem & Mohamed, 2016). India is having the highest qualities of medical tourism destinations, offering a vivid range of treatments or procedures (Rao & Choudhury, 2017).

2.5.4 Waiting Time (WT)

International medical travel is motivated by factors such as long wait times at home or a lack of access to care. Leading to heavy wait times for services or a lack of available treatments in their home countries, many patients travel from developed to developing countries (Kim et al., 2019). The "lengthy waiting time" in one's home country is among the most crucial considerations when deciding whether to seek medical care abroad. It is recommended that hospitals maintain short waiting times, as it leads to medical tourists to receive treatment in a foreign country (Subramanian et al., 2020). Despite the fact that both Canada and the United Kingdom provide universal healthcare coverage, most patients in both countries have to face a waiting time for elective procedures, according to

Turner (2007). Residents are encouraged to participate in medical tourism because the wait time for certain procedures in the United Kingdom and Canada can be more than 18 months (Altin et al, 2011).

According to Connell (2006), medical tourists in most developed countries must wait a long time for treatment under various schemes such as the National Health Service in the United Kingdom. According to another study, patients in the UK, the USA, Canada, and other developed countries must wait for major surgery, which can take months. Lengthy waiting periods for treatments in developed countries, according to Golikeri, 2009, are among the reasons for medical travel. Though, there is a possibility of receiving the greatest number of foreign tourists from the United Kingdom, Germany, the United States, France and Canada, where outgoing medical travel is in high demand due to long waiting lists (Collins et al, 2019).

Foreign patients would rather not wait for medical services underneath the government health insurance system, therefore emerging economies including, India, Thailand, Singapore, and a few American countries attracts them (Dawn & Pal, 2011). Hence, a massive foreign medical tourists from the developed nations have visited India for medical treatment (Kumar & Raj, 2015). Thus, India has a near-zero surgical waiting time (Singh, 2019), which is a plus for Indian medical tourism (Prakash et al., 2011).

Similarly, long waiting time in government hospitals is one of the motivational factor for domestic patients in Australia (Medhekar, 2020). However, Roy (2020) has identified that lengthy waiting time for reports and medication is a concern for domestic patients visiting hospitals in Jaipur.

2.5.5 Hospital Infrastructure (HI)

The destination infrastructure factor informs patients about the range of medical related and other facilities, including lodging options, that are available at the destination point and how easy it is to find their way around (Khan & Alam, 2014). According to Kim et al. (2019), high levels of medical technology are more emphasised in the healthcare sector because advanced equipment and other diagnoses systems are essential for check-ups and treatment procedures.

However, for medical patients, technical advancement should be a top priority because treatment procedure is totally dependent on accurate disease diagnoses. The demand for medical tourism for competitive nations began with

indigenous technology and methods of providing the best healthcare service (Mehta & Iqbal, 2019). Accreditation is also important because it builds trust in the healthcare system. The above confidence grows if certification is supported by a link to renowned hospitals and healthcare systems in developed nations (Rao & Choudhury, 2017).

The accreditation organisations such as JCI and NABH accredit almost all Indian hospitals that serve medical tourists (Kumar & Raj, 2015). In addition, Indian hospitals have a wealth of high-tech equipment for various procedures such as Cyber knife, IMRT, Gamma knife, Novelix TX, IGRT, brain suite and so on (Garg et al., 2020). Because of advancements in medical care, India has a stronghold among medical tourists (Garg et al., 2020). According to Mehta and Iqbal (2019), continuous infrastructure development can help India compete with competitors claiming to be the best and most preferred medical tourism destination. They went on to say that India's world-class facilities and infrastructure will make it the best medical tourism destination in the world.

2.5.6 Touristic Services (TS)

Medical tourism agencies act as intermediaries between medical tourism patients and medical tourism agencies, arranging comprehensive packages that include medical and travel services (Garg et al., 2020). The websites of medical tourism agencies provide useful information to patients, including accredited hospitals, reasonable prices, time savings, unique experiences, dependable care and high service quality (Hwang et al, 2018). Medical travel facilitators, according to Mohamad et al. (2012), have a direct impact on the destination selection choice of medical tourists and the medical tourism industry. It is backed up by Filistianova (2017), who found that medical tourism in Finland necessitates the presence of an operator and improved marketing to attract potential Russian customers.

In certain departure countries, the availability of tour operators to assist with making medical travel packages, including communicating with doctors, and planning aftercare can serve as a motivator for those who are hesitant to make the plans and bookings by self (Mohamad et al., 2012). Customers benefit from travel packages provided by tour operators because of the excessive stress and less personal time associated with the character traits of society today (Kamassi et al, 2019). Many people find the idea of joining recuperation in an exotic holiday spot

with a medical treatment appealing (Connell, 2006). Patients may think about the possibility of travel and tourism when deciding whether or not to go to medical tourism.

Certain travel-related elements, such as the destination location, may serve as deciding factor on medical tourism in the end (Nachimuthu & Krishnaiah, 2018). Apart from medical treatment, Chinese potential medical tourists, according to Ye & Assenov (2017), prefer shopping and sightseeing. The environment of a medical tourism destination includes the climate, tourist attractions, and other amenities that can improve the destination's attractiveness (Singh, 2019). Due to its rich cultural diversity, India has a stronghold among medical tourists (Garg et al., 2020). Foreign patients are drawn to India due to its beautiful location, and while arriving for treatment, they often end up staying to see the country (Garg et al., 2020). Nazem & Mohamed (2016) examined that the promises and available information given by the medical tour operators are deemed reliable in the case of Penang hospital, Malaysia.

2.6 Medical Tourist's Perception of medical tourism service quality

Perception is defined as "the effective creating meaning by choosing, arranging, and interpreting people, objects, events, situations, and other phenomena" (Wood, 2009). In simple words, a continuous or ongoing process is termed as perception. Moreover, perception can also be used to initiate learning, form feelings and influence beliefs. In particular, perception of tourists can be defined as "the process of interpreting tourist information from the external world into the internal, mental world that each of us encounters." 'Customer value' is a determinant that has a significant impact on tourist perception.

Subramanian et al. (2020) investigated whether Omanis patients' perception of service quality in hospitals of India are significant. Similarly, Ye & Assenov (2017) looked into perception of Chinese medical tourist in Thailand and discovered that quality of treatment, accreditation, excellent doctor skills, and communication skills were the most significant and important factors influencing respondents' perception. Nazem and Mohamed (2016) discovered that in Penang Island, the perception of medical tourist is significantly positive. They came to the conclusion that hospital facilities, staff, communication, and service all played a role in the positive perception. However, negative factors affecting medical

tourists' perception include hospital building issues, hospital staff not following established procedures, and no information for international patients.

According to Rao and Chaudhury (2017), the hospital can only influence patient perception by improving service delivery quality. It's essential to investigate the factors that cater to the needs of patients and attendants. Patients' perception of quality of service, according to Hu et al. (2009), are a part of the overall tourism services and product and are subjective to each person. Despite the industry's continued growth and size, more research is required for better understanding of medical tourists' behaviour and attitudes toward medical services of a destination (Connell 2013; Yu & Ko 2012). The perception of domestic medical tourists is still unknown. Moreover, there was lack of literature on perception of domestic patients. Therefore, the present study was identifying and comparing the perception of domestic medical tourists to fill the gap in research.

2.7 Overall Satisfaction (OS) of medical service quality

Satisfaction is a psychological term that describes the pleasure and joy that comes from receiving exactly what one truly wants from a preferable service or product (Pizam & Ellis, 1999). Customer satisfaction, according to Kotler et al. (1996), is defined as a customer's feelings of sadness or happiness resulting by comparing the perceived performance of product or service to customers' expectations. In order to decide, consumer makes trade-offs with one criterion for another, allowing OS to be measured (Pizam & Ellis, 1999). The psychological state of visitors following exposure to an experience or opportunity is referred to as "tourism satisfaction" (Baker and Crompton, 2000). The medical tourists are unique travelers, prefer to combine the health related service or treatment with tourism services. Thus, the health-care industry's concept of "patient satisfaction" should be considered.

Sitzia and Wood (1997) conducted a review of the literature on satisfaction of medical tourists. In terms of *technical aspects of care, interpersonal aspects of care, accessibility, and patient information*, their study classified four components of patient satisfaction. *Occurrences, value, interpersonal comparisons, entitlement, and expectations* are five social-psychological variables proposed by Linder-Pelz (1982) as determinants of satisfaction with medical care. According to Rad et al. (2010), customer

satisfaction with service delivery is significantly impacted by service quality. According to Khademian & Farshid (2015), factors relating to doctors, accessibility, and nurse satisfaction all have an impact on patient satisfaction. Thi et al. (2002) explored seven attributes related with satisfaction of medical tourists seeking medical treatment and care from medical destination, including *admission, medical care, overall quality of care, high services quality, nursing care, hospital environment, information, ancillary staff and recommendations or revisit intentions*. The focus of past research is more on the satisfaction of foreign patients. However, satisfaction of domestic patients was not theorized. The purpose of the current research was to compare and comprehend the overall satisfaction of domestic medical tourists for future use.

2.8 Revisiting & Recommending Intentions (RRI)

Loyalty of customer can be defined as the relationship a customer has with product or service of the company. Customer loyalty is a phenomenon in organizational studies that is approached as patient loyalty or commitment in health services (Liu et al., 2021). For healthcare providers, medical tourists' loyalty is characterized as "the circumstance in which the patient continues the relationship with the hospital and recommends the hospital's services to potential patients" (Engiz, 2007). A stronger recommendation from previous medical tourists, as well as intentions to return, can help destinations attract more medical tourists (Nwobodo, 2020). Following that, a study of consumer attitudes toward medical services discovered that a recommendation from a friend or family was the most important factor in selecting a physician for the majority of people (Woodside & Moore, 1987). According to some studies, tourists' intentions to return and recommend a destination are influenced by their level of satisfaction (Asnawi et al., 2019; Suhartanto, 2018).

Satisfaction had a greater impact on recommendation than on the intention to return (Hutchinson et al., 2009). Han and Hyun (2015) also put forth a conceptual framework that examined how inbound medical tourists' intentions are formed. They discovered that perceived satisfaction, quality, and trust have a positive impact on medical tourists' desire to return. However, according to Boo et al. (2009), tourists' positive experiences do not always imply that they will recommend or return to the destination. Zeithaml et al. (1998) measurement scale has been used in several studies to investigate tourists' intentions to return to and

recommend a destination (Baker & Crompton 2000; Chi & Qu 2008; Boo et al. 2009).

2.9 Relation among Medical Tourists' Perception, OS and RRI

According to Tran and Tran (2017), visitors with a favourable perception of an attraction are highly satisfied with the destination, and thus have a higher likelihood of returning to that tourist destination. Other research has found that the association between behavioural intentions and values is mediated by satisfaction, and this appears to be the most empirically supported hypothesis (Chen & Chen, 2010; He & Song, 2009). Furthermore, Bigné et al. (2001) looked into the link between tourists' perception of a tourist destination and their revisiting intentions. They discovered that the perception of medical tourists has an impact on their post-purchase behaviour. As a result, satisfied patients are more inclined to recommend or return to a medical destination with a better reputation to family members or relatives.

Jin et al. (2015) investigated the impact of tourists' perception of quality experience on satisfaction and behaviour intention. They discovered that a significant relationship exists between behavioural intention and perceived value, satisfaction, and image. Canoglu et al. (2016) discovered a link between promotional strategies, value perception, service quality perception, OS, and future intention. Similarly, Nwobodo (2020) found that medical travellers who have a positive perception of the destination are happier with its amenities and services. Additionally, it's likely that these medical tourists will come back and strongly suggest the destination in the future. The hypotheses were framed by looking at the empirical and theoretical evidence on the causal relations between perception, OS, and RRI of medical tourists.

2.9.1 Medical tourists' Perception and OS

Tourist satisfaction is determined by comparing what was originally desired with what was practically experienced at a location (Um et al., 2006). When a tourism destination meets the expectations of visitors, it is considered successful (Tran and Tran, 2017). The majority of tourists were satisfied with the perceived treatment, skilled doctors and nurses, expenses, hotels, food & beverages, location, hospital infrastructure, heritage sites, and website details of Tamil Nadu medical services, according to Nachimuthu and Krishnaiah in 2018.

Patient satisfaction improvement will benefit organisations that can create positive patient perception, and demonstrates a type of organisational culture that encourages success in these efforts (Rao & Choudhury, 2017). Providing thorough details on the diagnosis, suggested treatment options, medication lists, stay in the hospital, and discharge processes are all major factors that lead to customer satisfaction and a positive perception (Hensen et al., 2008). The perception towards quality of service in hospitals of India by medical tourists is generally positive, and it significantly satisfies medical tourists (Subramanian et al., 2020). In present study, the inter relationship between perception and OS of medical tourists was evaluated.

2.9.2 OS and RRI

Previous marketing research has analysed that satisfaction of customer has a significant and favourable influence on loyalty (Brandy & Cronin 2001; Oliver et al., 1994). This is also true in the domain of hospitality and tourism (He & Song, 2009). In the tourism industry, loyalty is defined as the desire to return, the spread of positive recommendations, and an increase in share expenditure from wallet. Due to the difficulty of collecting revisit patients' information, such behavioural pattern and intentions are frequently worked as a proxy to know actual loyalty pattern. According to marketing theory, brand loyalty is directly influenced by customer satisfaction (Fernandes & Moreira, 2019). Satisfaction of tourists is defined as the desire to return to or recommend a tourist destination (Kozak & Rimmington, 2000). Tourist satisfaction, according to tourism research (San Martn et al., 2019), is a direct antecedent of tourist loyalty.

Chi and Qu (2008) have explained that satisfaction and destination loyalty of tourist are essential elements of tourists' revisit intention to a particular location. According to Oliver (2010), dissatisfied visitors are more likely to return to the same place. As a result, simply asking tourists about their plans to return would imply their willingness to recommend the destination. Hashemi et al. (2015) included revisit intent as a component of satisfaction in their framework. Satisfaction can lead to a desire to return to the destination and the likelihood of recommending it. As a result, focusing on future intentions may lead to respondents expressing more specific feelings about the destination. Hence, the present study was evaluating the correlation between OS and RRI of medical tourists.

2.9.3 Perception and RRI

The effects of tourists' perception of the destination on tourists' revisit intentions and destination choice have also been confirmed in previous literature (Baker and Crompton, 2000; Darnell and Johnson, 2001; Chen and Chen, 2010; SooCheong and Feng, 2007). Bigné et al. (2001) have investigated how the perception of a positive destination image affects medical tourists' post-purchase behaviour. Im et al. (2012) discovered that the tourists' perceptions of a brand's image have an impact on their intentions to travel there.

In addition, the CBBE model was used to test the German tourists' perception in Slovenia; the results revealed that the destination quality has a significant impact on both first-time and repeat-visit intentions (Gartner & Ruzzier, 2011). Wang and Hasu (2010) investigated the impact of domestic and inbound tourists' perception on their intentions to return and recommend. Affective images were found to have a positive impact on revisiting intent in studies (Li et al., 2010). Therefore, tourists' perception of a destination's affective image are likely to influence their intentions to return. As a result, the present study was an attempt to assessed the association between perception and RRI of medical tourists.

2.10 Moderating effect of Nationality

According to Kluckhohn and Strodtbeck (1961), "customers from different cultures or countries may have different expectations regarding a service because cultures differ in terms of behaviour and attitude sets." Similarly, many researchers claim that cultural differences influence customer behaviour by causing different service evaluations (Money, Gilly, & Graham, 1998). The literature is limited that have examined the impact of nationality as a moderating factor on the relationship among medical tourists' motivations, perception of medical tourism services, OS, and RRI.

The moderating effect of nationality on tourist perception, satisfaction, and loyalty was investigated by Tran et al. (2020). The point of the study was to close this gap in the literature by examining the effects of nationality as a moderator factor on the associations between the aforementioned factors.

2.11 Research Gap

Several studies on inbound medical tourists' perception have been conducted across the globe, including Singapore, Thailand, Malaysia, Romania,

Iran, the United States, and Canada, according to the literature. The medical tourism literature, according to Hudson and Li (2012), focuses on an international perspective. Domestic medical tourism is a concept that is widely ignored and considered a neglected area of social science research (Dasthagir et al., 2015; Dasthagir and Arul, 2015).

Many studies are available in the literature of Indian medical tourism that focus on foreign medical tourists' perception of medical services and facilities at specific destinations (Sajjad, 2015; Nachimuthu & Krishnaiah, 2018; Shukla et al, 2019). On the contrary, domestic medical tourism is a little-known phenomenon in India. At the Indian (Arul & Babu, 2019; Roy, 2020) and global levels, there are only a few studies on domestic medical tourism (Hudson & Li, 2012; Fottler, 2014). Hence, the current study adds to the health tourism literature by highlighting a new dimension of domestic medical tourism, which is also in high demand.

As a result, no comparative research is available on the perception of domestic and international medical tourists in India, particularly in Delhi-NCR. Hence, there is a knowledge gap that can be filled by conducting research on foreign and Indian medical tourists' perception in Delhi NCR, as suggested by Shukla, R. et al. (2019) and Subramanian et al. (2019) (2020). Thus, a research study titled "Patients' Perception of Medical Tourism Services: A Comparative Analysis of Domestic and Inbound Patients in Delhi-NCR" will be conducted to fill the existing research gap.

2.12 Contemporary Research Methodological trends in the current research domain

The statistical analysis gives life to otherwise lifeless data by giving meaning to meaningless statistics. Only when appropriate statistical tests are used are the results and inferences precise. As a result, the fundamental research tools used in various studies will be applied to the current study's objectives and hypothesis. The most common method for reducing or simplifying data is factor analysis, which is based on a correlation or covariance matrix (Kline, 2016).

Exploratory and confirmatory factor analysis integration is critical for human behaviour research (Hu & Li, 2015), and it is widely used in current studies to establish and modify models (Nwobodo, 2020; Saiprasert, 2011). One of the trending techniques used in SEM is regression analysis, which is used to

test the causal relationships between variables. SEM is now being used by a number of researchers to investigate the structural relationship between variables (Nwobodo, 2020; Saiprasert, 2011;Wang et al., 2012). Recent studies have also looked into the moderation effect (Dedeoglu et al., 2017; Tran et al., 2020). The analysis methods used in various related studies are listed in the table 2.2.

Table 2.2: Analysis method used by previous studies

Authors	Analysis Method	Relationship Results
Saiprasert, W (2011)	EFA; CFA; SEM	Motivation→ Perception Perception →Satisfaction Satisfaction →Future intention
Wang et al. (2012)	EFA; CFA; SEM	Factors identification Perception → Future intention
Williams et al. (2017)	EFA; SEM	Satisfaction →Future intention
Nwobodo (2020)	CFA; SEM	Model Satisfaction →Future intention
Rahila (2019)	SEM	Moderation effect
Dedeoglu	CFA, SEM	

2.13 Summary of the chapter

This chapter reviews the existing literature on medical tourism, including motivations of medical tourists, perception of medical tourism service quality, OS, and revisiting intentions and recommending intentions. As a result, a gap in the literature was discovered. The next chapter will go over the research philosophy that was used to achieve the study's objectives and hypotheses.

CHAPTER: 3

RESEARCH METHODOLOGY

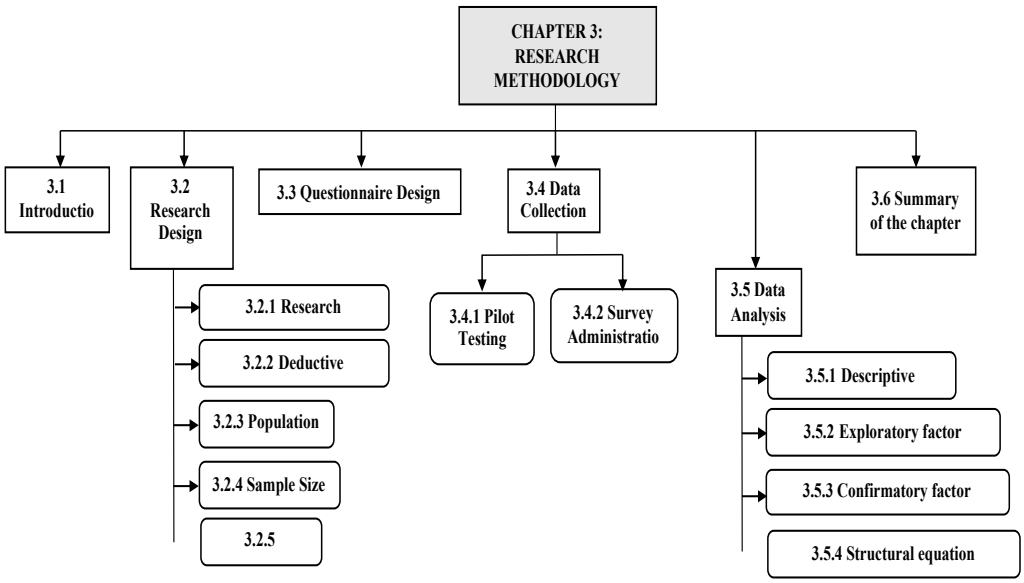
"Be stubborn about your goals, and flexible about your methods." – Unknown

RESEARCH METHODOLOGY

3.1 Introduction

This chapter has discussed the methods and techniques used to achieve the research objectives and hypothesis. The discussion starts with the research design, survey instrument construction, and data collection method and process (see figure 3.1 for overview of the chapter). The methodologies for testing the proposed conceptual framework, as well as the statistical techniques of data analysis, are briefly discussed.

Figure 3.1: Overview of Chapter 3



3.2 Research Design

A research design is a detailed blueprint for collecting, measuring and analysing the data (Bernard, 1971). Saunders et al. (2012) have present a process for research design to follow. The research design is the strategy and structure for conducting research in order to find a solution to the research problem and issues. Research design is essential to ensure that various research operations run smoothly, allowing for the most efficient research possible. A research design also includes an advance plan for methods of data collection to be used for collecting relevant data and the statistical techniques to be used in their analysis, while keeping the research objectives in mind. In fact, research design has a significant impact on the reliability of the final results. Following subsections of the chapter provide details on the research design of this study.

3.2.1 Research Approach

Before conducting any research, researchers must make active decision about their research approach, which reflects the nature of the relationship between theory and research. Whether researchers use an inductive approach in which observations lead to theory development or a deductive approach in which researchers derive hypotheses from theory, which leads to observations and theory fine-tuning, determines the direction of the research (Bryman and Bell, 2011). As required, the present study follows the deductive research approach.

3.2.2 Deductive Research

Deductive research is founded on reasoning (Bryman and Bell, 2011; Svensson, 2009; Zalaghi and Khazaei, 2016). Researchers begin the research process with an idea, which is usually a scholarly or practitioner-oriented problem or both, which is then transformed into objectives or a question (Svensson, 2009). Literature is reviewed and hypotheses are developed based on the objectives or question (Bryman and Bell, 2015; Zalaghi and Khazaei, 2016). Following the deductive research process, the researchers operationalize their literary findings about the concept in question into measurable concepts in order to collect empirical data. The hypotheses are tested, confirmed, or rejected using empirical data, and the theory is revised based on the results. This logically sequenced linear process allows researchers to fine-tune their knowledge while also providing theoretical and managerial implications and suggestions for future research (Svensson, 2009).

While following the deductive research approach, relevant literature was examined extensively which helped in developing a theoretical research framework and study hypotheses to test and validate or suggest any modification in the concept according to the findings. Keeping the nature of the study in view, a quantitative research approach was found appropriate against qualitative approach to conduct this research. The study objectives needed investigation of medical travel motivators and relationships among various latent variables; hence, a quantitative research approach is the best way to do so. Besides, the quantitative approach justifies and handles aptly the proposed sample size of 410.

3.2.3 Population

Malhotra & Birks (2007) defines the target population or the universe as a collection of objects or items containing the data pursued by the researcher and

from which conclusions are to be drawn. They went on to explain that elements, sampling units, and duration should all be used to define the universe. In the present study, inbound and domestic medical tourists visiting Delhi-NCR are accounting the total population.

