

# Medical Tourism blogs: Patient intention to choose a medical destination or treatment

SEDIGHEH MOGHAVVEMI \* [sedigheh@um.edu.my]

BRIAN KEE MUN WONG \*\* [keemunw@gmail.com]

ALI HASSANI \*\*\* [hassani@usc.ac.ir]

**Abstract** | The Internet and the world wide web are fundamental locations within our e-World - thus emerging new e-source of health and healthcare information that are an essential part of the changes in the medical tourism industry. The issues related to the challenges and problems that medical tourists face and the reliability of the information that influences their decision-making need special attention since much fake advertising, news, and business is distributed through social media and targeted medical tourists. A blog is different from other social media since the reader can identify the blogger; therefore, trust is unique. Considering past research on medical tourism and blogs, this study examines whether medical blogs would impact potential medical tourists settling on a choice of healthcare abroad. Data were collected from 143 blog readers and analyzed through Amos. Results showed that information usefulness and blog credibility are the key determinants influencing medical blog readers' intention to travel to destinations for treatments. Many people consider blogs as self-reported and reliable compared to the information on social media, which many people question its reliability and do not trust the information. Therefore, ignoring this information and area of research is not possible.

**Keywords** | Medical tourism, medical blog, attitude, intention, blog credibility

---

\* **Associate Professor** attached to the Department of Management at the Faculty of Business & Economics at the University of Malaya

\*\* **Associate Professor** at the Taylor's Business School, Taylor's University. **PhD in Tourism Management** from the University Malaya, Kuala Lumpur

\*\*\* **Associate Professor** at the Faculty of Tourism, University of Science and Culture

## 1. Introduction

Medical tourism is an industry that has seen development at an exponential rate. The Internet, an essential source of information, has been a critical component in the advancement of the medical tourism industry (Hohm & Snyder, 2015; Wong & Sa'aid Hazley, 2020). It was reported that 49% of medical tourists discovered needed information through the Internet (Medical Tourism Association, 2009). Patients look for information related to the accessible scope of methods, costs, accreditation and affiliations, settlements, understanding attributes, and diverse language competence on the web (Crooks et al., 2011; Ghosh & VK, 2022; Wong, Velasamy & Tengku Arshad, 2012). Hospitals and service providers are not alone in promoting medical tourism directly to consumers as other sources are also available in promoting medical tourism to consumers (Moghavvemi et al., 2017). Georgakopoulou (2013) highlighted the role of digital media for the co-construction and intertextuality of a narrative in an online environment. Digital media provides an opportunity for users (doctors and patients) to be involved in telling stories (Sowinska & Sokół, 2018; Wong & Sa'aid Hazley, 2020). Medical blogs are an example of a medium to communicate with information-seeking medical tourists.

Users produce content via social media for people with similar interests to share knowledge, answer related questions, and provide support (Robertson, 2016). The use of blogs in healthcare for obtaining information is becoming more popular among healthcare staff and patients (Fang et al., 2021; Robertson, 2016). Medical blogs provide direct access to detailed information on healthcare facilities worldwide (e.g., <http://www.mymedholiday.com/blog/>; <http://www.imtj.com/imtj-blog/>). Blogs have provided diverse narratives, including narratives in the medical context (Sowinska & Sokół, 2018). Blogs are considered a source of naturally

occurring data without influence from any investigators. In healthcare, blogs are regarded as a promising data source for health research (Atanasova, 2018). A blog is an example of a textual structure used for sharing experiences, stories, and the co-creation of new knowledge shaped by personal experience (Fang et al., 2021; Koteyko & Hunt, 2016).

Medical blogs are committed to raising awareness of international healthcare options among medical tourists and educating and increasing the number of medical tourists. This provides medical tourists the tools to locate, compare, and contact any medical travel or medical tourism providers in a more efficient and convenient way. Most medical blogs are either non-profit global associations for medical tourism (<http://www.medicaltourismassociation.com/en/index.html>) or individual medical tourism bloggers (<https://healthtourist.wordpress.com>; <http://www.mofrust.com/>).

Readers of medical blogs usually look for information on specific themes to understand the medical conditions they are experiencing, discover arrangements, and look for assessments from bloggers or different readers. About 40% of the patients surveyed by Honigman (2013) agreed that information found through online networking – including medical blogs – influenced the way they managed their health. They indicated that they would trust medical data shared by others via web-based networking media systems (Honigman, 2013). These insights prove that patients utilize blog(s) to gather research and health-related data. Despite the increased usage of blogs among medical tourists, only a few research articles concentrate on blogs from a reader's point of view to influence the medical tourists' goal to settle on making choices, particularly with medication.

Recently, medical professionals have also begun to write blogs to share their thoughts from an insider's perspective (Stephens, 2015). Some bloggers regularly work with healthcare suppliers,

governments, insurance agencies, businesses, and different healthcare purchasers to provide straightforward healthcare information to potential patients. These medical blogs are focused on bringing worldwide healthcare alternatives to medical tourism to light, in addition to instructing and increasing the number of medical travelers (Stephens, 2015).

This study is inspired by the limited research about the impact of medical blogs on patients in their goal to settle on choosing medical care. Besides, the nature of data obtained from blogs is another vital component that influences user interest in virtual groups or blogs. To our best knowledge, there is no detailed study on the sources of data available, particularly in terms of information usefulness and perceived information literacy within the context of medical blogs and tourism. Past studies have concentrated on bloggers instead of their readers, and no study has been completely focused on medical blogs. There is a lack of research in this context, and there is a need to shed some light in this area. The questionnaire in this study was created based on surveys from distinctive research gaps noted by past researchers.

Thus, the objective of this research is (a) to measure the relationship between e-WOM credibility, information usefulness of blogs, and expectation of knowledge capital with blog readers' (potential medical tourists') attitude, and (b) to measure the influence of blog credibility, user attitude, and gratification of participating in blog activities on readers' intention to choose a medical destination or treatment.

