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THE FACTORS ASSOCIATED WITH  
ATTRACTIVENESS OF MEDICAL TOURISM  
IN SOUTH KOREA  
BY MONGOLIAN CLIENTS

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## DECLARATION

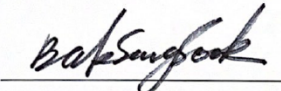
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## DEDICATIONS

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## LIST OF ABBREVIATIONS

GDP – Gross Domestic Products

MNT – Mongolian Tugrik

USD – United States Dollar

PGD - Preimplantation Genetic Diagnosis

ODA – Official Development Assistance

KHIDI – Korean Health Industry Development Institute

CIS – Commonwealth of Independent States

IRB – Institutional Review Board

WHO – World Health Organization

CDC – Centers for Disease Control and Prevention

OECD – The Organisation for Economic Co-operation and Development

KTO – Korea Tourism Organization

SPSS – Statistical Package for the Social Sciences

MOH – Ministry of Health

## ABSTRACT

### **Introduction**

Traveling away from their home countries for medical purposes offers patients successful access to healthcare not available in their home countries, whereas potentially relieving patients of suffering and saving lives. The most visited country for the purpose of medical healthcare service is Korea by the Mongolian clients for the last 5 years. On the other side, Mongolia is the 5<sup>th</sup> country in the top 10 countries list of medical tourism in Korea, in the same period.

### **Methods**

The study was conducted with a cross-sectional study. Analyzed through the online survey, 50 participants joined in the survey, which is to identify the satisfaction levels and the main reason for the choice of Mongolian patients who have experienced in Korean medical services. Qualitative and quantitative methods were used in the study. Qualitative method for the framework of policy, law, and registration. A quantitative method for Mongolian patients about a number of patients, registration information, cost, services, financial support, and average tariffs.

### **Result**

65% of the survey respondents are young people /30-49 years old/ travel to Korea for health care services. Most of them travelled for cancer treatment. Almost 63% did not register in any hospital or any official governmental organization. Mongolians generally take 13 types of healthcare services and treatment from Korean hospitals. These 13 different diseases

related to financial expense is USD1,618,323 by the 48 patients. The maximum amount was USD185,000 for one patient and the minimum USD1,000. Their source of funding for medical treatment is a basic few categories such as donation, loan, and own pocket. 81% of all survey respondents were very satisfied with Korean health care services and hospitals.

### **Conclusion**

Cancer is a leading cause of medical tourism in Korea. Among the survey, 52% of the respondents got treatment for cancer diseases and 65% of them are young generation. This high percentage shows Mongolia needs a cancer prevention and screening program nationwide. And the majority of them visited Korea looking for well-experienced doctors and nurses, medical types of equipment, and medical services category. Because Mongolia has no integrated registration system for medical tourism. 63% of the respondents did not register in official data of Mongolia. Therefore, their medical expenses, diseases, treatment, and dead or alive are unknown after medical tourism. The study suggested in first, develop the integrated registration data service in Mongolia.

**Keywords:** Medical Tourism, health expenditure, Mongolian patient

## 1 CHAPTER

### INTRODUCTION

#### 1.1 BACKGROUND

Medical tourism is attracting the attention of travelers from all over the world. Globalization, global warming, and advances in technology have transformed health care in the past decade. But mostly, the process of providing health care in developing countries is often poor and varies widely. Patients travel from one country to other countries with many influential factors; patients might search for the highest possible quality of health care, otherwise, others might be looking for less expensive treatment abroad. There are the conventional reasons why people are traveling for healthcare; is cost, shorter wait times for procedures, access to treatments unavailable in one's home country, and simply because they have no other choices. Medical tourism has a lot more direct and indirect advantages, and they all depend on the circumstances of their travel. The far less serious your condition is, the more you will have a better time being treated in a foreign land.

Traveling to seek healthcare is becoming a common incident[1]. In Mongolia, there are limited studies to find out factors associated with the destination of choice. Mongolia spent 3% of its GDP (\$4,133) on healthcare in the last 3 years. Every year the Ministry of Health approves MNT 500 million (USD 220 thousand) on Compile a list of diseases that cannot be treated in Mongolia and for those who need to be diagnosed and treated abroad[2]. Through the study of Mongol Bank and Center for Health Development, the most common visiting countries for healthcare is the Republic of Korea, India, Thailand, and China. The

object of this study is to determine Mongolian affording Health tourism to Korea, Financial expenditure for medical services and those financial sources, types of medical services, number of patients, and period of staying in Korea. Examine the patients' characteristics and motivation factors among the patients treated overseas from Mongolia. Traveling away from their home countries for medical purposes offers patients successful access to healthcare not available in their home countries, whereas potentially relieving patients of suffering and saving lives.

Ministry of Health, Mongolia is legally responsible for providing equal and accessible health care services to the entire people of Mongolia without discrimination. By 2020, Mongolia has a population of 3.2 million with an average life expectancy is 70,5 (female 74,8 and men 66,4). Almost 66 percent of the population lives in urban while 34 percent lives in rural settlements. Mongolia is the country with the least population density in the world, which makes it an extremely challenging task to provide healthcare services to everyone. There are 3500 health care providers all around the state include state and private hospitals. The physician to nurse ratio is 1.0:1.1 at the national level, 1.0:0.9 in Urban area, and 1.0:1.4 in the rural area. Physician and Nurse's ratio is important, but the issue pertains to quantity[3]. There are many things to do to improve the quality of healthcare services. Last 20 years, Mongolian citizens traveling is sharply increased. Not only for travel, some of them searching for access to medical care. According to a study of the 2015 Mongolian bank, each year 50,000 people travel abroad to receive health care and spending an average between 70 and 130 million USD a year. Investigating the cause, factors, trends, and

structure of Mongolian's import of medical treatment and taking adequate mitigation measures would not only save the money running from the peoples but also make a substantial difference in improving the country's healthcare services.

Medical tourism is the practice of traveling across international boundaries to access medical care. People of low-to-middle income countries with strained or inadequate health systems have long traveled to other countries to access procedures not available in their home countries and to take advantage of higher quality care elsewhere[4]. Mongolians continue to go abroad to receive healthcare services for diseases and medical conditions both treatable and non-treatable in Mongolia. Mongolia makes a list that not able to be treated with diseases and disorders every 5 years. There were 40 items in 1990 while this number had decreased to 26 in 2017. Those 26 medical services of diseases and disorders are usually rare conditions treated surgically using the most advanced technology, equipment, and skills.

Table 1 List of Medical services unavailable in Mongolia

<b>N</b>	<b>Type</b>	<b>Disease</b>
1	Neurosurgery	Inoperable tumors and tumor-like disease
2		Stereotactic procedures such as deep brain stimulation of electrical stimulators in Parkinson's disease and torsion dystonia
3	Otorhinolaryngology	Acoustic neuroma-Surgery from Acoustic Neuroma
4		A severe form of the Vegeners disease
5		A severe form of the Meniere's diseases - Saccotomy for Meniere's disease
6	Ophthalmology	Tractional Retinal Detachment of Retinopathy of Prematurity
7		A severe form of the coronary artery stenosis

8	Cardiovascular surgery	A severe form of Congenital malformations of cardiac septa
9		Transposition of the heart great vessels
10		Severe forms of the aortic aneurism
11		Intra-aortic Balloon Counter pulsation IABC, Extracorporeal Membrane Oxygenation ECMO
12	Oncology	Larynx prosthesis, the prosthesis of functional deficit and anatomical defect after extended surgery head and neck cancers, surgical treatment of nasopharyngeal cancer
13		Surgical treatment for cancer of the trachea
14		Reconstruction surgery of the Soft and Bone Tumors <ul style="list-style-type: none"> <li>- Limb-sparing resection in the extremities and larynx</li> <li>- Malignant tumors of pelvis and chest wall</li> </ul>
15		Stereotactic radiotherapy for brain and spinal cord tumors and recurrent head and neck tumors
16	Pulmonology	Congenital disorders of lungs
17	Traumatology and orthopedics	A severe form of Congenital Amelia or hemimelia of limbs
18		Disorders of the sub' axial cervical spine Klippel-Feil syndrome
19		Disorders of the thoracolumbar spine scoliosis
20	General surgery	Bone marrow transplantation
21		Heart, pancreas, bowel, and lung transplantation
22		Kidney and liver transplantation for recipients with high viral activation and cancer
23		Elephantiasis /lymphedema/ reconstructive surgery
24	Obstetrics' and gynecology and infertility	Complete Mayer-Rokitansky-Kustner-Hauser Syndrome: Vaginal reconstructive surgery
25		Intrauterine laser ablation of placental vessels for the treatment of twin-to-twin transfusion syndrome
26		Preimplantation Genetic Diagnosis (PGD)

*A370 order of Ministry of Health, 2017*



Patients with these diseases and disorders can take the treatment abroad and financial support will be done by Government funds. Government funds will cover only 5% of the total treatment payment for the residents and 60% for the state officials. It is so unfair. This regulation is under mitigation now. Here is the patient’s information on who took medical treatment abroad by the selected year.

