

Original Article

## Survey of Interest in Korean Traditional Medical Tourism among Japanese Tourists

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**Objectives:** This study was purposed to gain basic information for design of medical tourism for Japanese tourists using traditional Korean medicine (KTM).

**Methods:** A questionnaire regarding Korean traditional medical tourism was administered to Japanese tourists. 224 valid responses were selected, and their awareness of KTM, preferred subject and decision factors for participation in Korea traditional medical tourism were analyzed by SPSS 19.0 version.

**Results:** 23.6% of surveyees gave a positive answer on interest in medical tourism of KTM and 44.6% showed a middle degree. The most preferred subject was medical check-up followed by skin aesthetics, orthopedics and gynecology. Communication, medical skill level, hospital facilities and medical expenses were indicated as the important factor for participation's decision on KTM-based medical tourism.

**Conclusions:** KTM-based medical tourism could be a driving motor of medical tourism in Korea. The medical check & skin care associated medical services are recommended, and the public relationship for awareness of KTM supported by government is strongly required for acquisition of Japanese tourists.

**Key Words** : Medical Tourism, Japanese tourists, Korean traditional medical tourism

### Introduction

Medical tourism, a combined form of medical service and cultural tourism, is emerging as a leading industry, so interest in medical tourism is increasing worldwide. Medical tourism started up in earnest in the 1990s, and the reason for this development can be considered factors such as 1) increase of health care costs in developed countries, 2) long waiting times, 3) lowering air fares, 4) internet, 5) cosmetic surgery, 6) aging of the postwar baby boom generation, 7) ability to pay for medical costs and 8) increase of holidays combined with medical

treatment<sup>1)</sup>. Singapore, Thailand, Malaysia and India among Asian countries successfully have established the medical tourism as a national strategic industry using their existing natural resources and excellent medical infrastructure<sup>2)</sup>. The Asian medical tourism market is increasing 20% annually; the market size will be USD 4 billion in 2012<sup>3)</sup>.

Korea began to boost medical tourism later than some other countries in Asia, but the market potential is highly estimated thanks to technical and comparative cost advantages. The Korean government reorganized medical laws such as medical brokerage and in 2009 designated global

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health care as one of seventeen new growth-driving industries in order to strategically incubate medical tourism, whereby medical facilities and infrastructures are politically extended for foreign patients. In 2010, the government also selected local leading projects for the specialization of medical tourism in regional areas, and local governments also attempt to develop competitive medical service products & special complexes for medical tourism<sup>4)</sup>.

61,799 foreign patients were treated 2010 in Korea, however in 2011 this number has increased by 49.5% to 122,297<sup>5)</sup>. The proportion of Japanese patients (22.1%) followed the first position of American (27.0%), and it took over the second position from China through a 103.8% annual increase in spite of the East Japan earthquake and nuclear power plant accidents. Japanese participation in Korean traditional medicine (hereinafter called KTM) also has increased by 3.3 times from 844 in the first half 2010 to 2,752 in the first half of 2011<sup>6)</sup>. Recently, the interest of people worldwide in KTM is growing with the “Korean Wave”, and the number of visitors coming for treatment using KTM is growing<sup>7)</sup>.

A survey of Japanese tourists in Korea 2010 showed the most preferred medical services were cosmetic surgery, KTM treatment and medical check-up<sup>8)</sup>. In another survey, Japanese women preferred aesthetic services, whereas Japanese men preferred medical check-up and spine joint treatment<sup>9)</sup>. Skin care, KTM treatment and medical check-up were the preferred subjects according to survey results of Japanese tourists in 2010<sup>10)</sup>. In 2011, smooth communication was the most important factor among Japanese tourists experiencing aesthetic tourism and cosmetic surgery in a survey on satisfaction with service quality of medical tourism<sup>11)</sup>. However, none of those studies were conducted by investigators of

KTM.

Research quantity about KTM is not sufficient compared with general medical tourism, and research interest in KTM also seems to be low compared to its potential market size. This paper analyzes the factors influencing interest in KTM-based medical tourism such as awareness of Korean medical skill level and awareness of KTM among Japanese tourists. It also deals with the topics of subjects of interest of KTM-based medical tourism and considering decision making points for KTM-based medical tourism. These results hopefully will be reused in the future as basic data for the development of KTM-based medical tourism aimed at Japanese clients.

## Methods

### 1. Subjects and data collection methods

This survey was completed between August and October 2011 with Japanese tourists who visited Korea through Korean travel agents and were waiting to return to Japan at Incheon airport. Guides fluent in Japanese explained the survey's purpose and the ways to answer each question, in order for them to fill the questionnaire. 250 questionnaires were collected, of which 224 completely filled were accepted for the survey research.

