

# Study of the effective factors for attracting medical tourism in Iran

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*MASTER ' S THESIS*

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*Study of the Effective Factors for  
Attracting Medical Tourism in Iran*

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## ***Abstract***

It is confidentially predicted that over the next decade, Asia will have one of the fastest growing tourist populations in the world. Medical tourism in Asia is however relatively new, brought on in the aftermath of the Asian Financial Crisis that led first private hospitals in some Asian countries to seek alternative revenue sources. Nowadays many Asian countries such as Iran with high potentiality for attract medical tourism have sought to enter this market.

This paper sets out to determine the effective factor for attracting medical tourism to Iran and examined the actual potential that foreign patients represent based on costs, quality and recognizing other aspect of marketing mix and investigated the role of the government and related organizations in this markets. Iranian medical facilities according to special situation of Iran can provide a massive potential for medical and health tourism and Iran can become a hub of medical tourism in the region in future.

**Keywords:** Medical Tourism, Attracting, Effective.

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***Chapter1: Introduction***

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### ***1.1 Background***

The combination of medical and tourism seems to be a promising relatively new Type of niche tourism. Medical tourism is where “tourists” primarily seek medical treatment abroad and afterwards the more conventional form or tourism experience related to leisure and relaxation in tourist places (Caballero et al, 2006). In the past decades several Asia countries are dominate this industry but most countries have sought to enter the market (Connell, 2006).

It is also crucial that the more advanced developing countries open their market more significantly and provide increased opportunities for this industry (IHT, 2007). The main Factors contributing to this phenomenon include long waiting lists for surgery, costly healthcare in industrialized countries, No or minimal insurance coverage in many Developed countries, anonymity and surprising by medicine surgery in other countries, powerful communication between the various nations and states in the world , having natural resources in many developing and Asian countries for offering complementary and traditional medicine has led to the recent natural progression within health and medical from developed counties to developing countries (Jabbari, 2007). Many Asian countries involved after 1990 in the Asian economic crises and they need to find economic diversification and solution for wake of this crisis (IHT, 2007). In the recent decades Medical tourism is a fast growing industry in the Asian region and many countries are actively promoting it and the others such as Iran have sough to enter the market (Connell, 2006). According to Iranian Cultural Heritage News (2007), Iranian medical facilities are unique in the regions that can providing a massive potential for

medical and health tourism and Iran can become a hub of medical tourism in the region in future.

This chapter presents the introduction of the thesis, statement of the problem, objectives and hypothesis which led to do in this research. At the end of this chapter give the reader a view of the methodology that used in this study.

### ***1.2 Statement of the problem***

Tourism, described as the activities of persons traveling to and staying in Places outside their usual environment for not more than one consecutive year For leisure, business and other purposes not related to the exercise of an Activity remunerated from within the place visited, has grown substantially Over the last quarter of a century, as an economic and social phenomenon (WTO, 2000). A classification of purpose of visit (or trip) by major groups is elaborates on a classification proposed by the United Nations in 1979 in its Provisional Guidelines on Statistics of International Tourism. This classification is Designed to measure the key segments of tourism demand for planning, marketing and promotion purposes.

Classification of purpose of visit (or trip) by types of tourism major groups has been shown bellow (WTO,2000) :

1. Leisure, Recreation and Holidays
2. Visiting Friends and Relatives
3. Business and Professional
4. Health Treatment
5. Religion/Pilgrimages
6. Sport
7. Others

Therefore, it is reasonable to examine effective factors in attracting tourists according to the motives of any groups. Travel and tourism encompassing transport, accommodations, catering, recreation and services for travelers is the world's largest industry.

As experienced after the World War II and the Gulf War in 1990, the growth of tourism in the long term will continue (Connell, 2006).

During this time health tourism has grown in many countries such as Asia regions. Many Asian countries involved after 1990 in the Asian economic crises and they need to find economic diversification and solution for wake of this crisis (IHT, 2007).

It seems that health & medical tourism is the most growing sectors of tourism in the resources, and many countries interested in developing tourism industry have noticed this sector of tourism industry and are planning for this. Patients are increasingly traveling to developing countries for health care. Developing countries are increasingly offering their facilities to paying foreign customers. This international trade in medical services has huge economic potential for developing countries and serious implications for health care across the globe (Karla et al, 2007).

The first and most important growth factor for medical tourism in developing countries is the enormous costs of treatments and therapies in the developed countries. Also Waiting times for procedures in industrialized nations ,Facilities in international travels, access to various air lines, establishing powerful cultural and political communications between nations and states are the helpful factors in developing medical tourism (Jabbarii, 2007).

Ecommerce, which is the cause of enhanced knowledge of people in IT domain and created internet lines, is the first powerful communication factor between the various nations and states in the world (Levett, 2005). Moreover, the traditional methods and natural resources for therapy and treatment in developing Asian countries, has led to attract many patient by different religions in the world and caused to growth of this market for these countries (Huff-Rousselle et al, 1995). Successful countries in this sector

of tourism have recognized and examined existing the potentials and planning appropriately of needs for other countries, especially neighboring ones, and invested accordingly. Many Asian countries are rapidly-growing practice of traveling to another country to obtain health care. Also Iran with high potentiality for attract medical tourism have sought to enter this market.

The special geographical location of Iran, the history of medical sciences, the availability of medical and Para medical teams /faculties, low-cost and high-quality healthcare services, has led to high importance of medical tourism in economic and medicine fields in Iran. The variance and the low price of medical services by considering the geographical situation of border lines of Iran are of effective factors to attract medical tourism. The ancient history of Iran in medicine, the skilled specialists in various fields, special climate, vast natural recourses such as warm spa and mud areas for therapy are the other important factors for promoting medical tourism industry in Iran.

The suitable function of responsible organizations in this sector is very important. The policies and proper planning and cooperation of governmental organizations are influential factors for developing this sector in Iran. The proper factors of marketing mix for attracting medical tourists to Iran have been included special profits. Marketing mix is the key base of systematic marketing which are a set of executive decisions and actions and the managers of each department, who are active in the field of marketing and sale, must be aware of and sensitive to them. The concept of mix marketing was introduced by Neil Borden in 1950s. The factors of this concept were categorized by one of prominent scholars then named McCarty in America, and became known as 4P model: products,

pricing, placement, and promotion. After 50 years, Philip Kotler extended these factors and the new Marketing Mix consisted of 12 items which are explained below:

policy, public relation, physical evidence, processes, personality, packaging, participation, and power on marketing; another factor called "people" was added later. Nowadays some experts of travel and tourism marketing have added some other factors to the classic marketing mix that include: packing, programming, people, and participation.

Policy of the society, planning and programming by governmental and private organizations, contribution of foreigners, are considered as the most important factors in developing the tourism industry. The influence of environmental factors is also important. These factors have been expressed such as different geographical, economical, political, and social aspects. Changes in some of these factors can be very great, unexpected in some developing countries. These changes can be problematic or results in marketing opportunities. Based on its major goal ,tourism marketing consists of what the tourists come to see (product), the relative costs to access to these destinations in comparison to the other destinations (price), the situation of the destinations in terms of distance to the aim markets and easy access to that place (placement), and the various methods of communicating information to attract tourism (promotion), (Clarke et al,1988). The present study has been expressed that the functions of responsible organizations and recognizing the effective marketing mix which are related for this market. Also knowing Iran circumstances according to special geographical situation of Iran, have a basic role for attracting medical tourism. Also the present study surveying these potentialities of Iran for entering this market.



### ***1.3 The significance of the research problem***

This research was designed to determine the effective factors for attracting medical tourism to Iran in a variety of aspect such as proper function of related organization, proper marketing Mix according to special circumstances of Iran. It seems that knowing each of these factors are necessary for entering Iran to medical tourism market. The significance of this research has been expressed that:

1-Promoting medical tourism industry in Iran should be paramount which caused to raise the awareness of the related Iranian organization for this issue. It is necessary for these organizations to specify the significance of raising the standard and improving the medical and tourism facilities. Proper function of private and state organizations could be activated the different related sectors such as health centers and tourism destinations.

2- Knowing the proper factors of marketing mix for attracting medical tourism have been included special profits. Studying various factors such as products, price, places, and promotion plays have special roles in this sector of tourism.

Therefore; the present study is special importance due to examining the functions of responsible organizations, proper factors of marketing mix and recognizing the circumstances of Iran according to special geographical location of Iran. It is important to know this research has led to raise awareness of people about the importance and special factors for attracting medical tourists in Iran.

#### ***1.4 Research objectives***

The main objectives of this research are surveying the effective factors for attracting medical tourists in Iran. This research has been expressed in 3 main important criteria that included:

1-Investigating the proper function and performance of corresponding organizations and institutes (private and sates) for attracting medical tourists in Iran.

2-Examining the effective factors of proper marketing mix for attracting medical tourists in Iran.

3-Recognizing Iran situation and circumstances for attracting medical tourists in Iran.

Therefore the focuse of this study was considered on medical tourism discussion in Iran and surveying the potentiality and effective factors which are important for attracting medical tourism industry in Iran.

### ***1.7 Research Hypothesis***

A hypothesis defines an expected relationship between variables (based on causal relationships in the theoretical model), which can be empirically tested. The hypothesis in this research can be expressed as:

#### ***1-The proper functions of responsible organizations relate to attraction of medical tourists to Iran.***

1-1 The proper functions of responsible state organizations relate to medical tourism industry.

1-2 The proper functions of health centers relate to medical tourism industry.

1-3 Cooperating of responsible organizations relate to medical tourism industry.

#### ***2-The proper marketing mix relate to attractions of medical tourism industry in Iran.***

2-1 The diversity and variance of medical services relate to attraction of medical tourists to Iran.

2-2 The quality of medical services relate to attractions of medical tourists to Iran.

2-3 Pricing the medical services relate to attraction of medical tourists to Iran.

2-4 Advertising the medical services relate to attraction medical tourists to Iran.

#### ***3- Iran circumstances relate to attractions of medical tourism industry in Iran.***

3-1 Iran geographical situation relates to attraction of medical tourists to Iran.

3-2 Felling secured in Iran relates to attraction of medical tourists to Iran.

3-3 Being as an Islamic country relates to attraction of medical tourists to Iran.

3-4 Attraction of medical tourism to Iran relates to the medical civilization of Iran from the previous time to now.

### ***1.6 Methodology***

This study was conducted as an Empirical research method that descriptive analytical surveying used for observations or gathering data in order to answer particular research hypothesis.

In this study used quantitative techniques to obtain information from success of medical tourism discussion in Iran and for observe and analysis them, qualitative approach would be selected. Research method that uses in this research is triangulation (both qualitative and quantitative method).

In this study the method of collecting and gathering data from a part of population was used by the questionnaire structured. The software approach for data analysis in this research was SPSS.

### ***1.7 Research limitation***

Research limitation in this research has been expressed bellow:

- 1-Lack of the proper information about related Iranian organization for medical tourism industry.
- 2-Lack of the Scientific Persian references in Iran about medical tourism issues.
- 3-Lack of practical research that related to this topic in Iran.
- 4-Lack of information about medical and health centers about medical tourism discussion in Iran.
- 5-Lack of specific statistical information which is related to medical tourism industry in Iran.

## ***Chapter 2: Literature review***

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## ***2.1 Introduction***

This Chapter presents the definition of medical tourism, History of medical tourism in the world .Also discusses about the other practical researches, and medical tourism issues in Iran.

## ***2.2 Definition***

### ***2.2.1 Medical tourism***

Medical tourism or medical travel is the act of traveling to other countries to obtain medical, dental, and surgical care. Almost two decades ago, Goodrich & Goodrich (1987:217) defined health-care tourism as “the attempt on the part of a tourist facility (for example a hotel) or destination to attract tourists by deliberately promoting its health-care services and facilities, in addition to its regular tourist amenities”.

Chosen definition of medical tourism and wellness tourism were equally interchangeable in Europe during the 1960’s and 1970’s .in 1999 a report, on regional healthcare, released by the European Union (EU) tipped medical tourism to be a lucrative industry for Europe with the dominant market operators cited as being Switzerland and Germany and the targeted consumers; wealthy individuals from the Middle East and Eastern Europe.

While the fundamentals of the definition remain valid, a combination of leisure and health-care, the facilities referred to 20 years ago generally included spas, resorts, hot springs, were added to this definitions. This definition seems somewhat exclusive in that it was for the select few i.e. those who could afford to engage in such leisure pursuits. Today authors such as Connell (2006:2) define medical tourism as a popular mass culture “where people travel often-long distances to overseas destinations (India, Thailand, Malaysia) to obtain medical, dental and surgical care while simultaneously being holidaymakers, in a more conventional sense...”.

Another recent definition is made in the report *Medical Tourism: a global analysis* (2005), where medical tourism is described as any form of travel from one's normal place of residence to a destination at which medical or surgical treatments is provided or performed. The travel undertaken must involve more than one night away from the country of residence. The focus of the second definition is on the nature of the treatment provided and the destination without making reference to the simultaneous pursuit of leisure.

Another definition of Medical tourism is occurs when international patients travel across boundaries for their healthcare and medical needs (Monica, 2007). Medical tourism can be broadly defined as provision of 'cost effective' private medical care in collaboration with the tourism industry for patients needing surgical and other forms of specialized treatment (India medical care, 2007).

Nowadays medical tourism defined in many researches, as the act of traveling to other countries to obtain medical, dental, and surgical care or where people travel to other countries to obtain medical care maybe include complementary (alternative) and traditional medicine like (spa water or climate ,black mud, stone ,sand,...). It also includes medical services (inclusive of elective procedure and complex specialized surgeries) like knee/hip replacement, heart surgery, dental procedures and different cosmetic surgeries .Also Leisure aspect of traveling may be included on such medical travel trips. On the other hand medical tourism is where the healthcare services are sought and delivered outside of the home country of the customer, wherein the provider and the customer use non-formal channels of communication-connection-contract, with no or minimal regulatory or legal oversight to assure quality and with limited formal recourse to reimbursement or redress, if needed.



Tourism in this study it is a market that has been established and is experiencing significant growth over the last couple of years. Many of the sources used in our research not only provide their definitions of medical tourism but also show the variety and range of businesses that are involved in this type of good.

Figure 1 and 2 have been expressed the health tourism structure in 2 different kinds of category:

Figure 1: The Health Tourism Structure

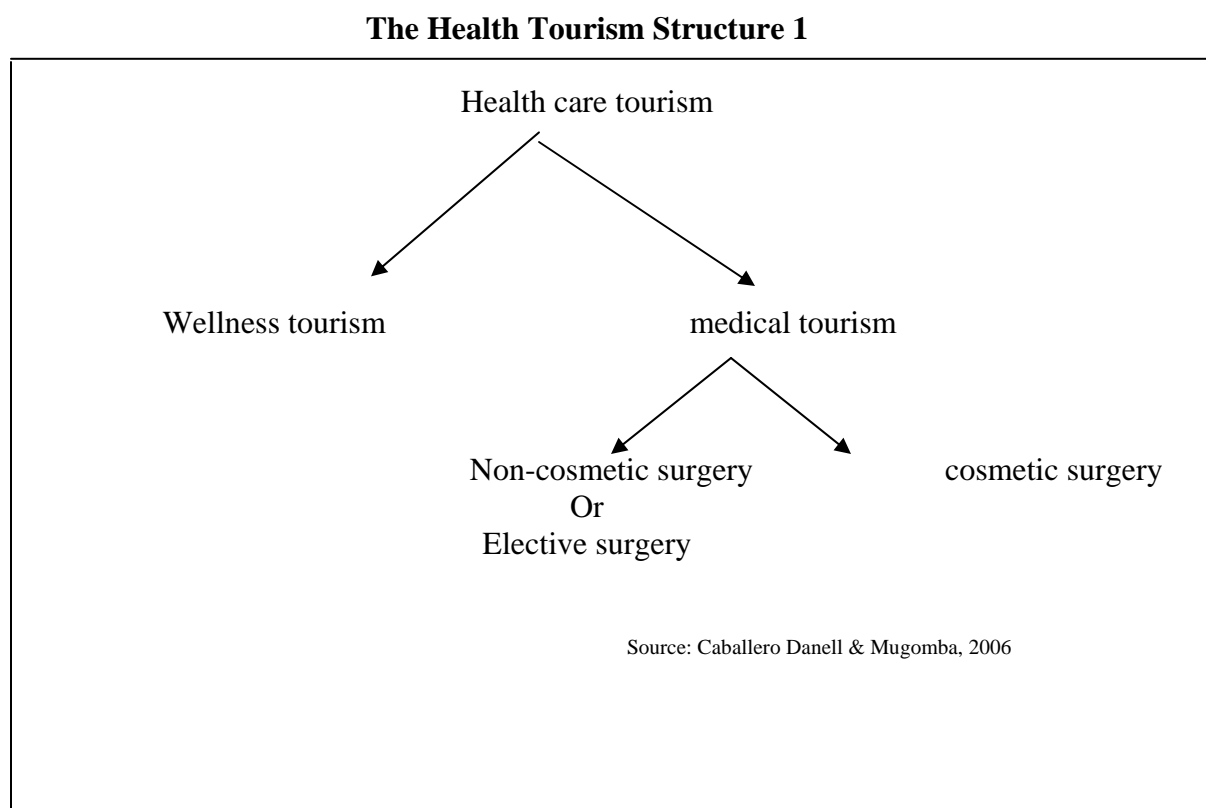
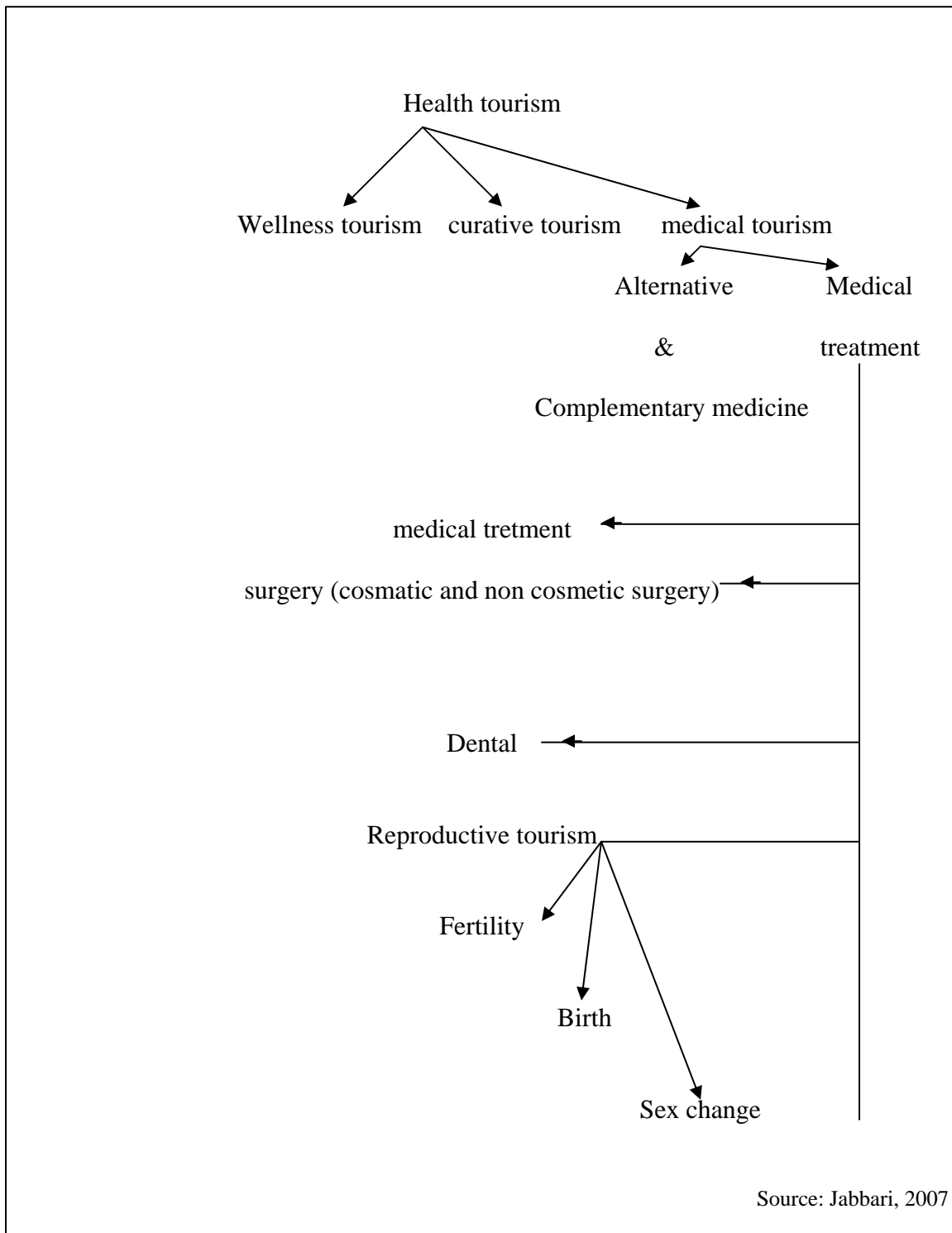


Figure 2: Health Tourism Structure 2

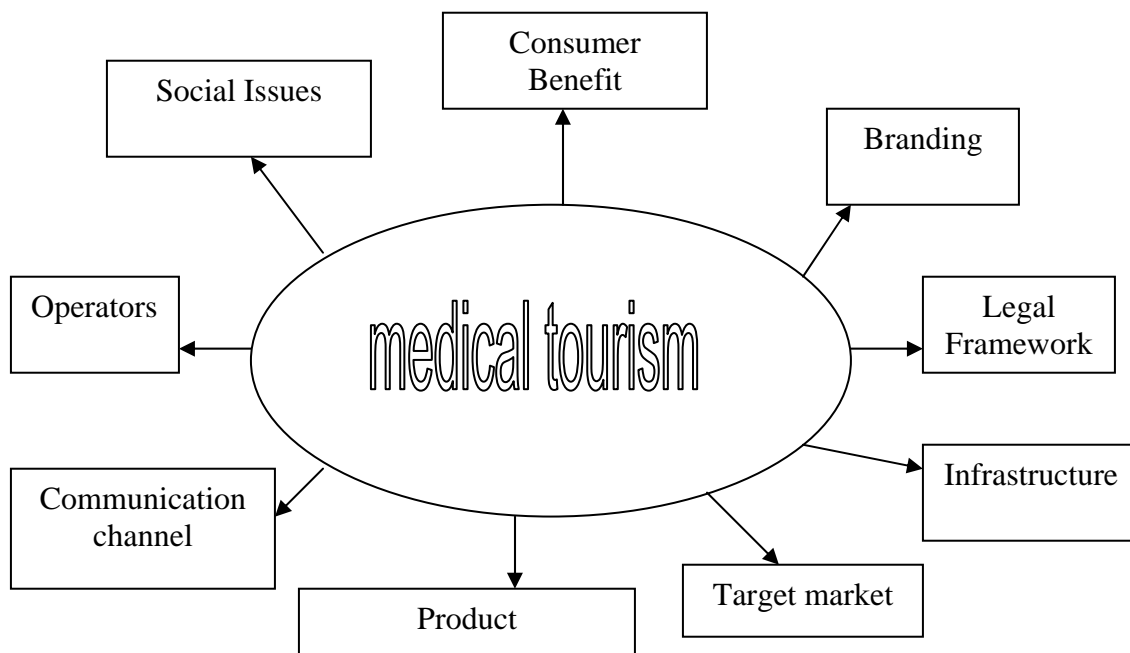


### 2.2.1.1 Market description of medical tourism

The market description is based on an analysis made of the medical tourism reality, what services operators offer how countries market their destinations and package them with medical treatments, the social issues that have arisen and the effects of the absence of a legal framework to keep up with the development of the medical tourism niche market. The analysis also explains how infrastructure in medical tourism destinations are changing in order to host tourists that are also patients by giving special attention to the safety and technological requirements, among other things, in an effort to compete against medical institutions in various Regions for the medical tourist's disposable income. To provide a better understanding of the current status of medical tourism and anticipated developments Caballero Danell & Mugomba, (2006) have developed a map in order to document all Information collected for describe market descriptions .