Even though this study is one of the first studies in the medical blogs and medical tourism industry, we trust that it will be a helpful guide in understanding the significance of medical blogs in encouraging patients' basic leadership, which will help medical tourism facilitators and healthcare suppliers in understanding the desires of patients.

## 2. Literature Review and Hypotheses Development

Healthcare professionals (HCPs) are no longer collected from the hotspot to obtain health information (Collins & Lewis, 2013; Wong & Sa'aid Hazley, 2020). Medical intermediaries use the Internet to spread important insights about accessible medical administrations and techniques to customers (Herrick, 2007) through different applications and social networking platforms such as emails, blogs, Twitter, Facebook, YouTube, and other online group sites (Collins & Lewis, 2013).

One of the key advantages of utilizing social media is that patients can guarantee the security of their content and have complete control over who reads their posts. On Facebook, patients can impart information to families and companions and provide opportunities for a more extensive gathering of followers. Patients can also utilize video platforms like YouTube to narrate their experiences and share information with different viewers. Similarly, weblogs (blogs) also permit patients to impart data to families and companions. Blogs are viewed as a social platform to help people speak to others (Baker & Moore, 2008; Sánchez-Villar & Bigné, 2020). They provide a platform for individuals to assemble or share information and experiences (Wang & Lin, 2011). Compared to social networks, blogs have a conceivably bigger group of onlookers or individuals who discover their blogs through searching the Internet. Blogs are more suitable for patients to insert content – for example, videos from different stages – and can be utilized as a part of an assortment of gadgets to help the patients to recount their stories. The critical advantage of blogs is that patients are not restricted by space constraints, unlike microblogging. With blogs, patients can share more of their considerations or encounters compared with other forms of communication.

Previous studies investigated variables that influence blog utilization (Hsu & Lin, 2008; Wang,

Chih, & Jhong, 2009), the potential use of blogs in various orders (Baker & Moore, 2008; Xu & Zhang, 2021), and the mental impact of blogging on customers (Ko & Kuo, 2009). The number of existing readers on a blog can influence the interest of new blog readers, indicating the popularity and comfortability of using the blog (Wang & Lin, 2011). Inevitably, individuals tend to depend on choices made by others (Bonabeau, 2004). Blogs are considered socially intelligent, group-like in nature (Ozmen & Orhon, 2010; Sánchez-Villar & Bigné, 2020), and as a social instrument for individuals to communicate with others (Baker & Moore, 2008). They are utilized as tools for emotional management and data sharing instead of critical thinking or remedial action and care (Chung & Kim, 2008).

People are likely to emulate others' choices or surmise qualities of others' conduct (Bonabeau, 2004; Sánchez-Villar & Bigné, 2020). Past studies have shown that social impact played an imperative part in user intention to utilize blogs. Lin and Lee (2006) observed that data quality emphatically impacts user goals to take an interest in a virtual group.

A few studies have connected blogging activities with a capacity to give its users esteem through content, innovation apparatuses, and social collaboration between blog users (Ip & Wagner, 2008). Blogs that share learning to enable users to communicate with others (Tang, Tang, & Chiang, 2014; Xu & Zhang, 2021).

Blogs also see the utilization of media as a type of expression, a method of social networking, and a gathering platform of social resistance and change (Heilferty, 2009; Sánchez-Villar, J., & Bigné, 2020). A study on women expounding on their breast cancer experience online was found as an example of illness blogging (NcNamara, 2007). The author found that self-expression, author-reader perception, and control over the story strongly affected the bloggers' capacity to provide important information from their breast cancer experience

(Heilferty, 2009). Blogs are also a valuable source of information on healthcare for researchers and individuals managing chronic conditions (Atanasova, 2018).

## 2.1. Theoretical Background

The Theory of Reasoned Action (Fishbein & Ajzen, 1975) and the Theory of Planned Behavior (Ajzen, 1985), form the backbone of the studies associated with the attitude-intention relationship and explain that behavior is partially determined through the intention of individuals to perform the behavior. These theories highlight the factor of intention, which resembles a person's level of encouragement and motivation in executing their decision by accomplishing a specific behavior (Ajzen, 1985). Based on the Theory of Reasoned Action (TRA), many individuals' behaviors become foreseeable based on intention because these behaviors are controlled by intention (Ajzen & Fishbein, 1980). The Theory of Reasoned Action (TRA) is commonly used as a base model to predict behavioral intentions in consumer behavior and the marketing industry because this theory possesses very strong predictive power (Lam & Hsu, 2004; Lee, 2005). In addition, the Theory of Reasoned Action (TRA) explained that behavioral intention consists of two essential factors: the subjective norm and the attitude towards performing a specific behavior (Fishbein & Ajzen, 1975).

The relationship between intention and behavior assumes that individuals tend to make rational decisions based on their information (Chung & Kim, 2008). Previous literature stated that the level of fascination a consumer has towards a website depends on the "quality" of the website (Kang & Kim, 2006). Factors contributing to intention are likely to vary in the social media community. Many studies have verified the effect of norms on intention to use Internet-related services. Hsu et al. (2013) stated that the intention was the level

to which the user would like to blog in the future. Their studies proved that social factors and attitudes towards blogging significantly influenced a blog participant's intention to continue using blogs.

## 2.2. Attitude

Rutherford and DeVaney (2009) denoted that an attitude towards a behavior is an individual assessment, either positive or negative, of behavior based on personal beliefs. Ajzen (1985) said that attitudes are derived from salient behavioral beliefs that influence a specific behavior. Ajzen (1985) defined attitude towards the behavior as a person's positive or negative feelings about executing a behavior (i.e., when an individual wants to use technology or a website) (Teo & Chwee, 2010). Hsu et al. (2013) quoted Lu and Lin, who proposed that customers' views on a particular website's content, context, and infrastructure impacted their corresponding attitudes. Studies have shown that intrinsic and extrinsic motivation steer a person towards behavior to achieve specific objectives (Hsu et al., 2013). Factors contributing to consumer attitude towards blogs are important for theoretical and practical reasons. In addition, previous literature suggests that the level of attraction a consumer has towards a website after visiting it relies on the "quality" of the website (Kang & Kim, 2006).