Table 2 Patients’ expenditure for treatment in Korea and covered by Government fund

Year	N of people	Total treatment payment	Covered by Governmental fund
2016	92	MNT 5,476,405.3 (USD 2,1M)	MNT296,798.5 M
2017	108	MNT 8,116,432 (USD 3,1M)	MNT 408,321,6M
2018	111	MNT 8,445,629 (USD 3,1M)	MNT 432,967.5M

*Source: Center for Health Development*

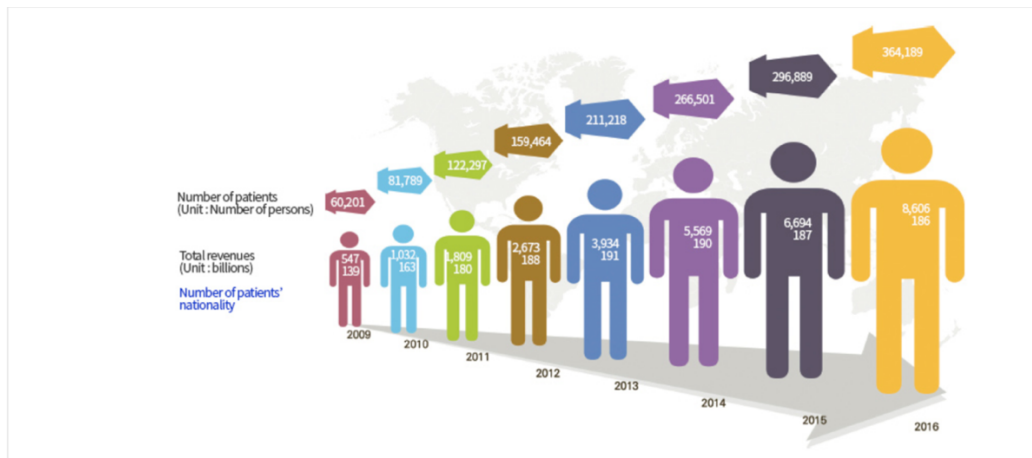
It is MNT22,038,466,300 by paid by 311 people and from the government covered its 5 percent MNT1,138,087,600. But those 311 people registered and what kind of services they have taken is clear. So, we have a question Where are other remained patients? However, increased access to medical services abroad through improved travel networks and expansion of the medical tourism sector in many countries has the potential for significant negative economic impacts on patients and their friends and families at home. As lifesaving procedures become within reach through the practice of medical tourism, these patients and their loved ones may lose their savings and incur substantial debt in the pursuit of care that may fail, require expensive follow-up care, or achieve limited success.

If we look more deeply into the types of medical service and treatment people are choosing to receive abroad, despite their availability in Mongolia, look at the following list:

Liver and kidney transplant	Delivery
Brain surgery	Cancer surgeries
Heart defect surgery	Preventative check-up
Surgery for injuries and joints	Early detection of fetal abnormalities
Rehabilitation services	MRI and CT scans for children under sedation
Cosmetic surgery	Eye surgeries

The above-mentioned diseases are not limited by these. This threatening can be done commonly at the hospitals in Mongolia. But what are the factors that affects to choosing to go to abroad? Maybe I can say queue, the bigger risk of incompatible organs, weak post-surgery treatment, and supervision, not enough skilled professionals, exist complaints after their services and quality, lack of more advanced equipment and others. But we need more determined evidence on it.

Also, we can see how Korean health tourism is developing and mostly what countries patients come to Korea. In 2016, the total number of inbound international patients climbed to 364,189 which represents a year-on-year increase of 28.6 it means an annual average growth of 29.3%. Totally 379 thousand foreign patients came to Korea in 2018 that year is the highest number in the past ten years[5].



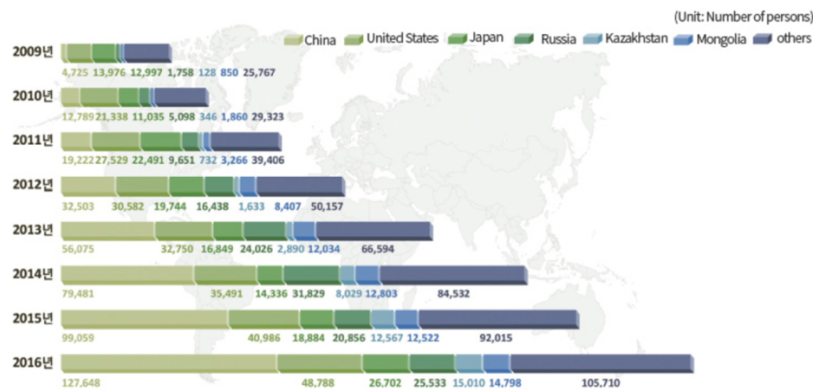
**Figure 1 Trends in Inbound International Patients (2009-2016)**

*Source: Ministry of Health and Welfare, Korea*

The total revenues from international patient care rose to KRW 860.6 billion in 2016, which represents a year-on-year increase of 28.6% (an annual average growth of 48.2%).

Chinese patients account for 35% of all inbound international patients to Korea, ranking China as the top sending country since 2012. Figure 2 shows the most visited countries and Mongolia is at 6<sup>th</sup> in 2016. In 2018, this level is changed by 5<sup>th</sup>. The number of medical tourists is **14,798** from Mongolia to Korea in 2014 and **20,250** Mongolian patients came in 2018.

The internal medicine department was the most visited department by medical tourists from Mongolia traveling to South Korea in 2018, with around 5.5 thousand patients.



**Figure 2 Trends in Nationality of Inbound International Patients (2009-2016)**

*Source: Website of Ministry of Health and Welfare, Korea*

## 1.2 PROBLEM STATEMENT

The Health tourism industry is the one sector someone's present is bright, and the future seems even brighter. Asia is one region in the world to promote medical tourism and has created a brand name for itself for having affordable and high-quality healthcare. Asian medical tourism arrivals number is doubled in 2015 from 2011 and by 2016 it is increasing by 28.6 a year by year. In Asia, there are 5 leading countries in this sector Thailand, India, Singapore, South Korea, and Malaysia. From them, South Korea is a fast-growing medical tourism destination by Mongolians. Korea was the 1<sup>st</sup> poorest country in the world. This country is developed in front of our eyes in a very short time. At every sector like industry, agricultural, social, and technology.

Why medical tourism increases to Korea? The current study says it is based on outstanding medical technology, abundant medical resources, and safe national infrastructure since

2005. Here are the main reasons for the increase in medical tourism to Korea[6] by all travelers.

1. Korea is the leading healthcare country in Asia.
  - In Asia, Korea is one of the most advanced countries in the healthcare field,
  - Korean number of outstanding scientific publication in medical science have been released,
  - Korea executes the largest number of clinical trials around the globe. In 2007, Pfizer announced to invest 3 million-dollar Korea for its clinical trials,
  - Numerous international community services are performed, including the medical training program for medical doctors in developing facilities with ODA funds,
  - They make the belief that Korea is responsible to serve international patients who are looking for better services at an affordable cost.
2. The most reliable and most advanced healthcare services.
  - Korea provides world-class healthcare services accompanied by highly advanced facilities and cutting-edge technology,
  - The quality of care provided in Korea is monitored by the Government through hospital accreditation and a strict evaluation program
  - All hospitals in Korea are nonprofit organizations. Therefore, patient safety and satisfaction come first instead of profitability
  - Korean physicians, medical specialists, and surgeons are well-respected amongst international medical societies.

### 3. Affordable prices

- The overall price is 20-30% of the cost in the US
- Less expensive than an international hospital in China and Similar to the price of a private hospital in Singapore
- The quality of care provided exceeds the cost

### 4. Easy accessibility

- Geopolitically, Korea is easy to travel anywhere in the world
- It is less than 8 hours of flight distance from China, Japan, Russia, East European Countries, Middle east countries, and Southeast Asian countries
- Direct flights are available from the major cities
- Waiting time is no longer than 2 weeks [6]

Luckily, we have a country to go to for our appropriate health treatment, on the other hand, there are issues of comers Countries. Through the very recent study, 2018 of KHIDI /Korean Health Industry Development Institute/ there are 6 countries in the top of inbound to Korea. There are Russia, China, the USA, Japan, Mongolia, and others like CIS countries. Most of these countries has potential benefits of their medical travel include improved care, decreased cost, and reduced waiting time. A competitive market for health care could help to control medical spending and increase access by introducing patients to new locations and lower costs for care. For developed countries, medical travel may result in small reductions in national health costs[7]. Even these countries are not bad about their health sector. But Mongolia is different. So, Mongolia is a developing country with a very less

population comparing with Russia, China, the USA, and Japan. Korean medical cost is very expensive for developing countries and otherwise, it is cheap for rich countries. So, there is a question. All of the Mongolian citizens can bear to pay for Korean medical healthcare service cost?

**Table 3 Average income by selected countries, 2019**

Country	Average income annually	Average monthly salary
Russia	11,260 USD	938 USD
USA	65,760 USD	5,480 USD
China	10,410 USD	868 USD
Mongolia	3,780 USD	315 USD
Japan	41,690 USD	3,474 USD
CIS	-	-

Source: <https://www.worlddata.info/average-income.php>

From the above table, the Mongolian monthly salary is very low comparing to the others. It means they all cannot pay the treatment cost by their selves. Therefore, one of the objects of this study is to determine their financial expenditure and their sources.