3.2.4 Sample Size

A sample is a subset of a larger population from which conclusions about the larger group can be drawn. This allows the researcher to conduct smaller experiments and then draw conclusions about the population using statistics, resulting in cost and time savings by not testing the entire population. Mesa et al. (2014) state that determining an adequate sample size is critical because it can reduce the risk of error, define the study's logistics, adhere to ethical standards, and enhance the study's success when it is assessed by funding agencies. In general, there is no consensus on the appropriate sample size for any study.

To choose an appropriate sample size from the study population, there was no record or unified data available on domestic and inbound medical tourist arrivals in the study area. However, some sources were providing information on medical tourists in Delhi-NCR but the information was incomplete and raising several questions on its credibility, base year of data, lacking domestic patients' data, and so on. As of the year of 2019, GOI has issued 6.9 lakhs medical travel visas to inbound patients (Ministry of Tourism, GOI 2020) but how many got treatment in Delhi-NCR is not known (Chaudhary & Agrawal, 2014). Besides, a few hospitals have updated merely inbound patients data on their websites 2 to 3 years back which is also not logical in considering total population on the basis of these websites. More importantly, domestic patients' data is hard to trace out.

Therefore, the population for present study is unknown. Several authors suggested sample size formula for unknown population such as Krejcie and Morgan table (KMT, Krejcie & Morgan, 1970). The KMT asserted a sample size of 384 for an unidentified population. According to Kline (2011), larger the sample size, the more accurate will be results. As a result, the current study follows SEM (Structural Equation Modeling) approach because the results of the study obtained using SEM technique. There are several thumb-rules for determining sample size requirements for SEM. According to Boomsma (1985), a minimum sample size of 100 is proposed for SEM studies. On the contrary, Hair et al. (2008) suggested a sample number between 100 and 200 for SEM. They

further added that the sample size should be at least 5 times the number of study items while as Bentler and Chou (1987) and Nunnally (1967) suggested that 5 or 10 observations per estimated item may be sufficient.

Now, in order to avoid all issues, the study followed Bentler and Chou (1987) and Nunnally's (1967) suggestions in choosing sample size in the present study. This study contained 41 items initially which were multiplied by 10 (41X10) and researcher got a total of 410 (41X10= 410) numbers. Therefore, according to Bentler and Chou (1987) and Nunnally (1967) 410 is the final sample size of the study to be surveyed in different hospitals in the study area. In case of hospitals, a total of 111 JCI and NABH accredited hospitals in Delhi-NCR were chosen as a population. As suggested by Veaux et al. (2015), 10% of the total hospital population (i.e., 11 hospitals) was taken for the survey.

3.2.5 Sampling

There are numerous types of sampling, which are broadly classified as Probability Sampling and Non-Probability Sampling based on the chances of being selected in the sample (Jackowicz, 2005). Probability sampling methods provide equal chances of being selected, whereas non-probability sampling techniques do not assure that each and every item in the universe will be included in the sample. In any case, the selection procedure is moderately subjective (Gupta, 2014).

The present study constitutes both, Probability Sampling and Non-Probability Sampling, procedures based on two phases. In phase first, 111 JCI and NABH accredited hospitals in Delhi-NCR were identified and enlisted (see in table 1.4). A ten per-cent (11 hospitals) of total hospitals were chosen for survey (Veaux et al., 2015). Out of 111 total hospitals, 11 hospitals (see table 3.1) were selected under purposive sampling method. In the second phase, 410 domestic and inbound patients were surveyed in the selected hospitals and 37 patients were approached in each hospital. Patients were selected under simple random sampling method. The study questionnaire was distributed among 205 domestic and 205 inbound patients during surveys. Distributing research instrument equally among the inbound and domestic patients was suggested by the research experts during research progress evaluation seminar.

Table 3.1: JCI and NABH accredited hospitals

S.No.	Name of Hospital	Location	JCI	NABH
1	Artemis Health Institute	Gurugram	√	√
2	Fortis Memorial Research Institute	Gurugram	√	√
3	Medanta – The Medicity	Gurugram	√	√
4	B. L.K. Memorial Hospital	New Delhi	√	√
5	Sir Ganga Ram Hospital	New Delhi		√
6	Indraprastha Apollo Hospital	New Delhi	√	√
7	Max Super Speciality Hospital (A Unit of Max Healthcare Institute Limited)	New Delhi	√	√
8	Max Super Speciality Hospital (A Unit of Devki Devi Foundation)	New Delhi	√	√
9	Fortis Escorts Heart Institute	New Delhi		√
10	Moolchand Hospital	New Delhi	√	√
11	Escorts Heart Institute & Research Centre	New Delhi		√

3.3 Questionnaire Design

The present study required primary data to draw conclusions on the set assumptions. Therefore, research instrument was developed including theory based and self-made items. Questionnaire included three different sections (see appendix -I). Before using in the study, the questionnaire was carefully tested during pilot study.

In section first of the questionnaire, demographics of the respondents was included. Respondents' demographics questions were on age, gender, income, marital status, occupation, and nationality. Respondents' demographics information is very help in post research decision making. Demographics items were adopted from previous studies (Dar, 2018; Medhekar & Wong, 2020).

In second section of the questionnaire, travel behavior was included. Respondents travel behavior questions were on medical cost, type treatment, source of information, treatment duration, and preferred alternative medical tourism destination. Travel behavior items were adopted from previous studies (Alnakhi et al., 2019; Saiprasert, 2011).

Third section of the questionnaire included 34 items of travel motivations, perception, satisfaction and RRI as shown in table 3.2 along with sources from literature. This section included a total of 9 study constructs. Patients travel motivations were studied by using 24 items/indicators. After applying EFA, all 24 indicators were condensed into 6 constructs. Seventh construct of the study was *patients' perception*. This construct constituted three indicators. Eighth construct was OS with four indicators. Similarly, ninth construct was RRI with three indicators.

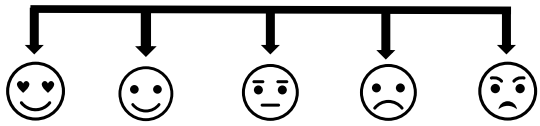
Table 3.2: Study Items/Indicators and Constructs

Constructs		Items/Indicators	Sources
Medical Travel Motivations	MC	accommodation	Collins et al. (2019)
		surgery or operation	Chaudhary & Agrawal (2014)
		Medication and Reports	Chaudhary & Agrawal (2014)
		Health care insurance	Ye & Assenov (2017)
	MT	Reputed and well-trained doctors	Collins et al. (2019)
		Doctors visit regularly	Dhodi et al. (2018)
		Nurses care	Cosma et al. (2020)
		Nurses are courteous and respectful	Rehaman & Husnain (2018)
		Communication skills of hospital staff	Al-Hussami et al. (2017)
	QC	Quality of medical treatment	Ye & Assenov (2017)
		treatment records confidential	Prakash et al. (2011)
		safety measures for emergency	Al-Damen (2017)
		follow-up treatment procedure	Ye & Assenov (2017)
		Healthy and clean environment	Al-Damen (2017)
	WT	Medical treatment	Al-Damen (2017)
		admission and discharge procedures	Al-Damen (2017)
		Required services are provided	Self
	HI	quality clinical infrastructure	Mahmoud et al.(2019)
		advanced technologies	Datta (2020)
		Accommodation facility	Cosma et al. (2020)
		Food and beverage arrangements	Moghavvemi et al. (2016)
	TS	Specialized tour operators	Shukla et al. (2019)
		shopping facilities	Collins et al. (2019)
		tourist attractions	Collins et al. (2019)
Per		Affordable medical treatment	Self
		Knowledgeable & efficient medical team	Canoglu et al. (2016)
		quality medical and touristic services	Canoglu et al. (2016)
OS		medical treatment	Al-Damen (2017)
		medical care	Al-Damen (2017)
		quality of services	Al-Damen (2017)

	hospital management	Al-Damen (2017)
RRI	Visit in future	Rehaman & Husnain (2018)
	First preference	Rehaman & Husnain (2018)
	Recommend to others	Rehaman & Husnain (2018)

However, respondents' responses were measured on a five-point Likert scale ranging from 1 to 5 where 1 indicated *Strongly Disagree*, 2 as *Disagree* 3 as *Neutral*, 4 as *Agree* and 5 as *Strongly Agree* (figure 3.2). To improve response amount and quality while lowering respondents' levels of frustration, a 5-point Likert scale was used (Buttle, 1996). However, a few studies have found that five-point scales have relatively high reliabilities (Jenkins & Taber, 1977; Lissitz & Green, 1975).

Figure 3.2: Five-point Likert Scale



Strongly Agree**(1)** Agree**(2)** Neutral**(3)** Disagree**(2)** Strongly Disagree**(1)**

3.4 Data Collection

3.4.1 Pilot Testing

Before a research design is approved, a pilot study is conducted to support in determining the research question or to evaluate the reliability, feasibility and validity of the questionnaire distributed. In the present study during pilot study, questionnaire was responded by 41 respondents in the study area which represents' a total of 10 per cent of the total proposed sample size. The *Reliability* and *Validity* of the instrument was checked. Both techniques showed significant results and instrument was found fit for the study.

Besides these approaches, questionnaire was sent to the e*xperts* from industry and academia for content validity. Researcher got valuable feedback from the experts and their productive feedback was incorporated in the questionnaire design as well. The overall pilot study findings and constructive feedback from the experts have resulted in minor changes in the instrument and finally, the final instrument (appendix I) was positioned for data collection.

3.4.2 Survey Administration

The study questionnaire was positioned during survey phases for main data collection. Pre-selected hospitals (table 3.1) were visited for data after seeking the required permission from the university. Despite obeying all the norms, it was tough to get permissions from hospitals for data collection. The administrations of some hospitals were not as helpful as desired. They denied for data collection in their hospital wards by giving different reasons, such as, someone said that they don't allow private institutes to conduct such surveys in their hospital and others said it is a privacy concern for them. However, some hospitals permitted to collect data from hospital wards and some allowed getting responses from hospital's outskirts and waiting rooms where patients' attendants largely cooperated in filling the questionnaire. In this way, data was collected only from eight hospitals out of eleven and rest three hospitals denied the permission for data collection.

Data collection period was affected by the COVID-19. There were restrictions on inbound travel in India and researcher had to wait for foreign patients while as domestic patients were easily available in the study area. However, keeping an eye on inbound patients' arrival, researcher was able to complete the data collection process in two different phases. First phase started from 1st Nov. to 15th Nov. 2021 and second phase started from 10th Feb. to 25th Feb. 2022. In each phase, respondents were selected randomly and all 410 questionnaires got filled from inbound and domestic patients or their attendants.

Each questionnaire was checked for completeness and 38 questionnaires were found either incomplete or with more than once responses to one statement and were removed. Out of 205 domestic responses, only 194 (94.63%) were considered for final analysis and on the other hand, out of 205 inbound responses, only 178 (86.82%) responses were found useful for final analysis. In this way, a total of 372 responses were found valid for final analysis which indicates 90.73% response rate.

3. 5 Data Analysis

Adopting data analysis techniques carefully is one of the fundamental considerations in overall research design because the results of the entire research

depend on analysis strategy. The primary objective of data analysis is to enhance information that will aid in the resolution of the issue at hand. The measurement scales used have a significant impact on the statistical techniques chosen. However, in the present study, data analysis process was conducted in different phases. In the initial phase, data were scrutinized for normality then descriptive statistical techniques, including mean and standard deviation, were testified.

In the second phase, integration of Exploratory and Confirmatory Factor Analysis (EFA and CFA) was applied for factorial structure of the study in which nine main study constructs were identified and to check the model fitness. In the third and last phase, structural equation modelling technique and independent t-test technique were applied to check the relationship between latent variables in theoretical framework of the study. An ephemeral of data analysis is given below.

3.5.1 Descriptive analysis

Descriptive statistics are a method of describing collected data to show researchers the characteristics of the observations (Spriestersbach et al., 2009). Descriptive statistics are used to calculate the mean values and standard deviation of constructs medical travel motivations, patients' perception, OS and RRI and to observe the pattern in the demographic and medical travel behavior of domestic and inbound patients.

3.5.2 Exploratory factor analysis

The exploratory factor analysis (EFA) is used to determine the dimensionality of constructs, medical travel motivations, patients' perception, OS and RRI. The assumptions of the Bartlett test of sphericity and the Measure of sample adequacy are checked to ensure the appropriateness of data for factor analysis, as according to Hair et al. (2006) these are the most commonly reported measures in exploratory factor analysis. "The number of extracted factors is based on eigenvalues, as factors with eigenvalues greater than one are considered significant, and all factors with eigenvalues less than one are considered insignificant and are ignored" (Hair et al., 2006). Cronbach alpha is used to assess the reliability and goodness of obtained factors.

3.5.3 Confirmatory factor analysis

"Confirmatory factor analysis (CFA) can test how well measured variables represent constructs" (Hair et al., 2006). Amos was used to test the convergent and discriminant validity, construct reliability, and overall model fit

for the measurement model across all four constructs of the study. Following the factor analysis (exploratory and confirmatory), the final stage is SEM testing of the entire model.

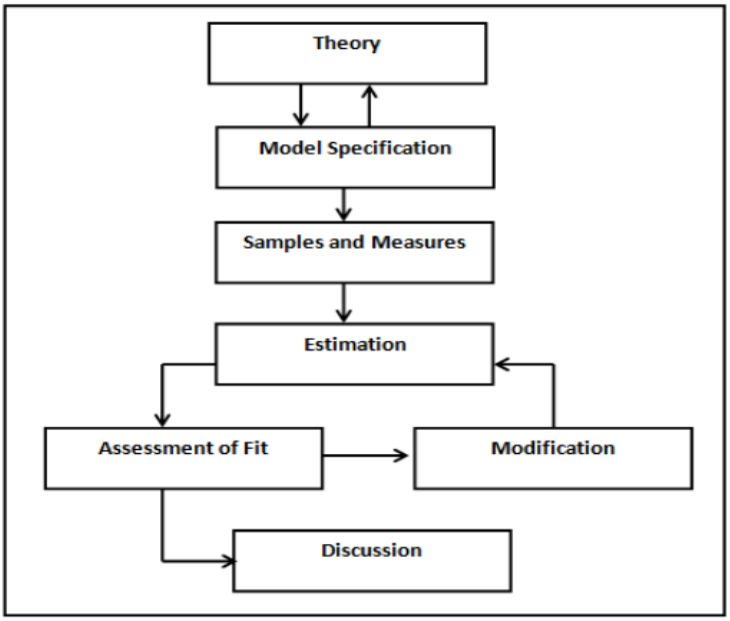
3.5.4 Structural equation modelling

The task of selecting the most appropriate statistical technique is critical in order to test the theoretical model. According to a review of the literature, regression analysis is the frequently used analysis technique for estimating the impact of dependent variables on independent variables. However, regression analysis has a number of limitations, including "its inability to assess or correct for measurement error, explaining 100% measurement reliability, and these limitations can be avoided by using structural equation modelling" (Byrne, 2010).

The confirmatory method is structural equation modelling. "SEM is a multivariate technique that combines aspects of confirmatory factor analysis and regression analysis, allowing the researcher to simultaneously examine a series of interrelated dependence relationships among variables" (Hair et al., 2010). Its main advantages are that "it is a relatively new and dominant multivariate technique that can test a series of dependence relationships" and "it is a relatively new and dominant multivariate technique that can test a series of dependence relationships" (Hair et al., 2010). Second, "it takes into account latent variables" (Kline, 2005). Third, "it accounts for measurement errors in order to provide more accurate estimates of construct-to-construct relationships" (Byrne, 2010; Hair et al., 2010). Finally, "alternative methods for modelling multivariate relations, as well as estimating point or interval indirect effects, are not widely and easily applied; these important features are available using structural equation modelling methodology" (Kaplan, 2009).

The conventional approach to structural equation modelling as used in the social and behavioral sciences is graphically depicted in Figure 3.3 in this study. In the social sciences, the traditional approach to structural equation modelling can be divided into the following five steps: "(1) a model is specified and considered to be a fairly close instantiation of a theory, (2) measures are collected, (3) the model is estimated, (4) the model is typically modified, and finally (5) the results are related back to the original question" (Kaplan, 2009).

Figure 3.3: Convention approach to SEM



Source: Kaplan (2009)

3.5.4.1 Introduction to the model- Model specification

Based on a review of the literature, a model for medical travel motivations, perception, OS and future intentions of patients was developed, and the full structural part of the model is shown in Figure 3.3 below. Endogenous constructs are the latent, multi-item equivalents of dependent variables that are conceivably determined by factors within the model, whereas exogenous constructs are the latent, multi-item equivalents of independent variables that are determined by factors that are external to the model (Hair et al., 2006). The hypothesized structural model included six exogenous variables: medical cost (ξ1), medical team (ξ2), services quality (ξ3), waiting time (ξ4), hospital infrastructure (ξ5) and touristic services (ξ6) and three endogenous variables: perception (η1), OS (η2) and RRI (η3).

Table 3.3: Exogenous and Endogenous constructs

Exogenous Variables	Endogenous Variables
Motivational Factors 1 to n (ξ1….. ξn)	η1 Perception η2 OS η3 Revisit & recommending intentions

There are five exogenous variables, medical cost (ξ1) had four, medical team (ξ2) had five, quality of care (ξ3) had five, waiting time (ξ4) had three,

hospital infrastructure (ξ5) had four and touristic services (ξ6) had three indicator variables. For the three endogenous variables, perception (η1) had three, OS (η2) had four, and RRI (η3) had three indicator variables.

Large circles represent exogenous and endogenous variables, while rectangles represent indicator variables. The small circles e1 to e34 denote measurement errors, and each one points to the observed factors, indicating that a portion of the indicator variable measures something other than the latent variable. "Measurement error reflects adequacy of indicator in measuring related underlying factors and drives from random measurement error and error uniqueness," according to Byrne (2001). The residual e35, e36 and e37 arrows pointing to dependent constructs. "The residual, also known as prediction error or disturbance, is the portion of the dependent construct not defined by the independent construct" (Kline, 2005). The nine constructs investigated in this study have hypothesized relationships attached to them. "Single-headed arrows (→) represent the impact of one variable on another, while double-headed arrows (↔) represent covariances or correlations between pairs of variables," according to SEM (Byrne, 2010).

3.5.4.2 Sample and Measures

According to Kaplan (2009), the next step is to "design and execute a study to collect data for testing the model." According to Hair et al. (2010), "the researcher should consider issues such as sample size and model specification, particularly when establishing model identification." As a result of the literature review, measures were defined and an effective sample size was determined.

3.5.4.3 Model estimation

The "maximum likelihood (ML)" method is used to estimate the model by taking into account the data distribution. Maximum likelihood estimation is the method that is commonly used in normal distributions and is the default in structural equation modelling software. "ML is a procedure that iteratively improves parameter estimates to minimise a specified fit function, as opposed to ordinary least squares used in multiple regression" (Hair et al., 2010).

3.5.4.4 Model Fit

The overall model fit was used to evaluate both measurement model and structural model. Table 3.4 lists the most widely mentioned model fit indices.

Table 3.4: Fit indices guideline

Measures of fit	Fit guidelines
$\chi 2$ and p-value	p-value > 0.05
GFI	≥ 0.9
AGFI	≥ 0.9
CFI	≥ 0.9
NFI	≥ 0.9
RMSEA	< 0.05 to 0.08
SRMR	< 0.05
$\chi 2$ /df	1 to 3

Source: Hair et al. (2006)

3.6 Summary of the Chapter

The methodology used to arrive at the study objectives and hypotheses was presented in this chapter. It goes over the research philosophy and approach, as well as the scope of the study, sampling design, questionnaire development, and data analysis techniques and applications. A quantitative research approach was chosen as the most appropriate, and data was collected using a questionnaire-based survey method. Factor analysis (EFA and CFA) and structural equation modelling were the primary methods of analysis. The study's findings are presented in the next chapter.

CHAPTER: 4

RESULTS & ANALYSIS

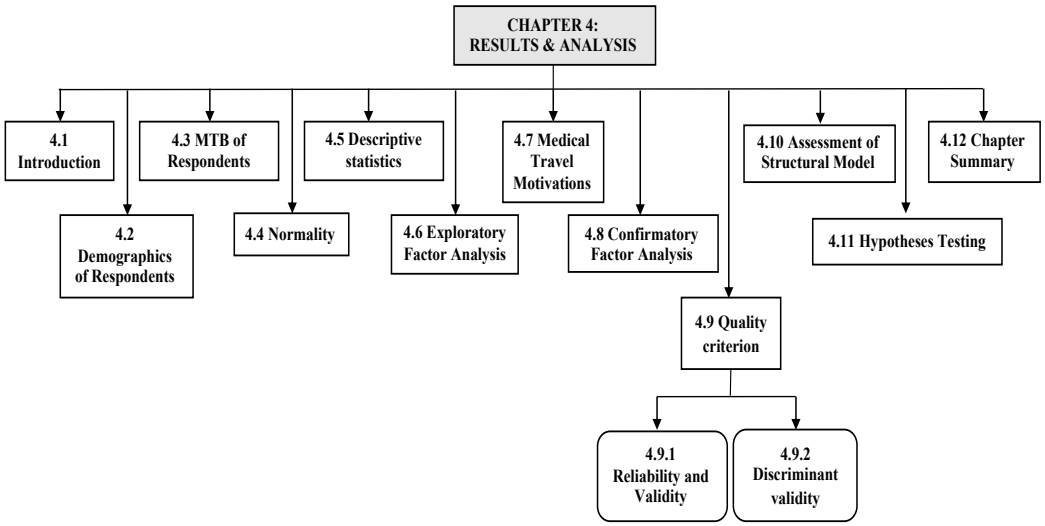
"Not everything that can be counted counts, and not everything that counts can be counted." - William Bruce Cameron

RESULTS & ANALYSIS

4.1 Introduction

This chapter discusses the results and data analysis of the study. Appropriate coding was used to prepare the data for analysis. The results from the quantitative research were presented, summarised, analysed, and evaluated in a precise manner in this chapter. To eliminate data set errors, the normality, missing values, and other technical errors were thoroughly checked. Mean, standard deviation and significant level descriptive statistics were used to describe tourists' demographics, medical travel profiles, motivations, perception, OS and RRI. For testing the study's hypotheses, the inferential statistics techniques such as, exploratory and confirmatory factor analysis (EFA and CFA), and structural equation model and independent t-test technique were applied. Furthermore, as explained in Chapters Two and Three, the measuring instrument's reliability and validity are ensured by a theoretical framework based on significant literature research.

Figure 4.1: Overview of Chapter 4



4.2 Demographics of the Respondents

The first section of the questionnaire includes various demographic questions that offered more information about the respondents. Age, gender, occupation, marital status, educational level and nationality are some of the questions that are asked. Table 4.1 represents the detailed demographic characteristics profiling of the domestic and Inbound patients.

Table 4.1 Respondent's demographics

Variable	Domestic Patients(D.P)		Inbound Patients(I.P)	
Age	**F**	**%**	**F**	**%**
Up to 20	27	13.9	30	16.9
21 to 35	45	23.2	55	30.9
36 to 50	51	26.3	45	25.3
51 to 65	40	20.6	32	18.0
66 & above	31	16.0	16	9.0
Total	194	100.0	178	100.0
Household Income/annum in lac (INR)				
Below 5	14	7.2	4	2.2
6 to 10	38	19.6	14	7.9
11 to15	49	25.3	18	10.1
16 to 20	69	35.6	88	49.4
21 & above	24	12.4	54	30.3
Total	194	100.0	178	100.0
Occupation				
Study	30	15.5	28	15.7
Job	54	27.8	65	36.5
Agriculturist	24	12.4	7	3.9
Business	29	14.9	33	18.5
Others	57	29.4	45	25.3
Total	194	100.0	178	100.0
Education				
Up to 10+2	59	30.4	29	16.3
Under graduate	19	9.8	17	9.6
Graduate	66	34.0	77	43.3
Post Graduate	16	8.2	20	11.2
Others	34	17.5	35	19.7
Total	194	100.0	178	100.0
Gender				
Male	105	54.1	99	55.6

Female	89	45.9	79	44.4
Others	0	0	0	0
Total	194	100.0	178	100.0
Marital Status				
Married	145	74.7	99	55.6
Unmarried	49	25.3	79	44.4
Others	0	0	0	0
Total	194	100.0	178	100.0

In figure 4.2, age of the domestic and inbound patients has been shown, where majority of the domestic respondents are from the *36 to 50 years age group* (26.3%) and the *21 to 35 years age group* (23.2%), followed by *51 to 65* aged (20.6%), 66 & above aged (13.9%) and up to 20 years aged (16%). In the case of inbound patients, majority of the respondents are from *21 to 35 years age group* (30.9%) and *36 to 50 years age group* (25.3%), followed by *51 to 65* aged (18%), up to 20 years aged (16.9%) and 66 & above aged (9%). This indicates, maximum domestic respondents are falling from 21 to 50 years of age (56%) gap while as most of the inbound respondents (49%) are also falling in in the same age group.

