

## FACTORS INFLUENCING THE INTENTION OF INDONESIANS IN CONDUCTING MEDICAL TOURISM TO MALAYSIA

Fransisca Kusuma Ningrum, Ferry Novrianto Suthiono, Martinus Prananta, Tara Farina Srihadi

Bina Nusantara University, Indonesia

Email: Kusuma.fransisca@gmail.com, Ferrynsuthiono@gmail.com,  
martinus.prananta82@gmail.com, tarafarina@binus.edu

---

### Abstract

Medical tourism is a diversification of medical treatment combined with tourism activities which have now developed a lot and become the lifestyle of people around the world, including Indonesia. There have been many comprehensive studies that discuss the relationship between medical tourism and various factors that encourage someone to want to do medical tourism activities, however previous research was conducted outside Indonesia. For this reason, the purpose of this study was to find out whether the factors of quality of care, potential for saving, and destination appeal affect the intention of the Indonesian people to take medical tourism trips to Malaysia. The research was conducted using quantitative research methods with a survey strategy for Indonesian people who are interested in medical tourism. The results are expected to create collaboration between the government and health service stakeholders to support medical tourism as a sustainable sector, creating quality medical services and in accordance with the interests and needs of medical tourism travelers.

**Keywords:** medical tourism; intention; factors; Indonesia

---

### INTRODUCTION

The phenomenon of medical tourism is a diversification of tourism by touching the world of health which encourages economic growth and has a relatively significant contribution to the tourism industry (Connell, 2013). Medical tourism itself is predicted to become a lifestyle and has enormous potential (Pimpale, 2016). Many people are motivated to travel for medical reasons, both for general check-up, treatment, and rehabilitation reasons. Medical tourism is a form of effort to improve health through various efforts, alternatives or other medical services, which are generally associated with recreational activities and are not carried out in the patient's hometown (Laws, 1996). Heung et al., (2010) through their research describe the income that can be obtained by a country through the medical tourism industry, where the contribution of income that can be generated by this industry is around US \$ 60 billion per year. In line with this, Wong & Musa, (2012) project revenues of US\$38–US\$55 billion annually from the medical tourism sector. Grand view research estimates that the market share and market size of medical tourism will be valued at USD 4 billion in 2021 and is expected to continue to grow with an annual growth rate of 32.51% from 2022 to 2030. Medical tourism has become a major competitive area with many destinations, especially in developing countries (Çapar & Aslan, 2020).

There have been many comprehensive studies that discuss the relationship between medical tourism and various factors that encourage a person to want to carry out this medical tourism activity (Vovk et al., 2021). Service quality is an important thing that affects the satisfaction of medical tourists in determining the destination of their medical tourism destinations (T.-H. Cham et al., 2021). The quality of service in question can be in the form of food quality, hospital atmosphere, and services that positively have an impact and influence on satisfaction, and the relationship successfully explains the formation of intentions (Han & Hyun, 2015). The same results were also obtained from a study conducted by Zarei & Maleki, (2019) which showed that there are several factors that motivate a person to do medical tourism to developing countries, one of which is the low cost of treatment and ease of access to this service. So it is not surprising, several countries such as Thailand, Singapore and India have become medical tourism centers for patients from the European continent.

Several other studies also try to see the relationship between a country's tourist attraction factor and a person's interest in doing medical tourism. Bagga et al., (2020) stated that 45% of medical tourism actors in India choose to stay for 5-15 days after undergoing medical treatment and the average of these medical tourism actors combines the opportunity to travel/vacation after undergoing medical treatment. In line with these findings, T. H. Cham et al., (2016) used several analytical factors such as opportunities to combine vacations and medical care, suitable places for relaxation after undergoing medical treatment, as well as a variety of tourist destinations that can be enjoyed by medical tourism actors (country knowledge) in assessing factors that influence patients from China in conducting medical tourism to Malaysia. As a result, country knowledge, safety factors, accessibility, and reasonable prices have an important role in influencing the interest of patients from China in conducting medical tourism to Malaysia.