### 2. Survey items and analysis methods

The survey items were composed of demographic factor such as sex, age, occupation and tourism-related factors such as visit frequency, length of stay, and tourism expenses. They also included image of Korea, awareness of Korean medical level, awareness of KTM and other factors related to KTM-based medical tourism (Table 1). The following 3 hypotheses were supposed in order to analyze factors influencing

**Table 1.** Major Questions and Choice Items in the Questionnaire

1. Your level of favorable image of Korea (very high; high; middle; low; very low)
2. What do you think of the level of Korean medical skill? (very high; high; middle; low; very low)
3. How aware are you of Korean traditional medicine? Ex, Acupuncture, Moxibustion, Herbal drugs, etc. (very much; much; middle; low; very low)
4. How much interest do you have in Korean traditional medical tourism? (very much; much; middle; low; very low)
5. Circle all the subjects of Korean traditional medical tourism that you are interested in: (medical check-up, gynecology, internal medicine, orthopedics, skin aesthetics, cancer treatment, rehabilitation, aftercare & relaxation)
6. Select your two most important criteria when choosing Korean traditional medical tourism. (information on medical services, quality of medical technology, communication, facility & environment of hospitals, travel distance, availability of Japanese food, kindness of staff, surroundings of the tourism area, expenses, awareness of the region)

interest in KTM-based medical tourism. Hypothesis 1: Favorable image of Korea influences interest in KTM-based medical tourism. Hypothesis 2: Awareness of Korean medical level influences interest in KTM-based medical tourism. Hypothesis 3: Awareness of KTM influences interest in KTM-based medical tourism. These hypotheses were tested by regression analysis using SPSS version 19.0.

## Results

### 1. Demographic and touristic characters

The female group (56.7%) was a little larger than the male group (43.3%), and 30s (45.1%) is followed by 40s (21.9%) and 20s (17.4%) were top-ranked among age groups. Employees (49.1%) were near to half proportion among occupational groups. At least college graduate was 72.2%, so the academic grade was relatively high. The

**Table 2.** Social-Demographic Characteristics

Questions	Criteria	Frequency (N=224)	Proportion (%)
Sex	Man vs. Woman	97 vs. 127	43.3 vs. 56.7
Age (year)	≤ 19	29	12.9
	20~29	39	17.4
	30~39	101	45.1
	40~49	49	21.9
	50~59	3	1.3
Marital status	60≤	3	1.3
	Single	106	47.3
	Married	114	50.9
Occupation	Others	4	1.8
	Specialized job	27	12.1
	Self employed	29	12.9
	Public servant	13	5.8
	Employee	110	49.1
	Student	16	7.1
	Homemaker	19	8.5
Graduation	Others	10	4.5
	≤ High school	55	24.6
	College	52	22.2
	Undergraduate	114	50.9
	Graduate school	3	1.3

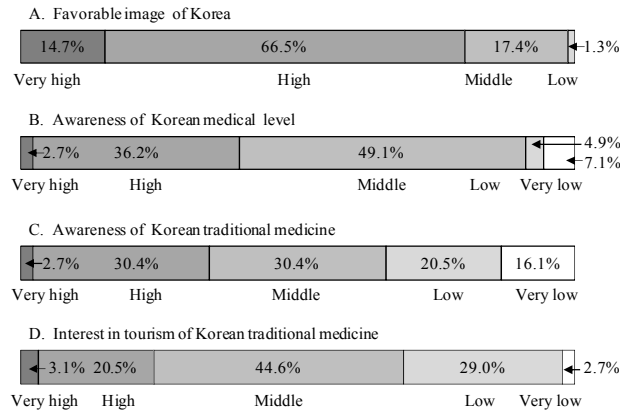


Fig. 1. Awareness of KTM and KYM-based medical tourism

majority of visit purpose was tourism, and the average number of visits to Korea was 2.58 times, it means the majority have revisited Korea. The average length of stay was 3.26 days, and the average expenditure per capita was USD 496, not counting flight charges and accommodations fees.

## 2. Favorable image of South Korea and awareness of KTM & medical tourism

Regarding favorable image of South Korea, Japanese tourists answered very high (14.7%), high (66.5%), middle (17.4%) and low (1.3%) respectively. Awareness of medical level of South Korea was answered as very high (2.7%), high

(36.2%), middle (49.1%), low (4.9%) and very low (7.1%). Only 2.7% of surveyees answered very high for awareness of KTM, whereas 16.1% answered very low. 23.6% answered positively for interest in KTM-based medical tourism, and 44.6% showed a middle level of interest (Fig. 1). This middle level could be interpreted as a potential interest group for KTM-based medical tourism depending on future marketing efforts and effects.