Figure 4.2: Age of the Respondents

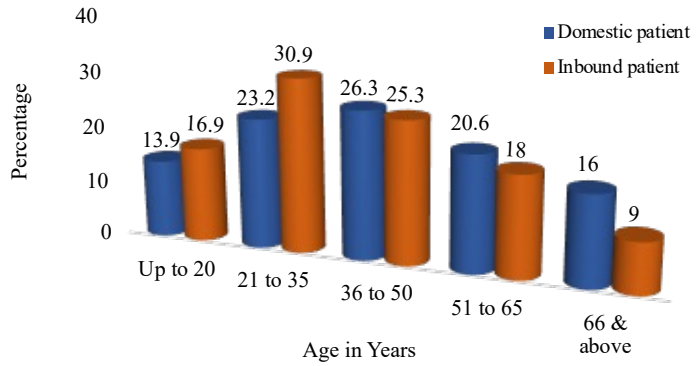


Figure 4.3 illustrates the household income of the domestic and inbound patients. Out of the total sample size, the majority of the domestic medical tourists are having *16 to 20 Lac* (35.6%) annual incomes followed by the 11 to 15 Lac (25.3%), 6 to 10 Lac (19.6%) 21 & above Lac (12.4%), and while the least number of the respondents (7.2%) are having below 5 Lac annual incomes. The majority of inbound medical tourists are also having *16 to 20 Lac* (49.4%) annual incomes, followed by 21 & above Lac (30.3%), 11 to 15 Lac (10.1%), 6 to 10 Lac

(7.9%) and below 5 Lac (2.2%).

Figure 4.3: Household Income of the Respondents

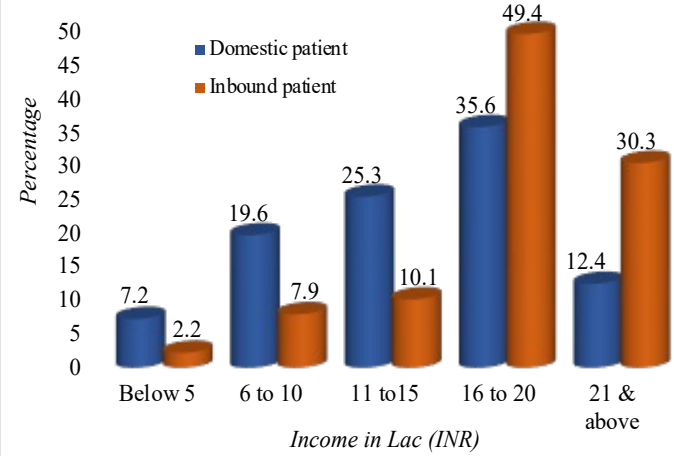


Figure 4.4 shows the domestic and inbound patients' occupation type. The study found that majority of the domestic medical tourists are *doing other type of occupation* (25.3%) which includes retired, house makers, etc. whereas 27.8% are doing *a job* (32%) followed by studies (15.5%) and business (14.9%), studies (15.9%) and agricultural activities (12.4%). Most of the inbound medical tourists are *involved in jobs (36.5%*), *doing other type of job* (25.3%) and *business* (18.5%), while least are involved in study (15.7) and agricultural activities (3.9%).

Figure 4.4: Occupation of the Respondents

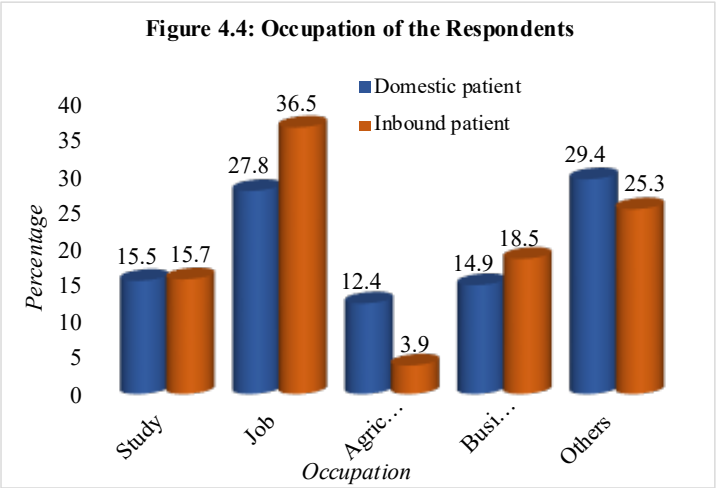


Figure 4.5 indicates the education of the domestic and Inbound patients. The maximum domestic medical tourists are well-educated with g*raduate (34%)* and *intermediate (30.4%)* education. Whereas, 17.5% respondents were having other type of education, 9.8% were under graduate and 8.2% were post graduate. Similarly, most of the Inbound medical tourists were g*raduate (43.3%),* followed

by others (19.7%), intermediate (16.3%), post-graduate (11.2%) and under-graduates (9.6%).

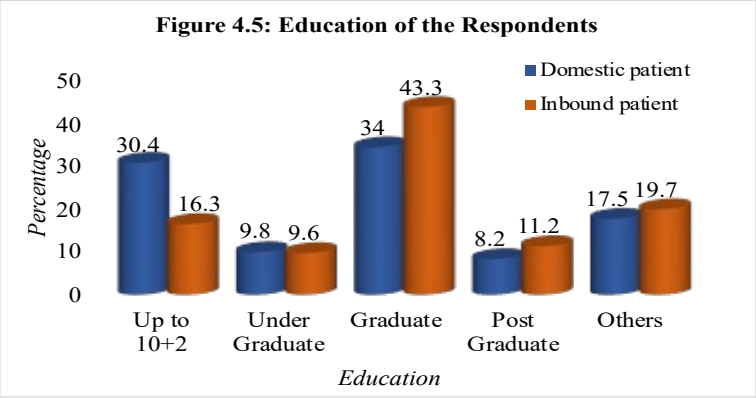
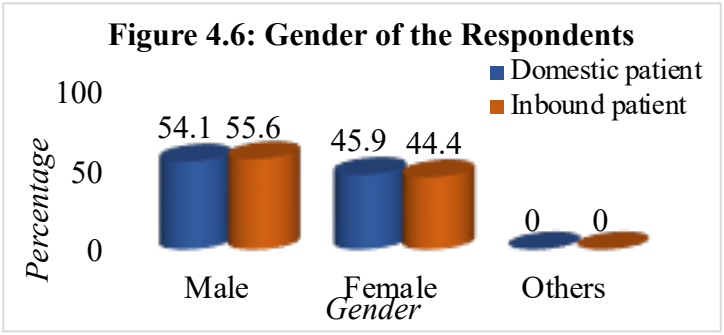
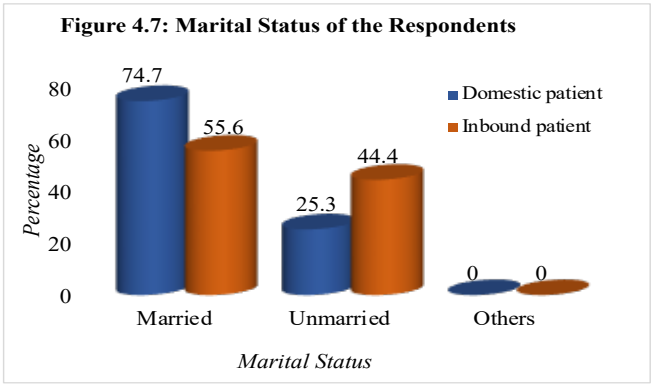


Figure 4.6 represents the gender of the domestic and inbound patients. In case of domestic medical tourists, the *male respondents* (54.1%) were more than female (45.9%). In same way, the *male respondents* (55.6%) were more than female (44.4%), in case of inbound medical tourists.

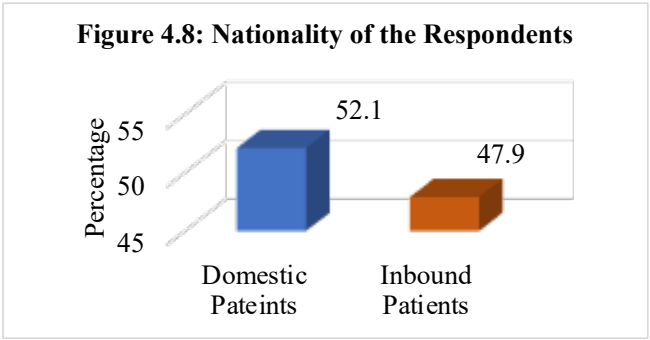


In figure 4.7, the marital status of the domestic and inbound patients is presented. Most of the domestic medical tourists were married (74.7%) than unmarried (25.3%). Similarly, most of the inbound medical tourists were married (55.6%) than unmarried (44.4%).



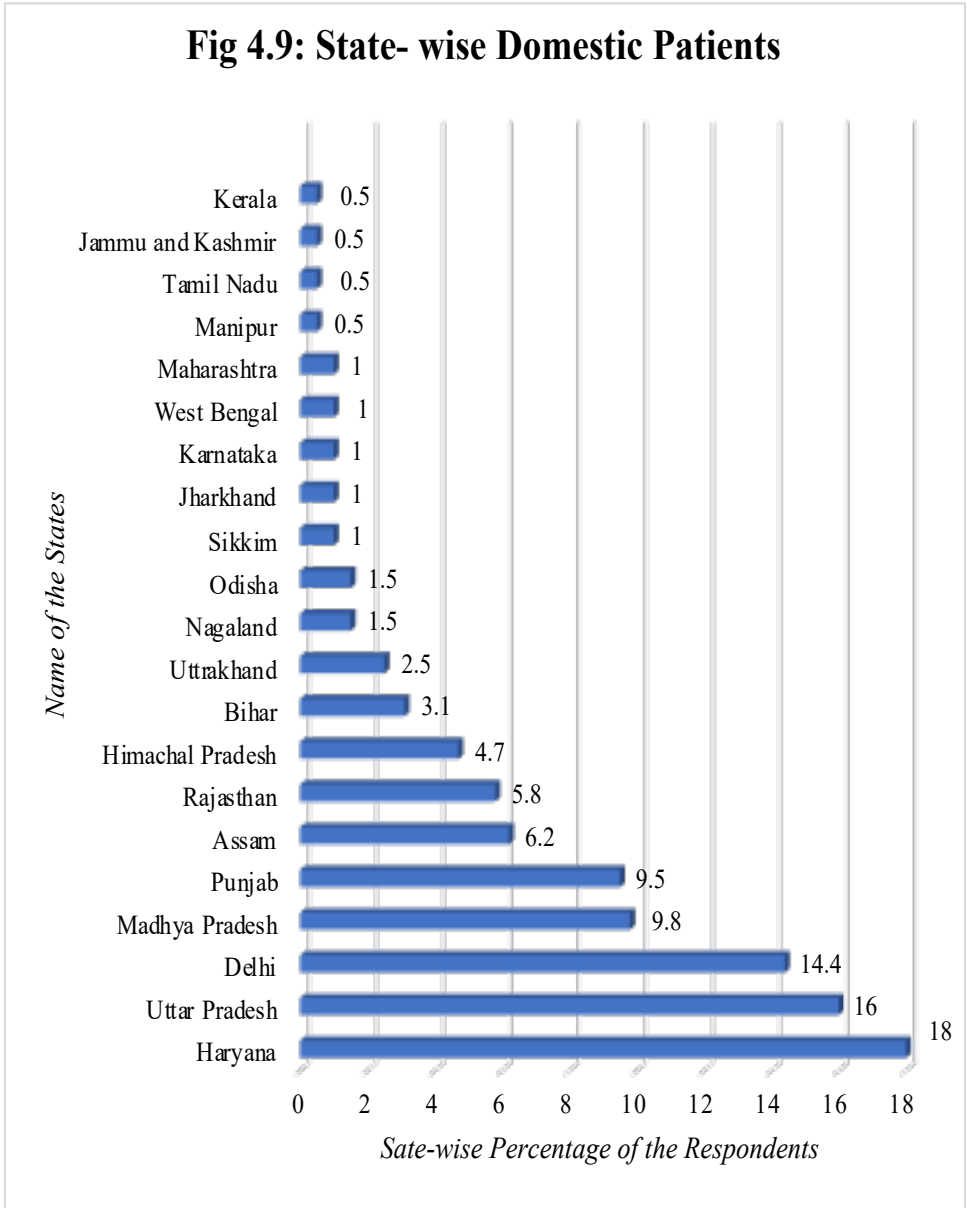
In figure 4.8, the nationality of the medical tourists is presented. The domestic patients were 52.1% whereas the inbound patients were 47.9%.

Figure 4.8: Nationality of the Respondents



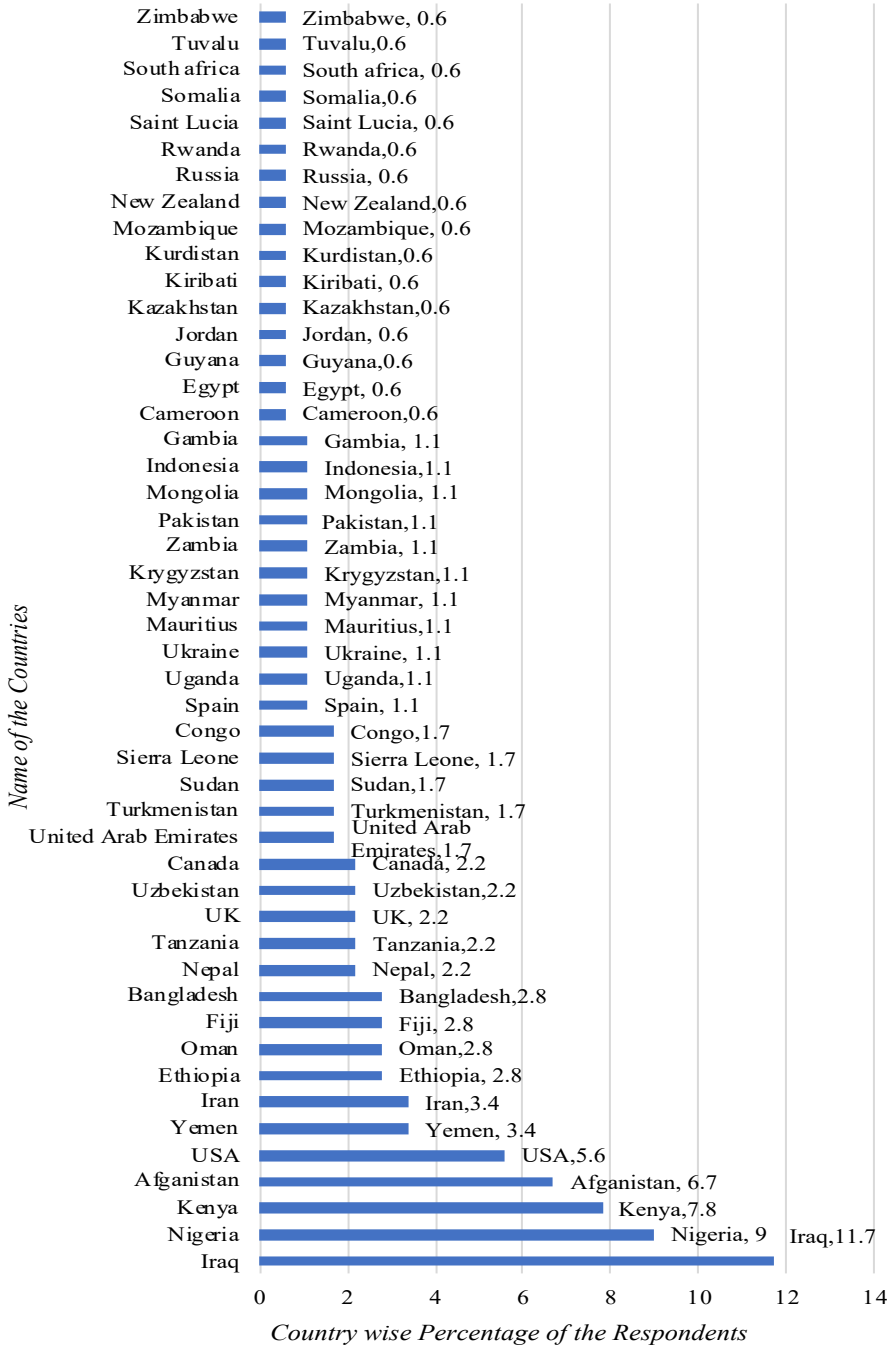
The majority of the domestic patients (figure 4.9) were from the states of Haryana, followed by Uttar Pradesh, Delhi and Madhya Pradesh, Punjab, Assam, Himachal Pradesh, Bihar, Uttarakhand, Nagaland, Odisha, Karnataka, Jharkhand, Maharashtra, Sikkim, West Bengal, Jammu and Kashmir, Tamil Nadu, Kerala and Manipur.

Fig 4.9: State- wise Domestic Patients



On the other hand, the majority of Inbound patients (figure 4.10) were from Iraq, followed by Nigeria, Kenya, Afghanistan, USA, Iran, Bangladesh, Yemen, Fiji, Ethiopia, Oman, Nepal, Canada, Tanzania, UK, Uzbekistan, Turkmenistan, Sierra Leone, Congo, UAE, Sudan, Mongolia, Mauritius, Ukraine, Uganda, Kyrgyzstan, Spain, Gambia, Indonesia, Myanmar, Pakistan, Zambia, Rwanda, New Zealand, South Africa, Egypt, Jordan, Cameroon, Kiribati, Mozambique, Kurdistan, Saint Lucia, Tuvalu, Kazakhstan, Zimbabwe, Guyana.

Fig 4.10: Country-wise Inbound Patients



4.3 Medical Travel Behaviour of the Respondents

The second section of the questionnaire is about medical travel behaviour of the medical tourists. The questions asked were related to the treatment cost, type of treatment, source of information, treatment time required and preferred medical tourism destination other than India. Table 4.2 represents the medical travel behaviour of the domestic and Inbound patients.

Table 4.2: Respondents Medical travel behaviour

Variable	Domestic Patients		Inbound Patients	
Medical Cost (INR)	**Frequency**	**%**	**Frequency**	**%**
Below 5 (In Lac)	96	49.5	39	21.9
6 to 10 (In Lac)	70	36.1	81	45.5
11 to 15 (In Lac)	16	8.2	34	19.1
16 to 20 (In Lac)	4	2.1	7	3.9
Above 21 (In Lac)	8	4.1	17	9.6
Total	194	100.0	178	100.0
Type of Treatment				
Plastic Surgery	4	2.1	3	1.7
Eye Surgery	1	.5	0	0
Dental Care	0	0	2	1.1
Heart Care	37	19.1	24	13.5
Cancer	29	14.9	24	13.5
Neurology	16	8.2	13	7.3
Orthopaedic	47	24.2	44	24.7
Organ Transplant	19	9.8	43	24.2
Others	41	21.1	25	14.0
Total	194	100.0	178	100.0
Source of Information				
Travel Agency	2	1.0	119	66.9
Hospital's website	43	22.2	16	9.0
Friends & Relatives	54	27.8	17	9.6
Social media Platform	40	20.6	14	7.9
Advice of Local Doctor	49	25.3	10	5.6
Others	6	3.1	2	1.1
Total	194	100.0	178	100.0
Treatment Duration				
Below 5 days	85	43.8	46	25.8
6 to 10 days	79	40.7	80	44.9
11 to 15 days	18	9.3	22	12.4
16 to 20 days	4	2.1	13	7.3
Above 21	8	4.1	17	9.6
Total	194	100.0	178	100.0
Preferred Alternative Medical treatment destination				
Thailand	8	4.1	10	5.6
Singapore	30	15.5	41	23.0
Malaysia	41	21.1	60	33.7
USA	1	.5	16	9.0

Dubai	6	3.1	31	17.4
Others	108	55.7	20	11.2
Total	194	100.0	178	100.0

Figure 4.11 shows the total medical cost of the domestic and inbound patients. The medical tourism package cost were *below 5 Lac* (49.5%) and *6 to 10 Lac* (36.1%) for majority of the domestic medical tourists. Whereas least medical cost for domestic respondents were 11 to 15 Lac (8.2%), Above 21 Lac (4.1 %) followed by 16 to 20 Lac (2.1%). In case of inbound patients, most of the respondents' medical tourism cost was 6 to 10 lac (45.5%) followed by below 5 (21%) and 11 to 15 (19.1%).

Figure 4.11: Medical Cost of the Respondents

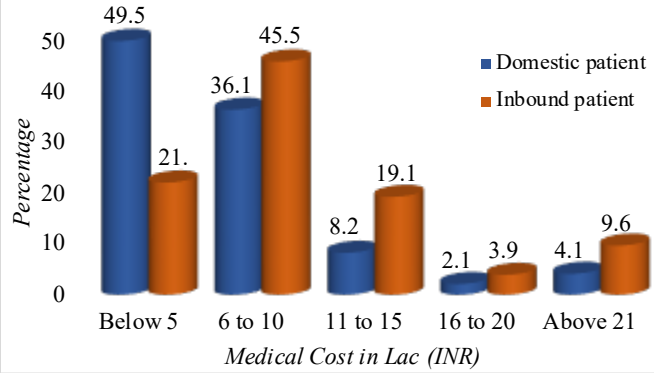


Figure 4.12 illustrates the treatment type preferred by domestic and inbound patients. For medical service seeking, 24.2 percent of domestic medical tourists seeking for *orthopaedic surgery/treatment*, 21.1 percent seeking for other related treatment/surgery, and 19.1 percent seeking for heart treatment/surgery, cancer treatment/surgery (14.9%). While as least of domestic respondents seeking for organ transplant surgery (9.8%), neurology treatment (8.2%), plastic surgery (2.1%) and eye surgery (0.5%).

Similarly, in case of inbound medical tourists, 24.7 percent of Inbound respondents seeking for *orthopaedic surgery/treatment*, 24.2 percent seeking for organ transplant surgery, 14 percent seeking for other related treatment/surgery and 13.5 percent seeking for both heart and cancer treatment. While least of Inbound respondents seeking for, neurology treatment (7.3%), plastic surgery (1.7%) and dental care (1.1%).

Figure 4.12 Treatment type of the Respondents

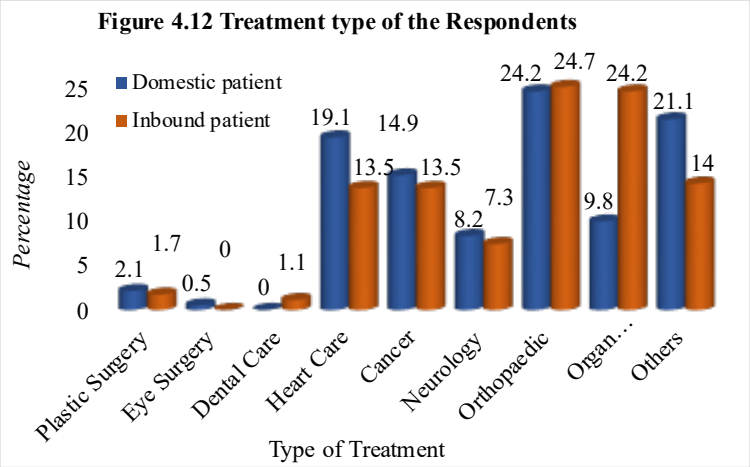


Figure 4.13 indicates the results of using source of information by the domestic and inbound patients. The majority of domestic respondents uses *friends & relatives* (27.8%), followed by advice of local doctor (25.3%), hospital websites (22.2%) and social media platform (20.6%) as the major source of information. While least of them use travel agency (1%) and other source of information (3.1%). On the contrary, the majority of inbound medical tourists use *travel agency* (66.9%) for information search, followed by friends & relatives (9.6%), hospital websites (9%) and social media platform (7.9%). While least of them prefer advice of local doctor (5.6%) and other source of information (1.1%).