Figure 3: Market Description

Source: Caballero Danell & Mugomba, 2006



### ***2.2.2 Complementary medicine***

Complementary and Alternative Medicine are the words for any help and treatment that is beyond the usage of Western Medicine (Avijgan, 2007).

A group of diagnostic and therapeutic disciplines that are used together with conventional medicine. An example of a complementary therapy is using aromatherapy to help lessen a patient's discomfort following surgery. Complementary medicine includes a large number of practices and systems of health care that, for a variety of cultural, social, economic, or scientific reasons have not been adopted by mainstream Western medicine. Complementary medicine is different from alternative medicine. Whereas complementary medicine is used together with conventional medicine, alternative medicine is used in place of conventional medicine. An example of an alternative therapy is using a special diet to treat cancer instead of undergoing surgery, radiation, or chemotherapy that has been recommended by a physician.

On the other hand Complementary and alternative medicine (CAM) are Practices not generally recognized by the medical community as standard or conventional. Includes dietary supplements, mega dose vitamins, herbal preparations, massage therapy, magnet therapy, spiritual healing, and meditation.

### ***2.2.3 Traditional medicines***

Traditional medicine refers to health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain well-being. Herbal Medicine is a branch of Traditional Medicine in that use specifically from herb to treat patients and diseases (Avijgan, 2007).

Countries in Africa, Asia and Latin America use traditional medicine (TM) to help meet some of their primary health care needs. In Africa, up to 80% of the population uses traditional medicine for primary health care. In industrialized countries, adaptations of traditional medicine are termed “Complementary” or “Alternative” (CAM).

## ***2.3 History of medical tourism***

### ***2.3.1 Earliest medical tourism centers***

With many of the earliest civilizations, medical tourism generally took the form of sacred temple baths and hot springs. Written historical accounts of Mesopotamian, Indian, Egyptian, and Chinese cultures clearly document bathing and healing complexes erected around therapeutic springs. As far back as the Bronze Age (2000 B.C.), hill tribes near present-day St. Moritz, Switzerland gathered around to drink and bathe in the iron-rich mineral springs of the region. Bronze Age implements, including votive drinking cups, have also been found around thermal springs in France and Germany, as well as in Celtic mineral wells.

In 4000 B.C., the Sumerians constructed the earliest known health complexes alongside mineral water springs that included elevated temples and flowing pools. Although many post-Sumerian civilizations probably understood and appreciated the healing effects of mineral-rich water, it was the Greeks who first laid the foundation for a comprehensive health tourism system (Health medical tourism, 2005).

### ***2.3.2 Greek medical tourism***

#### ***Asclepius of Greece***

The Asclepia Temples (built in honor of the Greek god, Asclepius) were some of the earliest healing centers where patients from around the region congregated for therapeutic purposes (Wiki pedia, 2007).

According to Greek mythology, Asclepius was the god of medicine who, in his pre-celestial days, had been mentored by Chiron, a master of medicine. The young Asclepius excelled in the healing arts and was visited by sufferers from all over Greece. Healing powers attributed to him included bringing the dead back to life, reversing aging, and curing blindness. Most of the other gods in the Greek pantheon, many of whom had formidable healing powers themselves, weren't too impressed with Asclepius' growing fame. Among the most distressed was Pluto, lord of the underworld. Because Asclepius' generous healing powers were proving to be bad for business, Pluto complained bitterly to the great Zeus who subsequently slew Asclepius with a thunderbolt. The Greek people's affinity for Asclepius, however, only grew stronger, and by the 4th century B.C., Asclepian healing temples had been constructed throughout the length and breadth of the Grecian world, from Epidaurus to Tricca.

### *The Rise of Greek medical tourism*

The numerous Asclepia Temples that were constructed during this time were usually established in prime “healthful” locations, often near mineral springs. Most temple complexes also included snake nurseries where serpents were farmed for mystic, healing rituals.

At Epidaurus, the longest preserved of the Asclepia Temples, the complex included bathing springs, a dream temple, gymnasium, palaestra (exercise area), and a snake farm large enough to supply nearby villages. Patients at the temple were attended to by a retinue of priests, stretcher carriers, and caretakers, before finally being granted an “appointment” with the mighty head priest. Sacrificial payments were made according to the status of the patient. The medical tourism treatment would culminate in a dream, during which Asclepius would allegedly visit the afflicted and recommend a remedy for the illness or injury (Health medical tourism, 2007).

The Asclepia Temples flourished well into the fourth century AD until treatments began to be less ritualistic and more clinical. However, even at the height of alchemy and herbal medicine, the old “sleep and dream” formula was still popular in certain parts of the Mediterranean. Other temple spas, like the Sanctuary of Zeus at Olympia and the spa multiplex at the Temple of Delphi, flourished throughout ancient Greece, although not on the same scale as the Asclepia Temples.



### ***2.3.3 Ancient roman medical tourism***

In ancient Rome, hot water baths (called *Thermae*) were not only used for their obvious medicinal purposes, but they also served as important social networking venues for some of the Empire's most privileged elite. The Romans were definitely not believers in Spartan healing, and those who could afford to do so spend lavish amounts of money on gaining access to the numerous baths and hot springs that surfaced. Much like the swank health care centers of 21<sup>st</sup> century medical tourism hotspots, these elaborate Roman complexes were posh establishments. Some treatment centers actually included theater activities, lounges, art galleries, conference halls, brothels, and even the occasional sports stadium. Some of the larger complexes could reportedly house as many as 3,000 patients and patrons at a time (Health medical tourism, 2007).

During the early days of the Roman Empire, these *Thermae* could hardly have been considered medical tourism spots since most visitors were within one day's journey. But as the Empire slowly expanded during its 1,000 year reign, pilgrims, diplomats, beggars, and kings from all corners of the "known" world flocked to the Mediterranean to seek medical counsel and health treatments.

And as a result of active trade with many parts of Persia, Africa, and Asia, these Roman baths necessarily expanded the healing art sciences. Ayurvedic massage, Chinese medicine, and various aspects of Buddhist spiritual healing became common features at some Roman thermal (Health medical industry, 2005).

### ***2.3.4 Persian, Arabian, and Islamic medical tourism***

Early Islamic civilization, known for its many contributions in the fields of medicine and healing, had a well established system in place for the treatment of foreigners. Probably the most famous medical tourism facility was Mansuri Hospital in Cairo (erected: 1248 AD). With a total in-patient capacity of 8,000 people, Mansuri Hospital was not only the largest hospital of the time, but it was also the most advanced health care facility that the world had ever seen. The complex included separate wards for women, a pharmacy, a library, and numerous lecture halls. There were also facilities for surgery and separate departments for eye diseases. No patient was to be turned away on account of race or religion, and no limits were imposed on a patient's stay in the hospital. Progressive well ahead of its time, the governing body of the hospital (*Waqf*) boldly promised the following :

The hospital shall keep all patients, men and women, until they are completely recovered. All costs are to be borne by the hospital, whether the people come from afar or near, whether they are residents or foreigners, strong or weak, low or high, rich or poor, employed or unemployed, blind or sighted, physically or mentally ill, learned or illiterate.

There are also numerous accounts of welfare-driven hospitals in Baghdad and Syria that catered to weary travelers from abroad. Accommodations at these healthcare facilities, or Bimaristans as they were known locally, were far from cramped. Many of them were actually palaces that had been donated by nobles and princes who were inspired by the Islamic principles of charity.

Furnishings were opulent, and these luxurious lodgings were available to an endless stream of people from abroad (Health medical tourism, 2007). Endowments were the primary source of funding at many of these medical tourism facilities.

### ***2.3.5 Japanese Onsen***

Medieval Japan discovered the healing powers of hot mineral springs (Onsen) when hunters followed fleeing prey up to bubbling pools where the animals instinctively went to relieve their pain and tend their wounds. The healing properties of the waters, enriched by the surrounding volcanic soil, attracted tourists from all over the country. Elderly farmers, hunters, and fishermen soon discovered that the rich waters were effective for treating arthritic aches. It wasn't long before members of the various warrior clans began visiting favored hot springs to alleviate pain, heal wounds, recuperate, and replenish lost energy levels (Health medical tourism, 2007).

There is little debate surrounding the therapeutic properties of Japanese Onsen, and bathing rooms at some Onsen still display lists of the many diseases and injuries that the mineral water can treat.

These days, Japanese Onsen still attract large numbers of visitors, and thanks to modern plumbing, most Japanese homes have large bathtubs specially designed to simulate the Onsen experience.

1000 years after the Onsen became such a cultural phenomenon in Japan, you can still see throngs of tourists, families, businessmen, and the elderly frequenting these revered hot springs in places like Kyushu and other regions of Japan where volcanic activity is still present.

Some Onsen even have mud pools or sulfur springs where bathers can receive rejuvenating mineral scrubs as they soak in hot, calming waters (Health medical tourism, 2007).

### ***2.3.6 Indian medical tourism***

Some might have difficulty categorizing yoga retreats, Buddhist pilgrimages, and meditation centers as medical tourism, but the unbelievable reach of India's healing arts is not to be ignored. Ever since yoga's birth more than 5,000 years ago, India has enjoyed a constant influx of medical travelers and spiritual students hoping to master and benefit from this most fundamental and revered branch of alternative medicine. When Buddhism came along roughly 2,500 years later, this only added fuel to the fire and helped position India as the epicenter of Eastern cultural, spiritual, and medicinal progress.

Although Western clinical medicine eventually eclipsed India's spiritually centered healing arts, the region has remained a veritable Mecca for all practitioners of alternative medicine. In the 1960s, India received a new boost of support when the "New Age" movement began in the US. India once again became the destination of choice for thousands of Western pilgrims. This mass influx of medical tourists was furthered helped by India's deep commitment to technology and health care infrastructure. Not only is India one of the world's oldest medical tourism destinations, but it has now also become one of the world's most popular ones as well (Connell, 2006).

### ***2.3.7 European medical tourism***

Although pilgrimages have remained central throughout much of Europe's history, leisure travel, recreational vacations, and medical tourism didn't really come about until the 16<sup>th</sup> century when Europeans rediscovered the Roman baths. Entire communities sprung up around spa towns like Baden, Aachen, and most notably, Bath. The emergence of Bath or Aquae Sulis (Sulis derived from the water goddess, Sulis Minerva) as a major medical tourism destination can be attributed to the heavy royal patronage and involvement that the city enjoyed. With heavy endorsements from members of the ruling class, it wasn't long before Bath became anointed as a fashionable wellness and recreation playground for the rich and famous. By the 1720s, aristocrats and gentlemen of leisure from other parts of Europe were swarming to Bath for cleansing and healing, while rubbing elbows with some of the continent's elite.

As a result of this attention, Bath received a whole series of technological, financial, and social benefits, not unlike modern medical tourism destinations of today. For example, Bath was the first city in England to receive a covered sewer system (years before London ever did). The roads were paved, the streets received a lighting system, and architects scrambled to beautify the facades of the many hotels, pubs, mansions, and restaurants that cropped up thanks to increased tourism and spending. Probably the most noteworthy medical tourist of this time was Michel Eyguem de Montaigne, French inventor of the essay, who traversed the continent for 9 years in search of a cure for a niggling gall bladder problem. De Montaigne is widely believed to be the father of luxury travel. He helped pen one of the earliest documented spa guides for European tourists (Health medical tourism, 2007).

***Belgium medical tourism***

England was not the only place in Europe where medical tourism flourished. In 1326, a sleepy little village in east Belgium gained overnight fame after the discovery of iron-rich hot springs within its boundaries. Although the Romans knew about the therapeutic waters of Ville d'Eaux (Town of Waters), it developed into a full-fledged health resort only in the 16<sup>th</sup> century. Visitors from all over Europe flocked to Ville d'Eaux for relief from gout, rheumatism, and intestinal disorders. Illustrious patients included Peter the Great and Victor Hugo. The word "spa," from the Roman "salude per aqua" (health through waters) was coined around this time, and it applied to any health and wellness resorts that didn't practice conventional clinical medicine.

### ***2.3.8 Health tourism in the new world***

Native Americans throughout the New World were adept in various aspects of the healing arts. In fact, their catalog of therapeutic plants rivaled much of what was known back in Europe at that time. Sadly, many opportunities for sharing and learning were squandered as the early settlers focused their efforts on securing land rather than on building relationships (Connell, 2006).

What we know about spiritual healers, shamans, witchdoctors, and ritualistic healing is but a small scattering of all the knowledge that once existed throughout the Americas. Even still, medical tourism managed to develop as desperate colonists and settlers frequently turned to local healers in last ditch efforts for recovery. To this day, various branches of alternative medicine flourish as historians, mystics, and believers uncover the many ancient healing arts of the New World (Health medical tourism, 2007).

In the 1600s, English and Dutch colonists in the newly discovered Americas constructed log cabins near mineral springs that were rich in medicinal properties. By the 19<sup>th</sup> century, free-thinking American reformists had developed a habit of traveling to remote Western springs, presumably to drink and soak in the bubbly hot and cold springs while pondering the future of modern civilization (Health medical tourism, 2007).



### ***2.3.9 Other important destination for attracting medical tourist***

Medical tourism has also developed in South Africa and in countries not hitherto associated with significant levels of western tourism such as Belarus, Latvia, Lithuania and Costa Rica. South Africa has grown in prominence in recent years, especially for cosmetic surgery, since its costs are less than half those of the United States, from where most of its patients come. Hungary, for example, declared 2003 to be the Year of Health Tourism. Eastern European countries have become important for dental care and plastic surgery.

Jordan serves patients from some parts of the Middle East while Israel caters both to Jewish patients and others from nearby countries, through specializing in female infertility, in vitro fertilization and high-risk pregnancies.

Argentina is also noted for plastic surgery. The Caribbean has found it more difficult to enter the medical tourism market since, despite its proximity to the United States; its rates cannot compete with those in Latin America (Huff-Rousselle et al, 1995). Some Caribbean states have sought to get around this by specialization; hence Cuba specializes in skin diseases and Antigua in dentistry. In the Pacific Guam has become a regional dental centre for Palau, the Federated States of Micronesia and also Japan.

### ***2.3.10 The rise of medical tourism in Asia***

The scope of this activity is surprising, with Asian countries of Thailand, Singapore, India, South Korea, and Malaysia attracting a combined 1.3 million medical tourists per year from around the world, and increasing annually. The estimated worth in Asia alone will be projected to generate more than US\$4 billion by 2012 is proving a windfall for the travel and hospitality sector (Gupta, 2007). Thailand became known as a destination for medical tourism as early as the 1970s because it specialized in sex change operations, and later moved into cosmetic surgery (Connell, 2006).

Connell (2006) expressed that Malaysia became involved after 1998 in the wake of the Asian economic crisis and the need for economic diversification, as did many Thai hospitals, when local patients were no longer able to afford private health care.

India is usually regarded as the contemporary global centre for medical tourism, and it advertises itself as offering everything from alternative Ayurvedic therapy to coronary bypasses and cosmetic surgery. To become the most important global destination it has upgraded technology, absorbed western medical protocols and emphasized low cost and prompt attention. Since economic liberalization in the mid-1990s private hospitals have expanded and found it easier to import technology and other medical goods, thus bringing infrastructure in the best hospitals to western levels. The links to India's highly successful IT industry are also advertised as important. Moreover, as hospitals improved and specific salaries increased, so doctors returned from overseas. Many had international qualifications and western experience that could be advertised to make potential tourists more comfortable. The same liberalization brought new structures of corporation that streamlined India's notorious bureaucracy and significantly improved administration. The

principal corporate hospital chains employ teams of interpreters, though India has benefited because of its widespread English speaking ability.

Singapore has belatedly sought to compete with Malaysia and Thailand, deliberately set rates just below those in Thailand and even set up a stand at the airport with fliers, information and advice for transit passengers. Singapore claims to be Asia's leading medical hub, with advanced research capabilities as well as nine hospitals and two medical centers that have obtained Joint Commission International (JCI) accreditation. This could be part of the reason why JCI chose to set up its Asia Pacific office in Singapore in 2006. In time, Singapore hospitals may look towards other European or Asian-based hospital accreditation systems in an attempt to broaden their market, as JCI's principal appeal is to the U.S. market, only a portion of the potential global clientele (Connell, 2006). Many patients come from neighboring countries, such as Indonesia and Malaysia. Patient numbers from Indochina, South Asia, the Middle East and Greater China to Singapore are also seeing fast growth. Patients from developed countries such as the U.S. are beginning to choose Singapore as their medical travel destination for relatively affordable health care services in a clean cosmopolitan city. Singapore has made news for many complex and innovative procedures, such as the separation of conjoined twins and tooth-in-eye surgery. The successful separation of 10-month-old Nepalese conjoined twins in 2001 put Singapore's medical expertise into headlines around the world. Singapore has since accomplished many more milestones both in Asia and in the world arena (wiki pedia, 2007). Philippines are vying to become the “new hub of wellness and medical care in Asia. They offer competitive prices as well as highly skilled and trained physicians (most trained in the United States), who speak English.

They advertise competent, compassionate, and caring people; world class, accredited health care facilities; and a chance to visit breathtaking tourist spots in the country (wikipedia, 2007).

It can be seen by the fact that Medical tourism is a promising new industry in Asia, offering prospects for hospitals facing saturation in patient growth. It is with a clearer view of the addressable market potential, internal strengths and limitations, as well as the level of external competition, that healthcare providers may best move forward to realize this potential.