## 3. Preferred subjects of KTM-based medical tourism

The preferred subjects of KTM-based medical

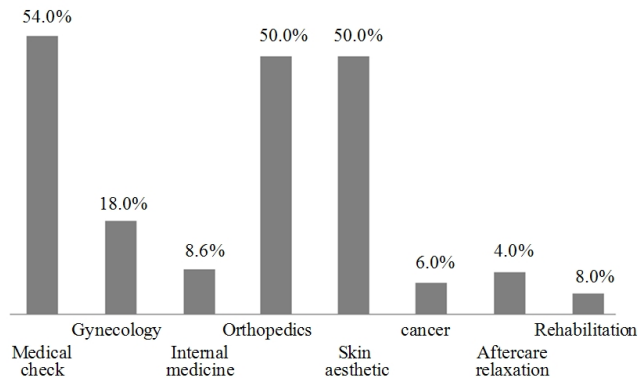


Fig. 2. Preferred subjects for KM-based medical tourism

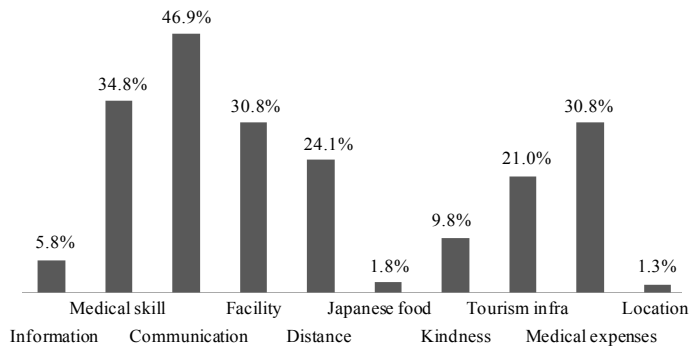


Fig. 3. Factors of consideration for KTM-based medical tourism

tourism were surveyed by multiple choice. The most preferred was medical check-up (54.0%), followed by skin aesthetics (50.0%), orthopedics (50.0%), gynecology (18.0%) and internal medicine (8.6%) (Figure 2). However, the lowest preference was shown for the subjects requiring longer stays, such as rehabilitation (8.0%), cancer treatment (6.0%) and aftercare relaxation (4.0%).

#### 4. Considering factors for KTM-based medical tourism

The survey also asked about the factors in considering the time to participate in KTM-based medical tourism. The most considered point was smooth communication (46.9%), followed by medical level (34.8%), hospital facilities (30.8%), medical expenses (30.8%), distance (24.1%), tourism infrastructure (21.0%) and kindness of staff (9.8%). Sufficient information on medical service (5.8%), availability of Japanese food

(1.8%) and awareness of region/location (1.3%) were comparatively low points of consideration (Figure 3).

#### 5. Factor analysis for KTM-based medical tourism

We statistically tested if ‘favorable image of Korea’, ‘awareness of Korean medical level’ or ‘awareness for KTM’ influence ‘interest in KTM-based medical tourism’. According to the regression analysis, only hypothesis 3 positively influences to a significant level of  $P < 0.001$ . This means the higher the awareness of KTM is, the higher the interest of KTM-based medical tourism is. Hypotheses 1 and 2 were rejected and only 1 was accepted. Favorable image of Korea and awareness of Korean medical level had no significant relation with interest in KTM-based medical tourism because of each p value, 0.272 and 0.092 (Table 3).

Table 3. Analysis for Influencing factor for medical tourism

Dependent variable	Independent variables	SE	$\beta$	<i>t</i>	<i>p</i>	Tolerance limit
KTM-based medical tourism	Constant	.437	-	2.478	.016	
	Favorable image of Korea	.139	.111	1.107	.272	.992
	Awareness of Korean medical level	.091	.177	1.711	.092	.937
	Awareness of KTM	.079	.520	5.020	< .001	.931

In order to access the influencing factors on KTM-based medical tourism, multiple regression analysis was conducted.

## Discussion and Conclusion

The following results were provided by the survey on awareness of KTM-based medical tourism among Japanese tourists visiting Korea. First, 81.2% of Japanese tourists answered positive for favorable image of Korea, whereas only 38.9% answered Korean medical level as high, and 33.1% were very well aware of KTM. 23.6% answered with high interest in KTM-based medical tourism, whereas 44.6% answered as 'middle', to be interpreted as a potential customer group. Awareness of medical level was low comparing favorable image of Korea and thus, the active public relations are strongly required for the higher awareness of Korean medical level and KTM.