## 2.3. Electronic-Word of Mouth

Today, the Internet has expanded consumer options for gathering information by including other consumer comments and providing opportunities for consumers to propose their consumption-related advice by engaging in e-WOM (Park et al., 2011). Research has shown that consumers tend to hear opinions and become influenced by others such as family members, relatives, circles of friends,

or even testimonials from other consumers while or before making a purchasing decision (Park et al., 2011; Ruhamak et al., 2018; Lee & Choeh, 2020). e-WOM, like marketers, provides explicit information and personalized answers to potential customers, but unlike marketers, they also offer interactivity and a sympathetic ear to e-WOM participants (Bastos & Moore, 2021; Tsao & Hsieh, 2012). Compared to formal commercial marketing platforms like advertisements, bloggers' commendations constitute a kind of informal communication channel (Hsu et al., 2013).

In the context of blogs, data quality can be defined as the blogger's general perception of the collective quality of blogs (Park et al., 2011; Sánchez-Villar & Bigné, 2020). As discussed in previous studies, e-WOM credibility is defined as the extent to which one recognizes the recommendation as believable, true, or factual (Park et al., 2011; Tran & Strutton, 2020). When users or information seekers acknowledge the reliability of the information, their expectations of the same or a similar service/product will increase. Views differ among researchers on the dimension of source credibility that influences consumer attitude towards a product or service. Blogs are examples of platforms used for e-WOM distribution. Information from a professional forum or a reliable review site is more credible and may change reviewers' perceived risk (Bastos & Moore, 2021; Wu, 2014). An example was given to a website known as TripAdvisor.com (a specialized travel website where travel information can be obtained), which was viewed as more reliable compared to an unknown source, increasing the acceptance of TripAdvisor.com to its readers.

Since blogs can vary from expert blogs to beginner blogs, it will be worthwhile to study how much influence e-WOM credibility brings to the attitudes of blog readers or information seekers. With consideration and the circumstances of the e-WOM, information received from bloggers or comments from readers is believed to affect the atti-

tude of blog readers. Based on previous studies and the above explanation, the following hypothesis has been developed:

H1: Electronic-WOM credibility has a significant effect on blog readers' attitude.

#### 2.4. Information usefulness

Davis (1989) has defined usefulness as the degree to which an individual trusts that using a particular system will enhance their job performance (Hsu et al., 2013). Based on previous studies, information usefulness can be defined as the main factor for users seeking to enhance their knowledge, which will affect their decision-making (Nowakowski, 2020). In the context of blogs, this research treats usefulness as the perceived usefulness of bloggers' recommendations (Hsu et al., 2013). From a customer's perspective, product information is needed from various reference groups and personal media, such as blogs, to reduce transaction uncertainty (Hsu et al., 2013). Blogs with higher information usefulness are expected to increase the beliefs and intention of a reader regarding a particular product or service. Accordingly, the following hypothesis is developed:

H2: Information usefulness has a positive effect on blog readers' attitude.

#### 2.5. Expectation for knowledge capital

The expectation for knowledge capital has been defined as the degree to which a person believes they can obtain mutual benefits through knowledge (Hsu & Lin, 2008; Sahasranamama et al., 2021). The term "knowledge capital" alludes to the insights and know-how that one has acquired (Lin & Lu, 2011). Weblogs help sort out learning (Sandars, 2007). Blogging is an advantageous route

for individuals to distribute their thoughts, record their learning encounters, and consolidate different assets (Lin & Lu, 2011). The blogger's capacity to put forth remedy expressions about the item by holding significant aptitudes, competency, and the information aims to impact the reader's goal towards an item or administration (Sánchez-Villar & Bigné, 2021; Zhu & Tan, 2007).

When readers read blogs, especially when seeking certain information, the expectation of knowledge and experiences is important. The main reason to read blogs is to understand better certain issues (Fang et al., 2021). The blogger's level of capability to make correct statements about the product by retaining relevant skills, competency and knowledge are expected to influence the reader's intention towards a product or service (Zhu & Tan, 2007). Hence, based on the above information, the following hypothesis is developed:

H3: An expectation for knowledge capital has a positive effect on blog readers' attitude.

#### 2.6. Relationship between Attitude and Intention

As explained by Hsu et al. (2013), attitude is related to influential beliefs that influence the individual's attitude towards a system, which explains the individual's behavioral intention to use the system. Attitude is a consistent behavioral inclination of a person based on their perception, whether they like or dislike an individual or a particular object (Park, Kim, & Ryu, 2019). Ajzen (1985) posited that attitude is derived from several salient behavioral beliefs influencing a specific behavior.

Based on the Theory of Planned Behavior (TPB), attitude towards the behavior is defined as a person's positive or negative feelings about ex-

cuting a behavior (i.e., when an individual wants to use technology) (Park, Kim, & Ryu, 2019; Teo & Chwee, 2010). Therefore, we hypothesize that a medical blog's positive or negative attitude will affect potential medical tourists' intention to choose a medical destination or treatment. Hence, the following hypothesis is derived for this study.

H4: Blog readers' attitude has a significant effect on blog readers' intention to choose a medical destination or treatment.

## 2.7. Blog credibility

Trust is characterized as the perceived credibility and benevolence of a target of trust (Doney & Cannon, 1997; Sánchez-Villar & Bigné, 2020). Credibility focuses on the exchange partner's reliability, and benevolence is the extent to which one partner is interested in the other partner's welfare. Trust is important in an online purchase setting when a consumer who is confronting some level of exchange hazard swings to the next individual whom he or she accepts as trustworthy and liberal (Hsu et al. 2013; Tran & Strutton, 2020). Trust is a critical component for fruitful online exchanges (Salo & Karjaluo, 2007; Sánchez-Villar & Bigné, 2020) and is essential towards gaining and keeping customers in addition to acquiring the upper hand on the Internet (Hsu et al., 2013; Tran & Strutton, 2020).

