

A Study on the Development Direction of Medical Tourism and Wellness Tourism Using Big Data

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Abstract

Since COVID-19, many foreign tourists have visited Korea for medical tourism. When statistical data were checked from 2022, after COVID-19, the number of foreign patients visiting Korea for two years was 24.8 million, an increase of 70.1% from 2020. It was confirmed that it has achieved a 50% level compared to 2019 (Statistics Office, 2023). Therefore, to create a development plan by linking medical tourism and wellness tourism, the purpose of this study is to find the link between medical tourism and wellness tourism as big data and present a development plan. In this research method, medical tourism, and wellness tourism for two years from 2022 to 2023 from the post-COVID period as big data are set as central keywords to compare text data to find common points. When analyzing wellness tourism and medical tourism, it was confirmed that most wellness tourism had a greater frequency than medical tourism. This confirmed that wellness tourism occupies a larger pie than medical tourism. As a result, when checking the word frequency, it was confirmed that wellness tourism and medical tourism share a lot as complex tourism products, and when checking 2-gram, to attract many medical tourists, it is necessary to combine medical tourism clusters and wellness tourism according to each other's characteristics among local governments.

Keywords: Big Data, Social Network Service, Network theory, Wellness tour, Medical tour

1. Introduction

Since COVID-19, many foreign tourists have visited Korea for medical tourism. When statistical data were checked from 2022, after COVID-19, the number of foreign patients visiting Korea for two years was 24.8 million, an increase of 70.1% from 2020. It was confirmed that it has achieved a 50% level compared to 2019 (Statistics Office, 2023). However, medical tourism is eventually visited only by metropolitan hospitals, namely tertiary hospitals and main plastic surgery clinics. In addition, foreign patients and host institutions

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complain of difficulty in issuing visas due to strict immigration procedures compared to competitors, and 78.2% of host patients are focusing on the metropolitan area (Medical Tourism Association, 2023). Medical tourism should highlight tourism to heal because its first purpose is to heal the body. Since Korea is a country with three sides of the sea and forests account for 70% of the country, wellness tourism should be developed in conjunction with medical tourism. Therefore, to create a development plan by linking medical tourism and wellness tourism, the purpose of this study is to find the link between medical tourism and wellness tourism as big data and present a development plan.

2. Research methods

In this research method, medical tourism, and wellness tourism for two years from 2022 to 2023 from the post-COVID period as big data are set as central keywords to compare text data to find common points. For the development of medical tourism, this study aims to come up with a plan to present regional development and diverse tourism by tying wellness tourism traveling to nature at once and distributing medical tourism concentrated in the metropolitan area.

3. Discussion

For this study, the analysis was conducted by setting the central words as wellness tourism and medical tourism. A total of two years of analysis were conducted by focusing on after Pandemic. Furthermore, by analyzing the words overlapping wellness tourism and medical tourism, we intend to break away from medical tourism that focuses on medical care and develop it into sustainable tourism along with wellness tourism that focuses on healing.

When analyzing wellness tourism and medical tourism, it was confirmed that most wellness tourism had a greater frequency than medical tourism. This confirmed that wellness tourism occupies a larger pie than medical tourism. The third-ranked word was tourist destinations, and most of them were aimed at healing and treatment, but it was found that tourism was not missed. This is a word that appears significantly higher than hospital, which is the 34th word related to medical tourism, and it was confirmed that the selection of tourist destinations puts a great emphasis on wellness tourism and medical tourism. In the case of wellness tourism, tourist destinations and regions were found to be important in the original text data, such as "Korea has developed wellness tourism related to tracking and the sea, which region is good?" Medical tourism mainly appears to be strong in beauty and plastic surgery tourism in Seoul, but recent medical tourists mainly move to other regions than Seoul to select tourist destinations and regions. In the original text data, it was found that tourists who visited Korea a lot as medical tourists prefer to go to other regions rather than Seoul, such as "How about tourist destinations other than Seoul, when it's already the second time to visit Korea?". The table 1. below shows the top 50 words for wellness tourism and medical tourism.

Table 1. Top 50 words

Rank	Word	Freq.	Rank	Word	Freq.
1	Wellness tourism	6730	26	Provision	564
2	Medical tourism	2643	27	Hotel	547
3	A tourist attraction	1606	28	China	546
4	Traveling	1242	29	Development	539

5	Selection	1070	30	Field	527
6	Activation	894	31	Seoul	519
7	Area	866	32	Certificate	512
8	Held	847	33	propulsion	494
9	Recommendation	810	34	a hospital	492
10	Foreigner	807	35	Education	490
11	Jeju	785	36	operation	485
12	Incheon	773	37	Global	465
13	Busan	767	38	International Medical Tourism Coordinator	434
14	Korea Tourism Organization	729	39	Promote	431
15	good health	714	40	Healthcare facility	415
16	Program	693	41	Visa	408
17	a variety of	672	42	Culture	404
18	Business	672	43	promotion	388
19	Childhood	647	44	Beauty	386
20	Patient	634	45	Healing	381
21	Experience	626	46	Spa	378
22	Industry	626	47	Visit	374
23	Support	621	48	Mongolia	374
24	Service	611	49	Research	358
25	Healing	572	50	Overseas	354

And visualization was conducted by analyzing the words in a word cloud. And the size was adjusted based on the frequency of words in dark blue, sky blue, and gray in the word cloud. The Figure 1. below is about the word cloud.