Figure 4.13: Source of Information of the Respondents

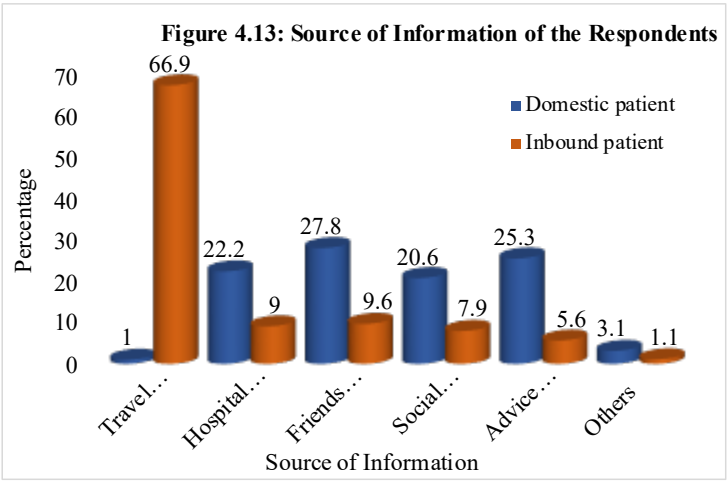


Figure 4.14 presents the duration of the stay of domestic and inbound patients at the medical destination. In terms of staying duration, most of the domestic medical tourists stayed for *below 5 days* (43.8%) and for 6 to 10 days (40.7%). However, the least of them stayed for 11 to 15 days (9.3%), above 21 days (4.1%) and 16 to 15 days (2.1%). Similarly, most of the inbound medical tourists stayed *for 6 to 10 days* (44.9%) and below 5 days (25.8%). However, the

least of them stayed for 11 to 15 days (12.4%), above 21 days (9.6%) and 16 to 15 days (7.3%).

Figure 4.14: Treatment Duration of the Respondents

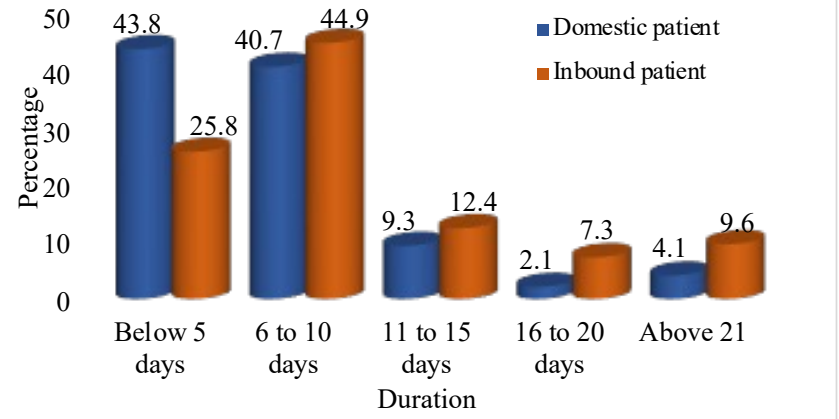
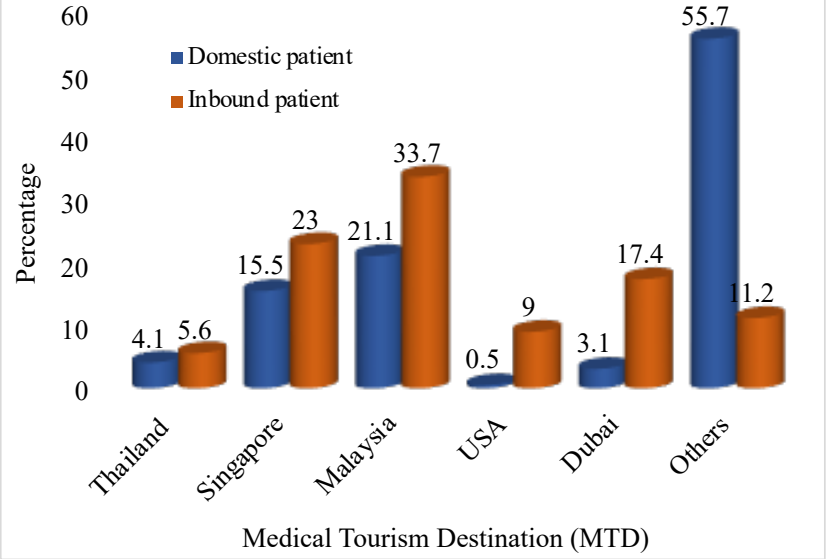


Figure 4.15 shows the medical tourism destination other than India preferred by domestic and inbound patients. The majority of domestic medical tourists prefer *others* (55.7%) as a medical tourism destination, followed by Malaysia (21.1%), Singapore (15.5%), Thailand (4.1%), Dubai (3.1%) and USA (0.5%). On the other hand, majority of inbound medical tourists prefer Malaysia (33.7%), Singapore (23%) and Dubai (17.4%). While the least of them prefer United States of America (9%), Thailand (5.6%) and others (1.2%) as medical tourism destination.

Figure 4.15: Preferred MTD by the Respondents



4.4 Data Screening for Normality

The normality of data was checked by Skewness and Kurtosis. The analysis was performed on the 5 points Likert statements in the data set. The Skewness and Kurtosis value for each statement is presented in Table 4. 3.

Table 4.3: Normality results

Factors	Label	Skewness	Kurtosis
Medical Cost	MC		
Cost of accommodation (bed) is low in hospital	MC1	-.305	-.968
Cost of surgery or operation is low in hospital	MC2	-.067	-1.347
Cost for Medication and Reports is low in hospital	MC3	-.308	-.597
Health care insurance is available in hospital	MC4	-.312	-.508
Medical Team	MT		
Reputed and well trained doctors are treating patients in this hospital	MT1	-2.295	4.180
Doctors are available when needed and visit patient regularly in this hospital	MT2	-2.882	2.879
Nurses are taking care of medication and meals of patients in this hospital	MT3	-1.892	5.204
Nurses are courteous and respectful towards the patients in this hospital	MT5	-2.162	3.316
Communication skills of the nurse staff in this hospital are worthy	MT6	-1.097	6.593
Quality of care	QC		
Quality of medical treatment is worthy in this hospital	QC1	.049	1.250
Hospital keeps patient's treatment records confidential	QC3	-.548	2.339
Hospital has appropriate safety measures for any unwanted emergency	QC4	-.335	3.279
The hospital is following follow-up treatment procedure for the patient	QC5	-.455	1.011
Healthy and clean environment is maintained in and around the hospital	QC6	-1.414	1.886
Waiting Time	WT		
I faced less waiting time for treatment in Delhi-NCR	WT1	-.510	-.188
There is fast admission and discharge procedures in the hospital	WT2	-.373	-.827

Required services are provided to the patients within time	WT3	-.422	-.420
Hospital Infrastructure	HI		
Accommodation facility is available for patient's attendant(s) in this hospital	HI1	-.249	.441
This hospital has quality clinical facilities	HI2	-2.104	3.308
There are entertainment facilities available in this hospital	HI3	-0.017	.126
The hospital is using advanced technologies for treatments	HI4	-.399	-.214
Food and beverage arrangements are available in this hospital	HI5	-.161	-.567
Touristic Services	TS		
Specialized tour operators offer Medical Tourism packages for Delhi-NCR	TS1	.135	.186
There are good shopping facilities in Delhi-NCR	TS2	.700	-.702
There is diversity of tourist attractions of Delhi-NCR	TS3	.567	.016
There is convenient local transport in Delhi-NCR	TS4	.486	.061
Perception	Per		
I receive quality medical treatment in this hospital	PP1	-.163	6.830
I believe that price of medical and other services is low	PP3	-1.251	2.823
I believe that medical team in this hospital is efficient and knowledgeable	PP4	-.637	.119
I believe that this hospital is equipped with modern infrastructure	PP5	-1.129	.100
I receive quality medical and touristic services at the hospital	PP6	.145	.174
OS	OS		
I am satisfied with the medical treatment	OS1	-2.245	6.370
I am satisfied with medical and nurse care	OS2	-1.683	3.833
I am satisfied with the quality of services	OS3	-1.975	5.444
I am satisfied with the management of premises	OS4	-1.315	3.039
RRI	RRI		
I will revisit if I need in future	RR1	-.837	3.160
The hospital will be my first choice in future	RR2	-1.276	3.902

Recommending this hospital to others who seek for treatment	RR3	-1.748	4.346

The univariate normality is assumed when the coefficients of Skewness and Kurtosis are less than ± 3 and ± 8 respectively (Kline, 2005). The results of data screening, as shown in Table 4.3, indicate that the coefficients of Skewness and Kurtosis are within acceptable limits. The Skewness values ranged from -0.67 to -2.88, while normality Kurtosis values ranged from 6.80 to 0.016. As a result, the data set would be considered normal in nature.

4.5 Descriptive statistics

The descriptive analysis of medical tourism motivations (medical cost, medical team, quality of care, waiting time, hospital infrastructure, touristic services), perception, OS and RRI is presented in Table 4.4.

Table 4.4: Descriptive analysis

Label	Mean	Standard deviation	Significant level
Medical Cost			
MC1	3.45	.972	.000
MC2	3.27	1.137	.000
MC3	3.61	.912	.000
MC4	3.97	.789	.040
Medical Team			
MT1	4.85	.405	.000
MT2	4.85	.433	.000
MT3	4.61	.615	.000
MT5	4.65	.608	.000
MT6	4.41	.610	.000
Quality of care			
QC1	4.23	.510	.000
QC3	4.06	.554	.050
QC4	3.93	.630	.027
QC5	4.04	.649	.032
QC6	4.62	.577	.000
Waiting time			

WT1	3.82	.894	.000
WT2	3.68	1.016	.000
WT3	3.89	.880	.014
Hospital infrastructure			
HI1	4.35	.550	.000
HI2	4.84	.585	.000
HI3	4.19	.628	.000
HI4	4.39	.579	.000
HI5	4.19	.628	.000
Touristic services			
TS1	4.16	.532	.000
TS2	4.27	.470	.000
TS3	4.22	.476	.000
TS4	4.22	.484	.000
Perception			
PP1	3.54	.921	.000
PP3	4.48	.612	.000
PP4	4.10	.775	.009
PP5	4.67	.502	.000
PP6	4.16	.530	.000
Overall Satisfaction			
OS1	4.66	.609	.000
OS2	4.58	.615	.000
OS3	4.59	.644	.000
OS4	4.34	.714	.000
Revisiting & Recommending Intentions			
RR1	4.25	.590	.000
RR2	4.38	.639	.000
RR3	4.57	.626	.000

The items listed in Table 4.4 were measured on five point Likert type statements. Medical tourism motivations (medical cost, medical team, quality of care, waiting time, hospital infrastructure, touristic services) were measured over 26 items and their mean values ranged from 4.85 to 3.27. Patients' perception of

medical tourism service quality included 5 items and their mean ranged from 3.54 to 4.67. The mean values of all the statements for OS and RRI were above 4.00 and between 4.34 to 4.66 and 4.25 to 4.57 respectively. The standard deviation for all the statement ranged from 0.405 to 1.137. The significant values of all the items ranged from 0.00 to 0.50, which indicates that the study items are significant.

4.6 Exploratory Factor Analysis (EFA)

This study began with an exploratory factor analysis, as suggested by Gerbing and Anderson (1988); Sweeney and Soutar (2001) for progressing from exploratory factor analysis (EFA) to confirmatory factor analysis (CFA). This technique was used to lessen and group the factors of motivation, perception, OS, and RRI attributes to a smaller set of dimensions. The 26 motivation items, 5 perception items, 4 OS items, and 3 RRI were reduced to a small set using principal component analysis with Varimax rotation. First, the correlation matrix is examined to ensure that there were enough correlations greater than 0.3 to justify the use of factor analysis. The KMO-MSA and Bartlett's test of sphericity are even used to see if there are enough correlations between the variables. The KMO-MSA should have an index close to 1, with an index between 0 to 1 indicating that each variable is perfectly predicted by the other variables without any error. Bartlett's test of sphericity should be statistically significant (sig >0.05).

According to tale 4.5 results, Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity indicated that an EFA for the set of given factors was appropriate. When the KMO-MSA was greater than 0.60, indicating that the data have been suitable for factor analysis. The Bartlett's Test of Sphericity revealed a non-zero correlation between variables with a value of 7803.215 at a significant level of 0.00.

Table 4.5: KMO-MSA and Bartlett's Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.915
Bartlett's Test of Sphericity	
Approx. Chi-Square	7803.215
df	741
Sig.	.000

Table 4.6 shows the results of EFA for patients' medical travel motivation, perception, OS and RRI. The analysis found that the study items have been condensed into nine factors including 6 motivational factors (*Medical Cost, Medical Team, Quality of care, Waiting Time, Touristic Services),* Perception, OS and RRI.

Table 4.6: Results of Exploratory Factor Analysis

Label	FL	Communalities
Medical Cost		
MC1	.704	.856
MC2	.708	.857
MC3	.766	.818
MC4	.713	.655
Medical Team		
MT1	.865	.587
MT2	.879	.482
MT3	.923	.656
MT5	.887	.634
MT6	.782	.641
Quality of care		
QC1	.723	.751
QC3	.812	.793
QC4	.732	.765
QC5	.756	.751
QC6	.706	.720
Waiting time		
WT1	.728	.69
WT2	.700	.60
WT3	.829	.72
Hospital infrastructure		
HI1	.742	.63
HI2	.874	.78
HI3	.686	.56
HI4	.715	.62
HI5	.792	.64
Touristic services		
TS1	.890	.74
TS2	.841	.71
TS3	.720	.61
TS4	.801	.70
Perception		
PP1	.899	.80
PP3	.816	.75
PP4	.838	.76
PP5	.789	.64
PP6	.880	.78
Overall Satisfaction		
OS1	.775	.64

OS2	.740	.61
OS3	.720	.65
OS4	.704	.60
Revisiting & Recommending Intentions		
RR1	.897	.79
RR2	.903	.85
RR3	.923	.88

FL= Factor Loading

Hair et al. (2006) proposed that eigenvalues, percentage of variance explained and item communalities be used to determine the number of factors to be extracted. Significant factors are those with eigenvalues greater or equal to 1.0. Hair et al. (2006) recommend a factor loading of 0.35 or higher, but for practical purposes, a factor loading of 0.6 has been used instead.

Table 4.7 shows the mean, standard deviation, total variance and eigen value of each factor. For most social science research, 60 percent of total variance explained is considered acceptable.

The first factor, *Medical Cost*, has been comprised of four main items. With an eigenvalue of 11.154, it attributed for 28.601 percent of the total variance.

The second factor, *Medical Team*, was comprised of five different items. With an eigenvalue of 4.557, it captured 12.887 percent of the variance.

Five items decided to make up the third factor, *Services Quality*. With an eigenvalue of 1.946, it explained 6.989 percent of the total variance.

Waiting Time, the fourth factor, had three items and described 6.243 percent of the total variance with an eigenvalue of 1.655.

Hospital Services, the fifth factor, was made up of four items. With an eigenvalue of 1.440, it explained 4.693 percent of the total variance.

Four items composed the sixth factor, *Touristic Services.* With an eigenvalue of 1.140, it depicted 3.922 percent of the variance.

Perception, the seventh factor, had six items. With an eigenvalue of 1.053, it covered 3.699 percent of the variance.

Six items made up the eighth factor, *OS*. With an eigenvalue of 1.044, it captured 3.624 percent of the variance.

Six items made up the ninth factor, *Revisit & Recommending Intention*. With an eigenvalue of 1.021, it acquired 3.467 percent of the variance.

Table 4.7: Exploratory factor analysis results

Factors	No. of items	M	SD	V (%)	E.V
MC	4	3.57	.878	28.601	11.154
MT	5	4.67	.399	12.887	4.557
QC	5	4.17	.377	6.989	1.946
WT	3	3.79	.848	6.243	1.655
HI	5	4.44	.361	4.693	1.440
TS	4	4.21	.343	3.922	1.140
Perception	5	4.11	.563	3.699	1.053
OS	4	4.54	.530	3.624	1.044
RRI	3	4.40	.534	3.467	1.021

MC=Medical cost, MT= Medical team, QC=Quality of care, WT=Waiting time, HI= Hospital infrastructure, TS= Touristic services, Per= Perception, OS= Overall satisfaction, RRI=RRI, M=Mean, SD= Standard deviation, V=Variance, EV= Eigen Value, R= Reliability

4.7 Medical Travel Motivations

Objective 1: To investigate the factors of medical tourism services influencing motivation of domestic and inbound patients for medical travel to Delhi- NCR. From the above exploratory factor analysis, six motivational factors were identified (Table 4.7).

Table 4.8: Mean results

Factors	Mean	
	Domestic patients (N=194)	**Inbound patients (N=174)**
MC	2.9034	4.3118
MT	4.6072	4.7472
QC	4.1000	4.2584
WT	3.2113	4.4326
HI	4.3866	4.4972
TS	4.1031	4.3408

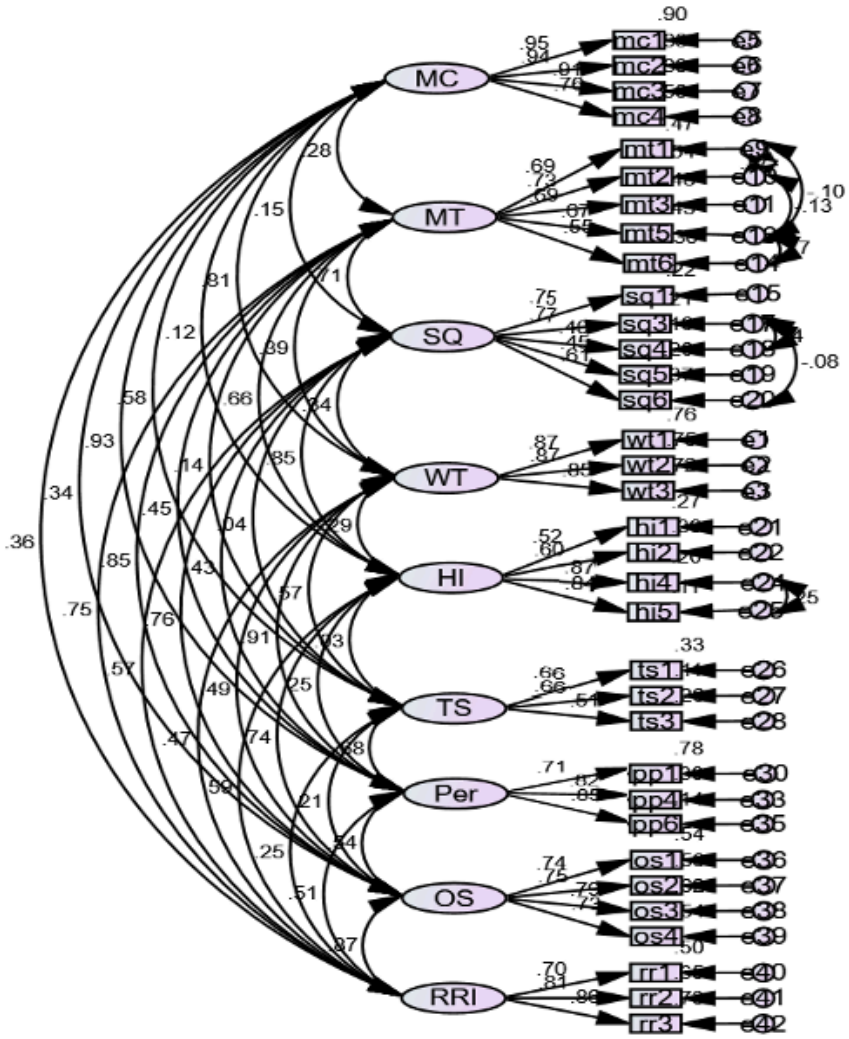
According to table 4.8, the motivational factors mean value is mentioned for the domestic and Inbound patients. In case of domestic patients, the mean value for medical cost is 2.90, medical team 4.60, quality of care 4.10, waiting

time 3.21, hospital infrastructure 4.38 and for touristic services 4.10. Further, in case of Inbound patients, the mean value for medical cost is 4.31, medical team 4.74, quality of care 4.25, waiting time 4.43, hospital infrastructure 4.49 and for touristic services 4.34. Hence, it is concluded that mean of medical cost is high for Inbound patients and low for domestic patients. Similarly, mean of waiting time is high for Inbound as compared to domestic patients. In addition to this, the mean of medical team, quality of care, hospital infrastructure and touristic services is in same range for both.

4.8 Confirmatory Factor Analysis

An evaluation of a measurement model entails assessing the relation between latent variables and their indicating variables (Hair et al, 2006). Confirmatory Factor Analysis (CFA) was used to evaluate the study's measurement model (Figure 4.16).

Figure 4.16: Measurement Model of the study



In total, 372 observations were used in the analysis. The overall model fit was used to evaluate the measurement model. The overall model fit in CFA represents how well the specified indicators represent the hypothesised latent construct. The results of model fit indices of model is shown in Table 4.9.

Table 4.9: Confirmatory factor analysis (CFA) model fit indices

Model fit indices	Criterion	Values
CMIN	*the higher the better*	1096.329
CMIN/DF	*< 2 – ideal, 2 – 5 – acceptable*	2.121
CFI	*> 0.9 – acceptable, > 0.95 – good*	.914
RMSEA	*< 0.08, ideally < 0.05*	.055
TLI	*> 0.9*	.901
NFI	*> 0.9*	.915

Simultaneously, the standardised regression weights factor loadings were evaluated, and any item with a value less than 0.45 was removed from consideration in order to meet the criteria (Table 4.10). According to Stevens (1992), using a cut-off of 0.4 for interpretation is acceptable. Similarly, Tabachnick and Fidell (2007) recommend using stricter cut-offs, such as 0.32 (poor), 0.45 (fair), 0.55 (good), 0.63 (very good), or 0.71(excellent) when the items have different frequency distributions. As a result, the CFA recommended removing the HI3 items from hospital infrastructure, the TS4 items from touristic services, and the PP3 and PP5 items from perception.

Table 4.10: Items removed after CFA

Label	Item	FL
HI3	There are entertainment facilities available in this hospital	0.421
TS4	There is convenient local transport in Delhi-NCR	0.398
PP3	I believe that price of medical and other services is low	0.447
PP5	I believe that this hospital is equipped with modern infrastructure	0.369

Finally, 34 items were used in CFA, including motivation (24 items), perception (3 items), OS (4 items), and RRI (3 items). The SMC is a value that represents how well an item measures a construct by indicating how much of a measured variable's variance is explained by a latent factor (Hair et al., 2006).

SMC ranged from 0.328 to 0.898 for exogenous variables and 0.305 to 0.735 for endogenous variables, as shown in table 4.11.