Bloggers' recommendations make a sort of casual communication channel, in contrast with formal business showcasing channels – for example, promotions. Consumers typically identify with recommendations by bloggers since the assessments from bloggers are not business-related (Cheng & Fang, 2015). Besides, this is because of the two-way correspondence that bloggers and readers set up, compared to a business promotion, which is a restricted correspondence.

Online clients respect blogs, which form one

of the prevalent e-WOM stages, as a trustworthy source across various types of media (Bastos & Moore, 2021; Hsu et al., 2013). The blogger is the objective of the trust generated by the online clients, and through perusing and continuous associations on the blog, blog readers get comfortable with bloggers and the content they provide, and thus, trust is shaped (Hsu et al., 2013; Sánchez-Villar & Bigné, 2020). A blog reader may have confidence in a blogger's confident suggestion and this example of trust will influence the reader's preference for specific items or administrations.

Hsu et al. (2013) have also specified bloggers' notoriety for being a believable source, which is viewed as a huge calculation affecting a consumer's choice to buy a specific item. Jain and Posavac (2001) additionally reasoned that a high-believability source will be more convincing in affecting consumers' buying conduct. Thus, the accompanying hypothesis in relation to blog credibility is to examine the relationship between website believability and the reader's state of mind (Tran & Strutton, 2020). A blogger's reputation as a credible source is considered as an influential factor in swaying a consumer's decision to buy a certain product (Hsu et al., 2013). Therefore, we hypothesize that:

H5: Blog credibility has a positive effect on a blog reader's intention to choose a medical destination or treatment.

## 2.8. Gratification from participating in blog activities

Logically, a patient's commitment to his or her own treatment and care happens with the assistance of intelligent new media (Chung & Kim, 2008). The effect of social support has been under the control of electronic care groups but not particularly under the control of blogs. The utilization of blogs in medical tourism has not been exami-

ned. Hillan (2003, p. 334) cited that "weblogs and online diaries can create the feeling of having a place with a bigger social gathering for the client when he or she makes or reads a website, and when they are gradually being incorporated into medical offices, permitting patients to get a welcome from loved ones and to give individual encounters to individuals with a similar medical condition."

Chung and Kim (2008) supported the use of the employment and gratification hypothesis to clarify how a growing number of patients and colleagues utilize weblogs and the apparent gratifications provided through blogging exercises. Blogs have helped people look for information not provided by their doctors and permitted them to exa-

mine data from websites with their doctors in a self-assured way (Chung & Kim, 2008). Kaplan et al. (1989) have demonstrated that more noteworthy support of patients improves physiological, behavioral, and subjective prosperity. Chung (2008) likewise said that a patient's support of his or her own treatment and care had demonstrated positive results in helping patients. The following hypothesis is developed in relation to gratification interests by readers.

H6: Gratification from participation in blog activities has a positive effect on a blog reader's intention to choose a medical destination or treatment.

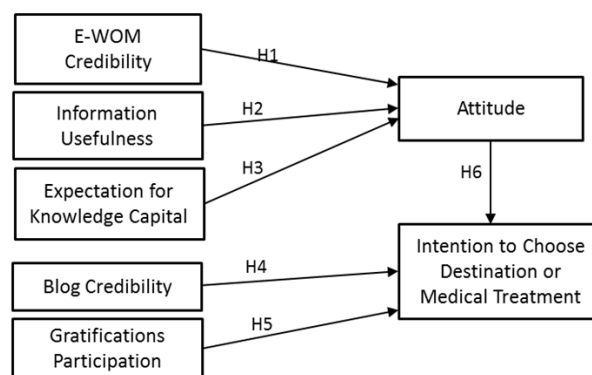


Figure 1 | Conceptual Model

### 3. Methodology and Results

#### 3.1. Measurement Instrument

The questionnaire items (e-WOM credibility, Blog credibility, Expectation of knowledge capital, Information usefulness, Gratifications from participation, Attitude, and Intention) used in this study, as depicted in Figure 1, were primarily adapted from previous studies. e-WOM credibility was adopted from Park et al. (2011). It was defined as the extent to which one perceives the recommendation from a medical tourism blog to be believable, true or factual. Blog credibility was

adopted from Hsu et al. (2013) and it was defined as a blog's reputation for source credibility, in addition to being considered as an influential factor in swaying a potential medical tourist's decision to choose a medical destination or treatment. Information usefulness was adopted from Hsu et al. (2013) and defined as the usefulness of the information published in medical tourism blogs.

Gratifications from participation was adopted from Deborah et al. (2008) and it was defined as how potential medical tourists used blogs and the perceived gratifications, they received from different blogging activities. The expectation of knowledge capital was adopted from Hsu et al. (2013)



and it was defined as the degree to which potential medical tourists believed they could obtain mutual benefits through knowledge shared in medical blogs. Attitude and intention to choose or use treatments were adopted from Hsu et al. (2013) and they were defined as positive and negative attitudes towards an intention to choose a medical destination or treatment. Each item was measured using a five-point Likert scale, ranging from "strongly disagree", with a value of 1, to "strongly agree", with a value of 5. Demographic items covered gender, age, education level, Internet experience, blogs they read, the frequency of reading blogs, and whether they were aware of medical tourism and medical or health blogs.

### 3.2. Sample and procedure

This research is part of a major project funded under the Ministry of Education (an unspecified country) starting in 2015 to investigate different aspects of medical tourism. A message was posted, outlining the objectives of this study and a hyperlink to a survey form on medical blogs (<https://healthtourist.wordpress.com>; <http://www.mofrust.com/>; <http://www.credihealth.com/>; <http://www.privatehealth.co.uk/blog/>), was sent through online forums such as Google+ Circles, as well as other social networking platforms such as Facebook and Twitter, in addition to email.