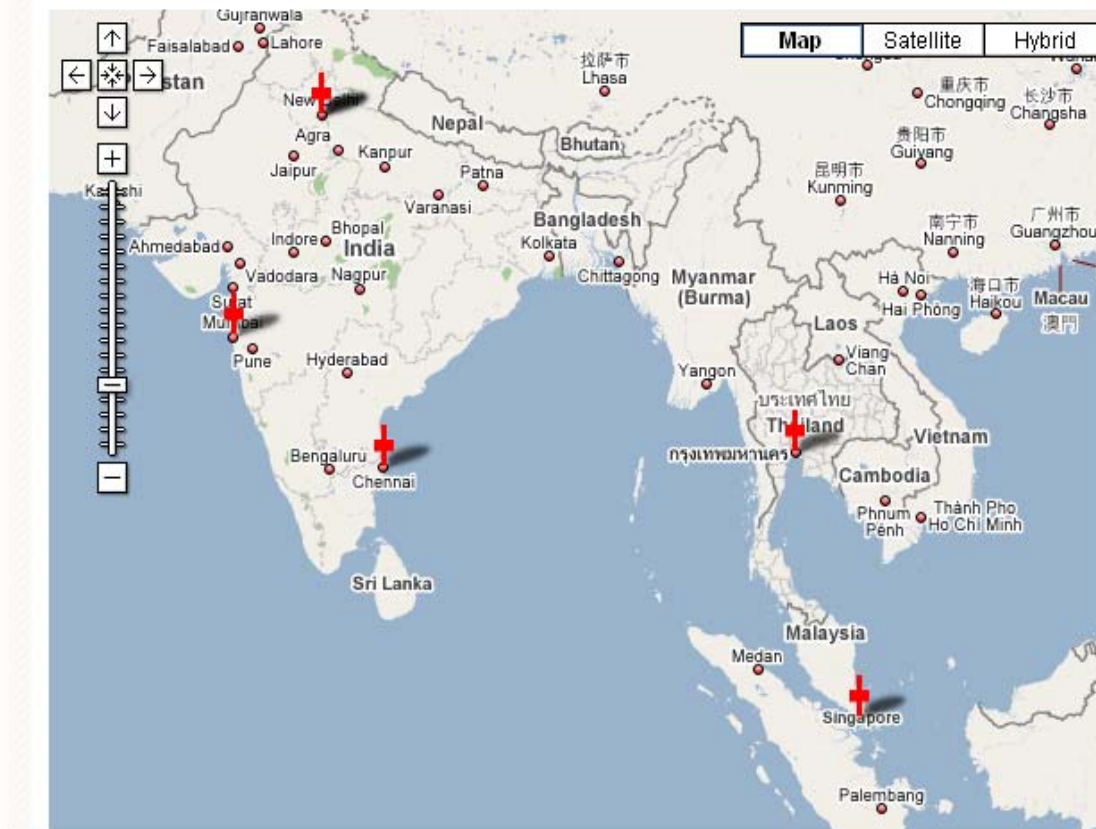
Healthcare providers may now consider the medical quality of their services, how non-medical services are key to encouraging patient access, and the various marketing options available to them. A final consideration towards implementing such reforms would be the partnerships that Stakeholders may establish. These include partnerships with universities, referring hospitals, agents, the government, accommodation and travel service providers, and even competing hospitals. A sincere commitment to these alliances allows each stakeholder to focus on his own competencies and may even alleviate the level of competition – allowing for better long run revenues throughout the entire sector.

The map of the best known hospitals, spa and wellness centers in Asia has shown the next page.

Figure 4: Medical tourism Map in Asia

This map intends to depict the medical tourism industry in Asia by listing some of the best known hospitals, spas, wellness centers in Asia.

### Medical tourism map



Source : Discovering Medical Tourism.Com, 2007

### ***2.3.10.1 Medical tourism in Middle East***

As one of the main sources of medical tourists, the Middle East—particularly Dubai, but also Bahrain and Lebanon, UAE (United Arab Emirates) has recently sought to reverse this flow and develop its own medical tourism industry. Dubai has just built Healthcare City (DHCC) to capture the Middle Eastern market and try and divert it from Asia. Unable to compete on price the Middle East has largely competed on quality, with Dubai bringing in German doctors to guarantee high skill standards, and Lebanon stressing its many doctors trained in Europe and America. Branding is seen as important; ‘it remains to be seen if DHCC will attract people if there is a single hospital that had one or two good brands that would be good if there was a Cleveland Clinic or a Guy’s or Thomas’s Hospital’ in gulf news. The Bavaria Medical Group (BMG) has developed links with Qatar Airways and the Sultanate of Oman that have taken patients from Oman to Germany and also resulted in specialist BMG doctors visiting Oman in the news of Times of Oman. Saudi Arabia has sought to link medical tourism, and especially cosmetic surgery and dentistry, with pilgrimage (Hajj) visits to the country, with most patients being from other Gulf countries in Arab News. In 2005 relatively low cost Jordan remained the main medical tourism destination in the Middle East (Holden, 2006). The Health Minister of Iran has claimed that ‘No Middle East country can compete with Iran in terms of medical expertise and costs’, comparing the cost of pen heart surgery at US\$18,000 in Turkey, \$40,000 in UK and \$10,000 in Iran so that patients ‘can afford the rest on touring the country’ in Persian Journal.

### ***2.3.11 Medical tourism today***

Throughout much of recorded history, health travel was restricted either to the wealthy or truly desperate. But in today's flattening global economy, the physical, economic, and cultural barriers that once separated nations from one another are dissolving as international travel, mass communication, and more lenient trade policies make it possible for those with modest means to enjoy the benefits of world-class health care in the form of medical tourism.

For example Today, Americans who suffer from grossly inflated health care costs often flock to hospitals in medical tourism destinations like Thailand for sophisticated procedures at a fraction of the price. In countries like England, where socialized medicine is the norm, long wait times and insufficient health care personnel have helped produce a steady stream of medical tourists to countries like India, where a highly evolved education system produces thousands of qualified doctors and nurses (many of whom also study in the West). Low labor costs, quality medical schools, and heavy investing are helping to transform many parts of the developing world into medical tourism hotspots that show no sign of stopping. While affordability and time are still the main reasons why patients trudge across borders for surgery, quality of care and 5-star treatments are major factors as well. In fact, medical procedures abroad are often better than what you would expect from primary health care centers back home.

#### ***2.4 Practical researches in other medical tourism destinations***

Connell (2006), has conducted the research about "medical tourism, sea, sun, sand and... surgery", that this paper is a preliminary attempt to examine a contemporary elaboration of the rise of medical tourism, where tourism is deliberately linked to direct medical intervention and outcomes are expected to be substantial and long term. A distinct tourism niche has emerged, satisfying the needs of a growing number of people, mainly in developed countries, benefiting both themselves and a growing number of destinations, principally in developing countries.

In the last decade and primarily in the present century the notion of well being has gone further than ever before.

No longer is improved health on holiday merely an anticipated consequence of escape from the arduous drudgery of work and the movement to a place with a cleaner (or warmer) climate, or the outcome of 'taking the waters', but in some circumstances—the rise of medical tourism, it has become the central theme of tourism in an active rather than a passive sense. A new niche has emerged in the tourist industry. While some writers have continued to use the phrase 'health tourism' to cover all forms of health-related tourism, it seems more useful to distinguish 'medical tourism' as one involving specific medical interventions.

Medical tourism as a niche has emerged from the rapid growth of what has become an industry, where people travel often long distances to overseas countries to obtain medical, dental, and surgical care while simultaneously being holidaymakers, in a more conventional sense. It has grown dramatically in recent years primarily because of the high costs of treatment in rich world countries, long waiting lists (for what is not always



seen institutionally as priority surgery), the relative affordability of international air travel and favorable economic exchange rates, and the ageing of the often affluent post-war baby-boom generation.

It has thus largely reversed an earlier pattern of wealthy patients traveling to rich world centers, such as Harley Street in London (but where tourism was not involved). Growth has been facilitated by the rise of the Internet, and the emergence of new companies, that are not health specialists, but brokers between international patients and hospital networks. It has also grown because of rapidly improving health care systems in some key countries, where new technologies have been adopted.

Above all it has followed the deliberate marketing of health care (in association with tourism) as medical care has gradually moved away from the public sector to the private sector, ensuring that a growing majority of people, especially in the richest countries, and particularly in the United States, must pay often considerably for health care. Finally, growing interest in cosmetic surgery, involving such elective procedures as rhinoplasty, liposuction, breast enhancement or reduction, Lasik eye surgery and so on, or more simply the removal of tattoos, have created new demands. Various forms of dental surgery, especially cosmetic dental surgery, are not covered by insurance in countries like the UK and Australia; hence dental tourism has become particularly common. In Asia these trends are 'the unlikely child of new global realities: the fallout of terrorism, the Asian economic downturn, internet access to price information, and the globalization of health services' (Levett, 2005).

The biggest hurdle that medical tourism has had to face, and continues to face, is the challenge of convincing distant potential visitors that medical care in relatively poor

countries is comparable with that available at home, in outcome, safety and even in dealing with pain thresholds.

This has been especially so when medical care systems, in countries such as India, have been conventionally regarded in the west as inadequate, 'even' for India itself. As the German radio station, Deutsche Welle, has pointed out 'India is not exactly known for health and hygiene' yet it nonetheless anticipates a major market in Germany. Attached to that is the parallel perception that 'you get what you pay for', hence cheap medical care may well be inferior. While such situations have now radically changed the perception of inadequacy remains.

Advertisements for medical tourism therefore invariably stress technology, quality reliability, and overseas training. For example Indian clinic which is set up to European standards and approved by the Ministry of Health is equipped with state of art technology.

Cuba emphasizes that the quality of its professionals in plastic surgery and dentistry is 'unquestionable as shown by the health indices given by the World Health Organization. In all these countries, and across them, new companies have sprung up, to link patients, hospitals, potential medical tourists and destinations, many with names that either attest to these linkages, such as Surgeon and Safari (South Africa), and Antigua Smiles, that hints at the pleasures associated with both cosmetic dentistry and visiting the Caribbean.

Economics effectively calibrates the rise of medical tourism. Price differentials between most Asian states and more developed countries are considerable and are presently diverging even further. This may be accentuated or influenced by long waiting lists. For complex surgery the differences are considerable. In 2003 a small child in the United

States with a hole in her heart was faced with a bill of around \$70,000 there, but the operation was carried out in Bangalore, India at a cost of \$4400 (Neelankantan, 2003). Open heart surgery may cost about \$70,000 in Britain and up to \$150,000 in the United States but in India's best hospitals it costs between \$3000 and \$10,000 depending on how complicated it is. Dental, eye and cosmetic surgery costs about a quarter of that in western countries (Neelankantan, 2003). The price differentials for cosmetic surgery are particularly significant since cosmetic procedures are not covered by insurance. A face-lift in Costa Rica costs about a third of that in the United States, and rather less in South Africa. However, any complications and post-operative costs may have to be met in the patient's home country.

Currency fluctuations can be a significant influence. When the South African Rand rose significantly in value against the US dollar in 2004, one company went from about 30 patients a month in 2003 to none in 2005.

India has cornered a substantial part of the market because its fees are significantly below those of other possible destinations. Thus bypass operations in India are about a sixth of the cost in Malaysia. Nonetheless, price differentials between all Asian countries and the west remain considerable. Thailand can offer liposuction and breast enhancement surgery for a fifth of the rate this would cost in Germany; hence it has focused on this particular European market. Singapore has sought to compete on quality rather than price and stresses its superior technology, and that Singapore doctors had carried out the first Asian separation of Siamese twins and the first South East Asian heart transplant, amongst other similar 'firsts'.

While economic benefits are central to medical tourism they are not the only factors. Waiting lists for non-essential surgery such as knee reconstructions may be as long as 18 months in the UK. In India the whole procedure can be done in under a week and patients sent home after a further 10 days. Some surgery, such as this, regarded as nonessential or low priority in the western world, may be necessary for certain forms of employment, and hence worth traveling for. Similarly, in the UK, waiting times for fertility treatments may be very long, and at an important period in couples 'fertility tourists' have gone overseas (Graham, 2005).

Distance offers anonymity. Some medical procedures, such as sex changes, have become small but significant parts of medical tourism, especially in Thailand, where recuperation and the consolidation of a new identity may be better experienced at a distance from standard daily life. Similarly cosmetic surgery patients may prefer recuperation in a relatively alien environment.

Distance also offers alternatives. Certain operations may not be available in origin countries. Abortions are banned in several countries or are restricted to early periods of pregnancy. In Britain, for example, health authorities are usually unwilling to countenance stomach stapling for Patients if they are aged less than 18; this is not the case in many medical tourism destinations where the 'customer' is more likely to be right.

If tourism is about travel and the experience of other cultures then all medical tourism is tourism. Usually it is also rather more than that, if only because medical tourists can only return home when they are, in a sense, well enough to be travelers and therefore tourists. Tourism may involve their relatives rather more than themselves, but most patients are

able to sample standard tourist experiences if they wish to. In a few cases patients have chosen holiday destinations with the secondary goal of medical treatment, usually for high-cost low-risk operations such as dentistry. Most visitors spend some time shopping, even if no further than hotel stores, and justify this (where they feel it necessary) on the grounds of the money saved through overseas health care.

Ultimately 'tourism' is rather more than just a cosmetic noun for an activity that otherwise has little to do with conventional notions of tourism, since most visitors and certainly those who accompany them, find some time for tourism. Moreover, at the same time, the whole infrastructure of the tourist industry (travel agents, airlines, hotels, taxis etc) all benefit considerably from this new niche. Indeed, since for a significant proportion of patients there may be a lengthy period of recuperation, the rewards to the tourist industry, and especially the hotel sector, are considerable.

Conclusion of this research expressed that Medical tourism is likely to increase even faster in the future as medical care continues to be increasingly privatized, and cost differentials remain in place. Moreover, as successful outcomes become more evident, demand is likely to increase further.

Were waiting lists to increase further an extension of this policy might benefit those countries now seeking medical tourists, and the larger Indian companies have been in negotiations with the National Health Service ( NHS ) about outsourcing the treatment of British patients to India. The number of countries seeking to develop medical tourism continues to grow rapidly. The success of medical tourism in Asia especially has prompted growing global interest and competition, and optimism is seemingly unbounded. In less than a decade the rise of medical tourism has demonstrated that a

form of service provision, the provision of health care, so labour intensive that it was assumed to be highly localized can now be globalize like so many other service activities. This process has followed the growing emphasis on technology, private enterprise and the attitude that health care can be bought 'off the shelf'. The trade in health services is expanding, becoming more competitive, and creating new dimensions of globalization, all elegantly packaged, and sometimes actually functioning, as the new niche of medical tourism.

There have been studies by authors such as Caballero and Mugomba (2006), Medical Tourism and its Entrepreneurial Opportunities that focus on implications of which remain to be seen as more entrepreneurs enter this niche market, medical tourism. According to Lundström and Stevenson (2005), the meaning of entrepreneurial culture is "maximizing the potential for individuals to start businesses and to others it means maximizing the potential for individuals in all kinds of organizations and in all aspects of life to behave entrepreneurially". Entrepreneurship is defined as the "opportunistic, value-driven, value-adding, risk-accepting, creative activity where ideas take the form of organizational birth, growth, or transformation".

The structure of their thesis is divided in three parts 1) a market description of the medical tourism reality, 2) development of an entrepreneurship-based conceptual Framework related to market entry into a medical tourism as a niche market and, 3) Superimposition of the latter on the former to serve as a guide for entrepreneurs Entering medical tourism. This study aims to provide a market overview of medical tourism for new entrepreneurs seeking investment opportunities in this sector. The purpose of this will be to determine whether, from the perspective of would be medical Tourism

entrepreneurs, the observed balance of power between medical tourism substitutes, suppliers of medical tourism, buyers of medical tourism, medical Tourism competitors and the influence of potential entrants favour market entry.

Determining a structured analysis of medical tourism as a niche market the objectives of this research and specific information requirements relied on a combination of Exploratory and descriptive research designs. The first stage of this research was exploratory, using the secondary data sources from the subject development stage.

The second stage of this research was a descriptive analysis of secondary data sources (the ones referred to in the exploratory stage of the research and new relevant sources). This article also not only cited countries that were investing in medical tourism by adding a leisure component after the treatment was done but also Alluded to the growth expectations of this market.

Within this study for a destination to qualify as a medical tourism destination it must satisfy all of the following requirements

- 1) It must have hospital and supporting infrastructure for international medical care.
  - 2) The destination must have developed infrastructure to support conventional tourism.
  - 3) Target international markets and 4) Its marketing campaign must include promotion of medical care and leisure package preceding or following the medical procedure.
- Destinations that did not meet all of the requirements were rejected from the study.

The descriptive stage of the research based on medical groups, websites as a Significant secondary data source revealed common attributes such as 1) International accreditation of medical facilities 2) International accreditation of medical staff 3) Medical procedure available 4) Comparative price quotes 5) Choice of website interface language 6) Local

infrastructure and transportation services and 7) Tourist information on leisure packages. These attributes were generally observed on all researched websites with some citing more details than others.

The developed entrepreneurship conceptual framework was used to analyze the data collected within the medical tourism market description model. The structure of the analysis was according to each of the five forces of Porter's model, "**Porter's 5 forces analysis** is a framework for industry analysis and business strategy development developed by Michael E. Porter in 1979 of Harvard Business School. Porter's Five Forces include three forces from 'horizontal' competition: threat of substitute products, the threat of established rivals, and the threat of new entrants; and two forces from 'vertical' competition: the bargaining power of suppliers, bargaining power of customers." Competition gives rise to and is derived from the emergence of new products, new efficiencies in terms of production, or organizational processes, or perhaps new marketing methods and market segments. According to Porter (1998) any move towards developing a new theory of international competitive advantage must be based on the supposition that competition is dynamic and evolving. Prior to the development of the renowned Porter's Five Forces model, in his research to develop this new theory on national competitive advantage, Porter (1998) posed numerous questions; one such was why firms in specific nations achieve international success in distinct segments and industries. For the purposes of our research we are more concerned with *how*. How firms/enterprises based in specific nations can gain international success (market share in foreign markets) in distinct segments of medical tourism. If "...The basic unit of analysis



of understanding competition is the industry” (Porter, 1998), then Porter’s model will enable us to better understand the structure of medical tourism.

Whilst commonly used to analyze necessary competitive advantage strategy for long term profitability in traditional manufacturing industries such as the automotive industry, computers, soft drinks, pharmaceuticals. Application of the model also extends to service industries. Porter posits that the three pure forms of international service competition are 1) mobile buyers traveling to a nation to have services performed, 2) firms from one nation providing services in other nations using domestically based personnel and, 3) a nation’s firms providing services in other countries via foreign service locations, staffed with either expatriates or local nationals. The goal of competitive strategy for a business unit is to find a position in an industry or chosen market where the enterprise can best defend itself against these five forces or can manipulate them in its favors. As a result, a superior return on investment for the firm can be achieved (Porter, 2004).

New entrepreneurs, entering a market must be concerned in finding answers to questions such as: What is driving competition in the industry I am thinking of entering? What reactive actions are competitors likely to take, and what is the best way to respond? How is this industry going to evolve? When answering these questions by doing a competitive analysis, entrepreneurs must avoid the inclination to focus on only one aspect of the industry structure or failing to address the industry perspective because they won’t be able to capture the richness and complexity of industry competition (Porter 2004 ).

Focusing on the entry of entrepreneurs into the medical tourism industry as a well-grounded business move. The analysis of the niche market was twofold; 1) a holistic analysis of the market under the heading externalities and 2) categories of the medical

tourism market description model were analyzed under a specific force; buyers, substitutes, suppliers, industry competitors and the potential entrants.

In conclusion, a preliminary analysis of the subject area revealed that medical tourism, when incorrectly interchanged with health tourism, is not a new concept.

As shown, within Europe destinations such as Switzerland and Germany are historically medical tourism destinations offering premium medical care to Eastern Europe and the Middle East at premium prices. However this study has made the distinction; medical tourism is a subset of health care tourism. Thus the provision of medical care and leisure to a mass population and at cost-effective pricing is medical tourism and this *is* a new concept.

Analysis of the described market under the forces indicates that on a macro perspective the medical tourism favors market entry. Simple application of the economic supply/demand curve dictates that as the gap between the supply of medical care and demand for non-cosmetic medical care widens in developed countries then so too will the global supply of medical care within the medical tourism as more entrepreneurs enter the market. However the current no-rules structure of the market implies that market rules are developed as a market grows therefore there are unknown penalties. The implications of which remain to be seen as more entrepreneurs enter this niche market, medical tourism.

This study has revealed potential areas for future research studies.

- As the destinations operate by competing with their target market there is no market benchmark in terms of marketing, product development or a pricing strategy to name a few. A comparison can be made on, for example, medical tourism in South Africa and Singapore.

- The absence of a statistical framework makes it difficult to acquire the actual size of the market. Studies conducted on the growth of the industry must rely on forecasted income claims by medical tourism destinations. Thus there is the opportunity for studies on the development of such a framework.
- As suggested throughout the course of this study the decision making process of consuming medical tourism is made complex by the sensitive nature of the product – shopping for surgery abroad. For potential entrants to gain a significant market share insight on what motivates the consumer to choose to have hip replacement in India over hip replacement in Singapore will provide insight on what are considered value added benefits in the medical tourism.
- Although the challenges of branding campaigns is not the focus of this study, given the frequency of some challenges encountered during our research the success of these branding strategies may be an appropriate research question for follow-up papers to add to the knowledge base about this niche market.
- What impact will the continued absence of global regulation on medical tourism have on the continued growth of the industry? As identified within this study thus far the current no-rules market structure has awarded developing countries such India, Thailand and Malaysia dominance in this niche market however an in-depth empirical study may reveal the disadvantages of the no-rules market environment and what effect this may have on market entry.

There have been some studies by authors such as Andaleeb (1994) that focusing on consumers. This study was conducted the attitudes towards hospital advertising and favourable or unfavourable dispositions for marketing strategies. These studies were

made based on the premise that advertising is an important competitive tool within communication activities. Past research on advertising efforts by hospitals indicates that information pertaining to the qualification and the specialization of doctors and the availability of advanced biotechnology competencies makes consumers less apprehensive (Andaleeb, 1994). Navigating around the various links on the websites one can view the medical physicians, academic qualifications and work experience. As the unique selling points of the medical tourism industry are its cost effectiveness and its combination of medicine and the attractions of traditional leisure tourism. The promotion strategies use the ploy of selling the exotica of the countries involved as well as the packaging of medical care with traditional therapies and treatment methods. The available testimonials of foreign medical tourists, praise the quality of medical care, received the leisure component of the package that presume the costumer satisfaction in terms of medical tourism industry.

Another research that analyzed in this research was conducted by Hanter-jones (2004), which discusses about cancer and tourism. Research exploring the relationship between health and tourism. This paper reports the empirical finding of qualitative study undertaken to explore this. The tourism propensity of patients treated for cancer, a population largely neglected by researchers, provides the focus of enquiry. The role of health as a motivator or inhibitor is questioned and patterns of participation pre- and post-diagnosis treatment are explored. Building upon this and earlier related research, a model is developed to more readily reflect and explain the vacation needs of patients at different stages of illness.