Table 4.11: Standardized Regression weights factor loadings

Factors	FL	SMC
Medical Cost		
MC1	0.959	.898
MC2	0.943	.876
MC3	0.914	.833
MC4	0.762	.580
Medical Team		
MT1	0.695	.470
MT2	0.747	.538
MT3	0.691	.479
MT5	0.672	.446
MT6	0.554	.404
Quality of care		
QC1	0.759	.517
QC3	0.774	.513
QC4	0.469	.463
QC5	0.454	.500
QC6	0.613	.373
Waiting Time		
WT1	0.875	.722
WT2	0.869	.754
WT3	0.848	.762
Hospital Infrastructure		
HI1	0.523	.468
HI2	0.612	.759
HI4	0.872	.595
HI5	0.841	.514
Touristic Services		
TS1	0.662	.328
TS2	0.669	.609
TS3	0.511	.556
Perception		
PP1	0.719	.381
PP4	0.829	.305
PP6	0.858	.345
OS		
OS1	0.74	.543
OS2	0.748	.560
OS3	0.789	.620
OS4	0.739	.540

RRI		
RR1	0.705	.497
RR2	0.809	.652
RR3	0.855	.735

FL= Factor loading, SMC= Squared multiple correlation

4.9 Quality criterion

To validate the measurement model, validity and reliability was checked. Internal consistency reliability, average variance extracted (AVE), composite reliability (CR) and discriminant validity are used to assess reliability and validity.

4.9.1 Reliability and Validity

The reliability of all the constructs was estimated and the results of Cronbach alpha ranged between 0.751 to 0.935 (Table 4.12). The overall Cronbach alpha value is 0.97, which is highly trustworthy. Hence, all the constructs are reliable.

Table 4.12: Reliability results

Factors	R(α)	Thumb rule for (α)
MC	.935	Excellent
MT	.751	Good
QC	.793	Very Good
WT	.897	Very Good
HI	.709	Good
TS	.691	Moderate
Per	.864	Very Good
OS	.837	Very Good
RRI	.829	Very Good

The factor loadings generated by the CFA were then used for the convergent and discriminant validity test, after reliability testing. The AVE, CR, and SIC were calculated as a result. According to Hair et al. (2010) the composite reliability and average variance should be above 0.70 and 0.50 respectively.

The composite reliability of all the study variables have ranged from 0.92 to 0.97. For each latent construct, the range of average variance extracted was from 0.52 to 0.79. As a result, the measurement model's reliability and validity of the latent variable operationalization were found to be acceptable (Table 4.13).

Table 4.13: Convergent validity results

Variable	Convergent validity	
	AVE (>0.5)	CR (>0.7)
MC	0.74	0.91
MT	0.79	0.94
QC	0.54	0.97
WT	0.55	0.97
HI	0.52	0.95
TS	0.57	0.92
Per	0.58	0.92
OS	0.56	0.95
RRI	0.63	0.91

AVE=Average Variance Extract, CR= Compute Reliability

4.9.2 Discriminant validity

In diagonals, the AVE's square root is depicted, and values off the diagonals depict construct intercorrelations (see Table 4.14). The square root of the AVE is well below the intercorrelations between constructs, revealing that constructs are markedly different (Fornell & Larcker, 1981). The convergent and discriminant validity of the model indicated that it is reliable and valid, making it acceptable for testing the structural relationships.

Table 4.14: Discriminant validity results

F	AVE	MC	MT	QC	WT	HI	TS	Per	OS	RRI
MC	0.74	0.863								
MT	0.79	0.272	0.892							
QC	0.54	0.146	0.693	0.738						
WT	0.55	0.809	0.381	0.34	0.738					
HI	0.52	0.116	0.633	0.722	0.288	0.725				
TS	0.57	0.582	0.117	0.039	0.573	0.031	0.757			
Per	0.58	0.828	0.44	0.435	0.709	0.245	0.685	0.762		
OS	0.56	0.345	0.828	0.756	0.486	0.736	0.212	0.544	0.752	
RRI	0.63	0.365	0.735	0.572	0.475	0.591	0.253	0.509	0.771	0.792

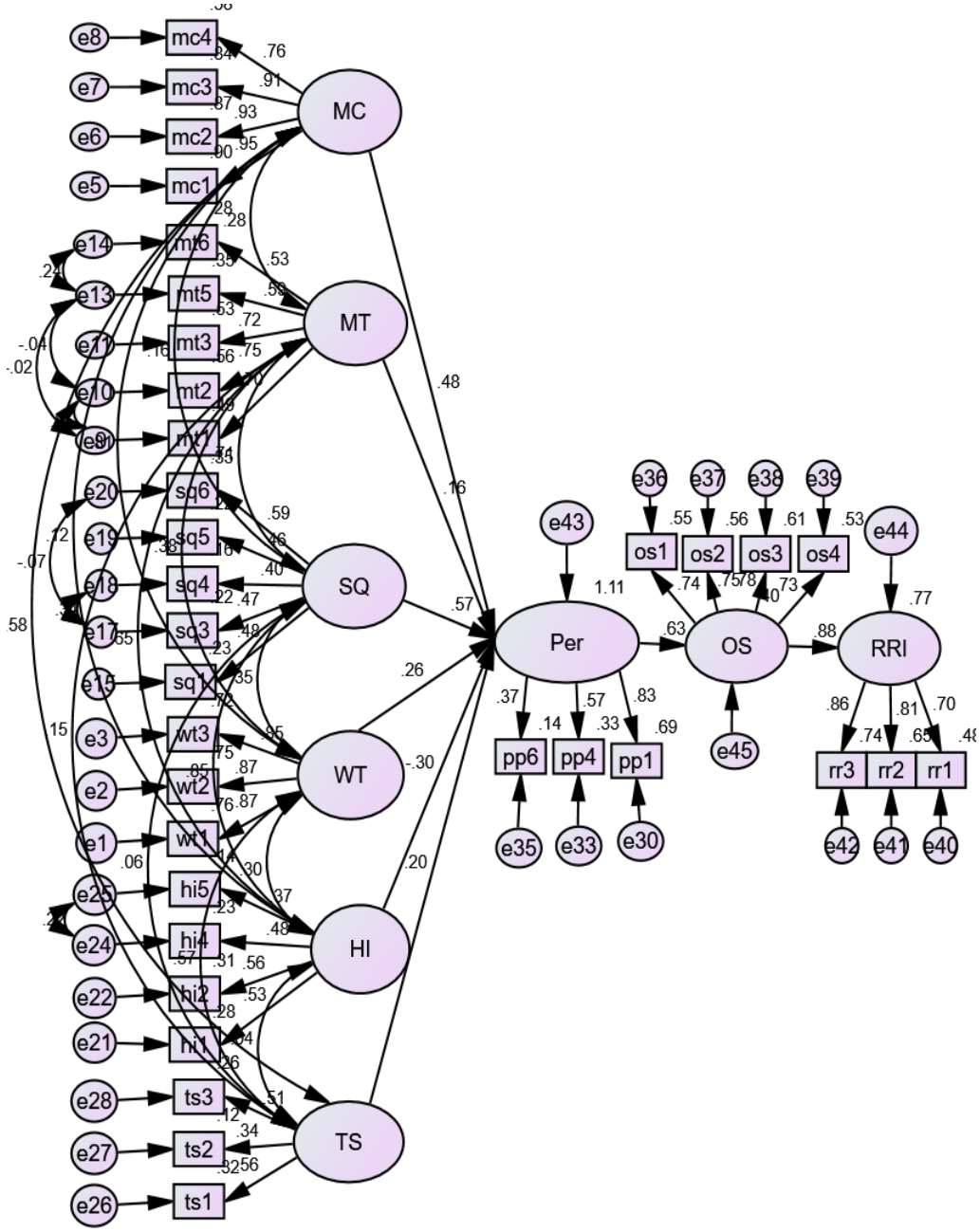
AVE= Average Variance Extract

4.10 Assessment of the Structural Model

The structural model of the study (Figure 4.17) was evaluated using Structural Equation Modelling (SEM). In total, 372 observations were used for the analysis. Finally, SEM employed a total of 34 items, including motivation (24 items),

perception (3 items), OS (4 items) and revisit & recommending intentions (3 items). After the assessment of the overall structural model, individual parameter estimates were analysed. By examining the relationships between endogenous and exogenous variables, the hypotheses were put to the test. df = 497, CMNI= 1275.852, CFI = 0.90, GFI = 0.885, NFI = 0.94, REMSEA = 0.06, and REMSEA = 0.06 are the structural model fit indices. The twelve hypotheses listed below were tested and described.

Figure 4.17: Structural model of the study



4.11 Hypotheses Testing

Objective 2: To analyse the perception of domestic and inbound patients' perception towards medical tourism service quality.

Hypothesis 1: *Patients' perception is significant as per their nationality.*

In order to test the hypothesis (H_1), independent t-test was applied to draw the conclusion. According to table 4.15, the *p* value of levene's test is 0.000 which is low than 0.05 and F value is 26.2. Since associate *p* value 0.000 is also less than our chosen significance level $\alpha = 0.05$, therefore hypothesis H_1 is not supported and concluded that the perception of domestic and inbound patients is significantly different ($t_{305.900} = -12.42$, $p < .05$). The mean values of domestic and inbound patients' perception are 4.05 and 4.53 and their mean different is -0.48.

Table 4.15: T-test results

Variable	Mean		Std. Deviation		Levene's test		t	Sig.
	D.P	I.P	D.P	I.P	F	Sig.		
Per	4.05	4.53	.47	.26	26.2	.000	-12.4	.000
OS	4.40	4.70	.64	.32	16.6	.000	-4.9	.000
RRI	4.24	4.57	.62	.35	12.1	.001	-6.3	.000

D.P= Domestic patients, I.P= Inbound patients

Objective3: To examine the influence of medical travel motivations on patients' perception.

Hypothesis 2: *Medical travel motivations have a positive impact on patients' perception.*

H_2a: Medical cost have a positive impact on patients' perception.

H_2b: Medical team have a positive impact on patients' perception.

H_2c: Quality of care has a positive impact on patients' perception.

H_2d: Waiting time has a positive impact on patients' perception.

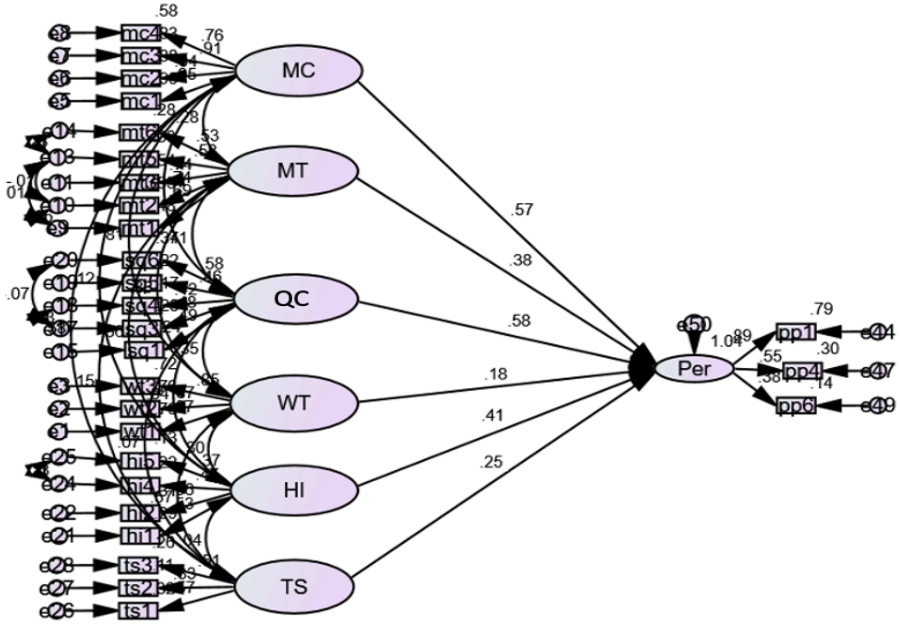
H_2e: Hospital infrastructure has a positive impact on patients' perception.

H_2f: Touristic services have a positive impact on patients' perception.

The predicated model was validated through structural equation modelling. The direct effect of medical tourism motivations on patients' perception was estimated (Figure 4.18). This relationship's model fit indices are as follows: $\chi 2$=1319.896, DF= 311, CMIN/DF=2.270, GFI=0.880, CFI=0.917,

and RMSEA=0.59. The goodness of fit indices indicate that the direct relationship is well-fitting.

Figure 4.18: Predicated model for Hypothesis 2



The results explain that majority of paths from motivational factors are significant at 0.05 (table 4.16). The path from medical costs to patients' perception has beta value .081 with critical ratio of 6.184 significant at 0.05 signifies that medical cost has direct positive impact on patients' perception. Hence, hypothesis H_2a which assumed medical cost have direct positive impact on patients' perception is accepted. Further, the path from medical team to patients' perception has beta value .254 with critical ratio of 3.199 is significant at 0.05 signifies that medical team have positive impact on patients' perception. Hence, hypothesis H_2b which assumed medical team have direct positive impact on patients' perception is accepted. Similarly, the path from quality of care to patients' perception has beta value .894 with critical ratio of 2.208 significant at 0.05 signifies that quality of care has direct positive impact on patients' perception. Thus, hypothesis H_2c which assumed quality of care has direct positive impact on patients' perception is accepted.

The path from waiting time to patients' perception has beta value .108 with critical ratio of .391 is not significant at 0.05 signifies that waiting time has no positive impact on patients' perception. Thus, hypothesis H_2d which assumed waiting time has direct positive impact on patients' perception is rejected. The path from hospital infrastructure to patients' perception has beta value .650 with

critical ratio of 2.380 is significant at 0.05 signifies that hospital infrastructure has positive impact on patients' perception. Hence, hypothesis H_2e which assumed hospital infrastructure has direct positive impact on patients' perception is accepted. The path from touristic services to patients' perception has beta value .243 with critical ratio of 2.010 significant at 0.05 signifies that touristic services have direct positive impact on patients' perception. Thus, hypothesis H_2f which assumed touristic services have direct positive impact on patients' perception is accepted.

Table 4.16: Results of Hypothesis 2

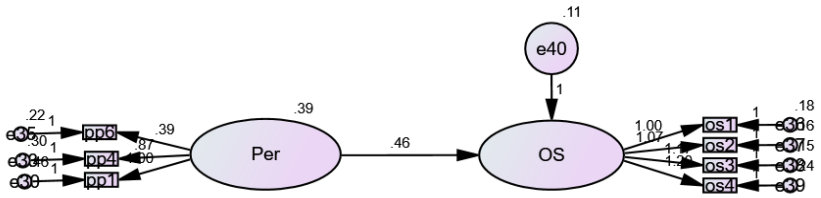
H2	beta value	CR	p-value
H_2a (MC)	.081	6.184	0.000
H_2b (MT)	.254	3.199	0.000
H_2c (QC)	.894	2.208	0.000
H_2d (WT)	.108	.391	0.709
H_2e (HI)	.650	2.380	0.000
H_2f (TS)	. 243	2.010	0.000

Hence, hypothesis (H_2) which assumed that motivational factors have positive impact on patients' perception is accepted, as factors such as *medical cost, medical team, quality of care, hospital infrastructure and touristic services* are significantly influencing patients' perception while as factors such as *waiting time* is partially influencing patients' perception.

Hypothesis 3: *Patients' OS is positively influenced by patients' perception of medical tourism service quality.*

The predicated model was validated through structural equation modelling. The hypotheses with regard to impact of perception on patients' OS is illustrated in Figure 4.19. The model fit indices revealed good fit for the model and are following: $\chi 2$=26.333, DF=13, CMIN/DF=2.026, GFI=0.981, CFI=0.984 and RMSEA=0.053. This indicates that data fits in the predicated model.

Figure 4.19: Predicated model for Hypothesis 3



In table 4.17, the path from patients' perception to their OS has beta value .060 with critical ratio of 7.748 significant at 0.05 signifies that patients' perception has direct positive impact on their OS. Hence, hypothesis H_3 which assumed Patients' satisfaction is positively influenced by patients' perception of medical service quality is accepted.

Table 4.17: Results of Hypothesis 3

Hypothesis	beta value	CR	p-value
H_3	.060	7.748	0.000

Objective 4: To assess the OS of domestic and inbound patients with medical tourism services.

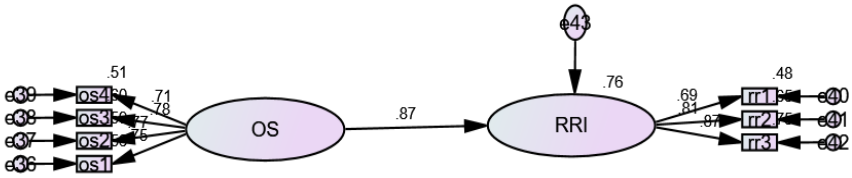
Hypothesis 4: *Patients' OS is significant as per their nationality.*

Independent t-test was applied in order to test the hypothesis (H_4) to draw the conclusion. According to table 4.15, the *p* value of levene's test is 0.000 which is low than 0.05 and F value is 16.6. Since associate *p* value 0.000 is also less than our chosen significance level $\alpha = 0.05$, therefore hypothesis H_4 is not supported and concluded that the OS of domestic and inbound patients is significantly different ($t_{292.651} = -4.9$, $p < .050$). The mean values of domestic and inbound patients' OS are 4.40 and 4.70 and their mean different is -0.259.

Hypothesis 5: *Patients' revisiting and recommending intentions are positively influenced by patient's OS of medical tourism services.*

The predicated model was validated through structural equation modelling. The hypotheses with regard to impact of patients' OS on their RRI is illustrated in Figure 4.20.

Figure 4.20: Predicated model for Hypothesis 5



The model fit indices revealed good fit for the model and are following: $\chi 2$=14.088, DF=13, CMIN/DF=1.084, GFI=0.989, CFI=0.999 and RMSEA=0.015. This indicates that data fits in the predicated model. The path from patients' OS to their revisiting and recommending intentions has beta value .067 with critical ratio of 11.587 significant at 0.05 signifies that patients' OS has direct positive impact on their revisiting and recommending intentions (table 4.18). Hence, hypothesis H_5 which assumed patients' RRI are positively influenced by their OS of medical tourism services is accepted.

Table 4.18: Results of Hypothesis 5

Hypothesis	beta value	CR	p-value
H_5	.067	11.587	0.000

Objective 5: To examine the domestic and inbound patients' RRI.

Hypothesis 6 : *Patients' RRI is significant as per their nationality.*

Independent t-test was applied in order to test the hypothesis (H_6). According to table 4.15, the *p* value of levene's test is 0.001 which is low than 0.05 and F value is 12.1. Since associate *p* value 0.000 is also less than our chosen significance level $\alpha = 0.05$, therefore hypothesis H_6 is not supported and concluded that the perception of domestic and inbound patients is significantly different ($t_{307.420} = -6.2$, $p < .05$). The mean values of domestic and inbound patients' OS are 4.24 and 4.57 and their mean different is -0.327.

Objective 6: To examine the relationship between patients' perception, OS and RRI.

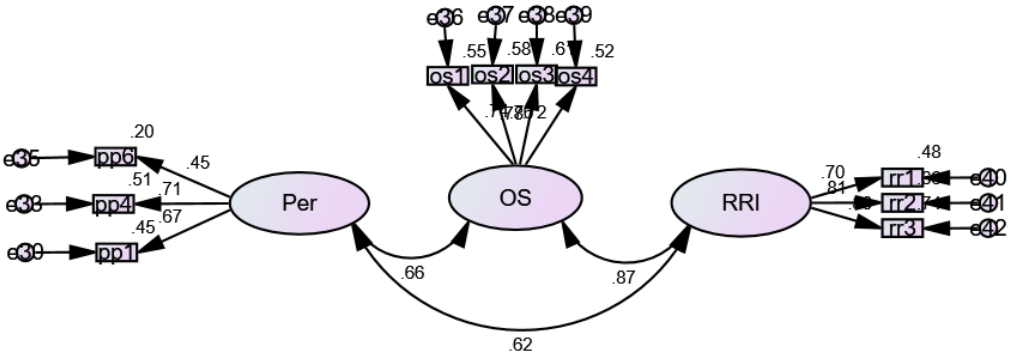
Hypothesis 7: *There is positive relationship between patients' perception and OS with regard to medical tourism services.*

Hypothesis 8: *There is positive relationship between patients' OS and RRI with regard to medical tourism services.*

Hypothesis 9: *There is positive relationship between patients' RRI and perception with regard to medical tourism services.*

In order to test the hypotheses H_7, H_8 and H_9, SEM was applied to test the linear correlation among the constructs (figure 4.21). According to table 4.19, the relationship of perception with OS (r=0.658) and RRI (r=0.870) is positive. Similarly, the linear relationship between OS and RRI (r=0. 623) is also positive. Hence, the hypothesis 7, 8 and 9 are accepted.

Figure 4.21: Predicated model for correlation results



Based on table 4.19, the perception, OS and RRI are significantly associated with each other (p<0.5, CR>1.98). The direction of associated among them is positive, i.e., these variables tend to increase together. However, the magnitude of their relation across the variables is moderately positive (r > 0.5) and high positive (r> 0.7).

Table 4.19: Correlation results

Hypothesis	Variable	r value	Sig.	CR	Outcome
H7	Per↔OS	.658	0.000	7.155	Supported
H8	OS↔RRI	.623	0.000	6.817	Supported
H9	Per↔RRI	.870	0.000	8.913	Supported

Hypothesis 10: *Nationality moderates the relationship between patients' motivations and perception with regard to medical tourism services.*

Hypothesis 11: *Nationality moderates the relationship between patients' perception and OS with regard to medical tourism services.*

Hypothesis 12: *Nationality moderates the relationship between patients' OS and RRI.*

The effect of nationality as a moderating factor on the relationships between Mot, Per, OS, and RRI was evaluated using SEM technique. The results were reviewed using critical ratios to evaluate the difference among the study parameters and examine the impact of nationality as a moderating factor on the relationships among Mot, Per, OS, and RRI. Table 4.20 represents that nationality has no effect on the relationship between Mot and Per (p >0.05), indicating that H_{10} is not supported.

However, both the domestic patient group (SEs = 0.68; p = 0.000) and the inbound patient group (SEs = 0.45; p = 0.000) have a positive impact on OS. However, p >0.05 revealed that Per has an equal impact on OS in both groups, indicating that H_{11} is supported. Both the domestic patient group (SEs = 0.77; p = 0.000) and the inbound patient group (SEs = 0.46; p = 0.000) show a significant impact of OS on RRI. Thus, H12 is also supported.

Table 4.20: Moderation results

Hypothesis	Relationship	Estimates		*p* value		z-stat	Results
		D.P	I.P	D.P	I.P		
H10	Mot → Per	0.97	1.2	.000	.000	-1.36	Unsupported
H11	Per → OS	0.45	0.68	.000	.000	2.37	Supported
H12	OS → RRI	0.46	0.77	.000	.000	3.50	Supported

4.12 Chapter summary

The fourth chapter discussed the study's findings. The chapter begins with a discussion of normality and descriptive analysis. To compress variables into factors, exploratory factor analysis was used. Following that, measurement models were validated using confirmatory factor analysis. The measurement models' reliability and validity were found to be satisfactory. As a result, the study moved forward to test the causal model and hypotheses. The goodness of the causal model was adequately fitting, and twelve hypotheses predicted in the study were confirmed based on the existence of various causal relationships. The following chapter discusses the study's findings and conclusions.

CHAPTER: 5
DISCUSSION & CONCLUSION

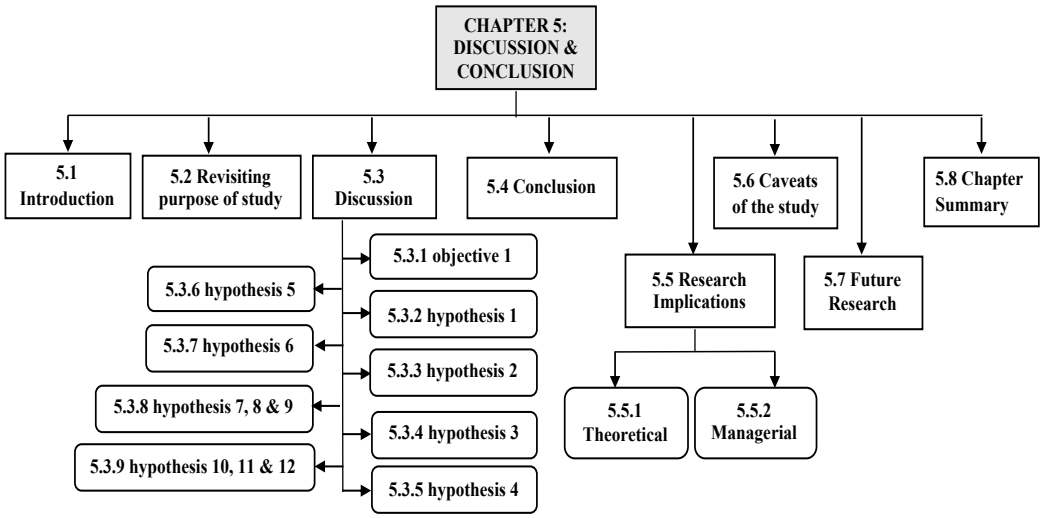
"Naming something," said Alice to the Red Queen, "isn't the same thing as explaining it." – Lewis Carroll

DISCUSSION & CONCLUSION

5.1 Introduction

The final chapter attempted to represent a summary of the findings, as well as a discussion of the findings and their managerial and theoretical implications (see figure 5.1 for overview of the chapter). The limitations of the study, as well as recommendations for future research, were then presented.