Based on studies related to previous literature, research sampling was entirely carried out in various Asian countries other than Indonesia, such as India and Malaysia. In addition, there is no research that describes in more depth the factors that affect the intention of the Indonesian people in conducting medical tourism to Malaysia, even though in practice there are not a few Indonesians who like to seek treatment and do medical tourism. This fact is in line with the market analysis conducted by UNESCAP, the United Nations Economic and Social Commission (UN) for Asia Pacific in 2007 which illustrates that medical tourists in Malaysia are 60% from Indonesia. According to Komari & Djafar, (2021), some of the reasons why Indonesians choose to seek treatment in Malaysia are Malaysian doctors never direct patients to seek treatment in certain hospitals, clear and transparent diagnoses, clear communication and procedures so that the cost of treatment becomes cheaper, and trust hospitals in Malaysia. Therefore, this study aims to see more about the factors that influence the intention of the Indonesian people in conducting medical tourism to Malaysia, especially related to service quality variables, potential savings in medical costs, and tourist attractions of the destination country.

The research questions for this article are:

1. Does the quality of service affect the intention of the Indonesian people to do medical tourism to Malaysia?
2. Does the potential savings in medical costs in the destination country affect the intention of the Indonesian people to conduct medical tourism to Malaysia?
3. Does the tourist attraction of the destination country affect the intention of the Indonesian people to do medical tourism to Malaysia?

Meanwhile, the objectives to be achieved from this research are:

1. Knowing the relationship between the level of service quality, the potential savings in medical costs and the tourist attraction of the destination country to the intention of the Indonesian people to conduct medical tourism to Malaysia
2. Provide an overview to the government and health service stakeholders, both in the country of origin and destination country of medical tourism, regarding factors that affect a person's intention in conducting medical tourism to Malaysia
3. Collaboration between health service stakeholders and the government to support medical tourism as a sustainable sector
4. Creating quality medical services that are in accordance with the interests and needs of medical tourism travelers.

## **RESEARCH METHODS**

The research method used in this study is a quantitative research method with a survey research strategy, which is to collect information from several people to describe, compare or explain their knowledge, attitudes and behaviors (Sekaran & Bougie, 2016). The research was carried out in the real environment without any interference from the research using the concept of field studies. The data analysis unit is individual, where the survey is aimed at seeing the perception of each individual towards the phenomenon and the reasons for their medical tourism to Malaysia. Data will only be collected in one period to measure and see responses from individuals.

The population in this study is Indonesian and the sample used is Indonesians who are interested and have never done medical tourism to Malaysia. The independent parameters or variables studied in this study consist of 3 variables, namely the quality of medical care, the potential for saving medical costs and tourist attractions in the destination country. And for the dependent variable is the intention to do medical tourism to Malaysia.

The survey method is the method that will be used in this study. The survey will be distributed online using media such as WhatsApp and email. Surveys themselves are very commonly used in various studies to collect quantitative and qualitative data, besides that the costs that must be incurred are relatively low and the response speed is relatively high that can be obtained from respondents. The survey will be distributed to Indonesians in various regions such as Makassar, Mataram, Jakarta, and so on who are interested and have never undergone inpatient or outpatient treatment in Malaysia. Furthermore, respondents will fill out a survey consisting of 2 parts:

a. Respondent Profile

Includes name, gender, age, domicile, occupation, income span, and care you want to undergo.

b. Approval Rate of Variables

Ask respondents for their opinions on the level of approval of the variables of medical care quality, potential cost savings and tourist attractions in the destination country

The data collection method used is non-probability sampling with snowball sampling technique which is a method to identify / select / take samples on a single network or continuous chain of relationships. The total sample studied is a minimum of 110 samples based on the calculation of all existing variables, both latent and manifest variables, so that the minimum sample calculation is  $5 \times 22 = 110$  samples. However, in this study, the number of samples studied was 192 samples.

This study used data analysis using Smart PLS software. Validity Test and Reliability Test will be conducted on the statements used in the survey. The results of the validity test will describe the validity or validity of the statements contained in the survey. Meanwhile, the

reliability test is used to see the level of reliability of a survey, where a survey is said to be reliable if the respondent's statements are stable or consistent.