During times of illness people turn to different sources for comfort and rehabilitation, the medical community, complementary, or alternative therapies, for instance. Vacations may well reflect one such source. Yet despite having roots within many of the earliest forms of tourism, the relationship between health and vacations in general represents one of the most neglected fields of research to date.

The research was broken down into a number of components which included investigating the relationship between ill-health and tourism activity, questioning the feelings and behaviors attached to a cancer diagnosis, determining the perceived effects of vacations upon health and wellbeing (Jones, 2003), and reviewing the relationship between adolescence, cancer and tourism (Jones, 2004). A central component of the study, and the focus of this paper, was to develop a profile of participation, since such findings may be significant on two counts. First, in helping to better inform the industry of the needs specific to this market. Second, in alerting the healthcare sector to the role of tourism may play in enhancing a patient's quality of life. Four aims were explored. The relationship between cancer and tourism was investigated (Aim one), the role of health within the decision-making process was questioned (Aim two), factors which may motivate (Aim three) or inhibit (aim four) patients to vacation post-diagnosis/treatment were determined. The range of responses gathered are interpreted through the Medical Tourist Lifecycle (MTL), a model developed to more readily reflect the needs of patients at different stages of illness. Stage four of the MTL outlines a Medical Tourist Typology. This paper has investigated the tourism propensities of a group of cancer patients. The findings collectively suggest the existence of a medical tourist class. For this group of tourists, participation was found to have altered post-diagnosis with an increasing

emphasis placed upon domestic trips and VFR (visiting friend and relatives). International activity was characterized by short-haul, package holidays, primarily located within English speaking destinations. Fatigue, loss of confidence, and financial considerations were each identified as contributory factors. What was significant for this group was that illness, even when serious, was not in itself found to act as the sole barrier to participation. The MTL was developed to reflect the differing tourism patterns through the lifecycle of a cancer diagnosis. The aim of the MTL was to provide a mechanism for identifying the different needs at different stages of treatment. It was envisaged that such information may be of relevance to both the tourism media and the wider community. The media (newspapers, radio, television, publishers of guide books, etc.), responsible for the marketing of opportunities and destinations, may be better able to direct would-be tourists to significant sources of relevant information. The wider community, including travel agent associations (such as the Association of British Travel Agents), the Foreign and Commonwealth Office, transport operators and accommodation providers, may be better able to accommodate specific needs, recommend more accessible estimations, seek ways of reducing pressure points on holiday's (queuing at airports, for instance) which collectively may benefit the consumer. It is significant that the current focus of the work of such organizations (Association of British Travel Agents included) is in advising on the health consequences of vacations (ABTA).

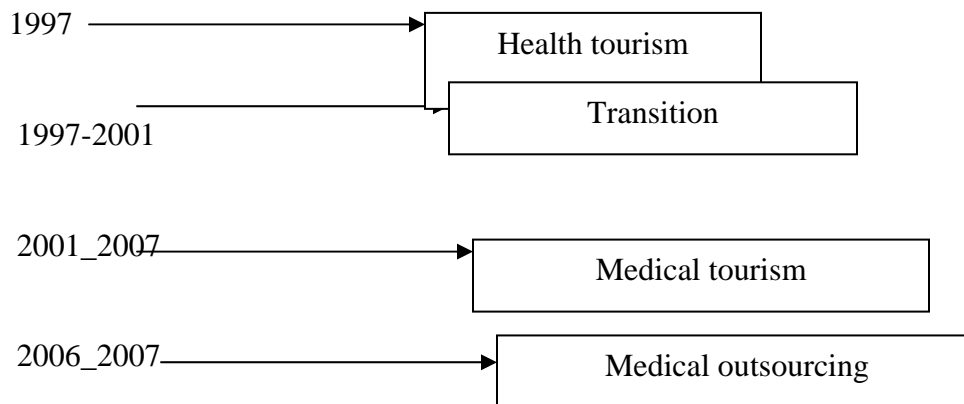
Yet the application of the MTL extends beyond tourism management alone and has a role to play in modeling the health sector's management of cancer rehabilitation. Increasingly today new approaches to enhancing a patient's quality of life are being sought. This study has demonstrated that informants acknowledged tourism as making a contribution to this

area. Consequently, the MTL may be of value to the medical community (doctors, nurses, and consultants) in terms of advising on the implications of trips at this time and of the make-up of appropriate vacation options (long-haul, short-haul, VFR). Although such a community may have limited empathy with the tourism industry, their responsibility for the overall welfare of the patient places an increasing onus upon them to look beyond the illness when formulating a patient's rehabilitation program

### ***2.5 The trend of medical tourism concept in the world***

The concept of medical tourism or health travel in the world was mooted in 1997, after Asian economic crises. The concept of Health Tourism, Medical Tourism, Medical Travel and Medical Outsourcing is the same. And it appears that traveling abroad to receive health care and treatment. In 1990 many factors in different countries such as Asian countries led to the growth of medical tourism in the long term will continue.

According To the first international conference of health tourism in Iran (Jabbari, 2007), the trend concept of medical tourism in 1997 to 2007 has shown bellow:



In 2006\_2007: Medical outsourcing defines as “a practice used by different companies to reduce costs by transferring portions of work to outside suppliers rather than completing it internally”. The term which has been generally associated with the automobile industry was popularized during the past decade by the computer or IT industry. So, medical outsourcing which is also commonly known as medical tourism is the practice of seeking health care abroad.

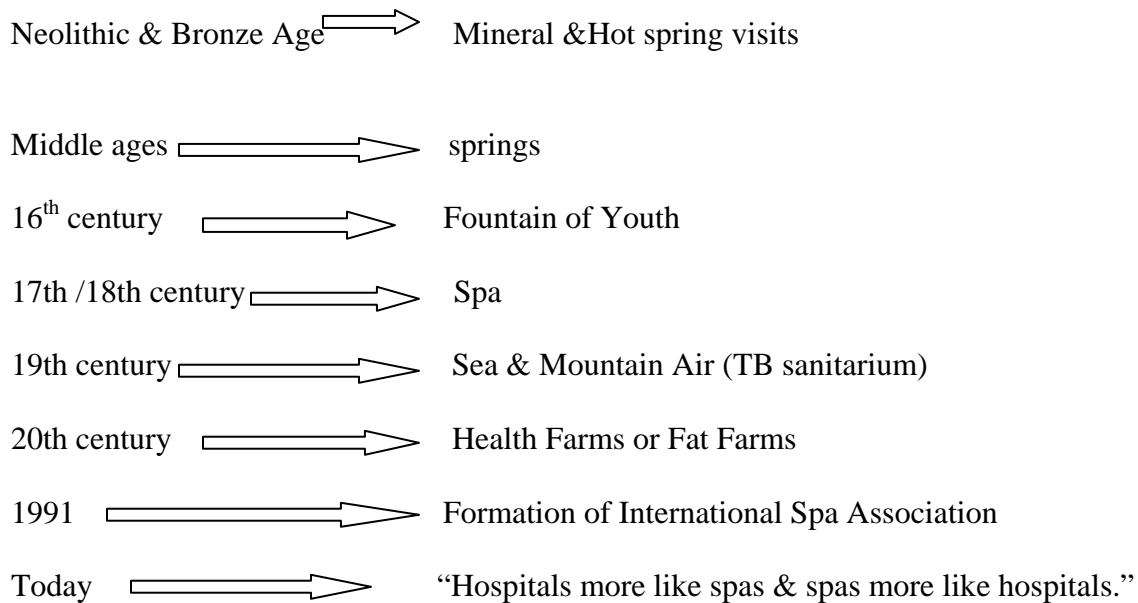


Earlier, people would go abroad mostly for elective cosmetic procedures which were not covered by insurances. Today, people outsource their orthopedic procedures as well as cardiac surgeries as well as organ transplants. It's not just individuals who are interested in this trend to save money. Medical outsourcing has also received attention from health insurance companies who have started offering overseas treatment plans to expand their customer base, and from employers who have included it as a benefit to their employees. The growth trend of medical tourism in (2004 to 2007) has shown in Figure 4 (searched by Google):

Figure 5: The Growth of Medical Tourism in the World



*The history of curative and wellness tourism which are used and named to each decade*  
*(Jabbari, 2007):*



The main important points that caused some people travel to others countries for curative and wellness aspects have been expressed bellow

- The Shifting in consumer values
- Increased stress and workload
- Older population
- Healthcare costs are escalating
- New attitude towards mental and spiritual activities
- The emergence of environmentalists

The main important points that caused some people travel to others countries for treatment aspects have been expressed bellow

- Exorbitant cost of treatment in the home country (developed countries)
- Long waiting periods
- No or minimal insurance coverage
- Privacy (anonymity)
- Lack of facilities in the home country (under developing & developed countries)
- Possibility of a holiday with healthcare

***Determining and comparing the objectives of medical travel in past (old model) with medical aspects of tourism in new model (new market of today's):***

Analyzing the old model which is called medical travel has been expressed that for the past status the objectives for medical travels are divided by 3 main factors:

1-Self-paying client from the Middle East, Asia or Latin America seeking care in the USA or Western Europe.

2-Specialists targeted: those where quality care not available in home countries, i.e. cardiac or plastic and other surgery.

3-They have to need the emergency care that not available in home countries.

The objectives of new model (new market) is classification for many factors that could be called it medical tourism has been expressed such as: waiting list lines for elective procedures in many developed countries such as England, opportunities to offer high quality interventions, a competitive prices, desirable environment, first class services at third world cost and combination of surgery with sightseeing tours (vacation, adventure and surgery) that these factors has led the patient from developed countries to developing countries. It can be concluded that the old model which is defined as medical travel (industrial medical tourism) and the new one which is defined as health medical tourism.

## ***2.6 Medical tourism issue in Iran***

Medical tourism is the issue which both health and the tourism authorities have paid attention during last several years in Iran. In the discussion of the fourth development program in 2001. The act of Medical Tourism has been considered (Jabbari, 2007). The act of the fourth development program was approved in the middle of 2004 after about one year and several months of discussion (Jahangeri, 2007). In brief, the program is about the determination of short-term goals and the way to achieve them. In other words, the program is a commitment to perform a set of activities to achieve the defined goals. According to the 87 act of the low constitution and along with the practical policies of trade, it is defined in the fourth development program that Ministry of the health, treatment and medical education is to offer necessary facilities for introducing medical and health potentials, offering and marketing health services and medical and Premedical products in order to take part in global markets and to introduce Iran as a center for medical issues of the region and to gain. According to the fourth development program Iran, the sum of foreign exchange equal to 30% of foreign exchange costs of health and treatment sector in Iran, have to provide by this industry (Jahangeri, 2007).

For the first time, The health and medical tourism industry have noticed by Ministry of health in Iran in 2003 , but in that time, the basic aim of ministry was the employment of its graduates and not development of medical tourism. In 2004, the medical tourism program was actually practiced for the first time, after forming the secretariat of the medical tourism committee in Iran Cultural Heritage Organization and then being integrated Cultural Heritage Organization into travel and tourism industry. In Iran, Medical tourism can be considered interdepartmental and due to having many managers

it necessitates to cooperate between them. Also Nine organizations join to the Cultural Heritage and Handicrafts Organization in this field; these organizations includes: Ministry of Health, Treatment and Medical Education, Ministry of Foreign Affairs, Ministry of Social Security, Ministry of Interior, Medical Discipline Organization, Health Commission, Chambers of Commerce, IRIB, and Ministry of Information (Khalily, 2007). The committee of policy making for medical tourism along with macro-policy making for medical tourism began to prepared the needed acts and articles for gaining foreign exchanges from offering medical services to medical tourists, and providing the proper functions for organizing the patients who traveled abroad for medical services, considering Iran future 20-years horizon in this field. In the future 20-years horizon, Iran is considered as a developed country with the first stand in the region economically, scientifically, and technically, reserving her Islamic characteristics, inspiring Islam World by her constructive and effective interaction in international relationship.

In 1999, “future horizon” discussion in Iran was proposed in the secretariat of recognition assembly and a concept named “landscape” was introduced in macro programming and management.

The definition of “landscape”: the achievable ideal of the society in a long-term period, according to the values and ideas of the people and the government. This program, first, guides the key constituents of the society and its goals, and second, integrates them as a compatible system.

The landscape has the following features:

- 1-forward looking      2- validation      3- realism      4- generalization

In the document of the 20-year landscape for medical tourism it is declared that Iran must be the first in the region and this movement must be national and it is the duty of the media to inform both public and specialists by indicating the various dimensions of this kind of service (Jahangeri, 2007). In the last year, 30000 medical tourists have entered to Iran according to the statistics of Cultural Heritage Organization and 12% of the total income of tourism industry gained from the medical tourism sector (Jahangeri, 2007). Yet, there is not any exact statistics of the treated patients or the patient under treatment because there is no extensive discipline for medical tourism and the health and medical centers are not duty bound to report statistics of their patients. But According to some of authorities, annually 20000 medical tourists enter Iran from Middle East and the countries of Persian gulf. According the declaration of 27/2/2007 by Dr. Moayed Alavian, any hospitals and health centers able to admit foreign patients can apply for license. According to this declaration, the Ministry of Health is to approve the qualification of the health center in terms of specialized personnel, skilled specialists, geographical situation, communication, and marketing. All centers can update their license via internet and upload all their data about the treated or under treatment patients at the first of 2008. A long with the medical tourism programs, Ministry of health has a set of special programs to extend medical tourism such as issuing medical visa and in the case of approval of ministry of foreign affairs; some advantages are given to the patient receiving this kind of visa. Jahangeri (2007), expressed that in order to attract 5% of total medical costs of the neighboring countries which amounts to 5.2 millions Dollars, it must be invested in Iran. This amount of money is equal to one third of total revenue from non-oil exports. Along with the activities of ministry of health, cultural heritage, handicrafts

and tourism organization has done some activities resulted in comprehensive program of medical tourism.

In the field of complementary medical services, according to the detection , more than 1000 spa water existing in Iran .it seems that Iran have high potentiality for attracting these kind tourism (complementary and traditional tourism) in the field of hydrotherapy. Iran can compete with other countries that have natural resorts for therapy by attracting the investments to build centers for naturopathy, hydrotherapy and sunbathing to treat the skin disease such as Vitiligo, skin diseases, pain of eyes (IHT, 2007).

This research was designed to determine the effective factors for attracting medical tourism to Iran in a variety of aspect such as proper function of related organization, proper marketing Mix according to special circumstances of Iran. It seems that knowing each of these factors are necessary for entering Iran to medical tourism market.

1-Promoting medical tourism industry in Iran should be paramount and raise in the awareness of the related Iranian organization. It is necessary for these organizations to specify the significance of raising the standard and improve the medical and tourism facilities. Proper function of private, state can be activating the different related sectors such as health centers and tourism destinations.

2-knowing the proper factors of Marketing Mix for attracting medical tourism include special profits. Studying various factors such as products, price, places, and promotion plays have special roles in this sector of tourism.



### ***2.7 Analyzing the experiences of successful countries for promoting medical tourism***

According to some practical researches that discussed before, many successful countries in terms of medical tourism industry have considered special implications for their some regions. This part has been classified each of these countries by analyzing the experience of them to promote medical tourism industry.

#### ***Cuba***

- Promoting Privatization of HealthCare
- Centralized Marketing through medical services.

#### ***Thailand***

- Inter-Sectoral Coordination
- Effective Marketing
- Focus on Hospitality
- Building Infrastructure

#### ***Malaysia***

- The effort made by the government to promote medical tourism promotional plans
- Tax incentives
- Lessening import duty on medical equipment
- Enabling supporting infrastructure
- Set up five committees to promote health tourism

#### ***Argentina***

- Combining both medical care and vacation while leveraging the existing brand image of Argentina.

- Focus on Breast implant – Tango tandem, plastic surgery

### ***South Africa***

- South Africa's Surgeon and Safari and discouraged from going on safaris after plastic surgery to ensure proper recovery(Andrews,2004)

### ***Philippines***

- Design of three business models for health: (1) creation of an international zone of health for wellness combining medical tourism, spa health, eco-tourism and retirement villages. (2) Health human resources development network with the top nursing and medical schools/hospitals in the Philippines. (3) Health crewing for specific health services, including Tele-health, medical transcriptions.

### ***Switzerland***

- Advertising In-flight magazines, Approaching Russian Executives and Indian journalists to visit facilities "Get well in Switzerland"

### ***Germany***

- "Healthcare made in Germany", various intermediaries for logistics, translations, hotel, travel, and medical appointments, lacks government participation though.

### ***Singapore***

- Singapore has a reputation for its high level of cleanliness, and the standard of training and professionalism, which is among the best in the world. Singapore has set a target of one million overseas patients by 2012.

### ***Chapter3: Methodology***

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### ***3.1 Introduction***

This chapter discusses the research methodology including an explanation about survey, research design, sampling, measurement and instruments that applied in this research.

### ***3.2 Research design***

Empirical research normally starts with some a priori theory, which develops to try for explaining and/or predicting what happens in the real world. This study was conducted as an empirical research because characterized by the collection of data which is guided by preliminary theoretical exploration.

The Descriptive analytical method to collect of data in order to test hypotheses is concerning the current status for this subject.

### ***3.2 Research approaches***

There are two different ways to approach a research, quantitative and qualitative. The difference between qualitative and quantitative research can be in the context of the research design. Qualitative Research: an unstructured, primarily exploratory design based on small samples, intended to provide insight and understanding. In this research using qualitative method has been expressed in Chapter 2.

Quantitative Research: Research techniques that seek to quantify data and, typically apply some form of statistical analysis. Such methods collect numerical and analyze statistical methods that using in this research has been expressed in Chapter 4.

The selection of an appropriate research method is critical to the success of any research project, And must be driven by the research question and the state of knowledge in the area being studied. In general, a combination of research methods may be most effective in achieving a particular research objective. For example, when a subject area is not well understood, qualitative methods may be used to build theory and testable hypotheses. This theory may then be tested using quantitative methods such as surveys and experiments. Mixing qualitative and quantitative research methods is called triangulation of method. While most researchers develop expertise in one style, the two types of methods have different, complementary strengths and when used together can lead to a more comprehensive understanding of a phenomenon. In this study used quantitative techniques to obtain information from success of medical tourism discussion in Iran and to observe and analysis them, so qualitative approach would be selected and research method that uses in this research is triangulation.

### ***3.4 Research Methodology***

Research instrument that used in this study for qualitative and quantitative approach has been expressed:

#### ***3.4.1 Research Instrument***

To begin for collecting information, the resultant keyword from the subject development were entered into in academic databases such as science direct, Pubmed, Ebsco, Irandoc, Elsevier and afterwards, using the same keyword into non-academic internet search in Iran. Using Lulea and Esfahan university library were other sources for got information in this study.

The secondary data sources included newspaper, articles, online news video, web pages related to medical tourism dissuasion in Iran (web pages in specific hospitals, intermediaries with medical care, and outsourcers, web pages related to the tourism part of the services and Related organization such as chambers of commerce industries and mines, ministry of health, therapy and education, heritage and tourism organization, chamber of Iran health tourism industry). Professional TV programmers that Related to health tourism industry in Iran were used for secondary data sources in this research.

These sources used in Chapter 2 and discussed for qualitative aspects of this study. Using questionnaire to manage the quantitative method that can demonstrate causal relationship between variables was selected for this study.

### 3.4.2 Measurement

In this study the method of collecting and gathering data from a part of population by using structured questionnaire. Questionnaires typically contain items each of which elicits a different bit of information. When a questionnaire that measures attitudes generally must be constructed as an attitude scale and must use a large number of items in order to obtain a reliable assessment of an individual's attitude. On method for analytical description researches which is based on some objective questions that expressed different aspect of attitudes.

In this study, the measurement scales of questioner for all reflective items were based on a 5-likert scale which is the common type of attitude. Each of these items that related to specific hypothesis which could be measuring 11 constructs. The scale ranging from very low to very high.

This table shows the likert scales in this study.

Very high	High	Medium	low	Very low	<b>Questions</b>
--------------	------	--------	-----	-------------	------------------

This study conducted in 3 main hypotheses and 11 sub hypotheses that related questions for each hypothesis has been shown next page: (table1)

Hypothesis	Related questions
1-1 the proper functions of responsible state organizations relate with medical tourism.	1,2,3,4,19,50
1-2 the proper functions of health centers relate with medical tourism.	5,10,11,12,13,14,15,18,20,51,52
1-3 cooperating of responsible organization relates with medical tourism.	17,21,22,23,24,25,53,54
2-1 the diversity and variance of medical services relates with attraction of medical tourism to Iran.	26,27
2-2 the quality of medical services relates with attractions of medical tourism to Iran.	30,31
2-3 pricing the medical services relates with attraction of medical tourism to Iran.	8,9,28,29
2-4 advertising the medical services related with attraction of medical tourism to Iran.	16,32,33,34,35,36,37,38,39,55
3-1 Iran geographical situation relates with attraction of medical tourism to Iran.	6,7,41,42,43
3-2 felling secured in Iran relates with attraction of medical tourism to Iran.	44,45
3-3 being as an Islamic country relates with attraction of medical tourism to Iran.	40,46,47
3-4 attraction of medical tourism to Iran relates with the medical validity of Iran from the ancient time to now.	48,49

**Table 1:** Sub Hypothesis and Related Questions



### *Statistical measurement*

Quantitative data may be analyzed using a variety of statistical packages such as SPSS. In This research we used SPSS to presents the assumptions, principles, and techniques necessary to gain insight into data. Several tests which are used in this research have includes: T-Test, ANOVA, Kolmogoroff-Smirnoff and Chi-Square.