The message was distributed to invite medical blog users to participate in an online questionnaire focusing on the effects of medical tourism blogs on medical tourists' decision-making. During the study, participants could respond to the online questionnaire by clicking on the link provided in the posting. Participants voluntarily responded to the online questionnaire. Pertaining to the segment of blog users, no differentiation of participation roles (blogger and blog readers) was considered since many blog participants were involved in both roles. The online survey yielded a total of 143 responses.

Respondents addressed their Internet encounters, the websites they typically read, how frequently they read weblogs, and their mindfulness on medical tourism and online blogs identifying with medical well-being. 92.3% knew about medical tourism and 87.4% knew about medical tourism online blogs, as seen in Table 1. The study revealed that the sample consisted of more females than males. This was consistent with the blog usage population because, according to statistics about blog users (LiveJournal.com, 2012), females used blogs more heavily than males worldwide.

**Table 1** | Demographics Profile

Measure	Items	%
Gender	Male	35
	Female	65
Age	Below 21 years old	1.4
	21-30 years old	2.8
	31-40 years old	16.1
	41-50 years old	60.1
	Above 50 years old	19.6
Education Level	Primary school	1.4
	Secondary school	2.8
	Diploma & certificate	16.1
	Bachelor degree	60.1
	Master degree & above	19.6
Internet Experience	Beginner (less than 3 years)	3.5
	Intermediate (3 to 10 years)	24.5
	More than 10 years	72
Most often blogs read	Company blogs	4.2
	Personal blogs	21.7
	General blogs (not related to personal lifestyles)	44.1
	Niche blogs (related to specific niche such as games, medical tourism, foods, etc.)	30.1
Frequency of blogs read per month	Never	1.4
	Once or twice	32.9
	3-4 times	28.7
	5-6 times	14
	More than 7 times	23.1
Awareness on Medical Tourism	Yes	92.3
	No	7.7
Awareness on Medical and Health Blogs	Yes	87.4
	No	12.6

#### 4. Results

The reliability of the data was examined through Cronbach's  $\alpha$  and the results show that the values of all variables are above 0.7 with Attitude = 0.893; Blog credibility = 0.867, Gratifications from participation = 0.906, Information usefulness = 0.915, Intention = 0.902, Knowledge capital = 0.809, and e-WOM = 0.821, which indicate that all the variables are reliable. This study examined the relationship between the independent and dependent variables through structural equation modelling of AMOS 18.0. Confirmatory factor analysis was conducted through AMOS to confirm the research model and to test the measurement model

in order to explain how measured variables logically and systematically represented constructs involved in a theoretical model. The final fit for the first model in the calibration sample shows a good fit with the data collected, with a chi-square value of 205.806 ( $\chi^2/df = 2.122$ ), a degree of freedom value of 97, CFI = 0.934; GFI = 0.861; AGFI = 0.780; TLI = 0.907; and RMR = 0.043, indicating that the model is at an acceptable level.

The study assessed the convergent and discriminant validity of the scales using Average Variance Extracted (AVE) composite reliabilities of all the constructs, and results for this study show that composite reliability for all the constructs exceeded 0.7, which support the convergent validity of

the variables, while the Average Variance Extracted (AVE) for each construct was greater than 0.5 (see Table 2). The results of these tests provide evidence for convergent validity (Fornell & Larcker, 1981; Hair et al., 2006). We compared the square root of each construct's AVE to its correlations with other variables, and the results showed

that the construct correlations were all below the square root of AVE for each respective construct (Fornell & Larcker, 1981; Hair et al., 2006) which supported the discriminant validity of the variables (see Table 2). Overall, the analysis supported convergent and discriminant validity.

**Table 2 | Inter-Construct Correlation and Square Root of Variance**

Constructs	AVE	Composite Reliability	e-WOM	BC	IU	GP	KC	ATT	INT
e-WOM	0.737	0.705	<b>0.858</b>						
Blog credibility (BC)	0.712	0.763	0.199*	<b>0.843</b>					
Information usefulness (IU)	0.828	0.897	0.461**	0.640**	<b>0.909</b>				
Gratifications participation (GP)	0.885	0.879	0.535**	0.396**	0.681**	<b>0.940</b>			
Knowledge capital (KC)	0.699	0.741	0.482**	0.494**	0.655**	0.647**	<b>0.836</b>		
Attitude (ATT)	0.768	0.812	0.559**	0.563**	0.697**	0.617**	0.738**	<b>0.876</b>	
Intention (INT)	0.738	0.933	0.357**	0.668**	0.781**	0.633**	0.705**	0.722**	<b>0.859</b>

\*\*. Correlation is significant at the 0.01 level (2-tailed); Value on diagonal are square root of AVE

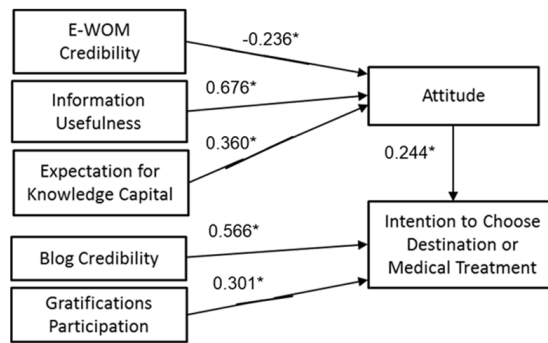
After confirmatory factor analysis and confirming the model we used the final results and run structural model to examine the effect of e-WOM, Information usefulness and knowledge capital on blog users attitude and the effect of the attitude, blog credibility and gratifications participation on their intention to choose a medical destination or treatment. The structural model tested, and the results shows that the value of fit indices is in the acceptable range with the value of chi-square 298.764 ( $\chi^2/df = 2.246$ ), degree of freedom 133, CFI = 0.907; GFI = 0.825; AGFI = 0.750; TLI = 0.881; and RMR = 0.045. As shown in Table 3 and Figure 2, Information usefulness is the strongest factor that influences blog users attitude ( $\beta=0.676$ ,  $P=0.000$ ), followed by Knowledge capital ( $\beta=0.360$ ,  $P=0.009$ ) and e-WOM ( $\beta=-0.236$ ,

$P=0.043$ ). The results supported H1, H2 and H3. In fact, the significant effect of e-WOM was found to be negative towards Attitude. The results show that blog credibility has the strongest effect on blog users' intention to choose a medical destination or treatment ( $\beta=0.566$ ,  $P=0.000$ ), followed by gratifications participation ( $\beta=0.301$ ,  $P=0.000$ ) and attitude ( $\beta=0.244$ ,  $P=0.01$ ). Thus, the results also supported H4, H5 and H6.