## RESULT AND DISCUSSION

The survey was distributed to 225 respondents and out of 225 respondents 192 respondents (85.3%) answered that they were interested in doing medical tourism to Malaysia and had never done medical tourism before, while 33 respondents (14.7%) answered that they were not interested or had done medical tourism before. The demographic characteristics of the data used are presented in Table 1 which shows that most respondents were female with a composition of 59.4% respondents (114 respondents), with 77 respondents with male gender (40.1%), and 1 respondent who chose not to mention gender. The highest age range was in the age range of 21-30 years as many as 90 respondents (46.9%), followed by the age of 31-40 years as many as 51 respondents (26.6%), aged 41-50 years as many as 35 respondents and 16 respondents with an age range of 51-60 years. In terms of education level, the S1 degree was 159 respondents (82.2%), followed by 16 respondents and 14 respondents who graduated from high school / equivalent and others with the level of education graduates D1, S3 each 1 respondent. Meanwhile, based on profession and occupation, most of them are private employees, namely 168 respondents (87.5%) then entrepreneurs as many as 10 respondents (5.21%), with income per year in the range of < Rp 240 million per year. Meanwhile, based on the domicile of respondents, it is dominated by respondents domiciled in DKI Jakarta, namely 47 respondents (24.2%).

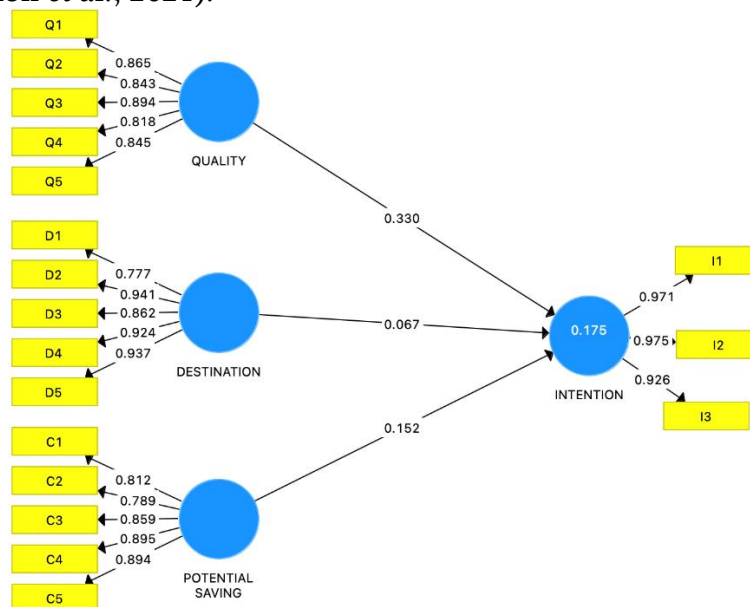
**Table 1 Respondent's Demographic Profile**

Demographics	Category	Frequency	Percentage (%)
Gender	Woman	114	59.4%
	Men	77	40.1%
	Vote not to mention	1	0.5%
Age	21-30 Years	90	46.9%
	31-40 Years	51	26.6%
	41-50 Years	35	18.2%
	51-60 Years	16	8.3%
Education	S1	159	82.8%
	S2	16	8.3%
	High School/Equivalent	13	7.3%
	D1	1	0.5%
	S3	1	0.5%
Work	Private Employees	168	87.50%
	Self employed	10	5.21%
	Not Working/ Retired	7	3.65%
	Housewives	2	1.04%
	Employees of SOEs	1	0.52%
	Personal Trainer	1	0.52%
	Pension	1	0.52%
	Student	1	0.52%
Income/Year	< 240,000,000	104	54.7%
	240.000.001 - 600.000.000	61	32.3%
	Not Working	11	5.7%
	600.000.001 - 1.200.000.000	9	4.7%
	> 1,200,000,000	5	2.6%
Domicile	Jakarta	47	24.5%
	Banten	35	18.2%
	South Sulawesi	28	14.6%
	West Nusa Tenggara	21	10.9%
	West Java	16	8.3%
	Bangka Belitung	10	5.2%

East Java	10	5.2%
Bali	7	3.6%
North Sulawesi	5	2.6%
D I Yogyakarta	3	1.6%
South Sumatra	3	1.6%
North Sumatra	2	1.0%
Riau	1	0.5%
West Sulawesi	1	0.5%
Central Sulawesi	1	0.5%
East Kalimantan	1	0.5%
Buoyo	1	0.5%

### SEM PLS modeling

All constructs that are latent variables and item code which are manifest variables in this study are designed to be modeled in Structural Equation Modelling-Partial Least Square (SEM-PLS) (Memon et al., 2021).