#### *3.4.3 Sample selections*

The statistical populations that survey in this study are the persons who are familiar to medical tourism discussion in Iran or had related education in tourism industry major. These persons included in 3 groups:

- 1-Specialist in medical tourism office in Ministry of health, treatment, and medical educations (Active experts in medical tourism office in Tehran Noor Hospital).
- 2-Participants in The first conference of Tabriz international health services in November 2007 (Administrators and mangers of active hospitals in this field).
- 3-Active experts in the field of medical tourism industry in Chamber of commerce, industries and mines in Isfahan.

According to chose sample selections of this population, selecting a sample may not have any chance of being selected in the sample because they didn't have familiar with medical tourism discussion, this kind of selected sample called a nonrandom or a no probability. Sample and there are two types of nonrandom samples: convenience sample and purposive sample, For this research the sample drown to specific criteria and the members are selected from the population based on the preceding knowledge of medical

tourism discussion and during the time that they have familiar with this discussion. Purposive sampling has been chose for this research. Purposive sampling is divided into two major types 1) judgment sample and 2) quota sample. Judgment sampling has been used in this research because sampling the members are selected from the population based on judgment and preceding knowledge for medical tourism dissuasion.

### ***3.4.3.1 Sample Size***

Perhaps the most frequently asked question concerning sampling is, "What size sample do I need?" The answer to this question is influenced by a number of factors, including the purpose of the study, population size, the risk of selecting a "bad" sample, and the allowable sampling error.

Determining sample size is a very important issue because samples that are too large may waste time, resources and money, while samples that are too small may lead to inaccurate results. In many cases, we can easily determine the minimum sample size needed to estimate a process parameter, such as the population mean or variance.

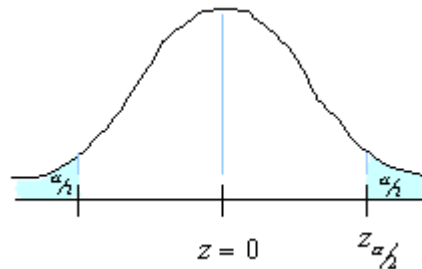
When sample data is collected and the sample mean  $\bar{x}$  is calculated, that sample mean is typically different from the population mean  $\mu$ . This difference between the sample and population means can be thought of as an error. The margin of error  $E$  is the maximum difference between the observed sample mean  $\bar{x}$  and the true value of the population mean  $\mu$ :

$$n = \left( \frac{z_{\alpha/2}}{E} \right)^2 \cdot \sigma^2$$

Where:  $Z_{\alpha/2}$  is known as the critical value, the positive  $z$  value that is at the vertical boundary for the area of  $\alpha/2$  in the right tail of the standard normal distribution.

$\sigma$  is the population standard deviation.

$n$  is the sample size.



Rearranging this formula, we can solve for the sample size necessary to produce results accurate to a specified confidence and margin of error.

$$n = \left( \frac{Z_{\alpha/2}}{E} \right)^2 \cdot \sigma^2$$

Where:  $Z_{\alpha/2}$  is known as the critical value, the positive  $z$  value that is at the vertical boundary for the area of  $\alpha/2$  in the right tail of the standard normal distribution.

$\sigma$  is the population standard deviation.

$n$  is the sample size.

This formula can be used when you know  $\sigma$  and want to determine the sample size necessary to establish, with a confidence of  $1 - \alpha$ , the mean value  $\mu$  to within  $\pm E$ . You can still use this formula if you don't know your population standard deviation  $\sigma$  and you have a small sample size. Although it's unlikely that you know  $\sigma$  when the population mean is not known, you may be able to determine  $\sigma$  from a similar process or from a pilot test/simulation.

In this research the  $\sigma$  was unknown, so we used pilot study with 30 samples to estimate the  $\sigma$  of population.

It was calculated below:

$$\sigma^2 = \frac{1}{n-1} \sum_{i=1}^n (y_i - \bar{y})^2 = 0.0393$$

So we had the estimation of sample size:

$$n = \left( \frac{z_{\alpha/2}}{E} \right)^2 \cdot \sigma^2 \Rightarrow n = \left( \frac{1.96}{0.05} \right)^2 \cdot 0.0393 \cong 60$$

#### ***3.4.4 Testing validity and reliability***

Questionnaires must meet the some standards of validity and reliability that apply to other data-collection measures in educational research (Jackson et all, 1999).

##### ***Validity:***

Validity isn't determined by a single statistic, but by a body of research that demonstrates the relationship between the test and the behavior it is intended to measure (Jackson et all, 1999) ). A general measure of validity would be the percentage of experts who agree the test items are valid. In this research validity is determined systematically by experts, asking several respondents to state in their own words what they think each question means. Some questions revised and retested until they are understood accurately by pretest sample.

***Reliability:***

In this research 2 methods used for testing reliably:

1-cronbach Alfa

2- Spearman-Brown

***1- Cronbach Alfa***

Cronbach's alpha is a test for a model or survey's internal consistency. Called a 'scale reliability coefficient' sometimes. Note that a reliability coefficient of .70 or higher is considered "acceptable" in most Social Science research situations. For this reason, one method for reliability estimated by the Cronbach Alfa in this study. This is actually a variation of the Kuder-Richardson formula specifically developed for tests with yes-no or right-wrong responses. so the coefficient alpha could be determined by:

$$R = \alpha = \left( \frac{N}{N-1} \right) \left( \frac{S^2 - \sum S_i^2}{S^2} \right)$$

where  $\alpha$  is the coefficient alpha and a general estimate of the internal consistency reliability, N is the number of items on the test,  $S^2$  is the variance of the total test score, and  $S_i^2$  is the variance of the individual items on the test (Kaplan & Saccuzzo, 1989). For the whole sample of population according to reliability test by SPSS tools:

**Cronbach Alfa=94.08%**

***2-Spearman-Brown prophecy formula***

Internal consistency reliability estimates come in several flavours. The most familiar is the split-half adjusted (i.e., adjusted using the Spearman-Brown prophecy formula). The Spearman-Brown prophecy formula is commonly used for adjusting split-half reliability estimates for full test reliability. To review briefly, split-half reliability is an internal consistency estimate. Split-half reliability is typically calculated in the following steps:

1. Divide whatever test you are analyzing into two halves and score them separately (usually the odd numbered items are scored separately from the even-numbered items).
2. Calculate a Pearson product-moment correlation coefficient between the students scores on the even-numbered items and their scores on the odd-numbered items. The resulting coefficient is an estimate of the half-test reliability of your test.
3. Apply the Spearman-Brown prophecy formula to adjust the half-test reliability to full-test reliability. We know that, all other factors being held constant, a longer test will probably be more reliable than a shorter test. The Spearman-Brown prophecy formula was developed to estimate the change in reliability for different numbers of items. The Spearman-Brown formula that is often applied in the split-half adjustment is as follows:

$$reliability = \frac{2 \times r_{half-test}}{1 + r_{half-test}}$$

In this study according to the Spearman-Brown prophecy formula: Reliability = **94.125%**

## ***Chapter 4: Result and Reasech finding***

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#### ***4.1 Introduction***

Explaining and discussing about the analysis of the sample data, results, hypothesis testing, and the confirmation or rejection of each questions.

#### ***4.2 Empirical Results***

The data analysis in this study was done by SPSS. The result of such procedure is simultaneous analysis of 1) how well the measures importance for attract medical tourism and 2) whether the hypothesized relationships at the theoretical level are empirically confirmed.

##### ***4.2.1 Descriptive Data analysis***

##### **Data analysis**

In this section the results of analyzing the questions are given. 55 questions was asked in part one and 4 questions were asked in part two of the research questionnaire about professional activity, organization, and city and the time duration of knowing about medical tourism discussion in Iran.

### **Professional activity**

As discussed before, From 60 sample in this research which is includes:

1-Specialist in medical tourism office in Ministry of health, treatment, and medical educations. (Active experts in medical tourism office in Noor Hospital of Tehran).

2-Participants in the first conference of Tabriz International health services in November 2007 (Administrators and managers of active hospitals in this field).

3-Active experts in medical tourism in Chamber of commerce, industries and mines in Isfahan, It can be concluded that 43.3% of the respondents were medical doctor and 26.7% were tourism specialist and 30% were managers in different organization who were the members of chamber of commerce industries and mines .As can be noticed the medical doctors were consisting the most range of the respondents in this research.

Descriptive statistics for Professional activity level of respondents has been shown in Table2:

**Table 2:** Statistical rate of Professional Activity

Population	Frequency	Valid percent	Cumulative percent
Medical doctor	26	43.3	43.3
Tourism specialist	16	26.7	70.0
Managing directors in different organization	18	30	100
List Wise	60	100	—

### *Organization*

---

From the demographic data it can be seen that 35% of the respondents were working in the part of educational of private and governmental hospitals. And the respondents who work in health ministry and chamber of commerce industries & mines are the same (30%), and the others were working in related tourism organization.

Descriptive statistics for related organization that the respondent working has been shown in Table 3:

**Table3:** Statistical rate of organization

Organization	Frequency	Valid percent	Cumulative percent
health ministry	18	30	30
Private governmental hospitals	21	35	65
Related tourism organization	3	5	70
chamber of commerce industries & mines	18	30	100
List Wise	60	100	-

### **The city**

From 55% of respondents who answered for this questioner who were working in hospital or therapy organization in Esfahan and 21% were working in hospitals or health ministry of Tehran. The others were working in different hospitals in Shiraz, Tabriz and Mashahad.

Descriptive statistics that base on the city of their respondents has been shown in Table 4:

**Table 4:** Statistical rate of City

City	Frequency	Valid percent	Cumulative percent
Tehran	13	21.7	21.7
Esfahan	33	55	79.7
Tabriz	1	1.7	78.3
Mashhad	8	13.3	91.7
Shiraz	5	8.3	100
List Wise	60	100	-

**The time duration of Knowing medical tourism discussion in Iran**

About 23.3 of the respondents have familiar with medical tourism discussion in Iran for 2 years. Also 16.7% of the respondents had familiar for 5 years and 15% had knowing this discussion for 10 years. It can be seen by the fact that the most of the respondents were familiar with medical tourism dissuasion more than one years.

The distribution of time duration of knowing the medical tourism discussion in Iran has been shown in table 5.

**Table 5:** Statistical rate of the time duration of knowing medical tourism issues

Time duration(mounts)	Frequency	Valid percent	Cumulative percent
2	6	10	10
12	8	13.3	23.3
18	1	1.7	25
24	14	23.3	48.3
36	5	8.3	56.7
48	2	3.8	60
60	10	16.7	79.7
120	9	15	91.7
240	3	5	96.7
324	1	1.7	98.3
360	1	1.7	100
List Wise	60	100	-

#### *4.2.2 Measurement tools for hypotheses testing*

##### **The effects of Job, city, organization and time duration about medical tourism discussion of the respondents on 55 questions:**

Surveying and analyzing the effect of these factors (job, city and organization of working and knowing the time duration of medical tourism discussion) in 55 questions were based on ANOVA tests:

We used some related statistical tests for this assumption of this study which was discussed below. A one-way Analysis of Variance is a way to test the equality of three or more means at one time by using variances.

##### **(a) Assumptions:**

- The populations from which the samples were obtained must be normally or approximately normally distributed.
- The samples must be independent.
- The variances of the populations must be equal.

1) At First, surveying the normal distribution of this population was examined by using **Kolmogoroff-Smirnoff (K/S)** test. The objective of K/S was to test a hypothesis concerning the Normal distribution of this population.

In this part, we considered the null hypothesis which is "the Residuals are distributed Normal" and the alternative hypothesis which is "the Residuals are not distributed normal".

H0: Residuals are distributed normally.

H1: Residuals are not distributed normally.

We tested the normality assumption in three main fields of this study which is:

Q1="the proper functions of responsible state organization relates for attracting medical tourism to Iran. "

Q2="the proper Marketing Mix relates for attracting medical tourism to Iran."

Q3="Iran circumstances and geographical for attracting medical tourism to Iran"

**Table 6:** Kolmogoroff-Smirnoff Analysis result

Q3	Q2	Q1	Main hypothesis in this research
0.998	0.876	0.606	Significance level

The decision to reject or accept the null hypothesis is based on significance level , thus, we desired significance level=0.05.according to table6 ,in this case we would accepted H0 because all of significance level in Q1, Q2 and Q3 were more than 0.05 .It can be seen by the fact that all of the Residuals in this research are distributed normally.

2) Secondly, surveying the equality of variance was explained by **Homogeneity** tests the objective of this was to test a hypothesis concerning the equality of variances.

In this part, we considered the null hypothesis which is "the variances is equal" and the alternative hypothesis which is "the variances is not equal."

H0: The variance is equal.

H1: the variances is not equal

**Table 7:** Homogeneity Tests result

Sig	Q1	Q2	Q3
Homogeneous test	0.721	0.473	0.651

The decision to reject or accept the null hypothesis is based on significance level , thus, we desired significance level=0.05. according to table7 ,in this case we would accepted H0 because all of significance level in Q1, Q2 and Q3 were more than 0.05. It can be seen by the fact that the variances are equal in this case of study.



### **F-Test for Analyses of Variance (ANOVA)**

F-test can easily do power analyses for single-factor and multi-factor. In multi-factor designs, we want to determine separately the power for the main effects and for the interactions involved. The null hypothesis will be that all population means are equal; the alternative hypothesis is that at least one means is different.

Surveying the effective factor of Professional activity on the main hypothesis in this research was tested by *ANOVA*. The null hypothesis was to be test that the four factors independently don't have effect on the main field (Q1, Q2, Q3) of this research.

In this part, we considered the 4 null hypotheses which were:

- 1-"The professional activity of respondent don't have effect to reply the questions."
- 2-"The organization of respondent don't have effect to reply the questions ",
- 3-"The city of respondent don't have effect to reply the questions"
- 4-"The time duration that knowing respondent about medical tourism industry in Iran don't have effect to reply the questions."

And the alternative hypothesis was to be test that these four factors indepdently have effect to reply the questions.

**Professional activity**

The result of ANOVA test for first hypothesis about *job* in three main fields in this study has been shown in table 8. It can be expressed that all of the sig. level for 3 main fields were more than 0.05. So we accept H0, which means that professional activity of respondents does not effect on the answers.

ANOVA test for Professional activity:

**Table 8:** ANOVA Test for Professional Activity

Main Hypothesis	df	F	Sig
Q1	1	0.362	0.551
Q2	1	0.253	0.617
Q3	1	0.012	0.913

**City / Organization / Time Duration**

In the same ways all of the factors (The Professional activity, The city that they living, The organizations that they working and the time duration of knowing medical tourism discussion) of respondents don't have any effect on answers to all of 55 questions. The result of ANOVA test for theses four factors has been shown bellow (Table 9):

*ANOVA test for organization:*

**Table 9:** ANOVA Test for Organization

Main hypothesis	df	F	Sig
Q1	2	0.758	0.475
Q2	2	0.314	0.732
Q3	2	0.541	0.586

It can be expressed that all of the sig. level for 3 main fields were more than 0.05. So we accept H<sub>0</sub>, which means that working of the respondents in different organizations doesn't have effect on answers to questions.

*ANOVA test for city:*

**Table 10:** ANOVA Test for City

Main hypothesis	df	F	Sig
Q1	4	0.515	0.725
Q2	4	0.876	0.487
Q3	4	1.053	0.392

It can be expressed that all of the sig. level for 3 main fields were more than 0.05. So we accept H<sub>0</sub>, which means that the city of respondents does not effect on answers to questions.

*ANAOVA test for knowing the time duration of medical tourism discussion in Iran:*

**Table 11:** ANOVA Test for the time duration of knowing medical tourism issues

Main hypothesis	df	F	Sig
Q1	10	1.885	0.076
Q2	10	1.906	0.072
Q3	10	1.323	0.251

It can be expressed that all of the sig. level for 3 main fields were more than 0.05. So we accept H0, which means that knowing the time duration of medical tourism discussion of respondents doesn't have effect on answers to questions.

**Surveying significant differential of frequencies in each 3 main fields(Q1,Q2,Q3)by chi-square test**

To determine the distribution of response frequencies in 3 fields, we used chi-square test. In the other words, we can specify that the proportion of answers in 3 fields are the same or not.

In this part, we considered the null hypothesis which is "the response are equal distributed" and the alternative hypothesis which is "the response are not equal distributed".

H0: The responses are equal distributed.

H1: The responses are not equal distributed.

The table 12 showed that the Sig in 3 fields are more than 0.05 that accept H0. So we conclude that population answered to the questions in the same ratio.

**Table 12:** Chi-Square Analysis result

Q(main field)	Chi square	Sig
Q1	3.467	1
Q2	13.5	1
Q3	19.5	0.999

### **T student**

The T-statistical test is a measure of the difference between the sample means, expressed in relation to the SE of the difference.

We can specify whether the mean of responses in 5 groups (very high, high, medium low very low) is equal or not. We have done this test for 11 sub hypotheses which are related to their own questions.

The results were shown in table 13. The Sig. of 11 hypotheses was less than 0.05. According to the means, the most respondents have given high and very high answers each question.

**H1:** The proper functions of responsible state organizations relate to medical tourism issues which is belong to the number 1,2,3,4,19,50 questions.

**H2:** The proper functions of health centers relate to medical tourism issues which is belong to the number 10,11,12,13,14,15,18,20,51,52 questions.

**H3:** Cooperating of responsible organization relate to medical tourism which is belong to the number 21,22,23,24,25,17,53,54 questions.

**H4:** The diversity and variance of medical services relate to attraction of medical tourism issues which is belong to the number 26, 27 questions.

**H5:** The quality of medical services relate to attractions of medical tourism issues which is belong to the number 8, 9, 28, 29 questions.

**H6:** Pricing the medical services relate to attraction of medical tourism which is belong to the number 30, 31 questions.

**H7:** Advertising the medical services relate to attraction of medical tourism issues which is belong to the number 32,33,34,35,36,37,38,39,16,55 questions.

**H8:** Geographical situation of Iran relate to attraction of medical tourism issues which is belong to the number 41,42,43,6,7 questions.

**H9:** Felling secured in Iran relates with attraction of medical tourism issues which is belong to the number 44, 45 questions.

**H10:** Being as an Islamic country relate to attraction of medical tourism issues which is belong to the number 40, 46, 47 questions.

**H11:** Attraction of medical tourism issues relate to the medical civilization of Iran from the pervious time to now which is belong to the number 48, 49 questions.

**Table 13:** T-Student Analysis result

Sig	Std.Deviation	mean	Related questions	Hypothesis	H
0	0.32	4.13	1,2,3,4,19,50	1-1	H1
0	0.47	3.93	5,10,11,12,13,14,15,18,20,51,52	1-2	H2
0	0.45	4.01	17,21,22,23,24,25,53,54	1-3	H3
0	0.42	4.06	26,27	2-1	H4
0	0.59	4.4	30,31	2-2	H5
0	0.51	4.08	8,9,28,29	2-3	H6
0	0.51	4.01	16,32,33,34,35,36,37,38,39,55	2-4	H7
0	0.51	3.98	6,7,41,42,43	3-1	H8
0	0.59	4.32	44,45	3-2	H9
0	0.62	3.8	40,46,47	3-3	H10
0	0.65	4.13	48,49	3-3	H11

#### *4.2.3 Ranking score for questions by descriptive analysis*

##### **Ranking the importance idea of respondents for attracting medical tourism in Iran by descriptive statistics:**

This paper investigates some important issues and factors that influence the decision by respondents that could help for tourism industry in Iran to develop a proper marketing strategy in different situations. This paper also investigates how to achieve the importance factors, which is the main advantage of medical tourism industry in Iran.

Means for calculating a score for each question requiring giving specific code to each range of answer. It means that each number from 1 to 5 is attributed for each answer from low to very high.

<u>Code</u>	<u>answer</u>
1	very low
2	low
3	medium
4	high
5	very high

On the other hand the highest score that could be related to each question is 5

(The score which is related to very high answer)\* 55(number of populations) =300(5\*55)

Table 8 has been expressed the ranking of each question by the preference of their scores.

From the result. Question number 2 (preparing the visa for medical issues rapidly causes in satisfaction of medical tourism) which is related to the first hypothesis has the highest



score. It means that most of the respondents believe that getting visa for medical issues rapidly is the most important factor for attracting medical tourism to Iran.

As can be seen all 4 questions that includes attraction of medical tourism relates with life and fiscal security and satisfactory quality of recreational and health services according to international standards and satisfactory quality of equipments according to intentional standards and entering and existing from the country easily are the important factors for attracting medical tourist to Iran .

As a result question number 10 and 47 which are expressed that access to ATM (automated teller machine) and respecting the religious ceremonies in Islamic hospitals is the least importance for attracting medical tourism to Iran.

***Chapter 5: Discussion & Research suggestions***

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### ***5.1 Introduction***

Summary of main results, implications, and future research suggestions are given in this chapter.

### ***5.2 Discussion***

From the empirical evidence, a number of questions regarding to each hypothesis in this research shows the main and important dimensions for attracting medical tourism to Iran. This part shows the result of hypothesis and related questions that could be supported for each sub and main hypothesis.