The R-Square value obtained shows that e-WOM, Information usefulness, and Knowledge capital can explain 69% of the variance in attitude, while Attitude, Blog credibility, and Gratifications from participation are able to explain 93% of the variance in intention to travel to a destination for treatments.

**Table 3 | Results of testing the research model**

Hypotheses	Beta	S.E	C.R	P
Information Usefulness -> Attitude	0.676	0.155	4.688	0.000
Knowledge Capital -> Attitude	0.360	0.135	2.611	0.009
eWOM -> Attitude	-0.236	0.119	-2.025	0.043
Blog Credibility -> Intention	0.566	0.084	5.047	0.000
Gratifications Participation -> Intention	0.301	0.056	4.189	0.000
Attitude -> Intention	0.244	0.096	2.355	0.019



\* Significant at 0.05 level

Figure 2 | Final Results of the Conceptual Model

## 5. Discussion

The main aim of this research is to examine the effect of e-WOM, information usefulness, and knowledge capital on blog readers' attitude and the effect of blog credibility, gratifications from participation, and attitude on blog readers' intention to choose a medical destination or treatment, with all independent variables and their relationship with intention being displayed in Figure 1. As displayed in Table 2 and Table 3, the results obtained from this research show that these factors are important predictors of a potential medical tourist's attitude and intention to choose a medical destination or treatments.

Information usefulness and blog credibility are the strongest factors which affect blog users' attitude and intention while other factors like knowledge capital and gratifications participation also have a strong effect. The input from this study helps medical bloggers – both individuals and medical associations – to comprehend the necessities of readers and enhance their marketing strategies.

Medical tourism blog readers have responded with positive remarks on the medical tourism blogs they read, and it must be noted that at least 87.4% of the blog readers have awareness about medical and health blogs, according to Table 1. The discoveries of this study propose that expectations are mainly controlled by

attitude, which is specifically impacted by information usefulness and blog credibility. This supports the testimonial from a medical blog reader who mentioned that the medical blog community has provided much information pertaining to the medical scope and services useful to it (refer to <http://blog.vitummedicinus.com/2007/07/new-to-medical-blogs-vitums-beginners.html>).

The earlier survey findings in the IMTJ Medical Tourism Climate Survey's also uncovered that different patient decides their selection of a specific goal for medical treatment. In this study, blog credibility, usefulness of information, e-WOM credibility and blog gratification from participation impact the potential medical tourist's attitude, which specifically impacts his or her aim to choose his or her medical destination or treatment.

TRA has been utilized to clarify individual convictions in specific conducts. Hsu and Lin (2008) and Xu and Zhang (2021) have demonstrated that attitude towards utilizing a blog has a noteworthy beneficial outcome toward the goal to blog. In this study, it has been demonstrated that there is a clear relationship between blog reader's attitude and expectation towards choosing their medical destination or treatment.

e-WOM believability was demonstrated to impact e-WOM (Bastos & Moore, 2021; Park et al., 2011). The study demonstrated that if consumers

think that the online survey is tenable, then they will buy in view of what they have reviewed and accepted. This study echoed the literature, where e-WOM believability has a noteworthy constructive outcome on the attitude of the blog reader to build his or her goal towards the choice that he or she will make. The survey accomplished in this study confirmed that blog readers rely on bloggers' suggestions before settling on any choice towards a specific medical administration.

Gratification investment in blogging exercises and the desires for information capital demonstrate a solid friendship through generating effects on the aim of blog readers in choosing their goal or treatment (Chung & Kim, 2008; Sánchez-Villar & Bigné, 2020). It creates the impression that the desires for learning capital have a real impact on the aim of the blog readers. However, Hsu and Lin (2008) observed that information sharing elements had no huge impact on a client's expectation.

### 5.1. Limitation of the study and future research

The data for this study was collected online and the respondents were from different countries, however, the study did not collect any information related to the respondents' country of origin. Future research articles can compare the data from bloggers belonging to different countries to explore their intention and behavior. In addition, medical blogs can be categorised into different types such as organization blogs, independent media publishers and individual blogs. These distinctions were not addressed in this research and, therefore, would likely reveal content or source credibility issues.

Thus, future studies may categorize and compare results on different blogs. Besides, the development of Industry Revolution 4.0 technologies (e.g., artificial intelligence, Internet of things) in the healthcare sector (Wong & Sa'aid Hazley,

2020) should also be given ample attention to facilitate an understanding of the effect of medical blogs on the choice of a medical tourism destination and/or medical treatment overseas.

## 6. Conclusion

This study aims to comprehend the impact of medical tourism blogs on medical tourists' goal to settle on a choice of medical destination or treatment. The online survey was distributed through a couple of individual medical websites and other social networking platforms (Facebook, Google+, messages, and LinkedIn). Medical professionals and corporate medical administrators can benefit greatly from this study in growing their marketing efforts by means of medical and healthcare blogs. As previously discussed, blogs are a specialized device to draw in potential customers/consumers. Blogs empower communication among scholars and readers. From an administrator's viewpoint, medical facilities may benefit from blogs. In this manner, knowing the factors affecting medical tourists will provide medical suppliers with vital data on whether to utilize blogs as a medium to provide data other than the websites.

Overall, blog credibility and information usefulness which impact readers' attitude and intention to choose a destination or treatment, are the primary determinants of a potential medical tourist's intention to take action. In that capacity, medical suppliers will need to build their blog guest's goal to enhance blog utilization and concentrate on the nature of data in the blogs used by the medical suppliers.