The key features of the new 21<sup>st</sup> Century style of medical tourism are summarized below[1]:

- The large numbers of people traveling for treatment
- The shift towards patients from richer, more developed nations traveling to less developed countries to access health services, largely driven by the low-cost treatments and helped by cheap flights and internet sources of information

- New enabling infrastructure – affordable, accessible travel and readily available information over the internet
- Industry development: both the private business sector and national governments in both developed and developing nations have been instrumental in promoting medical tourism as a potentially lucrative source of foreign revenue.

In, Mongolia there are no integrated registration and information system for the patients who are going for health services abroad, no legal regulation, and the how many people what kind of services they are taking is unknown[8, 9].

### **1.3 SPECIFIC OBJECTIVES**

- To determine factors associated with seeking medical tourism
- To determine what medical services mostly, they are taking in Korea
- To determine the total expenses related to healthcare services
- To determine the source of funding for healthcare services
- To determine the level of satisfaction of Mongolian clients

### **1.4 ETHICAL CONSIDERATION**

Ethical review sorted from the institutional review board IRB of Yonsei university.

IRB number: Y-2020-0132



## 2 CHAPTER

### LITERATURE REVIEW

#### 2.1 DEFINITION OF MEDICAL TOURISM

Medical tourism can be defined as the process of traveling outside the country of residence to receive medical care. Growth in the population of medical tourism has captured the attention of policymakers, researchers, and the media. Originally, the term referred to the travel of patients from less developed countries to developed nations in pursuit of the treatments not available in their homeland [10]. First of all, I wanted to know what is medical tourism? What is the definition of it? We say it very easily as when people travel from one place to another place, across the international border, to receive some form of medical treatment is called medical tourism. But no agreed definition of medical tourism is exists, as a result, the method applied by countries very substance. Some countries count foreign patients' visits to the hospital whereas others count the entry of individual patients into the country. Other countries record nationality but not a place of residents or patients, which can be problematic for migrants to return to their home country for treatment (WHO 2011). Here many unofficial definitions I found. Medical tourism is defined by the Medical Tourism Association as: "Medical Tourism is where people who live in one country travel to another country to receive medical, dental and surgical care while at the same time receiving equal to or greater care than they would have in their own country, and are traveling for medical care because of affordability, better access to care or a higher level of quality of care[11]." The Centers for Disease Control (CDC) has a simpler definition:

“Medical tourism refers to traveling to another country for medical care.” Not surprisingly while the Medical Tourism Association emphasizes why one should consider other countries for health care, the CDC has more information about the potential downside of this decision. The very first piece of information offered by the CDC, even before the definition of medical tourism, is this warning in bold text: “Receiving medical care abroad can be risky. Learn about the risks and how to minimize them [11].”

Comparing to other tourism, medical tourism is very new globally. But what countries medical tourism well developed and what countries people go there is depends on economic, social, technology, institutional, global factors, and tourism. It is sectoral interrelated and multifaced with them.

International Medical Tourism can be further divided into two types [1]:

1. Inbound Medical Tourism
2. Outbound Medical Tourism

**Inbound Medical Tourism** refers to tourists of outside origin entering a particular country. When people travel outside their host/native country to another country for medical purposes, then it is called inbound medical tourism for that country. At this point in Mongolia.

**Outbound Medical Tourism** refers to tourists traveling from the country of their origin to another country. When medical tourists travel to a foreign region then it is outbound tourism for his/her own country. At this point is Korea.

There has been a normalizing of medical tourism and inflation of the numbers traveling and attempts to project longer-term growth and industry development. Key interests include healthcare providers, brokers, and facilitators who act as intermediaries' providers and patients, providers of ancillary products, wider media interest, professional services, and government interests (tourism and health ministries and bodies coordinating national health policy and strategy [12]).

Regulation of medical tourism and the public health sector is not well known. But OECD /The Organisation for Economic Co-operation and Development/ countries follows international law and regulation: General agreement on Trade in Services mode II, countries state health policy and international trade law. Korea joined the OECD in 2006 and a decade later became a member of the Development Assistance Committee of OECD. Quality of Korean Health care had the OECD's highest rate by many types of cancer, less death rate, proton-therapy, robotic surgery, to highly specialized centers among the developed countries like Canada, Denmark, UK, Finland, Germany, and USA [13].

Korean medical tourism is led by the government, and the government is active in preparing institutional devices to revitalize medical tourism. In fact, in addition to providing institutional support for attracting foreign patients through the revision of the Medical Service Act in 2009, the Korean government announced that it would select global healthcare as a new growth engine project, along with the green technology industry and IT convergence industry in 2009, and actively participate in the promotion of medical tourism. The Ministry of Health and Welfare prepares conditions for hospitals to accept

overseas patients in the field of medical services, while the Ministry of Culture, Sports and Tourism, and the Korea Tourism Organization are in charge of overseas promotion marketing for medical tourism. The Ministry of Foreign Affairs and Trade and the Ministry of Justice are in charge of medical tourism visas. Such as, the medical tourism support system is strategically carried out by the sharing of roles among government ministries.

## **2.2 PROBLEM CONTEXTUALIZATION**

Several studies have shown that low socioeconomic status, older age, gender disparities, low education level, large family size, and limited physical and financial accessibility result in poor health service utilization. A study in the former Soviet Union found that lack of money was the most important reason for not seeking care. Numerous studies reported that poor health status, type of illness, and poor self-assessed health influenced utilization of health services. Furthermore, some research has shown that dissatisfaction with health services leads to less utilization of health services. In many developing countries, physical accessibility, infrastructure (including hospital location), and availability of transportation influence health service utilization. A smaller number of studies found that communication barriers, such as linguistic and cultural gaps, led to poor health utilization, self-medication, self-care, and home-based treatment [14].

Korean government developed marketing for Korea medical tourism and Korea Medical Tourism Marketing 2016 includes the Mongolian health system and its development and condition to start medical health care travel destination. A recent study of KHIDI /Korea Health Industry Development Institute/ shows total expenses, medical expenses, agency

commission, and other expenses of the foreign patients. This study compared Top 6 inbound countries to Korea [15].

**Table 4 Medical expenses in Korea by selected countries, 2018 /USD/**

Country	N/ Patients	Total cost	Medical expenses	Agency commission	Other expenses	Room charge	Food and beverage	Entert ainment
China	190	5,481.4	3,672.9	904	1,799.1	301.30	221.4	287.9
USA	156	5,708.5	3,993.9	370	1,677.6	322.20	231.9	175
Japan	194	2,068.2	749.7	605	1,312	337.1	271.2	146.2
Russia	270	12,688.5	7,309.4	435.4	4,943.7	1,072.8	871.6	684.9
CIS	215	15,361.1	10,996.6	101.9	4,262.6	806.9	590.8	381
Mongolia	138	38,384.6	14,290.2	3,340.7	20,753.7	7,717.9	3,847.7	679.4
Southeast Asia	62	3,435.8	2,015.9	1103	1,408.5	300.8	182.4	333.9
Middle East	55	44,169.4	7,668.2	1,914.7	34,586.5	4,630.2	2,467.5	2,16

*/KHIDI's foreign patients' satisfaction survey 2018/*

In the table 4, Mongolians pay more than other countries for the medical services, room charge, and agency commission. Why had they paid more? Or are they taking high-cost services and rare treatment? Those countries total 1,200 foreign patients' average spending in Korea is USD14,029 per person in 2018. It includes USD6,885 for medical services and USD595 for agency commission. By country, foreign medical patients from the middle east spent the most with USD44,169 on average, followed by the patients from Mongolia USD38,385.

In 2018, the average overall satisfaction of foreign patients with Korean medical services was 90.5 points. By nationality, the satisfaction of Russian patients is the highest with 94.4 points, CIS (92.5 points), the United States (91.8 points), China (90.1 points), Southeast

Asia (89.8 points), the Middle East (89.5 points), and Mongolia (85.2 points), followed by Japan (84.0 points). Overall satisfaction score has improved from the previous 9 years[15]. But still found widespread dissatisfaction with health care services among urban and suburban Mongolian communities. Other studies have noted that client satisfaction affected the decision to seek care. When satisfied with the overall cleanliness of hospitals was prevalent, people were 2.4 times as likely to use health services in this study. Furthermore, trust in domestic health care was very low, and many people felt that treatment abroad was much better than treatment in Mongolia. Numerous patients are treated abroad each year, and the number is increasing. However, there is no clear data on treatment abroad, which thus needs to be further examined [16].