#### ***5.2.1 Research results***

***Number one (main) hypothesis:*** The proper functions of responsible organizations relate to attraction of medical tourism to in Iran which is supported by 3 sub hypothesis. According to the result from chapter 4 this hypothesis is the main factor for attracting medical tourists to Iran. In the other words each of 3 sub hypothesis that supporting that, such as the proper functions of responsible state organization, health and medical centers and cooperation of responsible organization are a basic solution to overcome the problem of medical issues and improving medical tourism industry in Iran. 25 questions were supported for 3 sub hypothesis in this part. The result from these questions, Many respondents believe that, preparing the visa for medical issues rapidly, entering and existing from Iran easily are the most effective factors for promoting medical tourism industry in Iran.

Also, offering residential and recreational facilities for relatives of patients and dominating the oral and written communications with foreigners by hospital personnel that could be have the high influence promoting this industry. It seems that in terms of

cooperation between different organizations, cooperation between embassies and health centers have a basic role for attracting medical tourists in Iran.

Also Cooperation between tourism organization such as (hotels, travel agencies) and health organization is necessary for promoting health and medical tourism industry in Iran.

***Number two (main) hypothesis:*** The proper marketing mix which are related to medical tourism issues to Iran which is supported by 4 sub hypothesis that includes: The diversity of medical tourism services, The quality of medical services, The price of medical and health services and advertising for medical and health centers in Iran are the effective factors for attracting medical tourists in Iran. Data analysis and the interpretation of the result shows, in every way, consideration of the marketing mix is central to understanding modern tourism marketing and the key variables discussed in this part. Management should be considering all of aspect for marketing mix in medical tourism. As the focus of most marketing management decisions in practice, each of the Ps, product, price, promotion and place defined as the mixture of controllable marketing variables that the firm uses to pursue the sought level of sales in the target market (Clarke et al, 1988). Perceiving that the original Mc Carty principles are stated in producer orientated terms, Kotler restated Ps as Cs to reflect the consumer orientation that is central to modern services marketing in an area of growing competition (Kotler and Armstrong, 1999). These factors have been expressed bellow:

**Product** means customer value (the perceived benefits provided to meet needs and wants, quality of service received and the value for money delivered assessed against the competition. **Place** means convenience (in terms of consumer access to the products they

buy). In current marketing practice, products in Travel and tourism are designed for and continuously adapted to match the needs and exceptions of target consumers and their ability to pay (Middelton&Clarke, 1998). It can be concluded, From 18 question that supported for 4 hypothesis in this section, the high quality satisfactions of health and tourism organization and having the international standards of equipments are the most important terms for promoting medical tourism industry in Iran. In terms of product and place of marketing mix, accessing to different specialist and offering differential types of health and therapy service have a basic role for this industry in Iran.

**Price** means cost (price is a supply-side decision," cost is the consumer –focused equivalent also assessed against the competition). As concluded before, suitable costs of health and medical services in Iran and determining the appropriate tariff regarding the medical and health services for standards organization are the most important factors in terms of pricing of marketing mix for successful medical tourism industry in Iran .

**Promotion** means communication. It is important and visible that promotion or communication is still only one of the levers used to manage demand. It cannot be fully effective unless it is co-ordinate with other three. The result from some questions that supported by this sub hypothesis in this study which are included: having website, publishing special brochures, advertising traditional and complementary medicine and procedures are the necessary issues for this industry in Iran. Also many respondents believe that participating in international exhibitions and introducing health, medical, and tourism attractions of Iran are the most important factors for marketing this industry in Iran. Advertising in the embassies of other countries have a basic role for promoting this industry in Iran.

***Number three (main) hypothesis:*** Knowing the special circumstances and situation of Iran which are related to medical tourism attraction. This hypothesis was supported by 4 sub hypothesis. From the result, each of these 4 hypotheses were accepted by respondents. On the other hand, the result shows that the special geographical location of Iran, being as an Islamic country, felling secured and civilizations of Iranian medical history from the ancient time to now are the important factors for promoting medical tourism industry to Iran. These sub hypotheses were supported by 12 questions. It can be expressed that life and fiscal security for medical tourism is the important terms for attracting medical tourist. Also getting visa easily, providing the better equipment and appropriate transferring facilities for the neighboring countries of Iran is the necessary for attracting medical tourists. As a result it can be concluded that one of the important point is the mental security of the patients from being accompanied with relatives, because of that investigating for neighboring countries such as Arabs country that living in border regions of Iran and Armenia people that lives in north of the Iran are important factors for promoting this industry in Iran (Jahangeri, 2007). Also focus on objectives countries which are expectations for each specialist and requirement for treatment has led to improve this industry in Iran. Having world-known and famous Iranian specialists influences for foreigners to entering to Iran for special treatment.

From the result, it can be concluded that offering health insurance services to foreigners in Iran is not necessary for attracting medical tourism but respondents believe that accepting the health insurance of other countries in Iran is more important than offerings health insurance in Iran. Many respondents believe that some beauty and cosmetic

surgery such as Rinoplasty, fertility and Sex changes are not accepted by insurance in many countries. For this reason it is not necessary to offer for them insurance.

Also many respondents believes that access to ATM (automated teller machine) in health centers and dinning Hall that having menu for foreigners are the least importance for Iranian health centers for promoting medical tourist industry in Iran.

As discussed before respecting the religious ceremonies in Islamic hospitals are not important for foreigners entering to Iran for treatment .In the other world a few of Moslem people from Islamic country satisfied by this aspect of Islamic hospitals in Iran.

### ***5.3 Research suggestions***

This section based on the suggestions by the interpretation of the main objective of this study for Iran's country. Some suggestions are expressed as follows:

- Suitable credentials for tourism and treatment organization by state intuitions can be a good solution for improving the awareness of medical centers and related organization (like hotels, tour guides...) in responsiveness and empathy dimensions.
- Specified the proper accreditations program of Iran health tourism industry by ministry of health and therapy in Iran. According to master of Iran health ministry (2007), Iran have special programmes for improving of this issues such as: Each hospitals have to get approve from this site [www.eho.ir](http://www.eho.ir) and enter the characteristic of their own hospitals Furthermore health ministry of Iran will analyze each of their characteristics and specify some standards factors that each of them require. Each of theses organization have to standard their own infrastructures which is adapted by Health and therapy Ministry of Iran. Government also providing facilities for entering foreigners to Iran such as: Giving visa for medical issues easily for patient with one partner. Hossein zade (2007), The member of Health Ministry, expressed that, About 3 month ago specific credential sent to all hospitals of Iran and inform them for standardization. One of the another Programme of health and ministry of Iran is knowing the potential and ability of each hospitals which is important to enter this market. Jahngeri (2007), expressed that the year 2007, health ministry of Iran knew about 70% abilities of Iran to enter this market. Recognizing the other facilities will continue until the end of this yeas (2007). He also suggested that each



hospital have to specify the Tariff of different treatment for foreigners and they have to report to health ministry of Iran for confirming and entering to this market.

- Before entering the hospital and package in medical tourism industry, they have to identify with prior program regarding:
  - ❖ Whether the specialist in that area is available.
  - ❖ Whether the hospital has all investigations required within campus.
  - ❖ The credentials of the hospital are available.
  - ❖ The credentials of the specialist are available.
- Specified the role of different related organization for promoting medical tourism industry in Iran.
- Surveying and comparing of strengthens and weaknesses Iranian medical tourism issues by other successful countries such as India, Thailand, Malaysia and Singapore and analyzing the experience of these countries for promoting this industry in Iran.
- Health and therapy ministry of Iran have to specify the grade of each hospitals because Its necessary for each private and state organizations in terms of medical tourism issues that knowing the grade of their own institute for entering medical tourism industry.
- Health and therapy centers have to accept the foreign exchange of objective countries for promoting medical tourism industry in Iran.
- Some specialist suggested that advertising the chamber of commerce industries & mines in different cities of Iran and proper marketing have a basic role for improving medical tourism industry in Iran.

- Some members of Isfahan chamber of commerce industries & mines believe that investigating private organizations is the basic role for promoting this industry in Iran.
- It is necessary to design the information bulletin in health centers by international language that could be provided useful information about every information about health centers to foreigners.
- Designing the personnel dress adopted by each part of health centers in different sector of health and treatment organization that could be provided useful in formations for foreigner to inform which person work for each sectors of health centers.
- Designing the room of foreigner patient adapted by each nationality are effective factor for attracting medical tourists in Iran.
- Reception sector in Health and therapy centers have to separate for foreigner and domestic persons. It is better that treatment organization provide special offer for first entering of foreigner and also reception could help and inform foreigners easily and comfortably.
- Building hotel, health centers, and health city near natural medical resources in Iran such as Spa, mud, sand, and desert locations are the important factor for promoting complementary and traditional medical tourism industry in Iran.
- Many successful regions offer numerous options for touring, sight-seeing, shopping, exploring, and even lounging on sun drenched beaches beside their treatment. Special climate of Iran, having vast natural resources, having historical places and ancient civilization that could be provided many facilities to offer the numerous options such as Special touring, Sight-seeing to foreigners during their treatment .

- Providing Telemedicine and E-learning technologies in Iranians hospitals could be effective factors for attracting medical tourists (Domestic and foreigners). Some of the potential benefits of telemedicine include increased access to health care (especially in underserved areas), expanded utilization of specialty expertise and rapid availability of patient records could be provided to make specialty care more accessible to underserved rural and urban populations. Video consultations from a rural clinic to a specialist can alleviate prohibitive travel and associated costs for patients. Videoconferencing also opens up new possibilities for continuing education or training for isolated or rural health practitioners, who may not be able to leave a rural practice to take part in professional meetings or educational opportunities. Improving these technologies in hospitals that caused to increase follow up for foreigner patient and prevent Complication, side effect, post operative care for patients.

Theses suggestions have provided an overview of the many ways in which field, especially in treatment and health sectors in the entire medical tourism industry in Iran. Although this study leads to a new frontier of knowledge to understand medical tourism in Iran. Its findings demonstrate an important strategies implications that tourists can be seen as entering for medical and health issues to Iran.

### ***Future research suggestions***

Future research might take up issues that were not considered in the present study. The findings of the present study survey the effective factors of Iran which could be attracted medical tourists to Iran. Upcoming research might address the extend of following ways which are included:

- Designing to systematically planning of the proper function of related organizations for promoting medical tourism industry in Iran.
- Studying the requirement of international medical tourists trends and patterns relating to specific country for promoting medical tourism industry in Iran.
- Identifying the future demand of objective countries that could be expressed of future market development for promoting medical tourism industry in Iran.
- Future research might take up issues that analyzing the competitors and recognizing advantages and disadvantages of these countries and Iran .

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## Appendix A: Questionnaire

Introduction: Good day, this questionnaire is about the medical tourism issues in Iran.

May I please use a few minutes of your time to fill it.

Thank you very much for your kindly co-operation.

QUESTIONS	Very high	High	Medium	low	Very low

- 1- Entering to and exiting from the country easily is effective in attracting the medical tourism.
- 2- Preparing the visa for medical issues rapidly causes in satisfaction of the medical tourism.
- 3- Validating the patient's visa appropriate to the needed time for certain therapy.
- 4- Offering Health Insurance Services to foreigners is an effective factor to attract medical tourism.
- 5- Access to interpreters of different languages foreigners speak to be guided during admitting and hospitalizing and the other steps of treatment is very effective in attracting medical tourism.
- 6- Being related with the peoples living in border regions of other country is considered as a special factor in attracting medical tourism.
- 7- Various climate conditions (for example, having all four seasons), and various tourist destinations (historical, cultural, and natural) to visit are of effective factors in attracting medical tourism.
- 8- The other effective factor in attracting medical tourism is the adapted and suitable costs of health services in Iran.
- 9- Determining the various tariffs regarding the medical and health services, the rooms and meals, and other recreational activities for foreigners can have a significant role in attracting medical tourism.
- 10- There is a relation between medical tourism attracting and access to ATM (automated teller machine) in health centers and recreational centers.
- 11- Defining how to pay the costs of health services for foreigners can be effective in medical tourism attraction.
- 12- Possibility of consulting with physicians and surgeons through websites belonging to medical centers is effective in medical tourism attraction.



- 13- Possibility of follow-up therapies after being discharged from hospital through websites belonging to medical centers is effective in medical tourism attraction.
- 14- Access to international communication services (such as toll call, internet, and satellite communication) can be effective in attracting medical tourism.
- 15- Health centers equipped with dinning hall having menu is effective factor in attracting medical tourism.
- 16- Appropriate advertising about health and medical tourism in chambers of commerce in home and abroad can be considered as a special tool in attracting medical tourism.
- 17- Cooperation between the travel agencies and health and medical centers can be effective in attracting medical tourism.
- 18- Preparing brief history of treatments and methods used for the patient in English can serve as an effective factor in attracting medical tourism.
- 19- Issuing the visa according to the type of treatment is effective in attracting medical tourism.
- 20- Offering recreational services to the patients and their companions during the period of therapy can attract medical tourism.
- 21- Cooperation between health centers (such as Hospitals) and tourism centers (such as Hotels, Travel agencies) is necessary for attracting medical tourists.
- 22- Cooperation between embassies and health centers is effective in attracting medical tourists.
- 23- Cooperation between home and foreign insurance companies and health centers is effective in attracting medical tourists.
- 24- Cooperation between chambers of commerce and home and foreign private sectors to persuade investors in this sector is effective in attracting medical tourists.
- 25- Cooperation between function assessment and complaint settlement office and recreational and health centers is necessary for attracting medical tourists.
- 26- Access to any specialists and offering any health and therapy services is effective factor in attracting medical tourists.
- 27- Adapting health services with different nationalities and ethnicities can attract medical tourism.
- 28- Determining the appropriate tariffs regarding the medical and health insurance services to foreigners is effective in attracting medical tourists.

- 29- Competitive costs of Iran complementary medical and health services versus the other countries can attract medical tourism.
- 30- Satisfactory quality of recreational and health services according to international standards has an important relation with attracting medical tourism.
- 31- Satisfactory quality of equipments according to international standards is necessary for attracting medical tourists.
- 32- Having websites, publishing special brochures, and advertising are necessary procedures to attract medical tourists.
- 33- Participating in international exhibitions and introducing health and tourism potential and services offered in our country is effective trend in attracting medical tourists.
- 34- Giving Information and advertising about the cultural heritages is of necessary activities to attract medical tourists.
- 35- Giving Information to medical societies by Iran Medical Organization has an important role in attracting medical tourism.
- 36- Appropriate advertising by Ministry of Health and informing the various health centers in the country is effective factor in attracting medical tourists.
- 37- Introducing recreational facilities and health centers and their tariffs and allowance to select are of necessary procedures to attract medical tourists.
- 38-Advertising in the embassies of other countries can be effective in attraction of the medical tourism
- 39-Knowledge about the medical services ,cultural and geographical conditions relates with appropriate advertising.
- 40-Neighborhood of Islamic countries with Iran is considered as an effective factor in attraction of the medical tourism.
- 41-Easy traffic of the Neighboring countries to Iran is necessary for medical tourism.
- 42-Appropriate transferring facilities for the Neighboring countries are effective in attraction of the medical tourism.
- 43-Existence of different natural places used for treatment is effective factors for attracting medical tourism in Iran.

- 44-Attraction of medical tourism relates with life and fiscal security.
- 45-Mental security of the patients resulted from being accompanied with their relatives is effective for attraction of the medical tourism in Iran.
- 46-Low number of patients by Aids in Iran results in more attraction of medical tourism .
- 47-Respecting the religious ceremonies in hospital across the country leads to increase the medical tourism satisfaction.
- 48-the good history of medical science development in Iran has a great role in attracting medical tourism .
- 49-Having the world-known and famous Iranian specialists influences attracting of medical tourism.
- 50-Accepting the health insurance of other countries in Iran relates with the attraction rate of medical tourism.
- 51-Offering residential and recreational facilities for relatives accompanied the patients satisfies medical tourism.
- 52-Dominating the oral and written communication with foreigners by hospital personnel influences the attracting of medical tourism.
- 53-Cooperation between ministry of health and cultural heritage organization relates with the attraction of medical tourism.
- 54-Cooperation between banks (Private and states) and health centers across the country is effective factor for attracting medical tourism in Iran.
- 55-Introducing and defining the exact geographical situation and the way to hospitals effect the attraction of medical tourism.

### **Personal Information:**

Professional Activity \_\_\_\_\_

City \_\_\_\_\_

Organization \_\_\_\_\_

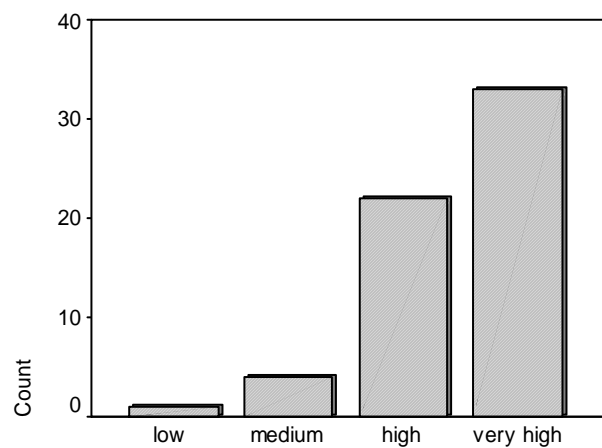
The Time duration of knowing about medical tourism discussion In Iran \_\_\_\_\_