Figure 5.1: Overview of the Chapter 5



5.2 Revisiting the purpose of the study

The study was planned with the following objectives:

Objective:1 To investigate the factors of medical tourism services influencing motivation of domestic and inbound patients for medical travel to Delhi- NCR.

Objective:2 To analyse the perception of domestic and inbound patients towards medical tourism service quality.

Objective:3 To examine the influence of patients' medical travel motivations on their perception.

Objective:4 To assess the OS of domestic and inbound patients with medical tourism services.

Objective:5 To examine the domestic and international patients' destination revisiting and recommending intentions.

Objective:6 To examine the relationship between patients' perception, OS and RRI.

Some of the objectives have been attained by developing appropriate hypotheses, and the final results are reported in Table 5.1.

Table 5.1 Recap of the Summary of the hypotheses

H	Hypotheses	Outcome
H1	*Domestic and Inbound patients' perception is significant towards medical tourism service quality.*	Unsupported
H2	*Patients' perception is positively associated with their medical travel motivations.*	Supported
H3	*Patients' overall satisfaction is positively influenced by patients' perception of medical service quality.*	Supported
H4	*Domestic and Inbound patients' overall satisfaction is significant towards medical tourism services.*	Unsupported
H5	*Patients' revisiting and recommending intentions are positively influenced by patient's overall satisfaction of medical tourism destination.*	Supported
H6	*Domestic and Inbound patients' revisiting & recommending intentions are significant towards medical tourism destination.*	Unsupported
H7	*There is positive relationship between patients' perception and overall satisfaction with regard to medical tourism services.*	Supported
H8	*There is positive relationship between patients' overall satisfaction and revisit and recommending intentions with regard to medical tourism services.*	Supported
H9	*There is positive relationship between patients' revisit and recommending intentions and perception with regard to medical tourism services*	Supported
H10	*Nationality moderates the relationship between patients' motivations and perception with regard to medical tourism services.*	Unsupported
H11	*Nationality moderates the relationship between patients' perception and overall satisfaction with regard to medical tourism services.*	Supported
H12	*Nationality moderates the relationship between patients' overall satisfaction and revisit and recommending intentions.*	Supported

5.3 Discussion

5.3.1 Objective 1: Motivation Factors of Domestic and Inbound Patients

Traveling for medical treatment is a well-established concept. Medical tourism is an important extension of this concept, in which people travel to obtain more timely, accurate, and affordable medical care. The meteoric rise of health and medical tourism has piqued the attention of medical practitioners, policymakers, the media, and academicians. Such widespread expansion

necessitates identifying and comprehending the factors that motivate patients to travel to medical tourism destinations. The present study attempts to identify the factors that motivate medical tourists to travel Delhi-NCR for treatment. The present study identified that the *medical team, hospital infrastructure, touristic services, quality of care, waiting time and medical cost* are significantly essential medical travel motivations for the medical tourists visiting Delhi NCR.

The study results revealed that medical cost of *medication & reports, accommodation, surgery or operation is low* and *health care insurance* availability in Delhi-NCR pulls tourists significantly. According to the existing literature (Crooks et al., 2010), cost in medical tourism is vital travel determinant in patient's travel decision making. According to the findings, *medical cost* is more important factor for the inbound patients as compared to domestic patients. In the existing literature, the most important motivator cited for inbound medical tourists is low cost (Burkett, 2007; Goodrich & Goodrich, 1987; Horowitz, 2007; Singh, 2013). Furthermore, deduction of health and substantial costs was also among the motives of domestic medical tourists in previous researches (Gola, 2015; Mokoena & Haarhoff, 2016) as well. Hence, the results identified that the medical cost for inbound patients is low, whereas the domestic patients found the medical cost very high.

The present study has found that *medical team* is one of the important medical travel motivations. The study findings make familiar with medical tourists' preference of *regular visits by doctor, well trained and reputed doctors, caring and courteous nurses, good communication skills of nurses and other staff.* The findings are also confirmed by literature as competence of staff, competence of doctors, professionalism in hospital's management, facilitation and care available are identified as four concerns of the medical tourists (Ahire et al., 2020; Prakash et al., 2011). It is also assured that a skillful communication process between the paramedical staff and the medical tourists is found to be very important in medical tourism (Nazem & Mohamed, 2016; Garg et al., 2020). Specialised doctors and caring staff is considered as an important factor for domestic patients as well (Morito, 2020; Roy, 2020). Thus, the study findings showed that *medical team* is an essential factor for both the inbound and domestic patients.

According to the study results, *quality of care* was found a significant medical travel motivation for medical tourists. Besides, medical tourists pertaining to *quality of treatment, keeping records confidential, safety measures, follow up procedure, adequate help-desk and healthy environment in the hospital* was also observed. The quality treatment and hygienic aspects are imperative for medical tourists in choosing a healthcare destination (Datta, 2020). The assurance of privacy and confidentiality in the treatment is yet another motivation for patients to choose medical tourism (Horowitz et al., 2007; Lunt et al., 2011). Lack of quality of care is a motivation for domestic patient to travel to other cities for medical treatment (Roy, 2020). Thus, quality medical tourism services are indispensable factor in overall travel choices of medical tourists (Nazem & Mohamed, 2016; Prakash et al., 2011).

In line with the study results, *waiting time* is identified as one of the essential medical travel factor for medical tourists. The study contributes a more vital understanding that medical tourists preferred *required services within time, no waiting time for treatment, fast admission and discharge procedures in the hospital.* It has been proved in the previous studies that *no waiting time* for medical treatment and other procedures is considered as an important motivation for medical tourists (Altin et al, 2011; Lagiewski & Myers, 2008; Monica & Ramakrishnan, 2018). Generally, inbound patients come for treatment because of less waiting times for medical procedures (Hopkins et al., 2010; Gill & Singh, 2011). On the other hand, study results revealed that domestic patients are unhappy with waiting time for treatments and this has been researched by Roy (2020) as well. Thus, it is concluded that domestic patients need to wait for treatments which makes them unhappy and inbound patients are happy with less waiting time as they get priority for treatments as compared to domestic patients.

The study findings demonstrated that medical tourists seek countries having most advanced technology for treatment purpose, which is one of the principle elements of the *Hospital Infrastructure*. Previous studies have confirmed that availability of accommodations and food and beverage at the hospital are prime concern of the medical tourists (Khan & Alam, 2014; Singh 2013). However, for the medical patients, the advanced technology is an essential concern (Kim et al., 2019). The present study revealed that medical tourists preferred *advanced technologies, Food and beverage arrangements,*

accommodation facilities and quality clinical facilities. Domestic patients also travelled to other cities/states for the reason of poor infrastructure at their home city. Thus, the study findings stated that hospital infrastructure is an essential motivational factor for both, domestic as well as inbound medical tourists.

Like other factors, *touristic service* is also one of the significant medical travel motivation for medical tourists. The present study stated that medical tourists opt for *specialized medical tour operators, good shopping facilities and diversified tourist attractions* of Delhi-NCR. Musa et al. (2012) supported the results by stating that one of the factors that allure patients to travel to a particular destination is the opportunity to combine healthcare with exotic trip. Generally, medical tourists prefer shopping and sightseeing, apart from medical treatment (Ye & Assenov, 2017). In a separate study, Mokoena and Haarhoff (2016) have also found that domestic medical tourists are significantly getting involved in shopping activities besides medical treatment. Consequently, like other travel factors, *touristic services* is equally important for both the inbound and domestic patients.

5.3.2 Patients' perception is significant as per their nationality (H_1)

The perception of Inbound and domestic patients was found to be significantly different towards medical tourism service quality. Inbound patients oriented medical tourism service quality may be the reason of varying degrees of perception of domestic and inbound patient experience towards the same medical tourism services. The findings is in line with the previous research in different domain that concluded domestic and international tourists differed in their perception of services (Yuksel, 2004).

In the existing literature, various researchers (Nazem & Mohamed, 2016; Subramanian et al., 2020) have identified positive perception of inbound patients when it comes to medical tourism service quality. On the contrary, there is no research available on domestic patients' perception towards medical tourism service quality to validate the results of this study from the past literature. Therefore, the present study is one of its own kind to analyse the domestic medical tourists' perception and compare it with inbound patients' perception of medical tourism service quality.

5.3.3 Medical travel motivations have a positive impact on patients' perception (H_2)

The motivation factors such as *medical cost, medical team, quality of care, hospital infrastructure and touristic services* are significantly influencing patients' perception while as factors such as *waiting time* is partially influencing patients' perception. The results are in line with the earlier researches that found motivation factors such as low cost, quality of care, treatment types and availability and expert doctors available influence significantly the medical tourist's perception (Nachimuthu & Krishnaiah, 2018; Sarwar et al., 2012). The study founds a positive and direct effect of medical travel motivations on patients' perception. Thus, the medical travel motivations predict patients' perception significantly. This relationship may increase patients' expectations of medical tourism service quality.

5.3.4 Patients' OS is positively influenced by patients' perception of medical tourism service quality (H_3)

In the present study results, patients' perception was found to have positive significant impact on patients' OS. The study findings are in accordance with earlier researches (Hensen et al., 2008; Subramanian et al., 2020) which stated that medical tourists' perception positively associates with their satisfaction and medical tourists' perception predicts satisfaction as well. The present study results revealed that OS was found to be based on four items with high attributes to *quality of services, medical treatment, medical care and hospital management.* The results identified four items of perception of medical tourism service quality having effect on OS including *quality medical treatment with a reasonable price, efficient and knowledgeable medical team and quality medical and touristic services at the hospital*. Thus the results indicate direct and positive influence of perception on OS of medical tourists.

5.3.5 Patients' OS is significant as per their nationality (H_4)

According to the study results, OS of domestic and inbound patients was found to be significantly different towards medical tourism services. More specifically, the medical tourists were satisfied with the *quality of services, medical treatment, medical care and hospital management*. According to the past literature (Khademian & Farshid, 2015, Rad et al., 2010; Thi et al., 2002), these attributes are playing crucial role in patients' satisfaction. However, the study results further designated that inbound patients were more satisfied as compared to domestic patients. As OS of domestic patients' was not theorized, now these

results are essential and novel in understanding the OS of domestic medical tourists in the literature.

5.3.6 Patients' RRI are positively influenced by patient's OS of medical tourism services (H_5)

According to the study results, RRI of patients is significantly influenced by OS of patients. This means, patients' OS predicts that patient will come again for treatment if required and they will also suggest other needy patients to visit Delhi-NCR for treatment. Aforesaid study results reconfirm the researches of Abd Manaf et al., (2015), Nazem and Mohamed (2016) and Zain et al. (2017).

5.3.7 Patients' RRI is significant as per their nationality (H_6)

The study results quantified that domestic and inbound patients' revisiting and recommending intentions were significantly different. More specifically, the results designates that the medical tourists responded to the attributes significantly, such as, *consider the hospital as first choice in future, using the hospital if needed and recommend the hospital to others who need care* while checking their RRI to Delhi-NCR. In case of inbound patients, various researches (Asnawi et al., 2019; Hutchinson et al., 2009; Suhartanto, 2018) have confirmed that inbound patients are willing to revisit destination, if needed, and recommend to other needy patients.

According to the present study results, RRI is a constructive indicator of more medical tourism demand in the study area which confirms supplementary inbound and domestic medical tourists' footfall in future. Besides, there was lack of research on domestic patients RRI aspect; thus, the results of domestic medical tourists RRI in the study is the novel addition in the existing literature body for future reference.

5.3.8 There is a positive relationship among patients' perception, OS and RRI (H_7 H_8 & H_9)

The study results establish a strong association among patient's perception, OS and their revisiting and recommending intentions. This correlation among the constructs will lead medical tourism sector towards the next level of development and medical travel demand.

5.3.9 Nationality moderates the relationship among patients' motivations, perception, OS and RRI (H_{10} H_{11} & H_{12})

In the present study, the moderating effect of nationality across the three casual relationships, such as the impact of (i) patients' motivations on patients' perception, (ii) patients' perception on patients' OS, and (iii) patients' OS on patients' RRI were tested.

The study results found that there is no moderating effect of nationality on patients' motivations and perception. Seabra et al., (2013) also identified no moderating effect of patients' nationality on their travel motivations and perception. On the other hand, moderating effect of nationality was found between the relationship of patients' perception and their OS. A significant difference was found between domestic and inbound patients regarding the relationship between perception of medical tourism services and patients satisfaction; altogether the relationships between the two factors are different for domestic and international tourists in the study (Tran & Tran, 2020). In terms of OS (outcome variable), perception (predictor) of medical tourism services is more determinant for inbound patients.

Similarly, nationality also intervenes (moderates) between the relationship of patients' OS and RRI. This indicates that the relationship between patients' OS and RRI is found to be significantly different for domestic and inbound patients. In terms of RRI, OS is more determinant for inbound patients than domestic patients. The trend among healthcare providers is to give inbound patients more attention. In many cases, medical tourism services for inbound patients meet international standards and costs, whereas services for domestic patients may consider local circumstances. As a result, inbound patients may be more satisfied than domestic patients.

5.4 Conclusion

The present study is aimed at doing a comparative analysis of domestic and inbound patients' perception of medical tourism service quality in Delhi NCR. The study identified travel motivational factors that influence patients travel decision making and perception. The study determined that the *medical team, hospital infrastructure, touristic services, quality of care, waiting time and medical cost* are significantly essential medical travel motivations for medical tourists visiting Delhi NCR. The study also investigated the significant relationship among four constructs of casual model. The results indicated that there is significant difference between perception, satisfaction and RRI of

domestic and inbound patients. In addition, nationality moderates the relationship between patients' perception & OS, and OS & RRI. However, nationality failed to moderate the relationship between motivations and perception of medical tourism services.

Collectively, the present study results have supported the conceptual model of the study successfully. Therefore it can be concluded medical tourists' perception was affected by their medical travel motivations. Besides, medical tourists' revisit and recommending intentions were affected by overall satisfaction and perception constructs. Thus, these three constructs are antecedents of medical tourist future intentions.

5.5 Research Implications

This thesis is, to the best of the researcher's knowledge, the first to look into the causal relationship among motivations, perception, OS and future intentions of medical tourists towards medical tourism services. This research also contributed to the existing of knowledge by addressing the concept of domestic medical tourists and their contribution to the growth of the medical tourism industry. The study provides insight on how both domestic and inbound medical tourists can benefit a medical tourism destination. In addition, this research has contributed theoretical and practical contributions to the field of medical tourism, as well as research on domestic medical tourism. The section is categorised into two different subsections.

5.5.1 Theoretical Contribution

The present study is first initiation in medical tourism research domain that has made a comparative analysis of domestic and inbound medical tourists' perception of medical tourism services. The study is one of only a few in the tourism research domain in the current times that has assessed the relationship among medical travel motivations, perception, and satisfaction with medical tourism services. In addition the study investigated whether the link between the study constructs varies depending on the nationality of medical tourists (domestic vs. foreign).

Previous studies in hospitality sector have investigated perception, satisfaction and post purchase intention as separate models (Kotler, 1996).The present study has proposed an integrated model examining the association among

all latent variables of the study and tested the intervention of nationality in patients' perception, satisfaction and RRI. The study will enhance the concepts, such as, medical tourists' travel motivations, perception, satisfaction and post travel behaviour in the medical tourism literature and implement it to the interdisciplinary research field as well.

5.5.2 Managerial Implications

In terms of practical applicability, the findings of this study are likely to provide better knowledge of the decision-making to planners for developing medical tourism sector further and medical tourists for considering Delhi-NCR for future visits and references. The findings offered some suggestions for how stakeholders in the medical tourism industry can address domestic and inbound medical tourists' concerns about their perception and satisfaction. Medical tourists' perception and satisfaction on various parameters, such as, medical cost, medical team, quality of care, waiting time, hospital infrastructure and tourism services should be understood by hospitals and should focus on improving these facilities and services for improved satisfaction of medical tourists.

The findings will assist entrepreneurs in developing and improving marketing efforts for their services in order to meet the expectations of domestic and inbound medical tourists' positively. Demographics and travel behaviour of the respondents are effective tools for agencies and authorities to target various tourist segments from various age groups, occupations, countries, etc. for organ transplant, cancer, orthopaedics and other diverse treatments available at destinations.

The study findings will help planners to target medical tourist generating areas and position medical tourism product easily in those regions. Furthermore, the study's findings would assist the government of the medical tourism destinations in terms of policy formulation for domestic and international medical tourism in the country. The demand of domestic medical market is also increasing with significant growth in recent years. As a result, it is critical to comprehend this market, both domestic and international, in terms of the reasons for growth, types of treatments, providers, information and technology use, and destination selection.

5.6 Caveats of the study

Despite of undertaking every effort, the current study is facing some limitations as below:

1. The study results are concluded only on the basis of patients' responses. Other stakeholders of the medical tourism in the study are not approached for their views.
2. Data were collected only from selected private hospitals accredited by JCI and NABH in Delhi-NCR. No response of the patients from government or semi-government hospital was recoded for this study.
3. The study is bound to limited time-phases for data collection as COVID-19 guidelines restricted the international as well as national travelling.
4. Most of the times, hospitals were not permitting to enter the wards to record the responses from patients and sometimes respondents were showing reluctant behaviour which can considered their biased responses.
5. The study results are focusing on Delhi-NCR only as a medical tourism destination. As a result, the findings may not be applicable to other populations or locations not included in the research.

5.7 Future research

Based on the findings and limitations of the present study. The study provides various ideas for future research. The present study is bound to limited time period and sample size. Thus, the future study may benefit from longitudinal study with more time phases in order to achieve wide range results. Keeping in view the complexities in medical tourists' perception, future researches may be extended to medical travel intermediaries and other medical tourism stakeholders. There is wide scope for research on domestic medical tourists with regard their perception, satisfaction and revisit intentions. Since, the study model has been tested at a particular destination, therefore further validation of model is required by replicating this to other destinations.

5.8 Chapter Summary

The conclusion of the thesis provides interpretation of the findings and discusses the findings in relation to the existing literature. Furthermore, the chapter discusses the study's implications, as well as its limitations and future research directions.

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Annexure-I

Questionnaire

Dear Respondent

This questionnaire is a part of academic doctoral research to study **"Patients' Perception of Medical Tourism Services: A Comparative Analysis of Domestic and Inbound Patients in Delhi- NCR".** You are requested to spare some time to respond this questionnaire. Your co-operation is highly solicited and your information will be kept confidential.

Researcher: Kirti Kashyap (Ph.D. Scholar)
University: Lovely Professional University, Punjab
Mobile: +91 9536953530
Email: kashyapkirti157@gmail.com

PART 1: Demographic Profile of Respondents

Please indicate your response by placing a **tick (✓)** mark in the appropriate box.

1. Age in years	2. Income/annum in lac (INR)	3. Occupation	4. Education
Up to 20 ☐	Below 5 ☐	Study ☐	Up to 10+2 ☐
21-35 ☐	6 to 10 ☐	Job ☐	Under graduate ☐
36-50 ☐	11 to 15 ☐	Agriculturist ☐	Graduate ☐
51-65 ☐	16 to 20 ☐	Business ☐	Post Graduate ☐
66 & above ☐	20 & above ☐	Others ☐	Others ☐
5. Gender	**6. Marital Status**	**7. Nationality**	
Male ☐ Female ☐ Others ☐	Married ☐ Unmarried ☐ Others ☐	Indian ☐ Foreigner ☐ Please specify country/state:	

PART 2: Travel Behaviour of the Respondents

Please indicate your response by placing a **tick (✓)** mark in the appropriate box.

1. Treatment cost (In Lac) (INR)	**2. Type of treatment**	**3. Source of Information**
Below 5 ☐	Plastic Surgery ☐	Travel Agency ☐
6 to 10 ☐	Eye Surgery ☐	Hospital's website ☐
11 to 15 ☐	Dental Care ☐	Friends & Relatives ☐
16 to 20 ☐	Heart Care ☐	Social media Platforms ☐
Above 21 ☐	Cancer ☐	Advice of Local Doctor ☐
	Neurology ☐	Others ☐
	Orthopaedics ☐	
	Organ transplant ☐	
	Others ☐	

4. Treatment Duration	**5. Preferred Alternative Medical treatment destination**
Below 5 days ☐ 6-10 days ☐ 11-15 days ☐ 16-20 days ☐ Above 21 days ☐	Thailand ☐ Singapore ☐ Malaysia ☐ USA ☐ Dubai ☐ Others ☐

PART 3: Travel Motivations of the Respondents

Please read each statement carefully and indicate your level of agreement by ticking **(✓)** the point scale;
1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree.

S.No.	Statements	Response Scale
	Medical Cost	
	Cost of accommodation (bed) is low in hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Cost of surgery or operation is low in hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Cost for Medication and Reports is low in hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Health care insurance is available in hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Medical Team	
	Reputed and well trained doctors are treating patients in this hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Doctors are available when needed and visit patient regularly in this hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Nurses are taking care of medication and meals of patients in this hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Appearance of the staff is professional in this hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Nurses are courteous and respectful towards the patients in this hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Communication skills of the nurse staff in this hospital are worthy	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Quality of care	
	Quality of medical treatment is worthy in this hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

	Hospital has adequate information desk to cater to specific needs of patients	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Hospital keeps patient's treatment records confidential	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Hospital has appropriate safety measures for any unwanted emergency	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	The hospital is following follow-up treatment procedure for the patient	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Healthy and clean environment is maintained in and around the hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Waiting Time	
	I faced less waiting time for treatment in Delhi-NCR	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	There is fast admission and discharge procedures in the hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Required services are provided to the patients within time	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Hospital Infrastructure	
	Accommodation facility is available for patient's attendant(s) in this hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	This hospital has quality clinical facilities	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	There are entertainment facilities available in this hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	The hospital is using advanced technologies for treatments	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Food and beverage arrangements are available in this hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Touristic Services	
	Specialized tour operators offer Medical Tourism packages for Delhi-NCR	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	There is convenient local transport in Delhi-NCR	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	There is diversity of tourist attractions of Delhi-NCR	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	There is good shopping facilities in Delhi-NCR	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
Part 4: Patients' Perception of Medical Tourism Service Quality		
	I receive quality medical treatment in this hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	I believe that price of medical and other services is low	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	I believe that medical team in this hospital is efficient and knowledgeable	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	I believe that this hospital is equipped with modern infrastructure	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	I receive quality medical and touristic services at the hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	I receive quality medical treatment in this hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Part 5:Patients' Overall Satisfaction		
	I am satisfied with the treatment at the hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	I am satisfied with medical care at the hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	I am satisfied with the nursing care at the hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	I am satisfied with the hospital management	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
Part 6: RRI		
	I will revisit if I need in future	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	The hospital will be my first choice in future	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Recommending this hospital to others who seek for treatment	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Thank you!!!

Annexure-I

Questionnaire

Dear Respondent

This questionnaire is a part of academic doctoral research to study **"Patients' Perception of Medical Tourism Services: A Comparative Analysis of Domestic and Inbound Patients in Delhi- NCR".** You are requested to spare some time to respond this questionnaire. Your co-operation is highly solicited and your information will be kept confidential.