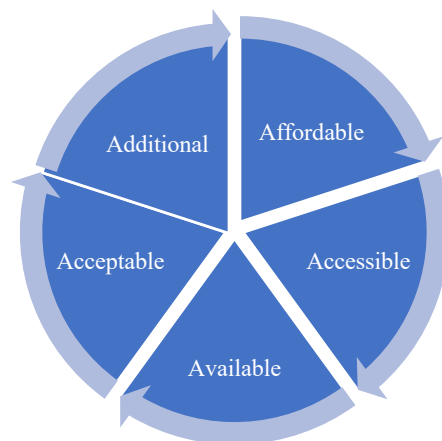
According to the Korea Tourism Organization's "2017 survey on Korean medical and wellness tourism," Korea was the third country after the United States and Germany as the destination for medical tourism. The KTO conducted the opinion poll on visitors from 12 countries that sent a large number of patients to Korea as of 2016 – China, U.S., Japan, Russia, Vietnam, Canada, Thailand, Philippines, UAE, Kazakhstan, Uzbekistan and Mongolia, and Kuwait considering its strategic importance. And the pollsters found Korea's recognition as the destination of medical tourism stood at 32.5 percent, compared to the U.S.'s 39.0 percent and Germany's 33.6 percent. In OPD: The questionnaires were distributed to the patient, after paying to the cashier and before waiting to receive medicine from the pharmacy. The patient who got the questionnaire was selected by symmetric

random sampling. These patients returned the questionnaires before they went back home [17].

### **2.3 SIMILAR STUDIES IN OTHER COUNTRIES ABOUT MEDICAL TOURISM**

The current global trend towards a more integrated world is challenging our understanding of public health. In recent years, more and more patients have decided to seek medical treatment in countries where they are not resident for a better healthcare system [18]. According to a media report, the Indonesian government estimated that its citizens spent roughly a USD11.5 billion a year on healthcare abroad much of it in Malaysia. However, it is not just Indonesians who are traversing the region to seek medical care they cannot find at home. Due to a lack of trust in local healthcare facilities, thousands of Cambodians spend millions of dollars a year on health tourism going to countries like Thailand, Vietnam, or Singapore for treatment [19]. The number of Cambodian outbound tourists reached some 1,400,000 in 2016 up from 1,200,000 the previous year. The visitors from 24% to 30% traveled to Thailand and Vietnam for the visit and medical check-up purpose [18]. For this medical checkup and treatment, Cambodians spend around USD600 million per year. The report states that 40% of medical travelers seek the world's most advanced technology; they search for high-quality medical care globally, giving little attention to the proximity of potential destinations or the cost of care. 32% seek better healthcare than they could find in their own countries, which are often in the developing world. Another 15% seek faster medical services while only 9% of travelers seek lower costs as their primary consideration

[18]. Cambodia also loses money in the same way as Mongolia. Globalization helps patients with their language barriers and traditional difference. So, people can go anyplace without any problems. People, who need medical services, explore options beyond borders due to dissatisfaction with their domestic health systems, such as the unavailability of appropriate treatments, relatively low quality of care, absence of modern technology, and shortage of healthcare providers. Many well-funded patients travel to countries with a long tradition of receiving foreign patients, others might decide to seek care in countries that have recently upgraded their health sector through new and better-equipped hospitals as well as well trained professionals. Some patients looking for more affordable health care might also travel to neighboring countries that offer health services of similar quality but at a significantly lower price. Such patient movements are often facilitated by health systems that are becoming more and more integrated.



**Figure 3 5 major factors by Dr.Drem Jagyasi**



Affordable is for the major reason and this is particularly true for patients from the well-off, developed countries like America and UK, where private health care is expensive, and some surgeries are not covered by their insurance. Available is often because the medical treatment they need is not available in their local areas or not trusted by the patients. Accessible applies more particularly to patients from countries where the waiting list is long, particularly to National Health Service patients in the UK and Canada. In the UK, private health care may be available locally, but is expensive.

Acceptable applies to services, which may be affordable, available, and accessible, but they are not acceptable in the patient's own country for religious, political reasons or other social reasons. Additional refers to the availability of better care, perhaps better technology, or a better specialist, or simply better service and personalized care abroad compared to care in the home country. According to the above five factors, the quality of Cambodian's healthcare is completely low than in other countries in the region.

Healthcare in Cambodia still facing many key areas of concern: lower aggregate health indicators than neighboring countries, despite higher per capita health spending; low public service wages creating a situation of low service delivery in the public health services; a continued shortage of key medical personnel; financial barriers remain for significant proportions of the population; significant lack of accountability within the financing of the health system, posing major challenges to the planning of efficient resource allocation; and external aid remains fragmented and is not always in line with national health priorities [18].

### 3 CHAPTER

#### METHODS

##### 3.1 SAMPLE SIZE

The study conducted with a cross-sectional study.

Primary sources include developed surveys and online interviews with patients who came previous 5 years, face-to-face interviews with current patients who are currently in Korea, and used an online survey developed on Google sheet form. The online survey reached to 70 people, 20 of them cleared because 6 respondents were not qualified, 3 are in exclusion criteria of the survey, 5 were not agreed to the survey and 6 were not active which mean did not opened the survey in their e-mail. Therefore, 50 participants joined in the survey and survey conducted between September and October 2020. This study is built using data and information sourced from proprietary databases, primary and secondary research.

Secondary sources information and data has been collected from various printable and non-printable sources like search engines, websites, government websites, trade journals, papers, Government Agencies, Trade associations, industry portals, industry associations, and access to more than official 311 databases.

Survey questions include records of age group, gender, total cost and its extraction, type of services, source of funding, and main factors to choose Korean healthcare services, and more. Also, a question was made about the registration if they registered state hospital or governmental organization before they visit to Korea. The survey includes context analysis.

Because one of the purposes is to determine the main factors to choose Korean Healthcare services. Therefore, made some open questions to identify clearly.

Research into this question has typically relied on quantitative and qualitative methods. Qualitative method for identifying factors associated with seeking medical tourism in Korea its satisfaction and faced problems in Mongolian health sector. Quantitative method for determine the number of patients who are diagnosed and threatened to Korea, its registration information, health expenditure and its financial source.

### **3.1.1 Inclusion criteria**

Mongolian Patients in Korean hospitals with the sole purpose of seeking healthcare services who consent to the study are included.

### **3.1.2 Exclusion Criteria**

1. Mongolian citizens living for long term in Korea
2. Mongolian citizens who came to Korean with other reasons other than for medical tourism
3. Mongolian citizen took Korean medical services in well-being like massage and plastic surgery related to cosmetics.

## **3.2 SAMPLING DATA**

### **DATA REGISTRATION AND STATISTICAL ANALYSIS**

Data registered into Microsoft™ Excel Spreadsheet and analyzed with Statistical Package for Social Sciences (SPSS).

The survey was conducted based on a google form-based self-written survey, and some respondents were surveyed with a paper questionnaire.

The way of developed survey

1. Build an online survey page – built the survey for both language of Mongolian and English
2. Online questionnaire pretest – online questionnaire pretest checked for 3 times from each 5 people
3. Establishment of an investigation progress page for each participant -Establish separate investigation progress and status confirmation page for each participant
4. Real-time progress status management – real time progress status management and inquiries response paper additionally sent when requested
5. Final data confirmation – the collected questionnaire is confirmed as the final data by verifying the logic of the input result

Collected data (Raw Data) is edited and coded through SPSS (Statistical Package for the Social Sciences) version 25.

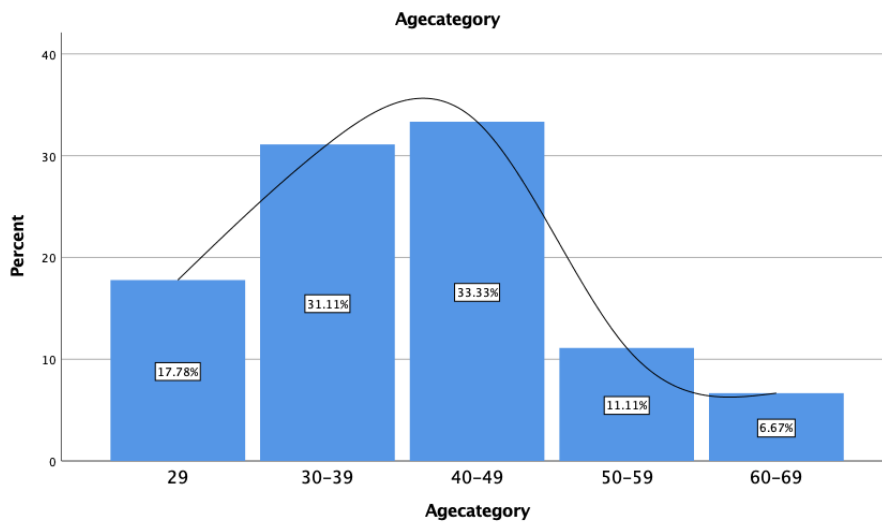
Editing / Verification of record errors and omissions/ – Coding / Encoding of survey content (other responses, etc.)/– Data cleaning / Search for errors in input data/– Data processing / SPSS PC+/

## 4 CHAPTER

### RESULTS AND ANALYSIS

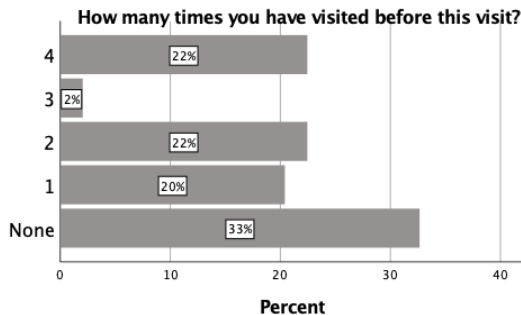
#### 4.1 RESPONDENT'S PROFILE

The study distributed a survey to Mongolian citizens who were used to taken healthcare services in Korea for the last 5 years. Totally 70 participants joined the survey and 20 of them cleared because 6 respondents were not qualified, 3 are in exclusion criteria of the survey, 5 were not agreed to the survey and 6 were not active which mean did not opened the survey in their e-mail. Therefore, the analysis was done with 50 participants.