Figure 1. Word cloud.

Next, a 2-gram analysis was conducted to confirm the relationship between the words of wellness tourism and medical tourism. 2-gram analysis is a method of confirming the similarity between words, and in this study, an analysis was conducted to see the relationship between words that appear together in wellness tourism and medical tourism.

The highest was wellness tourism-tourism destination, ranking first. As mentioned above, it was confirmed that wellness tourism was high because the tourist destination was the most selected item. And second place is foreign-patient. This is a word related to medical tourism, and it was confirmed that it appears as a related word when the fourth place, wellness tourism-medical tourism, is connected. This suggests that foreign patients are not limited to medical tourism but can continue to do wellness tourism.

As the next singularity, words related to the region appeared. It was confirmed that Incheon-wellness tourism ranked 5th and Jeju-wellness tourism ranked 13th. It was confirmed that Incheon was high because foreign tourists mainly enter Incheon. And in the case of Jeju, since it is a UNESCO-designated island, it has been confirmed that many tourists designate Jeju as a wellness tourism destination for cultural and natural tourism. Although it is in addition to the 2-gram 20th place in this study, Incheon-medical tourism was ranked 105th. The highest area in medical tourism was Seoul, which was found to go to Seoul for beauty and plastic surgery tourism.

The following peculiarities include healing and treatment, and furthermore, spas and clusters ranked 20th, although they were not ranked 20th. In medical tourism, clusters are services that provide people who want medical tourism with tourism options such as travel schedules, hotel stays, and meals after medical services, and many local governments are using wellness tourism in combination for sustainable tourism due to long-term stay by foreign patients.

When checking 2-gram, to attract many medical tourists, it is necessary to combine the medical tourism cluster and wellness tourism according to the characteristics of each other among local governments. This is a part of the diversity of tourist destinations mentioned above. Since medical tourists are mainly gathered at hospitals around large cities, local governments are expected to need cooperation from local governments to attract medical tourists as wellness tourists.

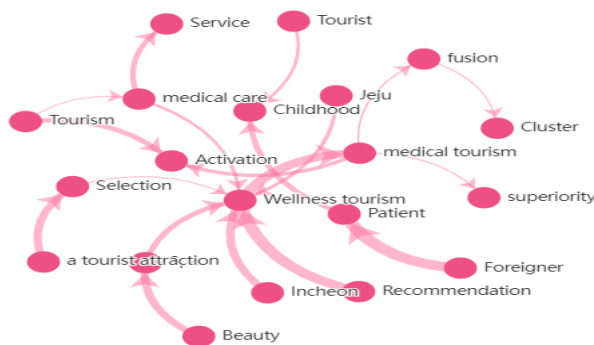


Figure 2. 2-gram

4. Conclusion

Since COVID-19, many foreign tourists have visited Korea for medical tourism. When statistical data were checked from 2022, after COVID-19, the number of foreign patients visiting Korea for two years was 24.8

million, an increase of 70.1% from 2020. It was confirmed that it has achieved a 50% level compared to 2019 (Statistics Office, 2023). Therefore, this study aims to find and suggest implications by analyzing overlapping words by finding the link between medical tourism and wellness tourism with big data text data and analyzing the connection between words and word-word in order to derive development plans by linking medical tourism and wellness tourism.

In this research method, medical tourism, and wellness tourism for two years from 2022 to 2023 from the post-COVID period as big data are set as central keywords to compare text data to find common points.

When analyzing wellness tourism and medical tourism, it was confirmed that most wellness tourism had a greater frequency than medical tourism. This confirmed that wellness tourism occupies a larger pie than medical tourism. The third-ranked word was tourist destinations, and most of them were aimed at healing and treatment, but it was found that tourism was not missed. This is a word that appears significantly higher than hospital, which is the 34th word related to medical tourism, and it was confirmed that the selection of tourist destinations puts a great emphasis on wellness tourism and medical tourism. The following peculiarities include healing and treatment, and furthermore, spas and clusters ranked 20th, although they were not ranked 20th. In medical tourism, clusters are services that provide people who want medical tourism with tourism options such as travel schedules, hotel stays, and meals after medical services, and many local governments are using wellness tourism in combination for sustainable tourism due to long-term stay by foreign patients.

As a result, when checking the word frequency, it was confirmed that wellness tourism and medical tourism share a lot as complex tourism products, and when checking 2-gram, to attract many medical tourists, it is necessary to combine medical tourism clusters and wellness tourism according to each other's characteristics among local governments.

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