**Figure 1 Model PLS Path**

From the test results of the three *latent variables*, the results of all the *outer loading manifest variable* values were at a  $>$  value of 0.708 and for the R Square value was 17.5% which indicates that the variable intention of the Indonesian people to conduct *medical tourism* to Malaysia can be explained by 17.5% by the variables of quality of care, potential cost savings and tourist attraction of the destination country.

**Table 2 Convergent validity and reliability values**

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
<b>Destination Appeal</b>	0.943	1.031	0.95	0.792
<b>Intention To Conduct Medical Tourism</b>	0.954	0.958	0.971	0.917
<b>Potential for Saving</b>	0.906	0.932	0.929	0.724
<b>Quality Of Care</b>	0.907	0.914	0.931	0.729

Based on the results of validity and reliability tests, the results for Cronbach's Alpha and Composite Reliability values of 3 variables are at a value of > 0.7 and the Average Variance Extracted (AVE) value is at a value of > 0.5, this condition indicates that all constructs have met the convergent validity requirements.

### Discriminant Validity Test

Based on the measurement results on discriminant validity, the HTMT parameter is at a value of < 0.9 so that the model is declared valid. As for the Fornell and Larcker Criterion measurements, the entire bolded diagonal value is already worth more than the relationship coefficient between latent constructs, so under these conditions it can be stated that the measurement model is valid.

**Table 3 Discriminant Validity Value : HTMT**

	<b>Destination Appeal</b>	<b>Intention To Conduct Medical Tourism</b>	<b>Potential for Saving</b>	<b>Quality Of Care</b>
<b>Destination Appeal</b>				
<b>Intention To Conduct Medical Tourism</b>	0.095			
<b>Potential for Saving</b>	0.122	0.266		
<b>Quality Of Care</b>	0.099	0.407	0.328	

**Table 4 Discriminant Validity Value : Fornell and Larcker Criterion**

	<b>Destination Appeal</b>	<b>Intention To Conduct Medical Tourism</b>	<b>Potential for Saving</b>	<b>Quality Of Care</b>
<b>Destination Appeal</b>	<b>0.89</b>			
<b>Intention To Conduct Medical Tourism</b>	0.126	<b>0.957</b>		
<b>Potential for Saving</b>	0.132	0.261	<b>0.851</b>	
<b>Quality Of Care</b>	0.117	0.384	0.302	<b>0.854</b>

### Test the Hypothesis

**Table 5 Hypothesis Test Results**

	<b>Original Sample (O)</b>	<b>Sample Mean (M)</b>	<b>Standard Deviation (STDEV)</b>	<b>T Statistics (O/STDEV)</b>	<b>P Values</b>	<b>Decision</b>
Quality Of Care -> Intention	0.33	0.327	0.076	4.346	0	Accepted
Potential for Saving -> Intention	0.152	0.163	0.07	2.16	0.015	Accepted
Destination Appeal -> Intention	0.067	0.065	0.109	0.615	0.269	<b>Rejected</b>

Based on the hypothesis testing carried out against the three hypotheses proposed in this study, the results were obtained that two hypotheses were accepted and one hypothesis was rejected.

H1 : The quality of service affects the intention of the Indonesian people to conduct medical tourism to Malaysia (Accepted)

Where based on the test results, the p value shows a value of 0.000 ( $< 0.005$ ).

H2 : Potential cost savings that must be incurred in the destination country affect the intention of the Indonesian people in conducting medical tourism to Malaysia (Accepted)

Based on the tests carried out, obtained a p value of 0.015 ( $< 0.005$ ), this condition indicates an accepted hypothesis.

H3 : Destination Appeal affects the intention of the Indonesian people in conducting medical tourism to Malaysia (Rejected)

Based on the tests carried out, a p value of 0.269 ( $> 0.005$ ) was obtained, this condition shows that the hypothesis is rejected.