Researcher: Kirti Kashyap (Ph.D. Scholar)
University: Lovely Professional University, Punjab
Mobile: +91 9536953530
Email: kashyapkirti157@gmail.com

PART 1: Demographic Profile of Respondents

Please indicate your response by placing a **tick (✓)** mark in the appropriate box.

1. Age in years	2. Income/annum in lac (INR)	3. Occupation	4. Education
Up to 20 ☐ 21-35 ☐ 36-50 ☐ 51-65 ☐ 66 & above ☐	Below 5 ☐ 6 to 10 ☐ 11 to 15 ☐ 16 to 20 ☐ 20 & above ☐	Study ☐ Job ☐ Agriculturist ☐ Business ☐ Others ☐	Up to 10+2 ☐ Under graduate ☐ Graduate ☐ Post Graduate ☐ Others ☐
5. Gender	6. Marital Status	7. Nationality	
Male ☐ Female ☐ Others ☐	Married ☐ Unmarried ☐ Others ☐	Indian ☐ Foreigner ☐ Please specify country/state:	

PART 2: Travel Behaviour of the Respondents

Please indicate your response by placing a **tick (✓)** mark in the appropriate box.

1. Treatment cost (In Lac) (INR)	**2. Type of treatment**	**3. Source of Information**

Below 5 ☐ 6 to 10 ☐ 11 to 15 ☐ 16 to 20 ☐ Above 21 ☐	Plastic Surgery ☐ Eye Surgery ☐ Dental Care ☐ Heart Care ☐ Cancer ☐ Neurology ☐ Orthopaedics ☐ Organ transplant ☐ Others ☐	Travel Agency ☐ Hospital's website ☐ Friends & Relatives ☐ Social media Platforms ☐ Advice of Local Doctor ☐ Others ☐
4. Treatment Duration	**5. Preferred Alternative Medical treatment destination**	
Below 5 days ☐ 6-10 days ☐ 11-15 days ☐ 16-20 days ☐ Above 21 days ☐	Thailand ☐ Singapore ☐ Malaysia ☐ USA ☐ Dubai ☐ Others ☐	

PART 3: Travel Motivations of the Respondents

Please read each statement carefully and indicate your level of agreement by ticking **(✓)** the point scale;
1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree.

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	Health care insurance is available in hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Medical Team	
	Reputed and well trained doctors are treating patients in this hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Doctors are available when needed and visit	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

	patient regularly in this hospital	
	Nurses are taking care of medication and meals of patients in this hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Appearance of the staff is professional in this hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Nurses are courteous and respectful towards the patients in this hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Communication skills of the nurse staff in this hospital are worthy	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Quality of care	
	Quality of medical treatment is worthy in this hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Hospital has adequate information desk to cater to specific needs of patients	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
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	Hospital has appropriate safety measures for any unwanted emergency	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	The hospital is following follow-up treatment procedure for the patient	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
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	This hospital has quality clinical facilities	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
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Part 4: Patients' Perception of Medical Tourism Service Quality		

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	I believe that this hospital is equipped with modern infrastructure	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	I receive quality medical and touristic services at the hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
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	I am satisfied with the treatment at the hospital	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
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Part 6: RRI		
	I will revisit if I need in future	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	The hospital will be my first choice in future	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
	Recommending this hospital to others who seek for treatment	1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Thank you!!!

Annexure-II

Papers Presented in Conferences

SWAMI VIVEKANAND SUBHARTI UNIVERSITY
UGC Approved Meerut
NAAC A
Where Education is a Passion...

Certificate of Appreciation

This Certificate is awarded to

Kirti Kashyap

For Participating in the 6th International Conference on
"ADVANCED TECHNOLOGIES & INNOVATIONS IN TOURISM & HOSPITALITY INDUSTRY"(ATITHI-2021)
Organized by
Bhikaji Cama Subharti College of Hotel Management on 10th & 11th April, 2021.
~~He~~/She presented a paper/Attended the conference/~~Keynote speaker~~/~~Session chair~~
Medical Tourism in India : A Management Perspective

Mr. Indraneel Bose, Organizing Secretary
Mr. Ankit Srivastava, Treasurer
Dr. Shiv Mohan Verma, Organizing Chairman

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Kaizen
अतुल्य!भारत Incredible!India

CERTIFICATE

This is to certify that

Ms. Kirti Kashyap

Of Lovely Professional University, Phagwara Punjab has Presented research paper on topic Indian Medical Tourism: Post COVID-19 Planning and Reviving Approaches during the International E-Conference-Gen Next Hospitality-"Fostering Research, Innovation and Entrepreneurship"(IC-GNH) 2021, organized by Institute of Hotel Management, Bhopal on 7-8th October 2021.

Conference Convener
Prof. (Dr.) Anand Kumar Singh

Organizing Secretary
Mr. P.K. Modi

Annexure-III

Research Publication

Wellness travel motivations in the wake of COVID-19

Hafizullah Dar* and Kirti Kashyap

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Lovely Professional University,
Phagwara, Punjab, 144411, India
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*Corresponding author

Abstract: COVID-19 pandemic has placed human health under unprecedented issues since its outbreak in 2019. During COVID-19, people were restricted to one place, which caused many psychological and other health-related concerns among them. Hence, this study aims to understand wellness tourists' key wellness travel motivations in Rishikesh, India, during the COVID-19 lock-down period and post-pandemic. To conduct this quantitative research work, data were collected through a structured questionnaire from 232 domestic wellness tourists. Exploratory factor analysis was used for the factorial structure of the observed variables, and multiple regression analysis was used to test the study hypotheses. The study establishes an understanding that Rishikesh offers an anticipated atmosphere to wellness tourists from rejuvenation to d-stress to detoxification and body fitness even in a COVID-19 type crisis. Though India is getting momentum in wellness tourism, its infrastructure and professionalism need improvement to maintain the faith of wellness tourists in the destination image.

Keywords: post COVID-19; spa; spirituality; travel motivations; wellness tourism; yoga; tourism; health; Rishikesh tourism; religious tourism; Indian tourism.

Reference to this paper should be made as follows: Dar, H. and Kashyap, K. (2022) 'Wellness travel motivations in the wake of COVID-19', *Int. J. Tourism Policy*, Vol. 12, No. 1, pp.24–43.

Biographical notes: Hafizullah Dar is working as an Assistant Professor in Tourism and Airlines at School of Hotel Management and Tourism, Lovely Professional University, Punjab (India). He has obtained a PhD in Tourism Management. His research interest cover tourism services, destination management and planning, religious tourism, tourism community development, smart tourism and technologies. He has authored and co-authored various publications in different reputed journals. His recent research is focused on *Wellness Travel Motivations in the wake of Covid-19.*

Kirti Kashyap is a PhD candidate at School of Hotel Management and Tourism, Lovely Professional University, Punjab (India). Her core research area covers health tourism, wellness tourism and medical tourism. She has presented her research work in various international conferences. Her other research interests

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include tourism services, tourism planning and management and role of technology in tourism. Her recent research is focused on *Wellness Travel Motivations in the wake of Covid-19.*

1 Introduction

COVID-19 is a contagious disease, and its massive epidemic was observed worldwide (Ugur and Akbiyik, 2020). The World Health Organization declared the virus as a 'public health emergency of worldwide concern' on March 11, 2020; the mobility of individuals has been restricted internationally and domestically due to the high possibility of getting infected by the virus. Various measures were provided by the World Health Organization (2020) to control the spread of the deadly virus, like minimisation of contact with infected surfaces, regular hand washing, wearing masks compulsorily, social distancing (at least 1 m), and avoiding crowding in their daily routine. However, the number of affected patients and deaths worldwide has increased rapidly with the second wave of COVID-19 that struck India adversely in February 2021. In India, more than 304,243 people succumbed to this disease as of May 2021, while the number of active cases was 2,586,764 (Worldometers, 2021). Since the vaccines are available against this virus, India has administered total of 1.28 billion COVID-19 vaccines across the country as of December 5, 2021 (Ministry of Health and Family Welfare, 2021). Therefore, the current times are a test of physical immunity, psychological resilience, and strength (Sharma, 2020).

Wellness tourism is a key aid to improve the wellness, body, mental health, and quality of life of an individual. It has been gaining a lot of attention as it provides health-related services such as therapies, meditation, exercise, relaxation, mesmerising landscape, spa treatments, traditional treatments, which, is highly required in COVID-19 times (Kemppainen et al., 2021). According to a survey in 2017, 830 million trips were made by wellness tourists, which were grown by 5.6% annually from 2015 to 2017, and wellness tourism had a global market of USD 639 billion in 2017 (Global Wellness Institute, 2018). In 2019, India was ranked 23rd on the global level with 10.93 million inbound tourists of which 6.4% were for medical and wellness tourism (Mishra and Panda, 2021).

1.1 Impacts of COVID-19 on Health

COVID-19 has diverse impacts on business, education, communication, health, and so on. The virus has presented unprecedented health challenges worldwide (Roman et al., 2020) as it is associated with increased stress, anxiety, panic, and sleep disturbance (Das, 2020). Generally, healthcare workers, unemployed stricken people, adults, children, and patients with pre-existing mental conditions suffer from more distress. Faced with abrupt changes in the routine life of working from home, online classes, job security, and lack of physical contact with others, it is essential to look after mental and physical health (Roman et al., 2020). In addition, people with weak immune systems or heart and lung disease are at higher risk of being infected (Wang et al., 2020).

Along with the whole symptoms of the virus, many people are susceptible to psychological distress and physical health problems due to the enforcement of

exaggerated lock-downs and home isolation (Tanoue et al., 2020). The people whose relations or relatives have serious COVID-19 complications could feel anticipatory mourning (Das, 2020). According to the Indian Psychiatrist Society, there is a 20% increase in mental illness cases since the pandemic outbreak (Jasti et al., 2020). Additionally, Tanoue et al. (2020) reported that 'symptoms of hysteria and depression (16–28 %) and self-reported stress (8%) are common psychological reactions to the pandemic'. The majority of individuals were observed with psychological problems like anger, insomnia, irritability, fear of contracting and spreading the infection to relations, frustration, loneliness, denial, despair, suicidal tendency, and confusion because of the disastrous impact of this virus (Tillu et al., 2020). Therefore, the harmful impact of COVID-19 on public health effects: psychologically, physically, mentally, emotionally, and socially (Roman et al., 2020).

1.2 Case of the area

Many tourists visit India for Ayurveda, Unani, Siddha, homoeopathy, yoga, meditation, aromatherapy, naturopathy, and gem therapy (Tillu, 2020). India features a strong background of medicine and wellness traditions from ancient times; it is a natural preference for wellness travel (Voigt et al., 2011). Kerala, Uttarakhand, and Goa are world-renowned wellness tourist destinations in India (Lamba and Mohan, 2021). However, within a short time of its existence, Uttarakhand (particularly Rishikesh) has developed as a significant and influential destination for wellness tourism. Home to world-famous yoga institutions, several ashrams, health centres, retreats, and high-end spas, Rishikesh in Uttarakhand is understood for its wellness atmosphere and is additionally named the 'Yoga Capital of the World' (Telej and Gamble, 2019). Therefore, Rishikesh can be a perfect wellness destination in Uttarakhand (Gupta and Vyas, 2014) for wellness tourists during the post COVID-19 period. However, Rishikesh has received a massive number of wellness visitors, including some of the renowned personalities, such as the Beatles, Steve Jobs, Mia Farrow, Oprah, Prince Charles, Camilla Duchess, etc., in the past (Sharma and Nayak, 2018). Therefore, the strong wellness historical background of Rishikesh motivated researchers to choose Rishikesh as the area of study.

1.3 Rationale of the study

COVID-19 conditions affect the tourism industry by nearly 80%, with international tourism in particular declining by 60% (OECD, 2020). Therefore, wellness tourism can specialise in the domestic clientele who are showing a renewed interest in wellness, and because the use of nature and lack of congestion is often a very effective solution for COVID-19 and post COVID-19 conditions (Lamba and Mohan, 2021). This may also aid in expelling the domestic tourism of India in the wake of COVID-19. More importantly, Rishikesh will get attention from destination planners for enhancing the destination quality standards, wellness service improvements, and promotion according to the requirements and demand. Therefore, identifying the wellness travel motivations of wellness travellers during the wake of COVID-19 is the purpose of this study.

It is imperative to focus on the relationship between travel motivations and COVID-19 for wellness tourists. This study enhances well-being tourism in remote destinations such as Rishikesh, which could alleviate deprivation in the region and stimulate

development. Additionally, the COVID-19 pandemic is an opportunity for India to re-strategise to enhance its strength, for which it needs to enhance the marketing tools that showcase India as a worldwide wellness tourism destination in the post-COVID-19 world. Consistent with current literature, no research has addressed the motivating factors of wellness tourists in the aftermath of COVID-19.

2 Literature review

2.1 Emergence of health and wellness during COVID-19

To address health challenges, wellness tourism is one of the practical tools for dealing with pandemics (Sharma et al., 2020). During the pandemic situation, the concept of wellness- staying healthy and achieving the best potential for well-being has become extremely popular (Rao and Mehta, 2020). Wellness is one of the fastest-growing tourism segments globally within the pre-pandemic era (Mishra and Panda, 2021). Wellness tourism has been highly sought after for the physical, mental and spiritual quality of life by wellness travellers over the years (Kemppainen et al., 2021). As an outcome, many individuals are expected to embrace wellness travel within the post-pandemic era, and therefore the demand for wellness travel extends as people become more conscious of their health (Lamba and Mohan, 2021).

Holistic approaches of wellness

Health is typically understood *not to be sick*. Holistic approaches to health and well-being focus on how to lead a healthy and dynamic lifestyle. Physical (exercise), nutritional (healthy diet), emotional (navigation of feelings), social (positive relation-building), spiritual (connect to nature or high power), intellectual (engaging mind), financial (live within your means and future plan), and environmental (personal surroundings) are key holistic approaches of wellness and healthy life (Templeton, 2017). The holistic approach to wellness care broadens the scope of wellness travel. The increasing pace of life, work-life imbalance, weakening of traditional concepts, loss of religious organisations, desire for relaxation, and searching for a meaningful life are a few of the reasons that have helped to increase the demand for wellness tourism in the world (Mishra and Panda, 2021). In addition, leading a healthy lifestyle and the rising cost of allopathic medicine have resulted in well-being care and therapies around the world (Zabihkhah and Afshar, 2015). Wellness tourism accompanies spa tourism, age tourism, sports and adventure tourism, yoga tourism, spiritual tourism, and religious tourism.

2.2 Wellness travel motivations

The travel motivations of wellness tourists are necessary to understand during and after the pandemic as well. The factors which determine the travel motivations travel deciding and plans about the destination experiences are expected to undergo a considerable transformation within the days to come (Sibi and Sherry 2017). Many studies have already studied various factors of wellness tourism that affect the selection of destination (Voigt et al., 2011). Lamba and Mohan (2021) have described physical, spiritual, emotional, mental, psychological, social, and environmental as the core dimensions of wellness; however, it has not measured the factors affecting choosing a wellness tourism

destination. Kim et al. (2017) have investigated the motivation of wellness tourists, but they need to neglect the Physical dimension, which is one among the vital dimension of wellness tourism.

One of the widely accepted and applied theories to know the travel motivations is Maslow's Need Hierarchy Theory (1943). Maslow (1943) divided the human need into five, namely 'physiological needs', 'safety and security, 'social need', 'self-esteem', and 'self-actualisation'. However, Karn and Kumar (2021) have embraced a model based on a detailed consideration of wellness motivation for health and human needs. His derived needs theory reinforces the concept of total reward and, therefore, the significance of the non-financial rewards as motivators, as shown in Table 1. Authors divided motivation factors into four categories, namely Physiological Reward (Physical Fitness and healthy-living, Rest and relaxation, shake everyday Environment), Interpersonal reward (Social interaction and social status), personal reward (Environment Sensitivity, Meditation and Yoga), and Psychological Reward (Inner peace and happiness, Self-knowledge and realisation).

Table 1 Model for wellness motives

Maslow's need hierarchy theory	*Motivational factor for travel*		*Motivation for health and wellness*	
Aesthetic	Psychological reward	Self-knowledge and realisation	Spirit	Health and Wellness
Acquiring Knowledge		Inner peace and happiness		
Self- Actualisation	Personal reward	Meditation and Yoga	Mind	
		Environment sensitivity		
Belongingness and Love	Interpersonal reward	Social interaction and social status		
Safety and Security				
Physiological	Physiological reward	Physical fitness and healthy living	Body	
		Rest and relaxation		
		Escape from everyday life		

Source: Adapted from Karn and Kumar (2021)

According to Maslow's need hierarchy theory, health, safety, and wellness fall into an individual's basic needs, essential to survival. Hence theory predicts and develops wellness travel thought for better physical and mental health (Karn and Kumar; 2021)) which is also needed during prevailing Covid-19 pandemic situations.

The push and pull theory of Dann (1977) categorised two factors that affect tourist motivations – Push factors and Pull factors. Consistent with this theory, push factors to constitute internal emotional desires which create demand to travel, including, medical, adventure, relaxation, sport, and fitness, and are associated with many intrinsic factors like nostalgia, feeling of escape, isolation, social interaction, etc. In contrast, Dann (1977) defined the specific reasons for choosing a tourist destination and associated with external factors that magnetise one to go to a destination.

However, Pesonen and Komppula (2010) have determined three push (tourist destination, relaxation, and local people) and two pull (culture and nature) travel motives within the case of tourists who place high importance on wellness services. Karn and Kumar (2021) have evaluated the perceived travel motivation during post-COVID-19 and identified that several motivational factors collectively play an influential role in travel motivation within the present scenario, displaying the consistency of the results of previous studies.

2.3 Dimensions of wellness travel

Wellness tourism, a sub-division of health tourism, is an amalgamation of different wellness attributes and services, which consists of physical fitness and sports, relaxation and stress relief; meditation; Yoga; beauty treatments, and health-related education (Sharma and Nayak, 2018). In addition, wellness tourists may also seek treatments using alternative, herbal or homeopathic medicine (Majeed and Ramkissoon, 2020).

2.3.1 Yoga practices

Bhavanani (2020) stated that stress, fear, and negative emotions weaken our immune system, while Yoga (including meditation), mindfulness, positive emotions, and relaxation strengthen it. Yoga consists of the practice of physical postures (asanas), breath regulation (pranayama), control of the senses (Pratyahara), positive behaviour modifications (yamas and niyamas), and meditative techniques (Dharana, Dhyana, and Samadhi) (Iyengar, 1996). In line with Telej and Gamble (2019), Yoga may be an excellent tool as the stretching poses help reduce tension in muscles and joints and help relax the sympathetic system. The practice of Yoga takes care of all the mental issues, so it is best suited during post-COVID-19 (Tillu, 2020). The study revealed the acceptability, usefulness, and feasibility of tele-yoga and the way it reduced stress and enhance well-being and reduce stress. However, this new format cannot be over-emphasised during pandemic times. Indians are practising Yoga and meditation to depreciate the mental state crisis, i.e., stress and anxiety. Also, the motivation of individuals towards Yoga is significantly influenced by the COVID-19. An increase in COVID-19 cases and deaths raises stress, depression, and anxiety, which extend the danger of acute respiratory infections (Jasti et al., 2020). However, several studies have affirmed that yoga techniques, postures, and the procedure is beneficial in improving lung function and act as an add-on therapy for the prevention and post-recovery management of COVID-19 (Tillu, 2020).

> "Yoga features a potential role to interact with the people in creating a more positive, healthy environment. It is not only practised regularly, but also on vacations. A person's involvement level with Yoga, physical health also as a psychological state positively contribute to the proclivity to travel for Yoga." (Kaminsky et al., 2017)

The travel craving is motivated by the alternatives of yoga opportunities at the destination. Consistent with Sharma and Nayak (2018), Rishikesh has been perceived as an efficient wellness tourism destination, by tourists, with all necessary facilities and services. Gupta and Vyas (2014) already studied that places like Rishikesh and Haridwar in Uttarakhand have tremendous potential to serve wellness tourists from any corner of the globe.

H_1: Yoga is a significant Travel Motivation in the wake of COVID-19 of Wellness Tourists for health.

2.3.2 Spa activities

The Spa is defined as "entities dedicated to enhancing overall well-being through a spread of professional services that encourage the renewal of mind, body, and spirit" (Mak et al., 2009). However, some surveys showed that people live with greater fear, worries, and stress from the beginning of the COVID-19 (Bhavanani, 2020).

> "The coronavirus affected the respiratory system of the patient, which may be prevented or cured with the assistance of thermal treatments. Therefore, this pandemic creates an opportunity for hydrotherapy because it has a crucial role in the healing of the virus. Moreover, in the Spanish context, Spa is considered a medicinal service that prescribes suitable treatments and facilities to use the prescribed treatments. However, the potential of a spa is motivated by its curative aspects to a medical role." (Navarette and Shaw, 2021).

In turkey, a study by Kardes (2021) had revealed that after spas have reopened on 1 June, 2020 (lockdown had lifted), people's interest in spas has begun to extend. Additionally, it is interesting to note that people are undertaking spa therapy during the COVID-19 period. Further, it has been reviewed that the Spa is demonstrated beneficial in improving fatigue, dyspnea, pain, depression/anxiety, and increasing the quality of life of infected patients and post-COVID patients (Kardes, 2021; Antonelli and Donelli, 2020). Moreover, spa centres and the surrounding natural environment have an efficient role in health improvement during the pandemic and post-pandemic (Antonelli and Donelli, 2020).

Sibi and Sherry (2017) stated that Spa is the preferred form of wellness tourism, which incorporates thermal pools, steam rooms, and saunas for relaxation and healing. Mak et al. (2009) in Korea have shown that tourists were motivated by relaxation far away from everyday life while involving in spa activities. The traveller is motivated by Spa because it satisfies their needs and health goals: de-stress, detoxification, and cleansing, deep relaxation, etc. (Srivastava and Sharma, 2009). Kardes (2021) stated that there is a strong demand for spas among tourists for mental peace.

H_2: Spa is a significant Travel Motivation in the wake of COVID-19 of Wellness Tourists for health

2.3.3 Search for traditional medicine and treatment

Modern scientists phrase the traditional medicine system as non-conventional, or complementary medicine (Ravishankar and Shukla, 2007). Nevertheless, the traditional medication system is more preferred due to its prolonged historical use (Samal, 2015). The practice of other medical systems is highly influenced worldwide, especially in Asia and Latin America (Ling, 2019). These medicines are utilised in combination with allopathic treatment in symptomatic alleviation and prophylaxis of COVID-19. Consistent with Lin et al. (2014), the oldest system of medicine in India includes Ayurveda, Unani, Homeopathy, and Siddha.

During the COVID-19 situation, various studies revealed that those people having strong immunity have a better recovery rate against this virus (Roman et al., 2020). Ayurveda has gifted many immunity boosters and regimes to take care of health and

overcome this pandemic (Ling, 2019). Doctors' strategies for COVID-19 have focused on agents to attack the virus or immunise against it. The virus droplets enter the lungs through the throat via the nose, mouth, or ear. To cure respiratory illness, Tillu (2020) recommended some ayurvedic measures like drinking hot water, hot meals, herbal decoctions, steam inhalation, gargling with medicated water, and local applications helpful for patients having mild symptoms of COVID-19.

Additionally, several Rasayana botanicals mentioned in Ayurveda may directly relate to the prevention and treatment of SARS-COV-2 infection as they are immunity stimulators. Noticeably, people are motivated towards the traditional practices which will strengthen and protect from the infection. Ayurvedic herbs like tulsi, cinnamon, turmeric, etc., are commonly used in Indian households, which are highly beneficial for strengthening immunity (Sharma et al., 2020). Xu and Zhang (2020) stated that Chinese traditional medicines alongside Indian traditional medicines like Ayurveda and Naturopathy have emerged as a critical measure for the prevention of COVID-19. He continued by saying that numerous remedies (such as drinking boiled lemongrass, drinking boiled garlic juice, etc.) are circulated in some countries. In China, scientists and doctors have recommended using Traditional Chinese Medicine to cure COVID-19 (Ling, 2019). Proper consumption of Indian herbs like Brahmi, Jyotishmati, and Shankhpushpi can aid mental health management. These botanical plants and herbs have the potential to reinforce immunity to fight against COVID-19 (Xu and Zhang, 2020). A wide range of herbal drugs is produced within the hilly areas of Rishikesh, Uttarakhand (Telej and Gamble, 2019) and this pandemic is often an opportunity for tourists to experience them.