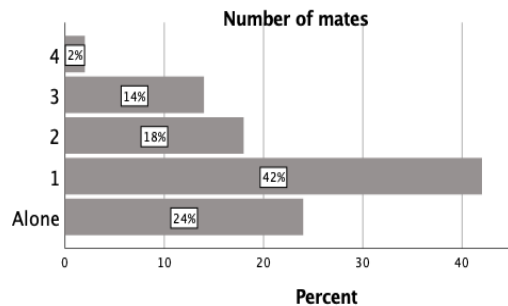


**Figure 4 Age group by percentage**

Figure 4 shows the age groups: 33,3% were 40-49, 31,1% were 30-39 years, 17,7% were less than 29 years, 11,1% were 50-59 and 6,6% were 60 and above.



**Figure 5 The number of visitors**



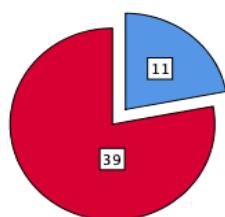
**Figure 6 Number of mates**

Here it shows the frequencies of their travel to Korea for the same reason. A total of 32 people /67%/traveled to Korea 1 to 4 times for the reason of health condition, while 33% did not. In other words, the majority of the participants have visited Korea and they might have a fairly good experience of traveling and 33% were traveled for their 1<sup>st</sup> time.

Figure 6 shows that the patients did not travel alone, they travel with someone at least 1 person as a caring, guard, and donor, which is around 42%. 18% were 2 people and 14% were 3 people and 24% of people traveled alone to Korea by themselves to take health care services. 2% of them traveled with 4 mates and it is the highest number of mates to Korea for health care services.

So how they find the appropriate hospital and the information? Among the patients, 11 patients traveled to Korea through the Travel agency and Attraction company. These 11 patient's satisfactions say 36.4% is very satisfied, 27.3% is satisfied and 36.4% is neutral. No one told bad or dissatisfied.

Number of Patients visited through Attraction and Travel agency



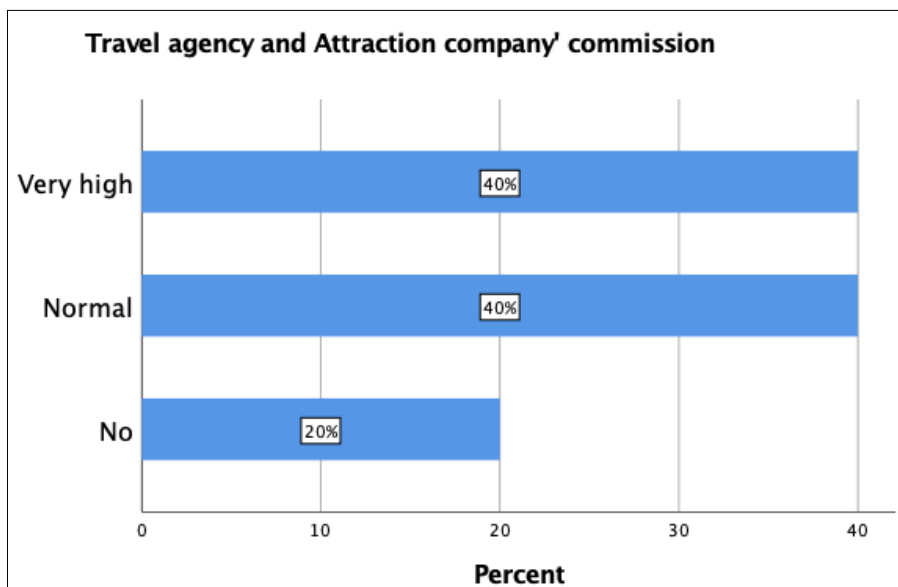
**Figure 7 Service done by Travel agency**

Satisfaction level with the travel agency services?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	4	8.0	36.4	36.4
	Satisfied	3	6.0	27.3	63.6
	very satisfied	4	8.0	36.4	100.0
	Total	11	22.0	100.0	
Missing	System	39	78.0		
Total		50	100.0		

**Table 5 Satisfaction score to the agency**

Patients who traveled through the travel agency and attraction company think their payment for the agent commission is normal /40%/ and very high were 40% and 20% of them thought the commission was not so high.



**Figure 8 Commission of Travel agency and attraction company**

But mostly they don't know how much they are paying for the commission. Because they pay the whole payment if the hospital healthcare services at once. Even a survey of KHIDI result says the health travel agency's commission is high responded by the 138 Mongolian patients[15] comparing to China, USA, Japan, and Russia.

## 4.2 FACTORS CONSIDERED IMPORTANT FOR SEEKING MEDICAL CARE IN KOREA

**Table 6 Influences to choose**

	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
<b>\$Influence<sup>a</sup></b>	48	96.0%	2	4.0%	50	100.0%
a. Dichotomy group tabulated at value 1.						
<b>\$Influence Frequencies</b>						
		Responses		Percent of Cases		
		N	Percent			
What influenced to your choice? Choose2 <sup>a</sup>	Government arrangement	3	4.9%	6.3%		
	Official work arrangement	2	3.3%	4.2%		
	Travel agency	2	3.3%	4.2%		
	Family and Friends	20	32.8%	41.7%		
	Internet	7	11.5%	14.6%		
	TV and Radio	1	1.6%	2.1%		
	Hospital doctor	25	41.0%	52.1%		
	Others	1	1.6%	2.1%		
<b>Total</b>		<b>61</b>	<b>100.0%</b>	<b>127.1%</b>		

To determine the factors associated with seeking medical tourism in Korea by Mongolians, 8 different questions are done with 61 responses. Highly selected family and friends were 32,8% and the hospital and its doctors were 41% for influenced their choices. 11,5% chose



internet and online research. Clearly the top pick was the hospital and its doctors in Korea. Also, family and friends affect their choice and manipulate them to go abroad to take medical healthcare services for secure. 4,9% chose government arrangement, 3,3% were official work arrangement and travel agency and TV and radio advertisements and others were quite low with only 1,6%.

**Table 7 The most common reason to travel to Korea**

<b>Case Summary</b>						
	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
<b>\$Reason<sup>a</sup></b>	49	98.0%	1	2.0%	50	100.0%
a. Dichotomy group tabulated at value 1.						
<b>\$Reason Frequencies</b>						
		Responses		Percent of Cases		
		N	Percent			
What is the main reason to choose KHCS? <sup>a</sup>	Fame of doctors and nurse	28	31.5%	57.1%		
	Medical services category	13	14.6%	26.5%		
	Medical equipment	26	29.2%	53.1%		
	Hospital Facility	3	3.4%	6.1%		
	Accessibility	5	5.6%	10.2%		
	Medical cost than other countries	5	5.6%	10.2%		
	Interpretation	6	6.7%	12.2%		
	Others	3	3.4%	6.1%		
<b>Total</b>		89	100.0%	181.6%		
a. Dichotomy group tabulated at value 1.						

Table 7 tells us which factors the respondents seem to consider for seeking medical health care in Korea from Mongolia: 31.5% focused on the fame of doctors and nurses, around 30% looked at Korean Medical equipment, 15% focused on the medical services category

and 7% of them chose interpretation. 5.6% looked for accessibility and medical cost. About the medical cost, Korean cost is lower than any other developed countries and western countries. The respondents were critically thinking about which factors would affect them and it is reflected in their responses.

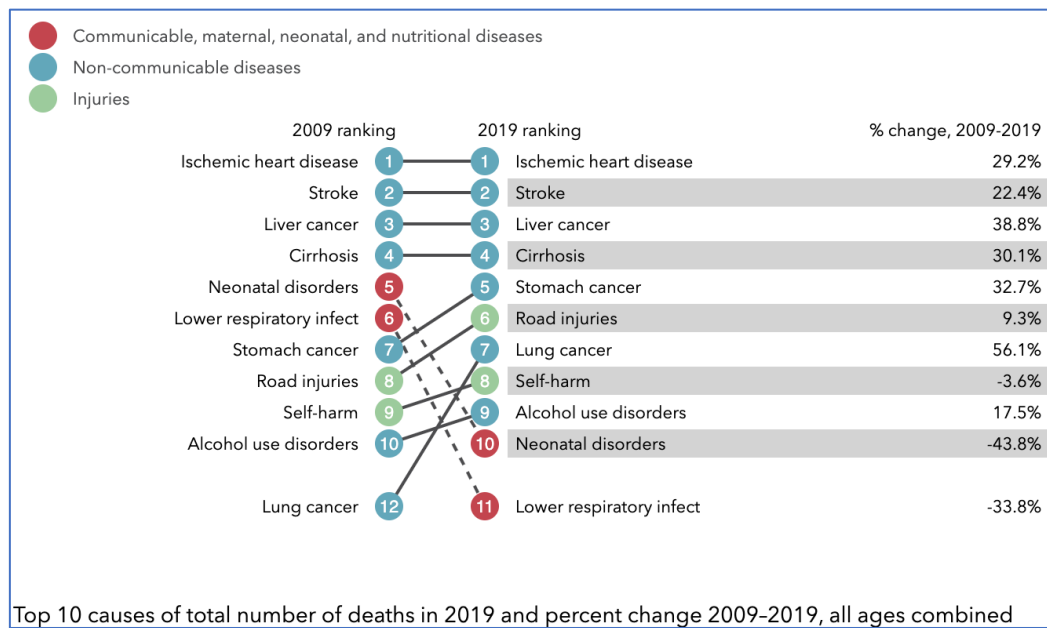
Korean doctors and medical professionals are trained well and well experienced. That is why the fame of the doctors' and nurses' responses is very high and patients believe them about their abilities. Of course, medical equipment and devices are chosen very high at 30%. Because Korea is famous for the development of technology especially in medical equipment, surgery, diagnosis, and very detailed species which are not available in Mongolia. Also, Mongolians traveling to Korea for the reason of medical services category which does not have in the home country. Some responses were about hospital facilities and the environment.