The examination of the impact of other factors, for example, the level of social inclusion, age, and gender of medical tourists, ought to be considered for future research. This study exhibited and approved the factors influencing medical tourists' aim in choosing their destination through medical tou-

rism blogs. In addition, the findings of this study will be valuable to industry players since blogging and providing helpful data can enhance mindfulness and draw potential medical tourists to their respective countries.

## Acknowledgement

We would like to thank Norrizma Niza Jama-luddin. We have greatly benefited from her Master thesis to conduct this study.

## References

- Ajzen I. (1985) From Intentions to Actions: A Theory of Planned Behavior. In: Kuhl J., Beckmann J. (eds.). *Action Control. SSSP Springer Series in Social Psychology*. Springer, Berlin, Heidelberg. [https://doi.org/10.1007/978-3-642-69746-3\\_2](https://doi.org/10.1007/978-3-642-69746-3_2)
- Atanasova, D. (2018). 'Keep moving forward. LEFT RIGHT LEFT': A critical metaphor analysis and addressivity analysis of personal and professional obesity blogs. *Discourse, Context & Media*, 25, 5–12.
- Baker, J., & Moore, S. (2008). Blogging as a Social Tool: A Psychosocial Examination of the Effects of Blogging. *CyberPsychology & Behavior*, 747-749.
- Bastos, W., & Moore, S. G. (2021). Making word-of-mouth impactful: Why consumers react more to WOM about experiential than material purchases. *Journal of Business Research*, 130, 110-123. DOI: 10.1016/j.jbusres.2021.03.022.
- Bonabeau, E. (2004). The Perils of the Intention Age. *Harvard Business Review*, 45-54.
- Cheng, R.-J., & Fang, W. (2015). Blog Intention Based on Fashion Involvement and Trust. *International Journal of Electronic Commerce Studies*, 19-36.
- Chung, D. S. and Kim, S. (2008). Blogging activity among cancer patients and their companions: Uses, gratifications, and predictors of outcomes. *Journal of the American Society for Information Science and Technology*, 59(2), pp. 297-306.
- Collins, S. E., & Lewis, D. M. (2013). Social Media Made Easy: Guiding Patients to Credible Online Health Information and Engagement Resources. *Clinical Diabetes*, 137-141.
- Crooks, V., Snyder, J., Johnston, R., & Kingsbury, P. (2011). Perspectives on Canadians' Involvement in Medical Tourism.
- Doney, P., & Cannon, J. (1997). An Examination of the nature of trust in buyer-seller relationships. *Journal of Marketing*, 35-51.
- Fang, J., Zhang, H., Zhu, Z., & Dai, W. (2021). Blog text quality assessment using a 3D CNN-based statistical framework. *Future Generation Computer Systems*, 116, 365-370. DOI: 10.1016/j.future.2020.10.025.
- Fishbein, M. & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Georgakopoulou, A. (2013). Small stories research & social media: the role of narrative stance-taking in the circulation of a Greek news story, *Working paper in Urban Language and Literacies*, paper 100.
- Ghosh, A., & VK, S. P. (2022). Analysis of Indian Medical Tourism literature using a bibliometric and narrative-based approach. *Revista Turismo & Desenvolvimento*, 38, 315-331. <https://doi.org/10.34624/rt.d.v38i0.25899>
- Heilferty, C. M. (2009). Toward a theory of online communication in illness: concept analysis of illness blogs. *Journal of Advanced Nursing*, 65(7), 1539-1547.
- Herrick, D. M. (2007) Medical tourism: global competition in health care. *National Center for Policy Analysis*, Dallas, 1-35. Retrieved from: <http://www.unf.edu/brooks/center/pdfs/Medical%20Tourism%20Herrick.pdf>
- Hohm, C. & Snyder, J. (2015). It Was the Best Decision of My Life: A Thematic Content Analysis of Former Medical Tourists' Patient Testimonials. *BMC Medical Ethics*, 16(8), 1-7.
- Honigman, B. (2013). 24 Outstanding Statistics & Figures on How Social Media has Impacted the Health Care Industry. Retrieved from: <https://getreferrallmd.com/2013/09/healthcare-social-media-statistics/>
- Hsu, C.-L., & Lin, J.-C. (2008). Acceptance of blog usage: The roles of technology acceptance, social influence and knowledge sharing motivation. *Information & Management*, 65-74.
- Hsu, C.-L., Chuan-Chuan Lin, J., & Chiang, H.-S. (2013). The effects of blogger recommendations on customers' online shopping intentions. *Internet Research*, 69-88.