## **CONCLUSION**

Based on the test results, it was concluded that from three variables, namely quality of care, potential for saving, and destination appeal, there are two variables, namely quality of care and potential for saving which shows the influence on the interest of the Indonesian people to carry out medical tourism. to Malaysia. And it can be concluded that the Indonesian people do not consider the tourist attraction factor of the destination country when deciding to do medical tourism in Malaysia. The limitation of this research is that this research only measures the interest of Indonesians who have the potential to do medical tourism to Malaysia, research can be developed to further measure the reasons for Indonesian people who have done medical tourism to Malaysia and intend to do re-treatment (revisit).

This research can be used by governments in Indonesia and Malaysia in assessing the potential of medical tourism in each country. The results of the research are expected to create collaboration between the government and health service stakeholders to support medical tourism as a sustainable sector, creating quality medical services and in accordance with the interests and needs of medical tourism travelers.

## **BIBLIOGRAPHY**

Bagga, T., Vishnoi, S. K., Jain, S., & Sharma, R. (2020). Medical Tourism: Treatment, Therapy & Tourism. *Int J Sci Technol Res*, 9, 4447–4453.

Çapar, H., & Aslan, Ö. (2020). Factors Affecting Destination Choice In Medical Tourism. *International Journal Of Travel Medicine And Global Health*, 8(2), 80–88.

Cham, T.-H., Lim, Y.-M., Sia, B.-C., Cheah, J.-H., & Ting, H. (2021). Medical Tourism Destination Image And Its Relationship With The Intention To Revisit: A Study Of Chinese Medical Tourists In Malaysia. *Journal Of China Tourism Research*, 17(2), 163–191.

Cham, T. H., Lim, Y. M., Aik, N. C., & Tay, A. G. M. (2016). Antecedents Of Hospital Brand Image And The Relationships With Medical Tourists' Behavioral Intention. *International Journal Of Pharmaceutical And Healthcare Marketing*, 10(4), 412–431.

Connell, J. (2013). Contemporary Medical Tourism: Conceptualisation, Culture And Commodification. *Tourism Management*, 34, 1–13.

Han, H., & Hyun, S. S. (2015). Customer Retention In The Medical Tourism Industry: Impact Of Quality, Satisfaction, Trust, And Price Reasonableness. *Tourism Management*, 46, 20–29.

Heung, V. C. S., Kucukusta, D., & Song, H. (2010). A Conceptual Model Of Medical Tourism: Implications For Future Research. *Journal Of Travel & Tourism Marketing*, 27(3), 236–251.

Komari, N., & Djafar, F. (N.D.). *Mengapa Warga Indonesia Berobat Di Malaysia*. 2021.

Laws, E. (1996). Health Tourism: A Business Opportunity Approach. *Health And The International Tourist*, 199–214.

Memon, M. A., Ramayah, T., Cheah, J.-H., Ting, H., Chuah, F., & Cham, T. H. (2021). PLS-Sem Statistical Programs: A Review. *Journal Of Applied Structural Equation Modeling*, 5(1), 1–14.

Pimpale, V. K. (2016). *Medical Tourism*. Lulu. Com.

Sekaran, U., & Bougie, R. (2016). *Research Methods For Business: A Skill Building Approach*. John Wiley & Sons.

Vovk, V., Beztelesna, L., & Pliashko, O. (2021). Identification Of Factors For The Development Of Medical Tourism In The World. *International Journal Of Environmental Research And Public Health*, 18(21), 11205.

Wong, K. M., & Musa, G. (2012). *Medical Tourism In Asia: Thailand, Singapore, Malaysia, And India*. *Medical Tourism: The Ethics, Regulation, And Marketing Of Health Mobility*. London And New York: Routledge, 167–186.

Zarei, A., & Maleki, F. (2019). Asian Medical Marketing, A Review Of Factors Affecting Asian Medical Tourism Development. *Journal Of Quality Assurance In Hospitality & Tourism*, 20(1), 1–15.

**Copyright holders:**

**Fransisca Kusuma Ningrum, Ferry Novrianto Suthiono, Martinus Prananta,  
Tara Farina Srihadi (2023)**

**First publication right:**

**AJHS - Asian Journal of Healthy and Science**



**This article is licensed under a Creative Commons Attribution-ShareAlike 4.0  
International**