**Table 8 Diagnostic group**

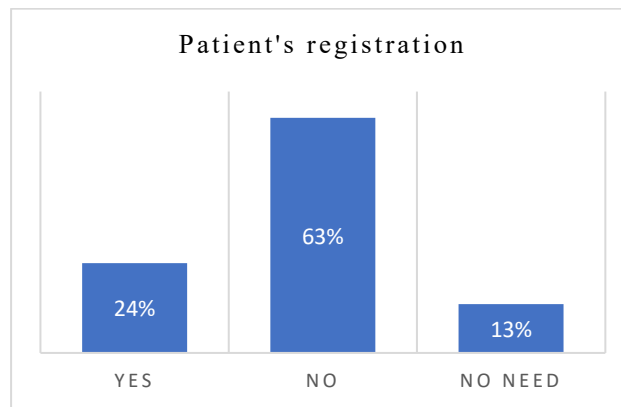
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3	6.0	6.0	6.0
cancer	26	52.0	52.0	58.0
cardiovascular surgery	2	4.0	4.0	62.0
Digestive system	3	6.0	6.0	68.0
Disorder	2	4.0	4.0	72.0
Genito-urinary system	1	2.0	2.0	74.0
Injuries	4	8.0	8.0	82.0
liver cirrhosis	1	2.0	2.0	84.0
Medical checkup	1	2.0	2.0	86.0
Neurological Surgery	2	4.0	4.0	90.0
Ophtamology	1	2.0	2.0	92.0
Organ system's disorder	2	4.0	4.0	96.0
traumatic injuries	1	2.0	2.0	98.0
turner syndrome	1	2.0	2.0	100.0
Total	50	100.0	100.0	

Table 8 shows us the diagnosis group and mostly Mongolians traveled for the types of treatment of disease from Korea. According to the survey, 50 participants wrote their diagnosis, and it seems mostly disease-related cancer. Among the respondents, there were 13 different diagnoses written in the table. This survey result is matched to Mongolian top causes of deaths in data 2019[20]. The top 5 diseases of destination for travel Korea were: cancer, injuries, digestive system, cardiovascular surgery, organ system disorders, and neurological surgery. Frequencies were analyzed for this table, cancer is ranked the highest by 26 respondents, 52% of the sample, injuries were 8%, the digestive system was 6%, organ system' disorders were 4% and cardiovascular surgery was 4% too, etc.

**Figure 9 Major causes to deaths of Mongolia, 2009 and 2019**



One of the questions is about registration for medical tourism out of Mongolia. 63% of all respondents did not registered in any official organization in Mongolia. 24% of respondents were registered in recognized hospitals and 13% were thought that registration does not need for their treatment out. In 2018, According to the survey of KHIDI, there were 20,250 patients from Mongolia[15], while there were 111 patients registered in the Mongolian system[21].



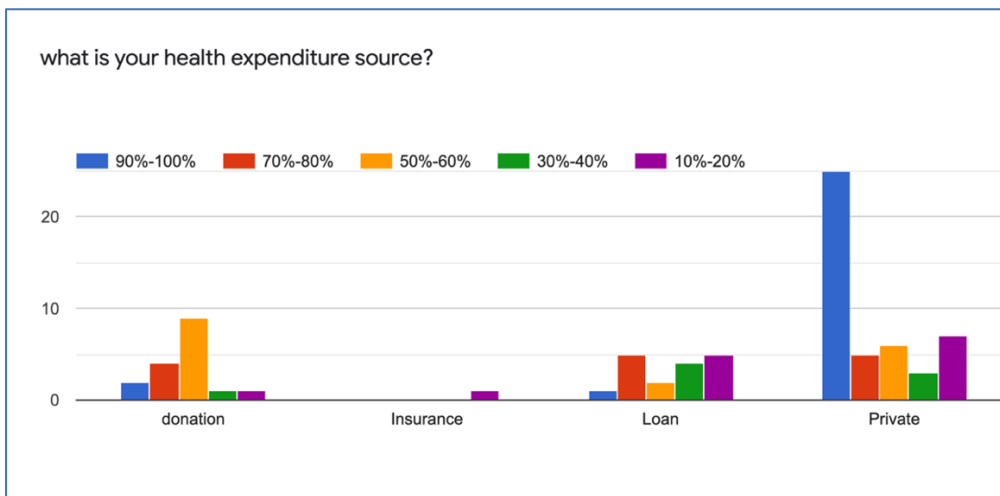
**Figure 10 Patient's registration**

**Table 9 Health Expenditure in Korea**

		Payment for the Healthcare services	Total amount of expenses includes medical services in Korea
N	Valid	48	48
	Missing	2	2
Mean		USD 28,423	USD 33,715
Minimum		USD 800	USD 1,000
Maximum		USD 176,300	USD 185,000
Sum		USD 1,364,330	USD 1,618,323

From the 50 respondents, 2 patients are not provided their financial expenditure and 48 patients are responded.

From the Korean survey, Mongolian one patients spent around USD38,314 for medical treatment in Korea[15] while the Mongolian survey shows USD27,900[21]. Table 9 shows the mean value of health care service payment was USD28,424 for 1 patient among the 48 respondents. The minimum cost is USD800 and the maximum cost for treatment is USD176,300. USD1,364,330 was spent on treatment by 48 patients last 5 years. The total amount of money includes food, hotel, and treatment is evaluated to USD1,618,323 by the 48 patients. The maximum amount was USD185,000 for one patient and the minimum USD1,000.