- Huang, C.Y., Shen Y.-Z., Lin, H.-X., & Chang, S. S. (2007). Bloggers' motivations and behaviors: A model. *Journal of Advertising Research*, 472-484.
- Ip, R. K., & Wagner, C. (2008). Weblogging: A study of social computing and its impact on organizations. *Decision Support Systems*, 242-250.
- Jain, S. P., & Posavac, S. S. (2001). Pre-purchase Attribute Verifiability, Source Credibility, and Persuasion. *Journal of Consumer Psychology*, 11(3), 169-180.
- Kang, Y. S., & Kim, Y. J. (2006). Do visitors' interest level and perceived quantity of web page content matter in shaping the attitude toward a website? *Decision Support Systems*, 1187-1202.
- Koteyko, N., & Hunt, D. (2016). Performing health identities on social media: An online observation of Facebook profiles. *Discourse, Context and Media*, 12, 59-67.
- Ko, H.-C., & Kuo, F.-Y. (2009). Can blogging enhance subjective well-being through self-disclosure? *Cyber Psychology & Behavior*, 75-79.
- Lee, S., & Choeh, J.Y. (2020). Using the Social Influence of Electronic Word-of-Mouth for Predicting Product Sales: The Moderating Effect of Review or Reviewer Helpfulness and Product Type. *Sustainability* 2020, 12, 7952; doi:10.3390/su12197952.
- Lin, H.-F., & Lee, G.-G. (2006). Determinants of success for online communities: an empirical study. *Behavior & Information Technology*, 479-488.
- Lin, K.-Y., & Lu, H.-P. (2011). Why people use social networking sites: An empirical study integrating network externalities and motivation theory. *Computers in Human Behavior*, 1152-1161.
- Lunt, N., Hardey, M., & Mannion, R. (2010). Nip, tuck and click: Medical tourism and the emergence of web-based health information. *The Open Medical Informatics Journal*, 3, 77-87.
- Medical Tourism Association. (2009). Releases first patient surveys on medical tourism. *Medical Tourism Magazine*, 10, 34-36.
- Morris, M., & Ogan, C. (1996). The Internet as mass medium. *Journal of Communication*, 39-50.
- Moghavvemi, S., Ormond, M., Musa, G., Mohamed Isa, Thirumoorthi, T., Mustapha, Z., Kanapathy, K., & Chandy, J. (2017). Connecting with prospective medical tourists online: A cross-sectional analysis of private hospital websites promoting medical tourism in India, Malaysia and Thailand. *Tourism Management*, 58, 154-163.
- NcNamara, K. R. (2007). *Blogging Breast Cancer: Language & Subjectivity in Women's Online Illness Narratives*. [Master thesis, Georgetown University]
- Newhagen, J., & Rafaeli, S. (1996). Why communication researchers should study the Internet: A dialogue. *Journal of Communication*, 4-13.
- Nowakowski, M. (2020). Analysis and Evaluation of Information Usefulness and User Experience For Content Presentation in Electronic Media. *Procedia Computer Science*, 176, 3654-3664. DOI: 10.1016/j.procs.2020.09.021.
- Ozmen, S., & Orhon, N. (2010). Turkish New Websites and Their Audiences. *International Journal of Arts and Sciences*, 287-297.
- Park, O.-J., & Kim, M. G., & Ryu, J.-H. (2019). Interface effects of online media on tourists' attitude changes. *Tourism Management Perspectives*, 30, 262-274. DOI: 10.1016/j.tmp.2019.03.005
- Park, C., Wang, Y., Yao, Y., & Kang, Y. R. (2011). Factors influencing eWOM Effects: Using Experience, Credibility, and Susceptibility. *International Journal of Social Science and Humanity*, 74-79.
- Robertson, A. (2016). Effects of a social media website on primary care givers' awareness of music therapy services in a neonatal intensive care unit. *The Arts in Psychotherapy*, 50, 17-21.
- Rutherford, L. & Devaney, S. A. (2009) Utilizing the Theory of Planned Behavior to Understand Convenience Use of Credit Cards. *Journal of Financial Counseling and Planning*, 20(2), pp. 48-63.
- Ruhamak, M.D., Vitasmo, P., & Rahmadi, A.N. (2018). The Influence of Testimonial, Social Media-based Promotions and Electronic Word of Mouth toward Purchase Intention, In *Proceedings of the Annual Conference on Social Sciences and Humanities (ANCOSH 2018)* - Revitalization of Local Wisdom in Global and Competitive Era, pages 78-81.
- Sahasranamama, S., Nandakumarb, M. K., Pereirac, V., & Temouride, Y. (2021). Knowledge capital in social and commercial entrepreneurship: Investigating the role of informal institutions. *Journal of International Management*, 27(1), 100833. DOI: 10.1016/j.intman.2021.100833.
- Salo, J., & Karjaluo, H. (2007). A conceptual model of trust in the online environment. *Online Information Review*, 604-621.

- Sánchez-Villar, J., & Bigné, E. (2020). Developing a blog trust scale via an international Delphi panel. *European Research on Management and Business Economics*, 26(3), 134-144. DOI: 10.1016/j.iedeen.2020.07.003.
- Sowinska, A., & Sokół, M. (2018). Luckily, she's alive: Narratives of vicarious experience told by Polish doctors. *Journal of Pragmatics*, 152, 76-88.
- Stephens, S. (2015, March 4). Female Physician Bloggers Take Readers behind the Scenes. Retrieved from: <http://www.monster.com/healthcare/a/Female-Pysician-Doctor-Bloggers>
- Tang, J.-t. E., Tang, T.-l., & Chiang, C.-H. (2014). Blog learning: effects of users' usefulness and efficiency towards continuance intention. *Behavior & Information Technology*, 33(1), 36-50.
- Tran, G.A., & Strutton, D. (2020). Comparing email and SNS users: Investigating e-servicescape, customer reviews, trust, loyalty and E-WOM. *Journal of Retailing and Consumer Services*, 53, 101782. DOI: 10.1016/j.jretconser.2019.03.009.
- Tsao, W., & Hsieh, M. (2012). Exploring how relationship quality influences positive eWOM: The importance of customer commitment. *Total Quality Management & Business Excellence*, 821-835.
- Wang, S.-M., & Lin, J. C.-C. (2011). The effect of social influence on bloggers' usage intention. *Online Information Review*, 50-65.
- Wong, B. K. M. & Sa'aid Hazley, S. A. (2020). The Future of Health Tourism in the Industrial Revolution 4.0 Era. *Journal of Tourism Futures*, 7(2), 267-272. <https://doi.org/10.1108/JTF-01-2020-0006>
- Wong, K. M., Velasamy, P., & Tengku Arshad, T. N. (2014). Medical Tourism Destination SWOT Analysis: A Case Study of Malaysia, Thailand, Singapore and India. *SHS Web of Conferences*, 12, 01037.
- Wu, C. (2011). How quality influence user's continuance of the recommendation blog. *Key Engineering Materials*, 1132-1136.
- Wu, M.-H. (2014). *Relationships among Source Credibility of Electronic Word of Mouth, Perceived Risk, and Consumer Behavior on Consumer Generated Media*. [Masters Thesis, University of Massachusetts Amherst]
- Xu, W., & Zhang, X. (2021). Online expression as Well-be(com)ing: A study of travel blogs on Nepal by Chinese female tourists. *Tourism Management*, 83, 104224. DOI: 10.1016/j.tourman.2020.104224.