Second, the most preferred subject for KTM-based medical tourism was medical check-up followed by skin aesthetic and orthopedics, but the preference degree for these 3 subjects was similar. The preference degree for rehabilitation, cancer treatment and aftercare relaxation was low, so Japanese tourists seem to prefer medical services that need a short stay rather than a long one. Therefore, we recommend a focus on short stay services in the early stage of planning KTM-based medical tourism for Japanese.

Third, smooth communication was the factor most considered at the time of making the decision for KTM-based medical tourism, followed by medical skill level, hospital facilities, and medical expenses. It is worthwhile to consider travel distance and tourism infrastructure, but the availability of Japanese food and awareness of region/location were not important factors. Therefore, it is necessarily to educate the professional staff to be able to understand the Japanese language and culture, to establish comfortable and clean hospital environments, and

to set up a transparent and reasonable calculation system for medical expenses.

Fourth, the most significant influential factor for interest in KTM-based medical tourism was awareness of KTM, which means the more Japanese tourists are aware of Korean traditional medicine, the higher their interest in KTM-based medical tourism is. In contrast, favorable image of Korea and awareness of Korean medical level did not sufficiently influence interest in KTM-based medical tourism. This result contrasts with that of a survey of Chinese tourists which showed both favorable image of Korea and awareness of Korean medical level influenced interest in KTM-based medical tourism to a significant level<sup>12)</sup>.

The unique Korean traditional medical system has developed with a deep history and culture, and its excellence has been recognized worldwide since Donguibogam became the first comprehensive medical book registered in the World Culture Heritage of UNESCO in 2009. The two thirds of the country's territory is mountainous, where various medical herbs and clean air exist abundantly, and there is also the rich tangible and intangible resources of KTM. Experience tourism is taking the spotlight nowadays, and so the degree of satisfaction and revisit intention of tourists for KTM-based medical tourism could be increased through culture tourism and experience of KTM<sup>13)</sup>.

The number of Japanese tourists visiting Korea annually was 1,817,043 as of June of 2012, an increase of 30.2% compared with June of 2011<sup>14)</sup>, and it will likely increase further in the future. The "Korean Wave" and tourism promotional policies seem to have attracted Japanese tourists, so Japan emerges as the largest potential market for Korean medical tourism. Japanese are interested in KTM and cosmetic surgery & aesthetic treatment<sup>15)</sup>, so it is recommended to

focus on short stay programs based on medical check-up and skin aesthetics for KTM-based medical tourism.

Combining a variety of shopping with medical tourism packages can vitalize tourism<sup>16)</sup>, and thus the programs of KTM-based medical tourism combined with shopping, improvement of traffic access and the development of tourism infrastructure will boost the attractiveness to medical tourism patients. Smooth communication with medical teams is preferentially needed for improvement of brand image<sup>17)</sup>, and it seems to be very important to incubate skillful staffs who possess the ability to understand both the language and culture<sup>18)</sup>. Because communication is a cultural exchange, job education for staff and worker in the medical tourism industry must be planned to increase their cultural competence, and a job attitude not to respect foreign culture, to neglect foreigners or to show racial superiority should be overcome<sup>19)</sup>.

The medical services necessitating a long stay, including not only the medical treatment process but also the recovery or improvement process of patients, are less popular compared with other service products. Therefore, medical staff should improve their service attitude and give quick feedback to build the trust of their patients in involved medical service programs<sup>20)</sup>. Just as a fast reservation process and useful information system were the ways that raised the degree of satisfaction among Japanese patients in Seoul-Gangnam<sup>21)</sup>, the efficacies of the related marketing & information infrastructure should be improved.

KTM-based medical tourism potentially can be developed as a high value-creating industry, but active plans are needed immediately in order to boost awareness of KTM, as this study showed. KTM should be introduced through cooperation with the foreign medical organs and active public

relations in foreign countries, whereas KTM should be established as a scientific and systematic medicine healing the soul & body in harmony with nature and maintaining health in daily life. It needs a strategic approach such as tourism packages combining KTM with cultural experience to enable the promotion of KTM intimacy in order to transform foreign visitors to tourists of KTM-based medical tourism. Programs for KTM-based medical tourism also should be planned from a long-term viewpoint for repeated and continuous visits. The return on investment in the medical tourism industry will take longer compared with other service industries, so it will be difficult for the planners of medical tourism to bear the expenses for continuous PR of KTM. Therefore, the central and local government should financially support such expenses.

Because this study focused only on Japanese tourists who visited Korea in a limited period, the study results are not able to represent the majority of Japanese who did not visit Korea. Thus, a study extension including all Japanese who have visited or not visited Korea is needed for systematic research on the Japanese market for KTM-based medical tourism.

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