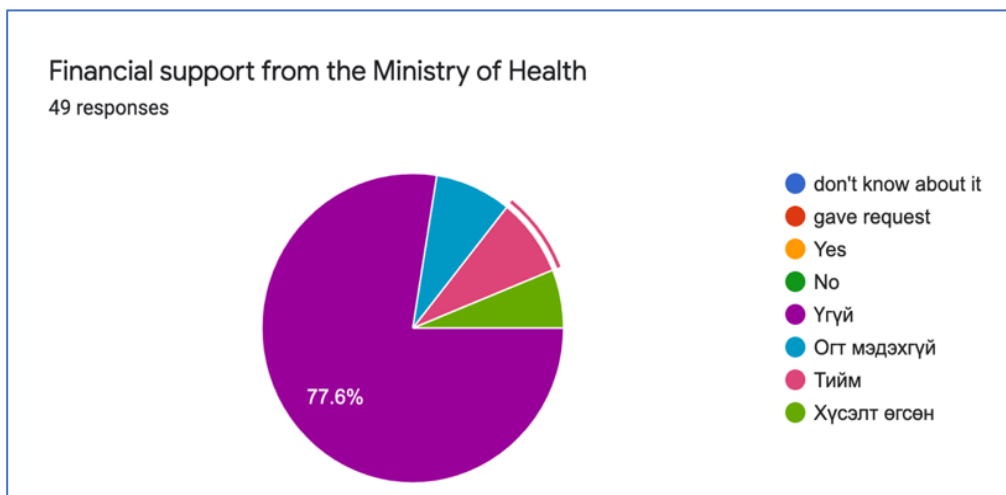


**Figure 11 Financial source of health expenditure**

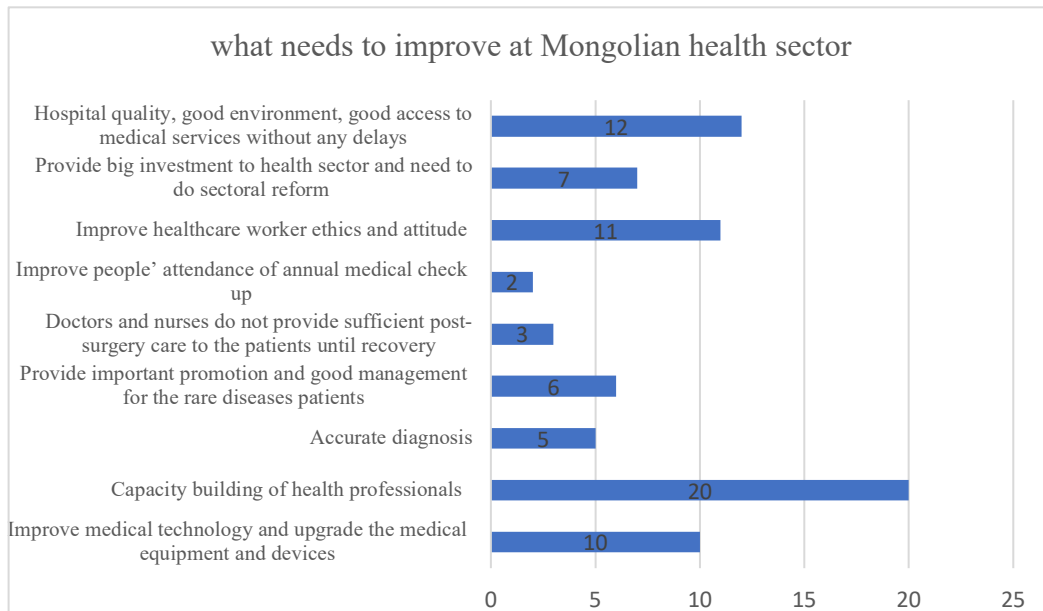
One of the main objects of the study is to determine the health expenditure's sources. From the figure 11, majority of respondents funded their health expenses in Korea from private sources. An equal number of respondents obtained some funding from donations and loans.

Only one respondent obtains an attraction of funding for health expenditure from insurance. 90-100% of the private fund was paid by 25 respondents and remained 25 respondents' financial source become from the donation, loan, and some private fund. 5 respondents with loan 70%-80%, 90%-100% loan for 1 person, 50%-60% of loan for 2 people, 30%-40% of loan for 4 person and 10%-20% for 5 people. Totally 17 people took loans by different amounts. 17 patients took donation with 20% for 2, 70%-80% for 4, 50%-60% for 9, 30%-40% for 1 and 10%-20% for 1 person.

**Figure 12 Financial support from the Ministry of Health**



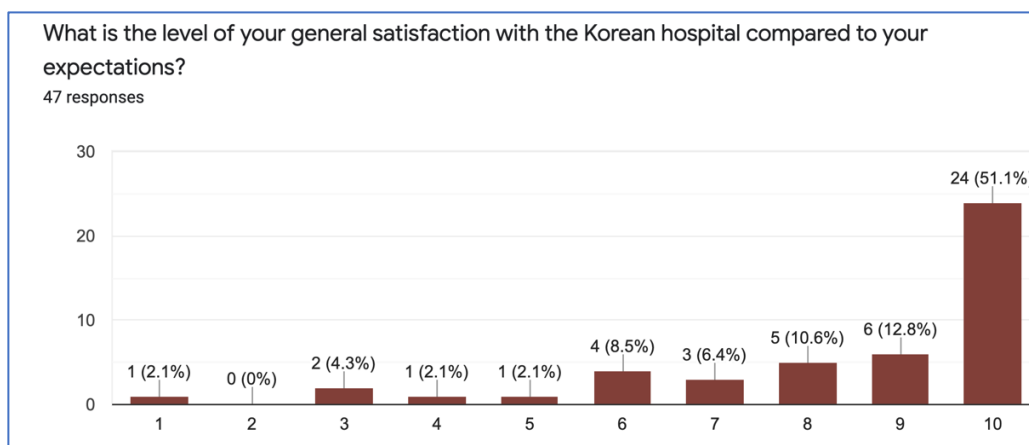
4 (8,7%) patients were taken financial support from the Mongolian state fund, which is obligations for the patients whose diseases are not available in Mongolia. 77.6% is said no and remained 14% for the never heard about it and gave their request to MOH.



**Figure 13 Improvements to Mongolian health sector**

Survey participants shared their mind and idea about Mongolian healthcare services improvement on the open-ended question of the survey. Capacity building of healthcare professionals is the highest indicator among the other factors are 20 respondents followed by 12 people responded like hospital quality, good environment, good access to medical services without any delays 11 respondents wrote similar ideas to Improve healthcare worker ethics and attitude. 10 respondents wrote to improve medical technology and upgrade the medical equipment and devices, 7 respondents wrote about to improve health sector and needs to do sectoral reform with big investment and 6 for provide important promotion and good management for the rare disease patients. Up to 5 respondents wrote about accurate diagnosis and doctors and nurses do not provide sufficient post-surgery care

to the patients until recovery. Even issue about to improve people' attendance of annual medical checkup by 2 respondents.



**Figure 14 Satisfaction about Korean health care service**

Survey participants gave their score on Korean healthcare services and satisfaction. Patient's satisfactions say 64% is very satisfied, 17% is satisfied and 18% is neutral. 1 respondent is not satisfied, and it is around 2.1%.



## 5 CHAPTER

### DISCUSSION

#### 5.1 DISCUSSES STRENGTH

Medical travel involves additional risks compared to obtaining treatment domestically. If complications or adverse outcomes occur, additional expenses are likely, but insurance companies may not be willing to cover these costs. Medical travel may jeopardize the well-being of vulnerable individuals who are ill, in unfamiliar locations or cultures, and who lack social support. Factors such as social support, familiarity with language and carers, and proximity to a home can be important for recovery from clinical procedures. One of the survey respondents mentioned his situation that his treatment payment is high, and he had another 2 surgery. But the surgery is high risk. Therefore, he did not take loan from bank. He sold his car, and he took donation from population. Because he does not want to leave his loan to his wife and family, if he would die. He is a young guy. Result of the survey, 65% of all survey young people /30-49 years old/ travel to Korea for health care. Most of them have cancer.

Most of the participants thought the commission and payment for the medical care tourist company are normal and they don't think it is a high price. If we see other countries' commission on medical tourism is quite lower than the Mongolian patients paying commission. Maybe we should deal with the agents or we find regulations for hospitals. Mongolian hospitals may make a new relationship with Korean hospitals to send patients

to appropriate Korean hospitals directly. This agreement needs to include commission-free and 2 parties work together on VISA requests. It would be helpful for time.

The work of healthcare professionals should be better appreciated and valued. Instead of encouraging people to go on medical tourism, we need to bring skilled professionals from abroad, Developed countries and learn their know-how[1]. Survey respondents said this issue and hey expressed clearly about Mongolian doctors and nurses. It is about human recourses capacity, ethics and their attitude. These was the one big factor for their medical travel.

Even Mongolia moves to digitalization there is a gap in the registration system. Through the survey, almost 63% did not register in any hospital or any official governmental organization. We see the number of patients abroad from other countries' registered data. It seems from 311 people registered in the Ministry of Health, Mongolia while 20,250 people registered in the Ministry of Health and Welfare of Korea in the same year. Therefore, we need a state registration system that calculates who is going for what treatments and what country.

What our research is showing about outbound medical tourism from Mongolia: this qualitative research has identified several trends related to the practice of outbound medical tourism from Mongolia, and some of how these trends are impacting Mongolian citizens, their expectations of the health system, and the health system itself.

Some patients want to change health system and they says the main reasons that Mongolian patients go abroad is because they are dissatisfied with how they are treated in the public health care system. If these issues are addressed through system reforms that focus on improving provider-patient relations, patients may be more willing to access medical care domestically. The Mongolian health care system has a poor reputation in some domestic circles, being perceived as ineffective, inefficient, and/or of low quality. While this view is certainly not held by all Mongolians, it is acknowledged that this perception motivates some patients to pursue medical care in other countries. It is thought that if this perception can be changed by improving the reputation of the Mongolian health system domestically, fewer Mongolians will travel abroad for care.

## 6 CHAPTER

### 6.1 CONCLUSION

Many factors appear to influence the movement of people for better healthcare services, such as lack of highly skilled professional health care workforce to address the country's significant health challenges, waiting time, perceived costs, effectiveness and availability of medicine, mode of administering medicines, and interpersonal skills displayed by medical personnel, and high cost, lack of modern trauma units or services such as ambulances with trained medics, etc. The medical services and hospitals in Mongolia do not meet international standards and lack hands-on training of advanced practical applications by medical professionals. Hence an increasing number of patients are seeking care abroad, mainly in neighboring countries. Medical tourism is challenging the traditional ways of thinking about public health and we are confronted with a wide array of questions that still need to be answered. Research about the topic is still in its infancy and more studies are urgently needed. The concept of medical tourism is appealing to anyone interested in high quality and affordable healthcare. The medical tourism phenomenon is gaining popularity and the number of people going abroad for treatment increases rapidly every year. With many medical tourism benefits, advancements in technology, and improvements in healthcare standards within developing countries, it is likely that the medical tourism's advantages will provide a striking economical solution to many healthcare problems.

Mongolians generally takes 13 types of healthcare services and treatment from Korean hospitals. These 13 different diseases related financial expense is USD1,618,323 by the 48 patients. their source of funding for medical treatment is basic few category such as donation, loan and own pocket. 81% of all survey respondents were very satisfied with Korean health care services and hospitals and it shows from the part of patient's satisfaction of the survey.