Thank you for your kindly Co-Operations

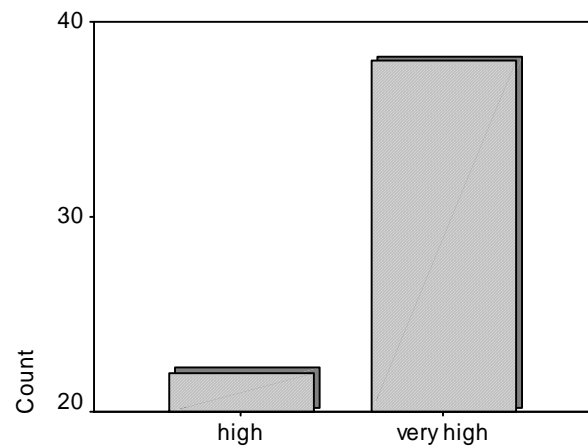
Zahra kazemi

**Appendix B:** Descriptive analytical (Rank Score for each question)

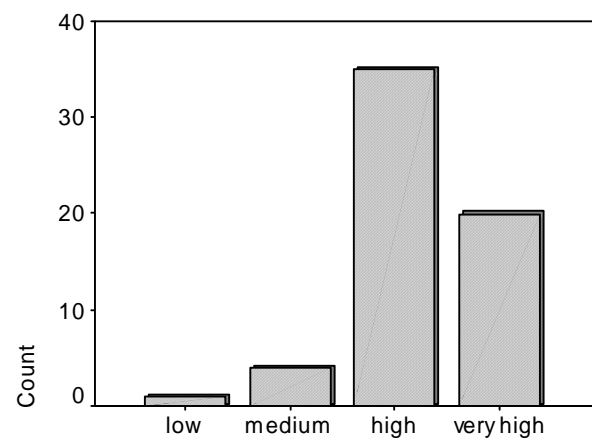
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VAR00044	60	2.00	5.00	267.00	4.4500	.6746
VAR00001	60	2.00	5.00	267.00	4.4500	.6993
VAR00030	60	3.00	5.00	265.00	4.4167	.6187
VAR00031	60	3.00	5.00	264.00	4.4000	.6938
VAR00051	60	3.00	5.00	259.00	4.3167	.5672
VAR00022	60	3.00	5.00	259.00	4.3167	.5964
VAR00052	60	3.00	5.00	258.00	4.3000	.6457
VAR00041	60	3.00	5.00	257.00	4.2833	.6662
VAR00049	60	2.00	5.00	255.00	4.2500	.7507
VAR00008	60	2.00	5.00	255.00	4.2500	.7041
VAR00003	60	2.00	5.00	254.00	4.2333	.6475
VAR00021	60	3.00	5.00	253.00	4.2167	.6662
VAR00033	60	3.00	5.00	253.00	4.2167	.7152
VAR00045	60	3.00	5.00	252.00	4.2000	.6840
VAR00032	60	3.00	5.00	251.00	4.1833	.6507
VAR00026	60	3.00	5.00	251.00	4.1833	.6241
VAR00005	60	1.00	5.00	251.00	4.1833	.8535
VAR00042	60	3.00	5.00	250.00	4.1667	.6681
VAR00038	60	3.00	5.00	249.00	4.1500	.6846
VAR00040	60	3.00	5.00	249.00	4.1500	.7089
VAR00029	60	3.00	5.00	248.00	4.1333	.6235
VAR00037	60	2.00	5.00	247.00	4.1167	.8045
VAR00039	60	2.00	5.00	246.00	4.1000	.7059
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VAR00017	60	2.00	5.00	245.00	4.0833	.6455
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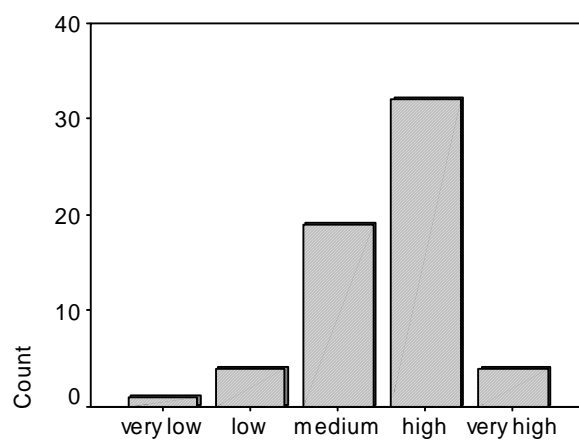
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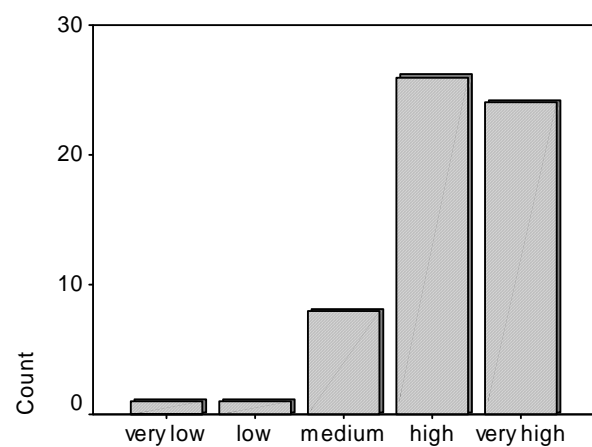
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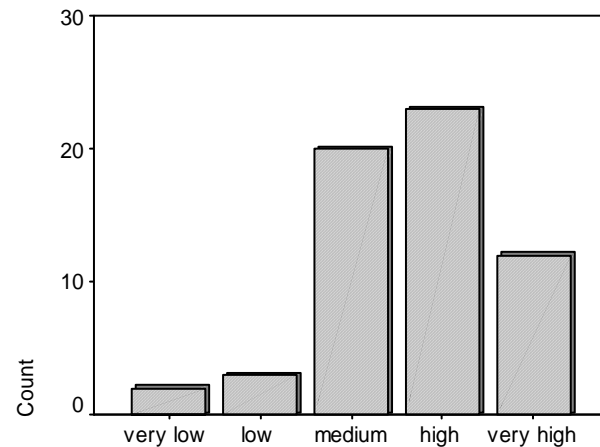
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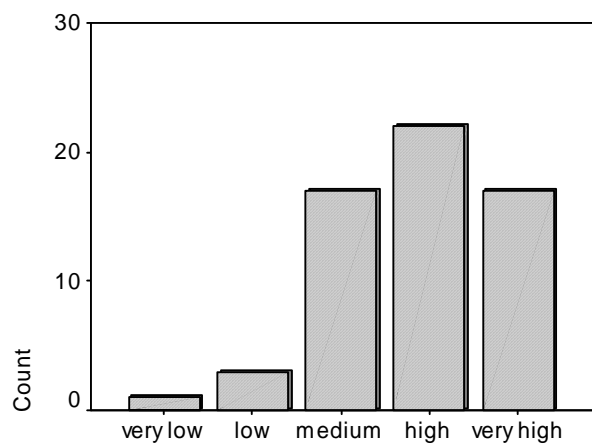
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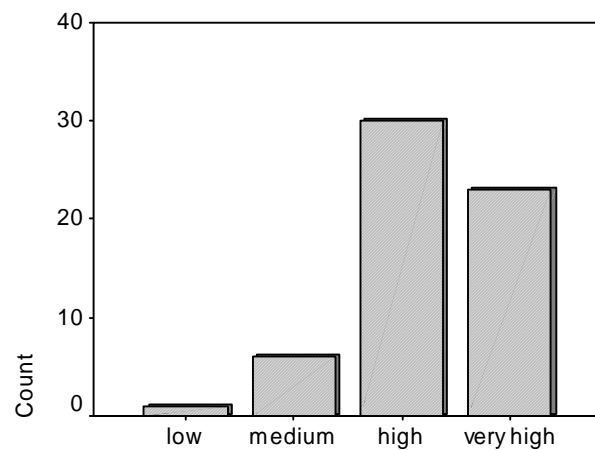
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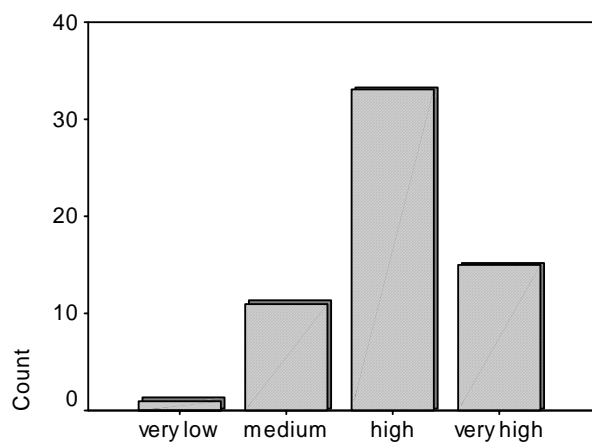
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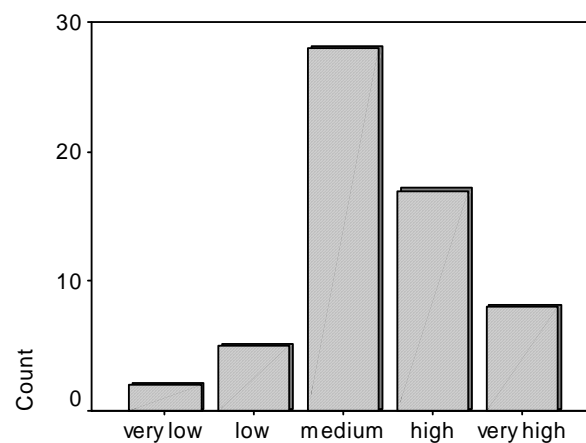
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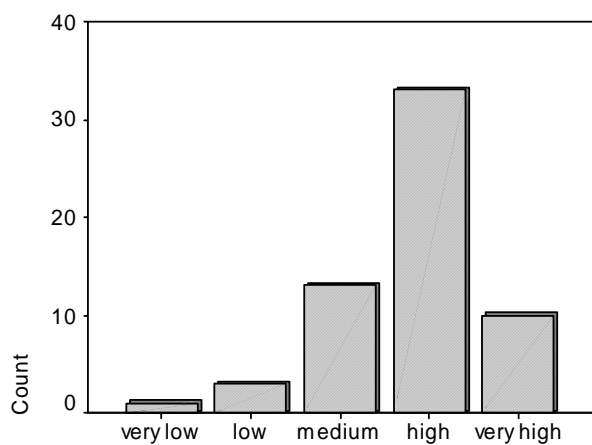
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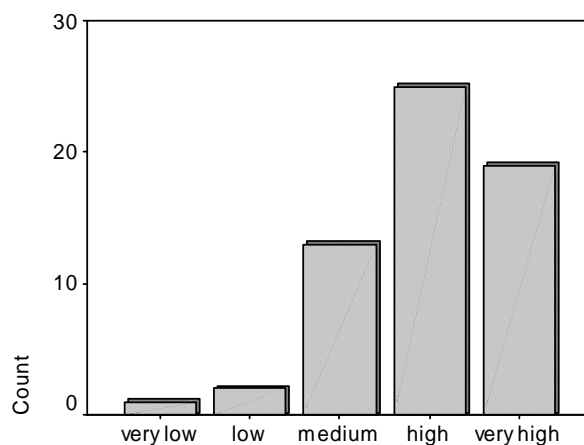
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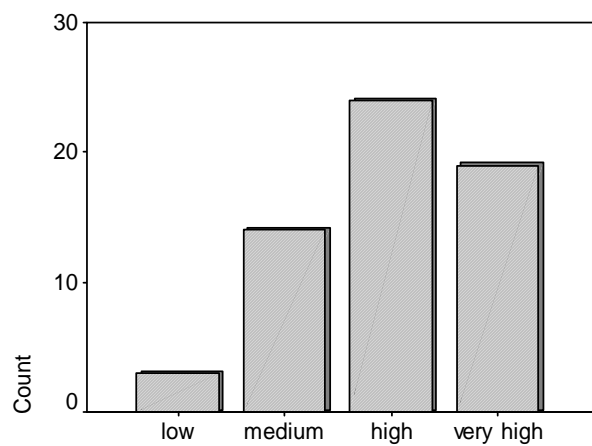
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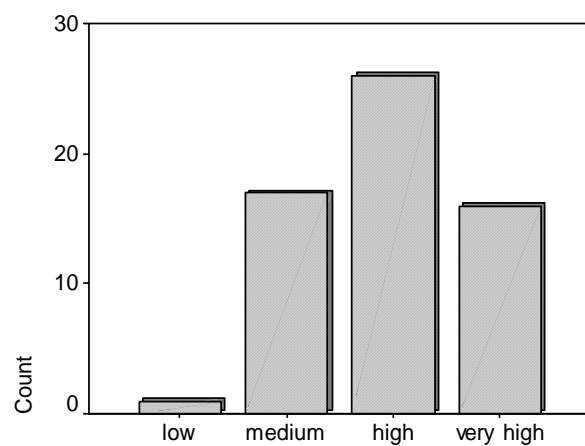
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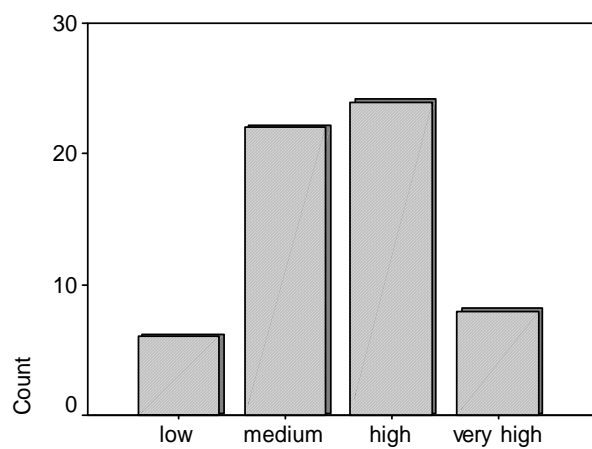
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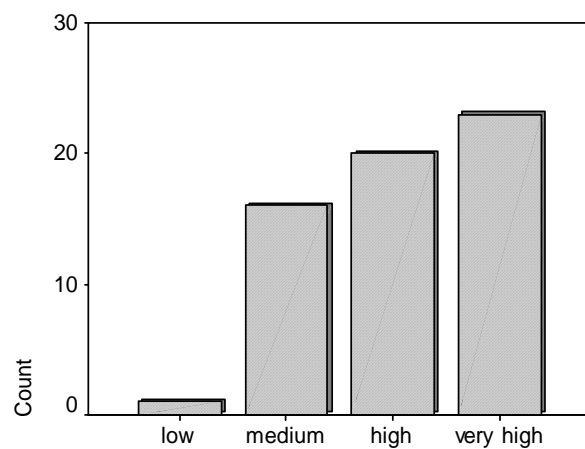
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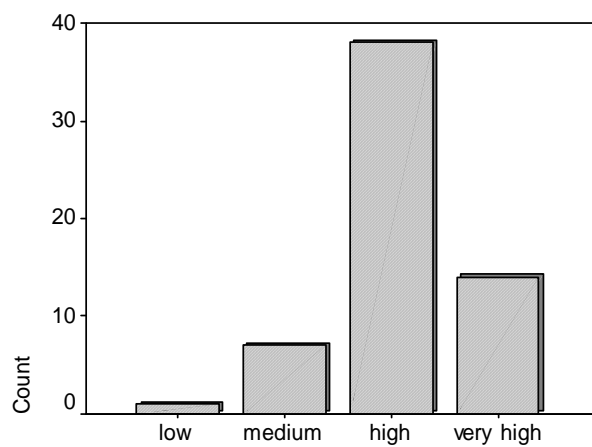
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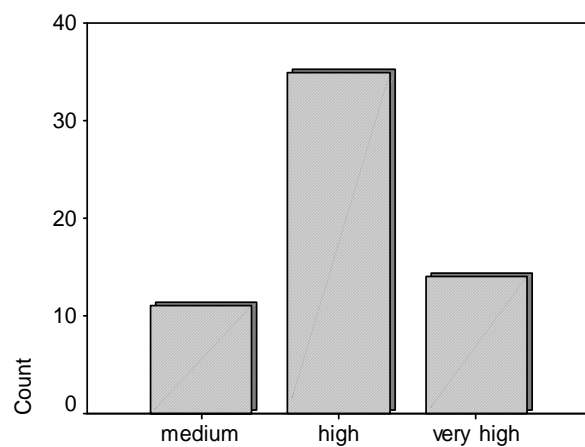
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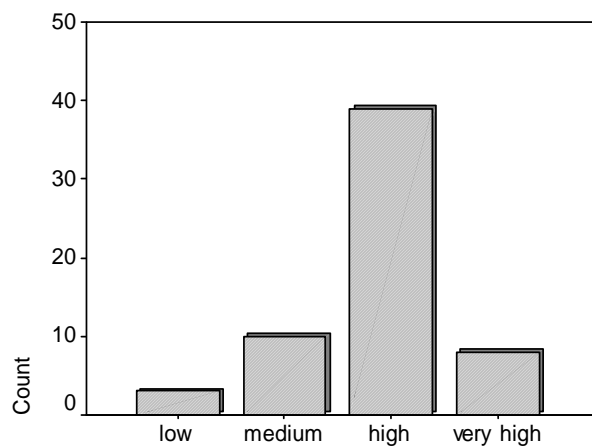
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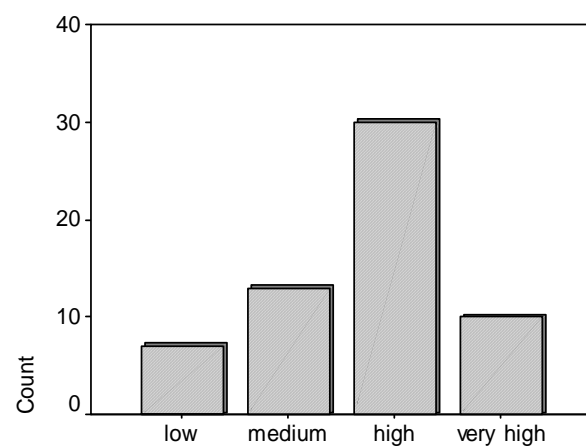
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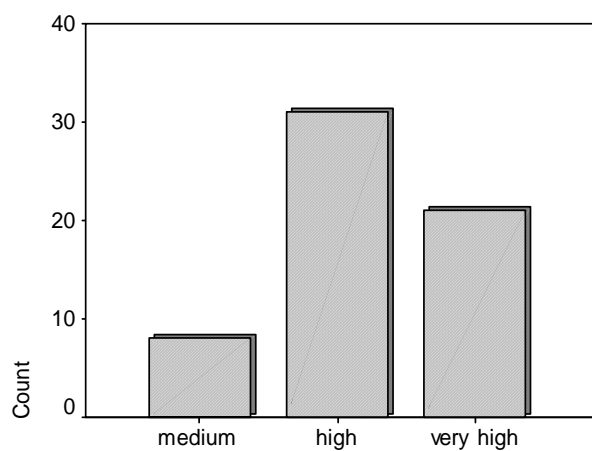
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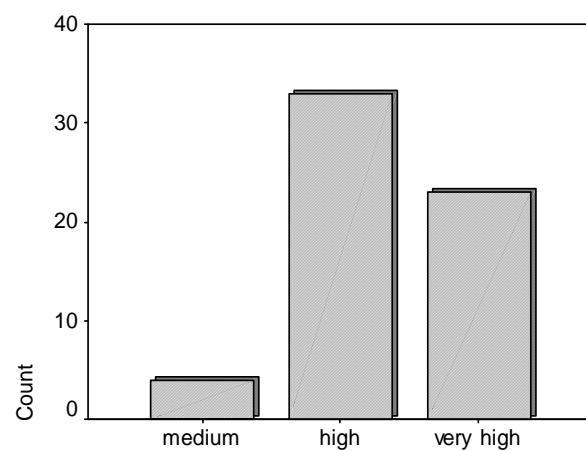
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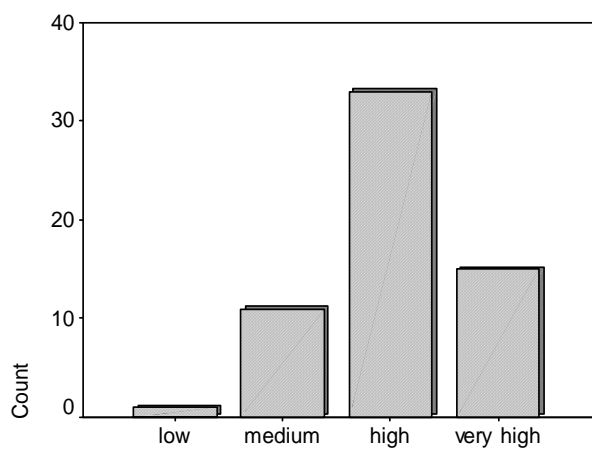
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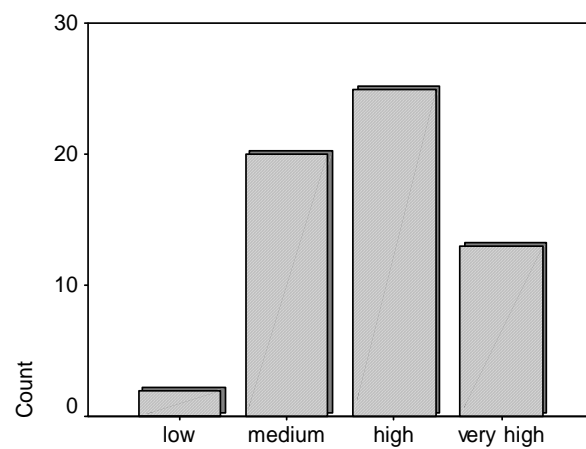
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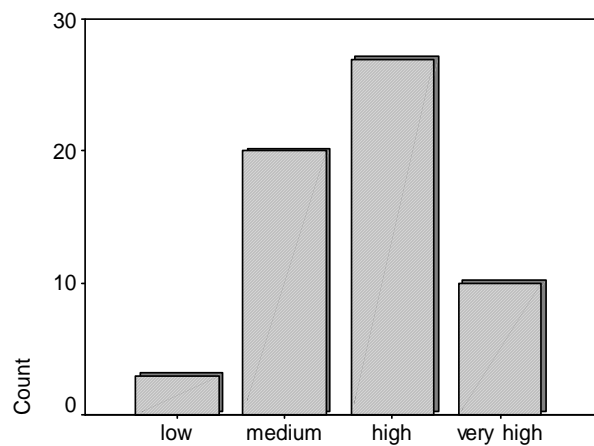


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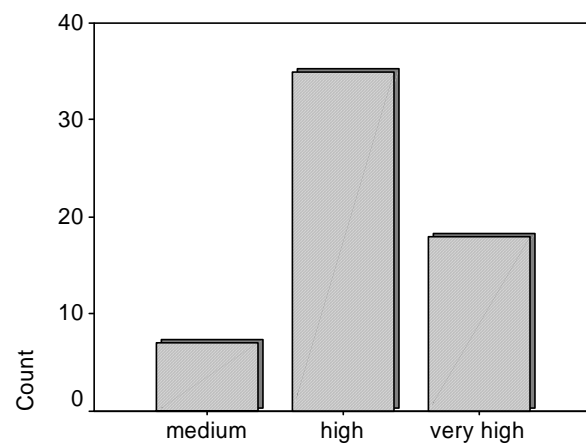


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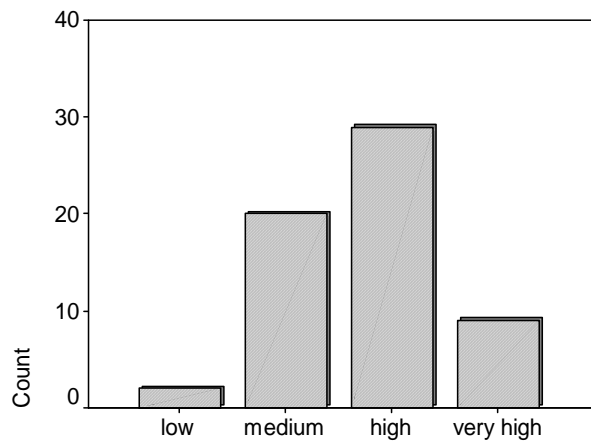