H_3: Traditional Indian treatment is a significant Travel Motivation in the wake of COVID-19 of Wellness Tourists for health

2.3.4 Spirituality and religious practices

Spiritual tourism is not just religious tourism like a pilgrimage, one word which puts a human being on the very best pedestal of life. Nicolaides and Grobler (2017) stated that Spirituality is a crucial consideration for a few tourists, and the general public believes that a higher divine power influences their lives. Spiritual tourist seeks something worth being and may give new richness or maybe a new direction to their lives (Luccheti et al., 2020). Spirituality is directly proportional to health as beliefs and practices are usually used with medicine to cope up with illness. Also, empathy from family and friends is helpful for a person's well-being (Mukherjee et al, 2020).

The pandemic altered the routine life and came up with massive challenges to the people. However, Spirituality proved to be a resource for people to affect stressful life (Castillo, 2020). Several studies have supported the positive effect of Spirituality on psychological state, especially in times of crisis and acute diseases; virtually worships and meditation are often the right solutions to form a mental peace and relaxation in people (Dar, 2020). During the COVID-19 outbreak, Spirituality and meditation are often among the apt methods to make mental relaxation (Roman, 2020). The recent study of Luccheti et al. (2020) in Brazil indicated a high use of spiritual beliefs during the pandemic, which was further linked to better health outcomes.

Similarly, Hamilton et al. (2021) suggested that Spirituality is a crucial strategy for carcinoma survivors to cope with psycho-social issues as they engaged themselves in

religious practices, wishing to God for protection, finding joy and courage through religious songs, and reading Biblical text. However, several studies are almost like this, indicating that faith may promote resilience during a crisis. Mukherjee et al. (2020) discussed that tourists' motives behind visiting ashrams are the belief that religious places give peace of mind and spiritual satisfaction. Thus, Spirituality and religion can help humans in trauma and times of crisis. Thus, Spirituality is found to be one major attraction for tourists in Rishikesh, and this place has the potential to become a significant spiritual tourism destination. During this global pandemic of COVID-19, spiritual care contributes as a coping strategy for practitioners and families (Roman, 2020).

H_4: Spirituality is a significant Travel Motivation in the wake of COVID-19 of Wellness Tourists for health

3 Research methodology

This study is quantitative, aimed to understand the wellness travel motivations of domestic tourists after the COVID-19 lockdown had uplifted. The area of the study is Rishikesh, a Himalayan celestial city of Uttarakhand in north India. Rishikesh is one of the holiest places of Hindus and the *Yoga Capital of the World* (Telej and Gamble, 2019). The holy atmosphere of Rishikesh fascinates spiritual seekers who come to meditate, Ayurveda, and do Yoga (Bhavanani, 2020).

3.1 Sampling

In this study, domestic tourists who visited Rishikesh for Yoga, Spa, and other wellness travel-related activities were considered as the study population. However, the study population is unknown. Therefore, the study sample size was chosen by considering the total number of the study items multiplied by 10 (items $\times$ 10). This method has been recommended by several searchers. According to Roscoe (1975), the sample size is several times (at least 10 times) larger than the number of items in the study in multivariate research. Hair et al, (2010) also recommended that using a sample size of 10 cases per item (10 : 1 ratio) in the study is acceptable to conclude. The present study constitutes 25 items. Therefore, a total of 250 wellness tourists was taken as the study sample size after multiplying the total number of study items by ten.

There are numerous Yoga, Spa, and wellness centres in Rishikesh (Gupta and Vyas, 2014), in this study, three ashrams (*Parmarth Niketan Ashram, Vivekananda Ashram, and Bihar School of Yoga*), two wellness centres (*Ananda in The Himalayas resort and the Glass House at the Ganges resort*) and one hotel (*Taj Resort and Spa Hotel*) with spa services were selected for data collection based on their popularity in offering wellness tourism services. However, after surveying these wellness units, the respondents were selected randomly for participating in the survey. Two hundred thirty-two responses were found usable out of 250 for final analysis and study results. The acceptable response rate from the respondents was 92.8%. Moreover, it is pertinent to mention that the research survey was administered from December 2020 to February 2021 and post Covid-19 lockdown times. After the first wave of Covid-19 (August 2020) in India, the Uttarakhand state government has lifted the travel restrictions and opened all travel attractions for domestic tourists in September 2020 with specific guidelines (Times of

India, 2020), which increased the tourist influx swiftly at the destination and it was the right time for study survey during ongoing COVID-19 pandemic. However, all guidelines (regarding social distancing, wearing masks, sanitising, etc.) issued by the authorities were followed during data collection and interacting with the respondents.

3.2 Questionnaire design

The data has been collected by self-designed questionnaire after a good review of the literature. The questionnaire was systematised into two different sections. In Section 1, respondents were asked about their demographics such as *gender, age, occupation, income, education, and marital status*. A total of six demographics of the respondents was included in this section (Table 2). On the other hand, there were twenty-five wellness travel motivation items in Section 2 of the research instrument (Table 3). The respondents' responses were measured at 5 points Likert scale where 1 was considered *Highly Disagree* and 5 as a *Highly Agree*.

Table 2 Socio-demographics of the respondents

Variable		*f*	*%*	*Variable*		*f*	*%*
1.	Male	144	62.1	4.	Up to 12th	35	15.1
Gender	Female	88	37.9	Education	Graduate	77	33.2
	Total	232	100		Post Graduate	106	45.7
2.	Up to 20	12	5.2		PhD	7	3.0
Age	21 to 40	94	40.5		Other	7	3.0
	41 to 60	103	44.4		Total	232	100
	Above 61	23	9.9	5.	Up to 5	101	43.5
	Total	232	100	Annual Income in lacs (INR)	5 to 10	63	27.2
3.	Studies	74	31.9		10 to 15	46	19.8
Occupation	Employee	77	33.2		15 to 20	16	6.9
	Business	38	16.4		20+	6	2.6
	Agriculture	15	6.5		Total	232	100
	Total	232	100	6.	Married	160	69.0
				Marital Status	Unmarried	72	31.0
					Total	232	100

'*%*' represents the percentage '*f*' represents the frequency.

Data were analysed in different steps. First, exploratory factor analysis (EFA) was employed to condense the study items into *Health, Yoga, Spa, TIM, and Spirituality* as study constructs. EFA was performed as the observed study constructs are not adopted from the previous research. Next, the study factors were identified with eigenvalue bigger than 1and factor loadings bigger than 0.6. Then, Cronbach's alpha test was used to check the reliability, and factors more significant than the 0.6 reliability were accepted into this study. In the next step, wellness travellers' travel motivations were investigated by mean and standard deviation statistics. However, the researchers widely used the regression analysis technique in hospitality literature to predict the impact of dependent variables on

independent variables while studying travel motivations. Therefore, multiple regression analysis was introduced for inferential assessment and to test the study hypotheses on an ordinal scale. Research techniques were used with the help of SPSS 23.0 software.

4 Results of the study

4.1 Demographics of the respondents

According to the demographic statistics of the respondents, presented in Table 2, male respondents (62.1%) are more than female (37.9%). Out of the total sample size, most respondents are from *the 41 to 60* years age group (44.4%) followed by the *21 to 40* years age group (40.5%), above 61 aged (9.9%), and up to 20 years aged (5.2%). Generally, they are doing a job (33.2%) and studies (31.9%) while least are involved in agricultural activities (6.5%). Moreover, maximum respondents are well-educated with g*raduate* (*33.2%*) and *postgraduate* (*45.7%*) degrees. On the other hand, the majority of the respondents (43.5%) are having *up to 5* Lac annual incomes followed by the 5 to 10 Lac (27.2%), 10 to 15 Lac (19.8%) and while the least number of the respondents (2.6%) are having more than 20 Lac annual incomes. Similarly, the results indicate that most of the respondents are married (69%) than unmarried (31%).

4.2 Exploratory factor analysis

According to Table 3, the study sample is adequate for factor analysis with Kaiser-Meyer-Olkin (KMO) value of 0.734, and study item Sphericity is also significant as $p < 0.05$. Therefore, the study items have been condensed into five factors, i.e., *Health, Yoga, Spa, traditional Indian Medicine, and Spirituality,* extracted from 31 study items.

Table 3 Results of exploratory factor analysis

S. no	*Factors*	*FL*	*Item references*
	Health		
1	I have physical health issues due to COVID–19	0.755	Sharma (2020)
2	I am inactive due to COVID–19	0.750	Majeed and Ramkissoon (2020)
3	I am in depression due to COVID–19	0.724	Sharma (2020)
4	I have work pressure due to COVID–19	0.720	Sharma (2020)
	Yoga		
5	Yoga enhance my mental wellness	0.842	Valentina (2016)
6	Yoga will improve physical health	0.765	Sibi and Sherry (2017)
7	Yoga provides me unusual community involvement atmosphere	0.749	Lehto et al. (2015)
8	Yoga constitutes diverse sports and fitness activities	0.713	Sibi and Sherry (2017)
9	Yoga helps me in controlling negative emotions	0.667	Lehto et al. (2015)
10	Yoga helps me in gaining a sense of balance	0.658	Kaminsky et al. (2017)

Table 3 Results of exploratory factor analysis (continued)

S. no	*Factors*	*FL*	*Item references*
	Spa		
11	I prefer qualified spa professionals	0.871	Valentina (2016)
12	There are a range of spa treatments available in Rishikesh	0.834	Kaminsky et al. (2017)
13	I need a relaxing and recreational atmosphere	0.768	Valentina (2016)
14	The Spa is appropriate for my stress reduction	0.686	Sibi and Sherry (2017)
	Traditional Indian Medicine (TIM)		
15	I visited Rishikesh for the Ayurvedic system of medicine	0.887	Sibi and Sherry (2017)
16	I visited Rishikesh for Herbal products	0.883	Valentina (2016)
17	I visited Rishikesh because of an available high-quality practitioner	0.750	Brown and Howat (2011)
18	I visited Rishikesh because of available healing therapies	0.651	Brown and Howat (2011)
	Spirituality		
19	I need to seek miracles and solace in the face of misfortune due to COVID–19	0.827	Brown and Howat (2011)
20	Rishikesh has a suitable atmosphere for mental relaxation and evaluation of self	0.815	Nicolaides and Grobler (2017)
21	I travel to Rishikesh to deepen my Spirituality due to COVID–19	0.762	Nicolaides and Grobler (2017)
22	Visiting Ashrams will help me to engage in spiritual activities	0.743	Brown and Howat (2011)
23	I need to attend religious and spiritual proceedings in the sacred atmosphere	0.693	Nicolaides and Grobler (2017)
24	I want to give back to the earth to deepen my relations with nature	0.676	Nicolaides and Grobler (2017)

KMO value: 0.897 (greater than 0.5)

Bartlett's Sphericity: Sig. at 0.000 ($p < 0.05$), FL = Factor Loadings.

Table 4 results designate that the mean values of each factor range from 3.82 to 4.12, which, as per the study Likert scale, are significant. *Health* factor is explaining the highest percentage of data variance (21.85%) and E.V. (4.32) followed by the Yoga (*V = 20.44, EV = 3.98*), Spa (*V = 11.12, EV = 2.57*), TIM (*V = 10.07, EV = 2.37*), and Spirituality (*V = 9.64, EV = 1.98*). In addition to this, Figure 1 signifies the comparison of wellness tourists' wellness travel motivations concerning Yoga, Spa, TIM, and Spirituality. These factors explain a total of 73.12% of data variance, and their reliability coefficient alpha values ($0.70 < \alpha > 0.90$) are also acceptable.

Table 4 Variance, E.V., and Reliability matrix of each factor

Factors	*M*	*SD*	*V (%)*	*E.V*	*R (α)*
Health	4.12	0.49	21.85	4.32	0.869
Yoga	3.96	0.33	20.44	3.98	0.794
Spa	3.82	0.46	11.12	2.57	0.893
TIM	3.86	0.39	10.07	2.37	0.761
Spirituality	3.97	0.43	9.64	1.98	0.826

M = mean, SD = Standard Deviation, EV = Eigen Value, V = Variance, R = Reliability.

Figure 1 Comparison of wellness travel motivations (see online version for colours)

4.3 Regression analysis

According to the regression model results in Table 5, the dependent variables have an R-value of 0.647, which indicates that the dependent variable has a moderate linear correlation with a decision of 64.7%. This also means *Spirituality, Spa, Yoga, TIM* predicts 64.7% impact on wellness travel motivations of wellness travellers during COVID-19. The table also designates the coefficient of determination (R2) as 0.418, which depicts 41.8% variation in the dependent variable (Health) is explained by independent variables, i.e., Yoga, Spa, TIM, and Spirituality.

Table 5 Model summary

Model	*R*	*R Square*	*Adjusted R Square*	*Std. error of the estimate*
1	0.647[a]	0.418	0.401	0.68251

[a]Predictors: (Constant), Yoga, Spa, TIM, Spirituality.

[b]Dependent variable: Health.

Table 6 tries to test the overall goodness of fit of fitted regression. From the table, it can be concluded that the fitted model is significant as the P-value of F statistics is 0.00, and it is less than the level of significance level ($\alpha < 0.05$). Since, the F count is also $40.93 > F$ table ($\alpha = 0.05$) 2.48. Therefore, a regression model can be used to predict the impact on health (dependent variable). Findings indicate that all the independent variables, i.e., *Yoga, Spa, TIM, Spirituality*, significantly contribute to the prediction of the dependent variable, i.e., *Health*.

Table 6 ANOVA

	Model	*Sum of squares*	*df*	*Mean square*	*F*	*Sig.*
1	Regression	30.782	4	7.6955	40.93	0.000[a]
	Residual	42.849	227	0.188		
	Total	73.631	231			

[a]Predictors: (Constant), Spiritual Tourism, Spa, Yoga, TIM.

[b]Dependent variable: Health.

Table 7 helps to determine the regression equation, the standardised column coefficients, and its sub column 'Beta' provide the regression coefficients. The first one is constant, or Y-intercept and the other is the regression coefficient of Health (Y) on Yoga (X1), Spa (X2), TIM (X3), and Spirituality (X4). Hence the regression equation using a coefficient table is:

$$Y = 0.167X1 + 0.050X2 + 0.018X3 + 0.028X4$$

From the above equation, it can be seen that the coefficient from the regression equation is positive. Additionally, the regression coefficient is significant as p-values of all the variables are less than the level of significance level ($\alpha = 5\%$), which also revealed the results of the proposed hypotheses.

Table 7 Impact of COVID-19 on wellness travel motivations in Rishikesh in the wake of COVID-19

Model	*Unstandardised coefficients*		*Standardised coefficients*	*t*	*Sig.*
	B	*Std. error*	*Beta*		
(Constant)	3.001	0.522		5.753	0.000
Yoga	0.243	0.098	0.167	2.480	0.014
Spa	0.053	0.070	0.050	0.757	0.050
TIM	0.022	0.085	0.018	0.264	0.022
Spirituality	0.031	0.076	0.028	0.411	0.042

[a]Independent Variable: COVID-19.

The p-value of Yoga is significant at 0.014 which is less than α (0.05) value (i.e., $p < \alpha$ or $0.014 < 0.05$). Therefore, the assumption that '*Yoga is a significant Wellness Travel*

Motivation in the wake of COVID-19 of Wellness Tourists for health' in hypothesis first (H1) is supported.

The p-value of the Spa is significant at 0.050, which is equal to the α (0.05) value. Hence, the assumption that '*Spa services are significant Wellness Travel Motivation in the wake of COVID-19 of Wellness Tourists for health*' in hypothesis second (H2) is accepted.

The p-value of TIM is significant at 0.022, which is less than α (0.05). Thus, the assumption that '*Traditional Indian Medicine is a significant Travel Motivation in the wake of COVID-19 of Wellness Tourists for health*' in hypothesis third (H3) is confirmed positives.

Similarly, the p-value of Spirituality is significant at 0.042, which is less than the α (0.05) value. Therefore, the assumption that "*Spirituality is a significant Travel Motivation in the wake of COVID-19 of Wellness Tourists for health*" in hypothesis fourth (H4) is supported.

5 Discussion and conclusion

COVID-19 outbreak is a global challenge as this pandemic has affected individuals in almost every possible way. The study results revealed that the impact of COVID-19 is so deep down that it becomes a menace to public health and discerning. The present study determined that the travel for *Yoga* (0.014), *Spa* (0.050), *Traditional Indian Medicine* (0.022), *and Spirituality* (0.042) are significantly essential motivations for the wellness tourists in the wake of COVID-19 for their health and well-being. COVID-19 compelled them to undertake wellness travel tours for health. Therefore, this provides new insight into the relationship between COVID-19 and travel for wellness activities, and Rishikesh is an apt destination for wellness activities and facilities in India (Gupta and Vyas, 2014).

Although previous studies have focused on various usual aspects of wellness travel while studying the wellness travel motivations, the results of this study demonstrate the profound impacts of wellness travel motivations on health due to COVID-19. The study results also endorse that the people, during COVID-19, are facing physical health issues, inactiveness, depression, and work pressure, hence they need to get healed.

The study contributes a more vital understanding that Yoga could enhance wellness travellers' mental wellness and physical fitness, sense of balance, provide an unusual community involvement atmosphere and control their negative thoughts during COVID-19. Previous research has also proved that wellness travellers are attracted to Yoga to improve physical and mental health (Telej and Gamble, 2019; Bhavanani, 2020). The study results showed that the effectiveness of Yoga in apprehensions in the wake of the COVID-19 is quite significant for wellness tourists' health, and Rishikesh is giving the best experience to Yoga lovers (Gupta and Vyas, 2014).

In line with the study results, despite the deadliest COVID-19 worldwide, wellness travellers preferred *qualified spa professionals, a range of spa treatments, relaxation, and recreation* at *Spa* centres with knowledge of ancient Indian sciences and modern western treatments where prescribed guidelines have also been followed. The findings establish that spa service providers must be well equipped for adequate services and tourist experiences even in pandemic situations. The Spa is widely visited for overall health improvement by the individuals over the years in average days (Pesonen and Komppula,

2010), but this time study confirms that due to COVID-19, they are highly motivated to experience better spa services for their well-being.

The study results, build on existing evidence, proved the profound belief of Indian people in Ayurveda during COVID-19, which is one of the principal elements of the *Indian traditional treatment*. Rao and Mehta (2020) have also confirmed while researching the adequacy of Ayurveda, Yoga, Unani, Siddha, Naturopathy, and Homoeopathy during the COVID-19 pandemic. The present study demonstrates that *wellness tourists, mostly preferred Ayurvedic medicine and herbal products' consumption*. Ministry of AYUSH, the government of India, has also recommended that taking herbal tea, golden milk, and Chyavanprash is helpful during COVID-19, which further encouraged wellness travellers to visit Rishikesh for quality wide varieties of traditional medicines. *Traditional Indian Medicines* (Ayurvedic and herbal medicines) contribute effectively in boosting the immunity of the consumers, which is highly required against the Coronavirus (Xu and Zhang, 2020).

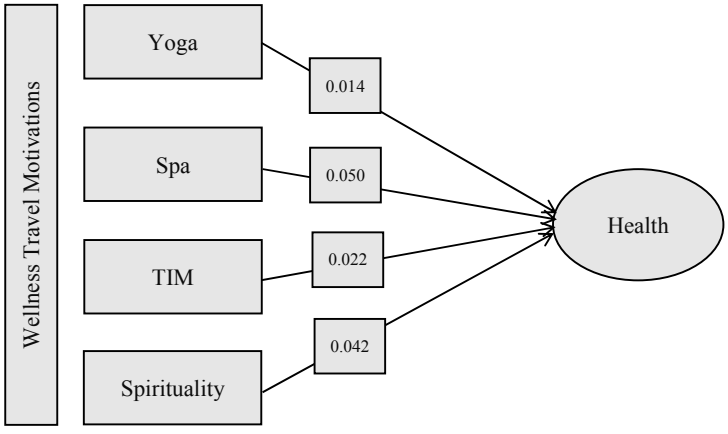
Like other motivations, *Spirituality* also remained a significant travel motivation of wellness travellers in the wake of COVID-19. According to the study results, wellness travellers significantly travelled for seeking miracles, solace, peace, sacred atmosphere, and deepening and engaging in spirituality, due to the COVID-19. These results build on existing evidence that spiritual life is peaceful and divine, where believers feel safe and stable (Nicolaides and Grobler, 2017; Dar, 2020). Rishikesh has a long and robust history of religious and spiritual atmosphere in the mighty Himalayas for the devotees (Gupta and Vyas, 2014), and this is why wellness travellers preferred to visit the destination during COVID-19 and give back to the earth by deepening relations with nature.

The present study has evaluated tourists' perceived wellness travel motivations, and the study findings contribute a more precise understanding that wellness tourists consider Yoga, Spa, traditional medicine, and spirituality significantly important wellness travel motivations during the post-COVID-19 period for health (Figure 2). Identical to Bowers and Cheers (2017), the study findings specify significant linkages among the travel motivations of wellness tourists. The study results also indicate that Rishikesh tends to attract and serve wellness tourists in post-pandemic situations, as wellness tourists' satisfaction develops revisiting intentions among wellness tourists in Rishikesh (Sharma and Nayak, 2018). Because of its spiritual and holy atmosphere, Yoga and Spirituality are the primary motivations for wellness tourists in Rishikesh.

The study findings support Maslow's Need hierarchy theory (1943), in which the author stressed better health and peaceful life in the basic needs of a human being. Yoga, Spa, TIM, and Spirituality are best suitable for human well-being and wellness during Covid-19 crises to follow Maslow's theory. The study results further designate what destination attributes attracted wellness tourists in Rishikesh and how health and mental issues, due to the Covid-19 pandemic, pushed them for wellness travel to better-fit Push and Pull factor theory.

Although this research provides significant support in developing the literature on the impact of COVID-19 on the health and importance of wellness tourism during the pandemic and post-pandemic, further research is needed to establish comparative insights on wellness travel motivations of national and international tourists after COVID-19. In addition, destination wellness service quality and marketing approaches are much-needed further research opportunities that future studies should focus on.

Figure 2 Conceptual model of the study



Develop by the Authors

6 Limitations of the study

The current research has a few limitations that ought to be considered while its results. First, the research was conducted in restricted COVID-19 guidelines, which protected researchers from understanding the travel motivations, besides research instruments, from wellness tourists during a survey. Besides, the tiny sample size limits our ability to generalise to an enormous population as a broader sample size may improve the understanding of current wellness travelling motives after a pandemic. Further, because of the dearth of knowledge on foreign wellness travellers, the results cannot confirm what wellness travellers worldwide want in the very wake of COVID-19. Moreover, the methodological adoptions are affected by the limited time-frame, around three months, for surveys.

7 Significance of the study

This study provides important insights into the event and promotion of wellness tourism products and services worldwide during post-pandemic crises. Destination level management bodies can make the most of this study to promote wellness tourism destinations during a crisis like a coronavirus while specialising in the identified wellness travel motivations. There are different scenarios on what new challenges and standards will be imposed, who are more likely to travel which products and services will disappear and transform. Hence the various wellness travel stakeholders in Rishikesh should be ready to develop different action plans for every scenario and that they have a risk and crisis management decide to improve the number of tourists flow in the area. As per the tourist's needs, they will also provide additional quality services that will increase revenue and help the local economy.

Regardless significance of the study, the study results have further future implications. The current century has its roots in technology and industry. Hence, it has been known as the century of anxiety, stress, and nervous disorders that have had the

opposite effect on human health and have brought new social, health, and medical issues. Therefore, wellness tourism can be a very effective solution even in post-pandemic conditions as well.

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