Cancer is leading cause of medical tourism to Korea. Among the survey, 52% of the respondents got treatment of cancer diseases and 65% of them are young generation. This high percentage shows Mongolia needs cancer prevention and screening program at nation wide. And majority of them visited Korea looking for well experienced doctors and nurses, medical equipments and medical services category. The mean value of health care service payment was USD28,424 per person among the 48 respondents. Through the many factors such as cancer prevention and screening program, medical new technology and experienced doctors and specialist can be decreasing the monetary flow. Every similar survey has different amount of expenditure. Because Mongolia has no integrated registration system for the medical tourism. It shows from the survey, 63% of the respondents did not registered in official data of Mongolia. Therefore, about their medical expenses, diseases, treatment, and dead or alive is unknown after the medical tourism. The study suggested the most, develop the integrated registration data service in Mongolia.

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**APPENDIX – A: QUESTIONNAIRE FORM /IN ENGLISH/**

**QUESTIONNAIRE FORM FROM MONGOLIAN PATIENTS TRAVELLED FOR  
TAKING MEDICAL SERVICES IN KOREA**

I agree to participate in this survey and I heard the explanation

about the purpose of the survey: \_\_\_\_\_

/Signature here/


This is a Mongolian Patient Satisfaction Level Survey. This survey is aimed at identifying the satisfaction levels and the main reason of choice of Mongolian patients who have experienced Korean medical services and tours, reflecting the results on government policies for the attraction of international patients, and actively. Furthermore, it would be and evidence to support health sector policy measures and improve the quality of Mongolia's external sector statistics.

This survey is being conducted by SOLONGO SHAGDARSUREN who a master's degree student in Global Health Security of Yonsei University, in accordance with IRB approval; the given answers in this survey shall not be used for other than statistics and will ensure the confidentiality of the information.

I would be appreciating your active cooperation inaccurate survey.

September to October 2020

**PART 1. GENERAL INFORMATION**

1	Age										
2	Sex										
		1. Female	2. Man	3. Other							
3	Last visited year to Korea for health service.										
		1. 2016	2. 2017	3. 2018	4. 2019	5. 2020					
4	Did you visit Korea for the same purpose before this visit?										
		1. None	2. Once	3. Twice	4. Thrice	5. Four					
5	How many persons came to Korea with you at this time?										
		1. Alone	2. One	3. Two	4. Three	5. Four					
6	What influenced you to choose Korean medical services? Please tick all the items that apply to you.										
		1. Government arrangement	2. Work arrangement	3. Insurance company	4. Travel and attraction agency	5. Family and friends					
		6. Internet	7. Brochure and magazines	8. Tv, radio	9. Hospital/doctor	10. Others					
7	What is the main 2 reason to choose Korean healthcare services?										
		1. Fame of m/personnel	2. Medical services	3. Medical equipment	4. Hospital facility	5. Accessibility					
		6. Medical cost	7. Interpretation	8. Others							
8	Did you visit the hospital through a travel agency or an attraction agency?										
		1. Yes		2. No							
9	If yes, what is the level of your general satisfaction with the services of the travel agency or attraction agency?										
											
		10	9	8	7	6	5	4	3	2	1
10	Did you pay for the travel agency or attraction agency?										
		1. Yes		2. No							
11	Do you think that your paid commission is high?										
		1. Yes	2. Normal	Yes, very high							












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**PART 2. MEDICATION AND TREATMENT IN KOREA**












12	How long did you stay in Korea during your last visit?			
	Total days	.... days	Treatment period	... days
			Tour period	.... days

13	Write your hospital name?

14	What is the level of your general satisfaction with the Korean hospital compared to your expectations?
----	--

          										
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 8.33%; text-align: center;">10</td> <td style="width: 8.33%; text-align: center;">9</td> <td style="width: 8.33%; text-align: center;">8</td> <td style="width: 8.33%; text-align: center;">7</td> <td style="width: 8.33%; text-align: center;">6</td> <td style="width: 8.33%; text-align: center;">5</td> <td style="width: 8.33%; text-align: center;">4</td> <td style="width: 8.33%; text-align: center;">3</td> <td style="width: 8.33%; text-align: center;">2</td> <td style="width: 8.33%; text-align: center;">1</td> </tr> </table>	10	9	8	7	6	5	4	3	2	1
10	9	8	7	6	5	4	3	2	1	

15	What do you think about the level of Korean medical services?
----	---

          										
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 8.33%; text-align: center;">10</td> <td style="width: 8.33%; text-align: center;">9</td> <td style="width: 8.33%; text-align: center;">8</td> <td style="width: 8.33%; text-align: center;">7</td> <td style="width: 8.33%; text-align: center;">6</td> <td style="width: 8.33%; text-align: center;">5</td> <td style="width: 8.33%; text-align: center;">4</td> <td style="width: 8.33%; text-align: center;">3</td> <td style="width: 8.33%; text-align: center;">2</td> <td style="width: 8.33%; text-align: center;">1</td> </tr> </table>	10	9	8	7	6	5	4	3	2	1
10	9	8	7	6	5	4	3	2	1	

16	Will you intend to take Korean medical services again?
----	--

1. Yes	2. No	
--------	-------	--

17	What department did you get medical services in Korea?			
	1. Gastroenterology	5. Ob/gyn	9. Cardiology	13. Checkup center
	2. Family medicine	6. Neurosurgery	10. Ophthalmology	14. Urology
	3. General surgery	7. Ent	11. Aesthetic Surgery	15. Dentistry
	4. orthopedics	8. Thoracic surgery	12. Dermatology	16. Others

18	What is your diagnosis?	
	Is your diagnosis available to treat in Mongolia?	
	1. Yes	2. No
	What problems faced to take health care services in Mongolia?	

### PART 3. FINANCIAL EXPENDITURE INFORMATION

19	How much did you spend on medical services during this visit to Korea? You can write a rough estimation in USD			
	Items	Amount	Percentage	
	Medical expenses include all diagnosis, treatment, surgery, and hospitalization costs			
	Expenses other than Medical expenses	Airfare		
		Accommodation		
		Food and beverage		
		Tour entertainment, cultural activities/ Others		
Total				
20	How did you pay for the medical bills?			
	1. Through Travel agency or Attraction agency	2. Myself	3. Insurance company	
	4. Others			
21	Explain your source of funds fund?			
	Items	Percentage		
	Private fund			
	Loan			
	Insurance			
	Donation			
Total		100%		

22	Have you received financial support from the Ministry of Health for people in need of medical treatment abroad?				
	<table border="1"> <tr> <td data-bbox="268 479 663 524">1. Don't know</td> <td data-bbox="663 479 914 524">2. Requested</td> <td data-bbox="914 479 1149 524">3. Yes</td> <td data-bbox="1149 479 1305 524">4. No</td> </tr> </table>	1. Don't know	2. Requested	3. Yes	4. No
1. Don't know	2. Requested	3. Yes	4. No		
23	Please write freely that your reason to choose health care services in Korea, and its satisfaction				
24	Please write your word about what it needs to improve in Mongolian health development?				
25	Please write in your own words the current situation, shortcomings, and issues to be addressed in the Mongolian health sector. Write comment as well.				

THANK YOU FOR YOUR INVALUABLE TIME TO COMPLETE THIS SURVEY

APPENDIX – B: ONLINE QUESTIONNAIRE ON GOOGLE FORM /IN  
MONGOLIAN/

Questions Responses 50



Section 1 of 4

## СОЛОНГОС УЛСЫН ЭРҮҮЛ МЭНДИЙН ТУСЛАМЖ ҮЙЛЧИЛГЭЭГ АВАХААР СОНГОН ИРСЭН МОНГОЛ ИРГЭДЭЭС АВАХ СУДАЛГАА

Энэхүү судалгаа нь Монгол иргэдийн БНСУ-д авсан эрүүл мэндийн тусламж үйлчилгээний талаарх сэтгэл ханамжийн судалгаа юм. Тус судалгаагаар сэтгэл ханамжийн түвшин, БНСУ-ын эрүүл мэндийн үйлчилгээг сонгох болсон гол шалтгаан, мөнгөн урсгалын хэмжээ, үүнд нөлөөлж буй Монгол улсын эрүүл мэндийн үйлчилгээний доголдол, хүчин зүйлсүүдийг тодорхойлоход чиглэсэн. Цаашлаад тус судалгаа нь Монгол улсын эрүүл мэндийн салбарын бодлого болон гадаад секторын статистикийн чанарыг сайжруулах үндэслэл болох юм.

Ёнсэй Их Сургуулийн судалгааны хяналтын хороогоор баталгаажсан тул энэхүү судалгаанд өгөгдсөн хариултыг статистикаас бусад тохиолдолд ашиглахгүй, мэдээллийн нууцлалыг ханган ажиллах болно. Үнэн зөв үр дүнг тогтооход энэхүү судалгаанд идэвхи зүтгэлтэй оролцож байгаад талархал илэрхийлж байна.

Email address \*

Valid email address

This form is collecting email addresses. [Change settings](#)

Би энэхүү судалгааны зорилго, агууламжтай танилцаж сонссоны дүнд тус судалгаанд оролцохыг зөвшөөрч байна. \*

Тийм

Үгүй