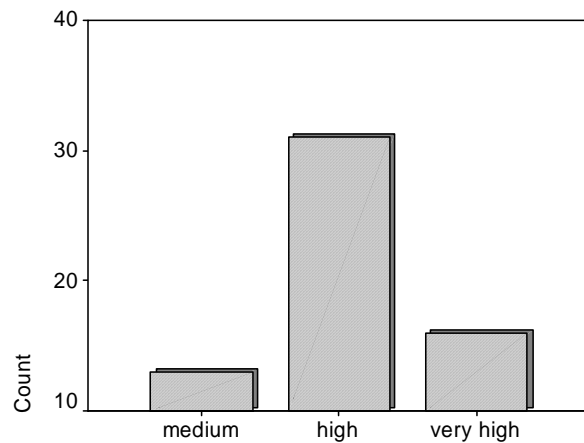
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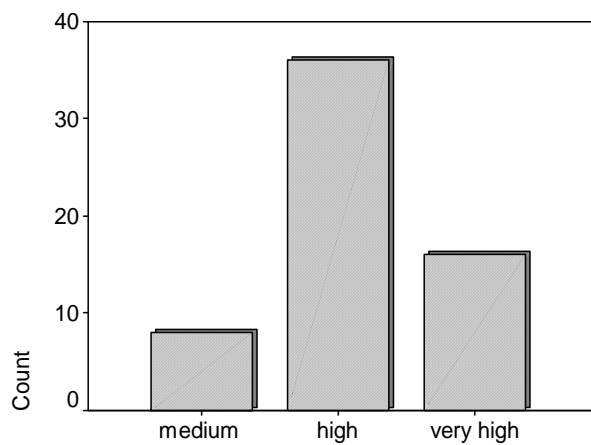
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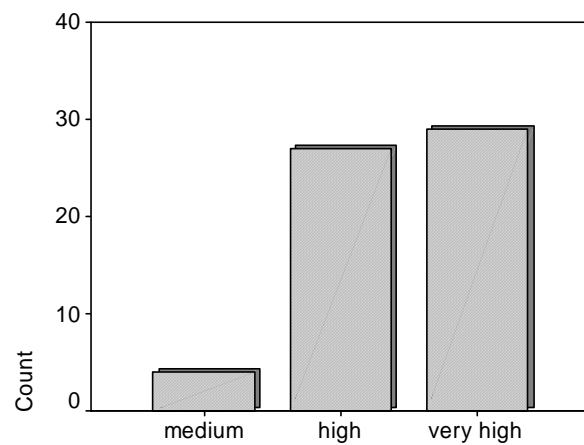
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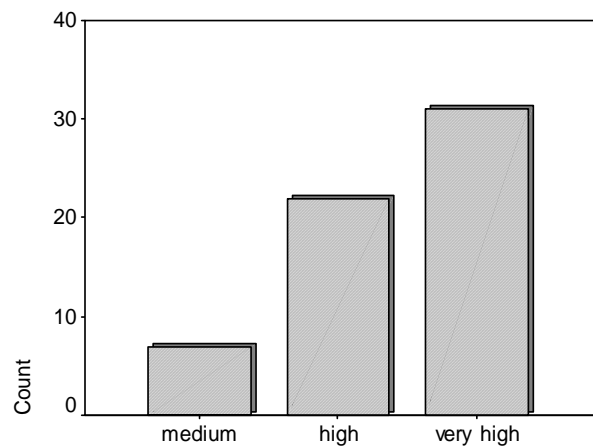
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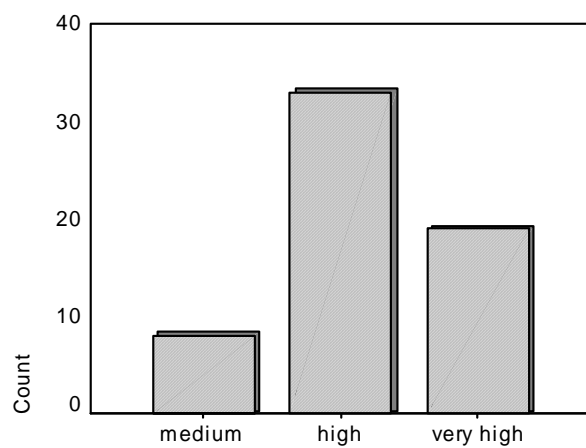
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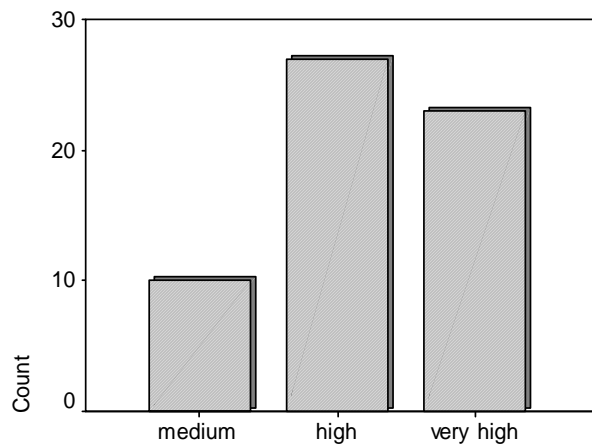
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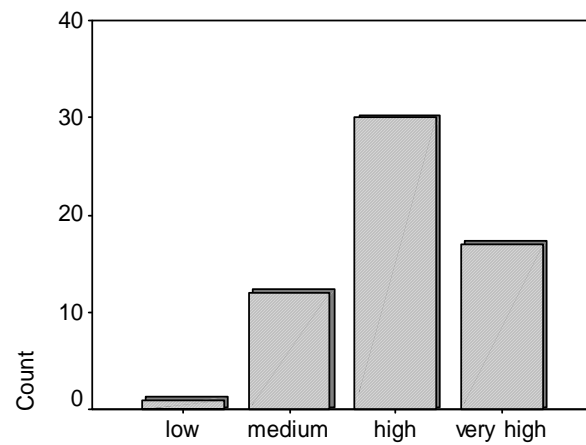
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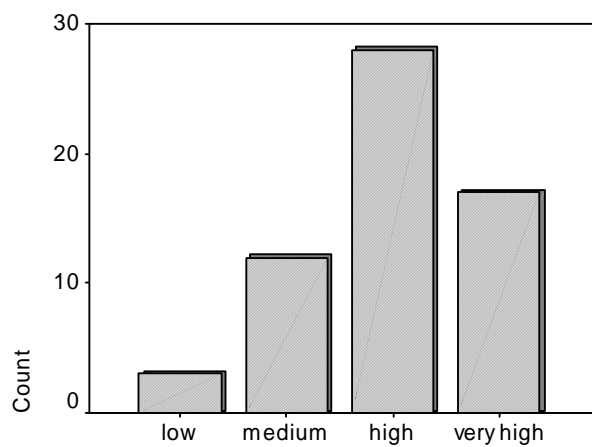
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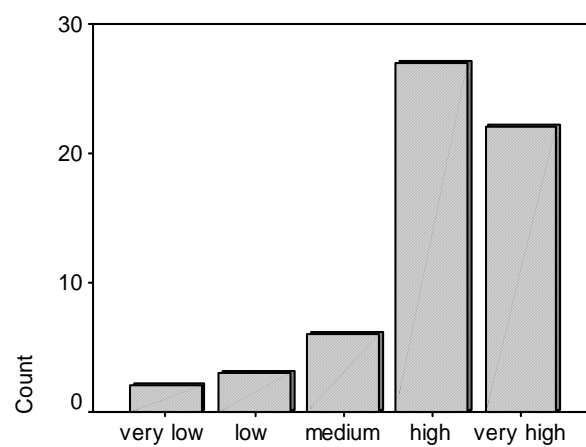
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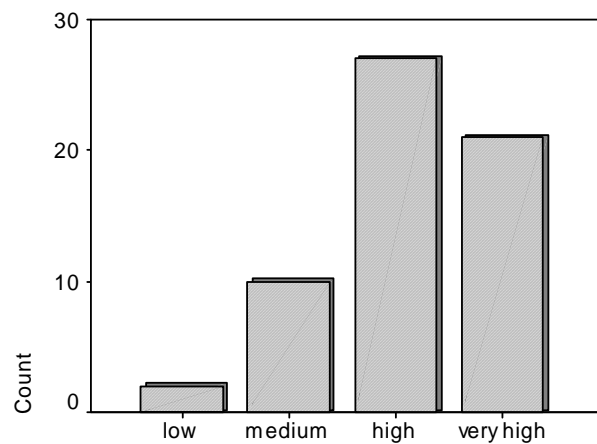
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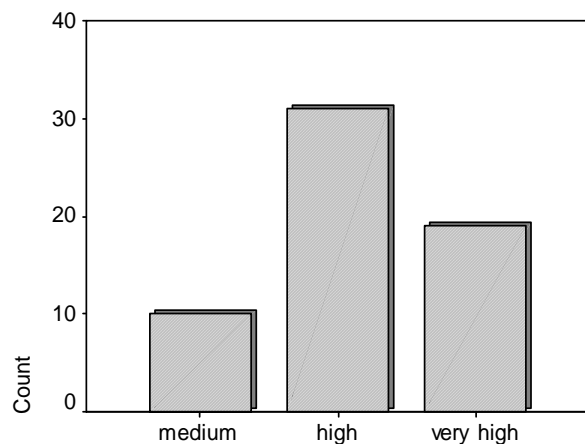
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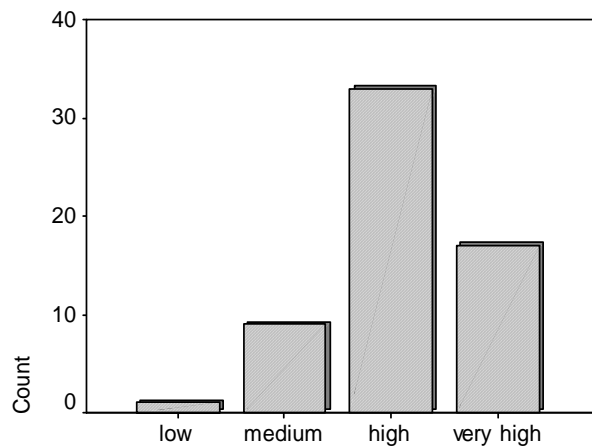
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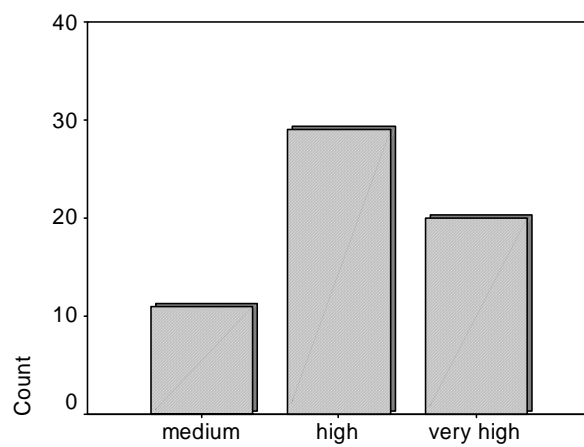
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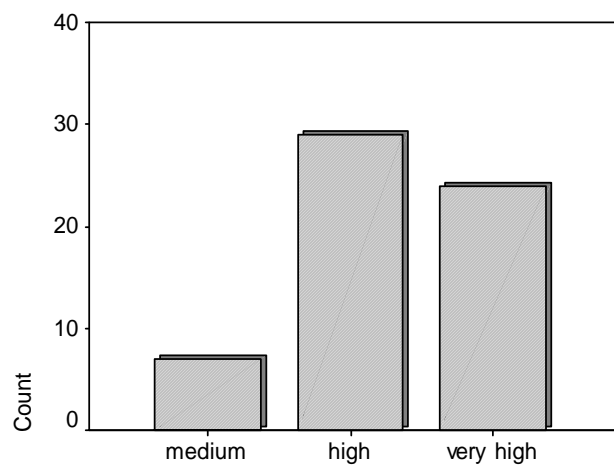
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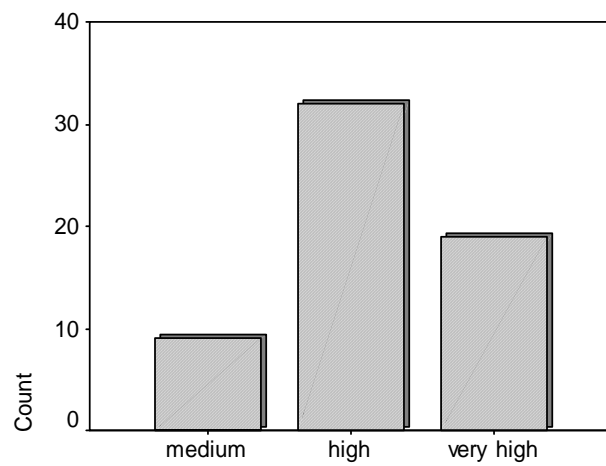
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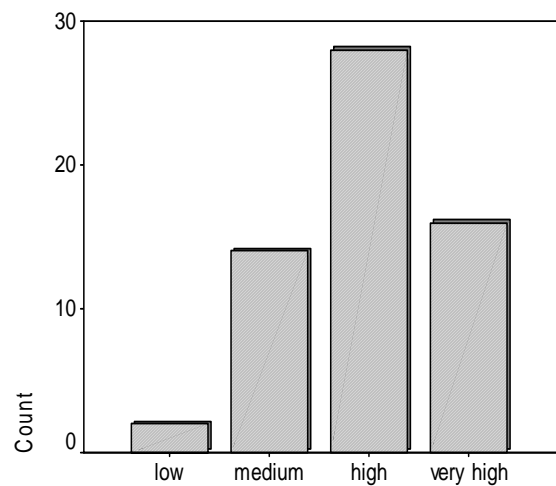
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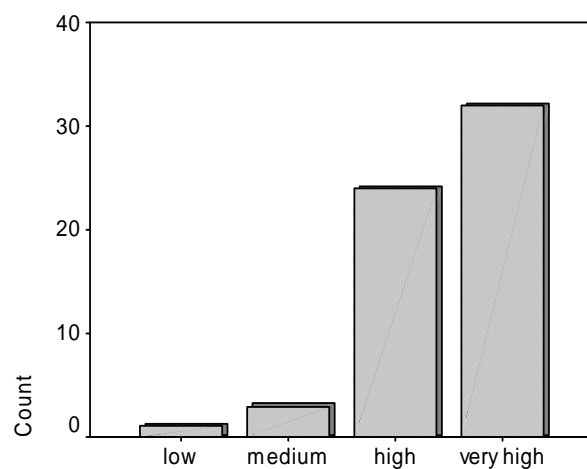
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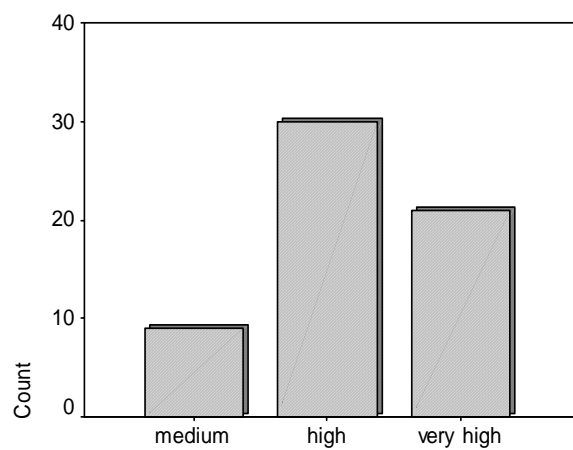
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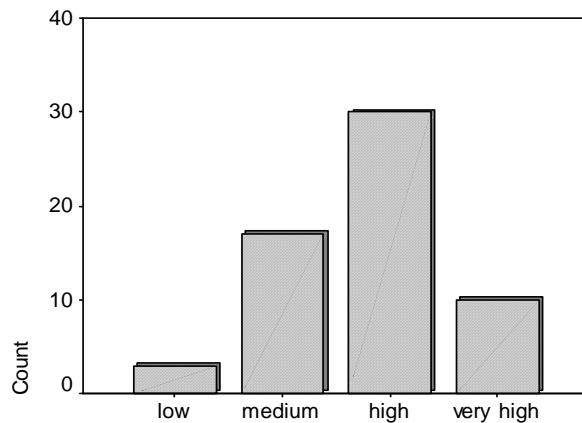
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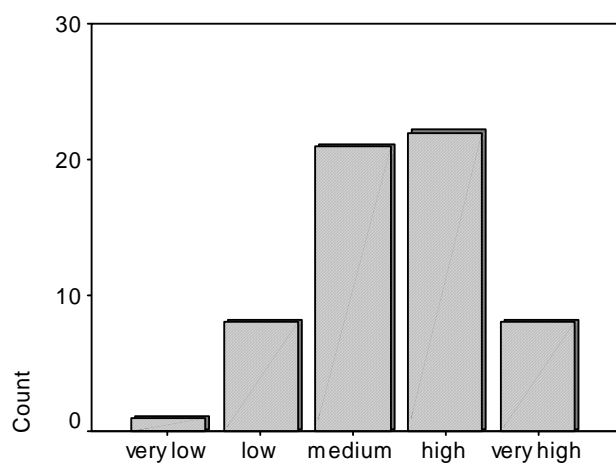
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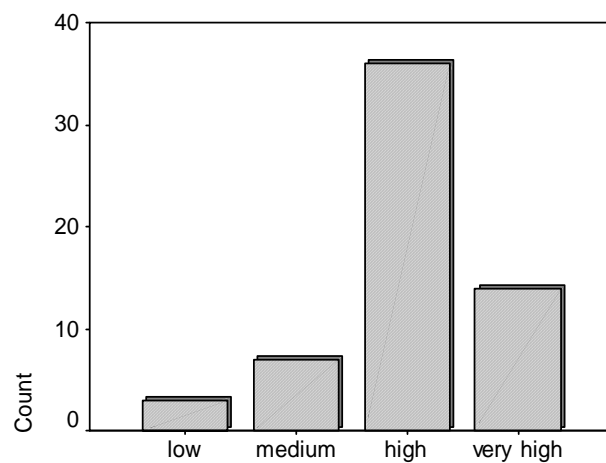
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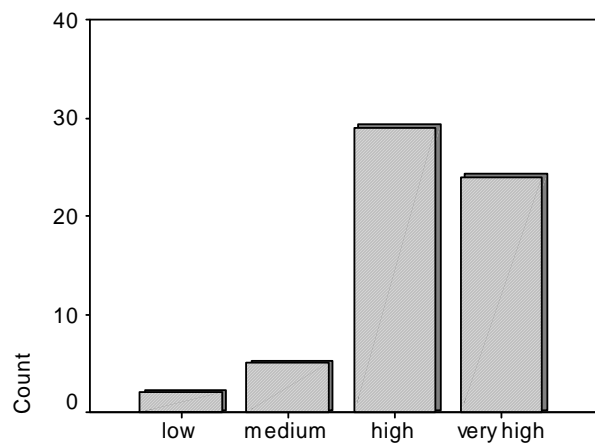
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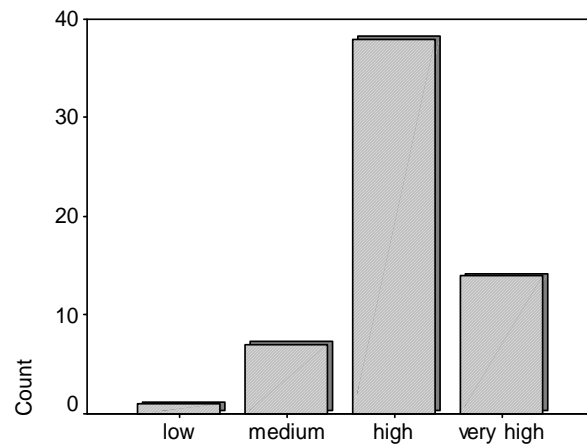
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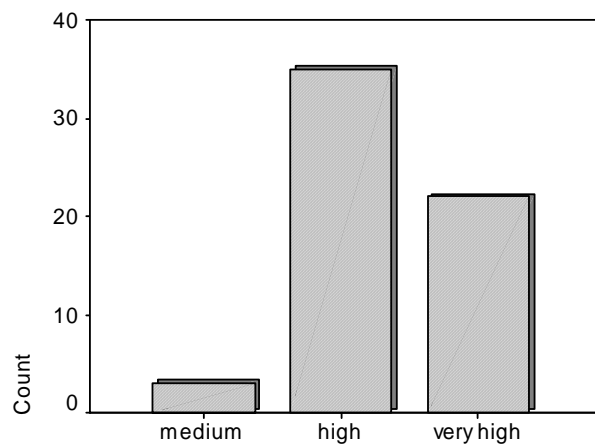
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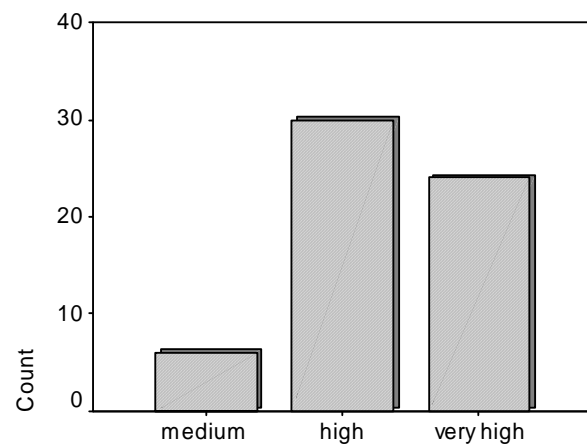
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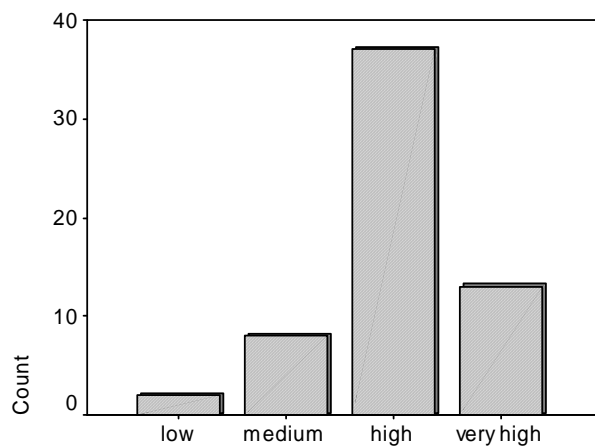
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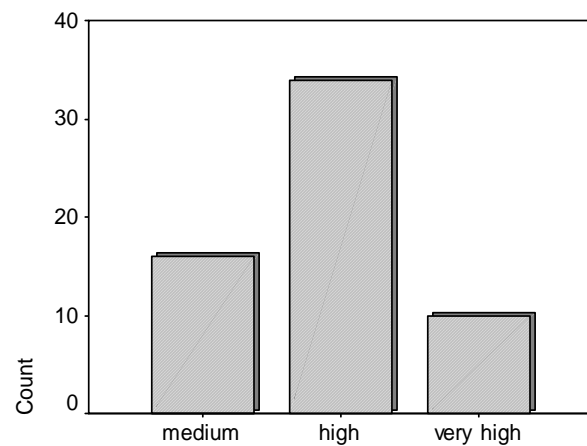
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Q52



Q53



Q54

