Hospital brand image and trust leading towards patient satisfaction: medical tourists' behavioural intention in Malaysia

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Abstract

In Malaysia, hospital branding is critical to recruiting medical tourists. Reputation, service quality, and word-of-mouth influence hospital branding. Thus, hospitals and the healthcare tourism sector must understand these elements to gain a competitive edge in the global market. This study investigated the effect of hospital advertising factors on healthcare tourists' behavioural intentions (BI) in Malaysia, with emphasis on clarifying the nature of hospital brand image and hospital brand trust. Additionally, the study assessed how perceived standards and satisfaction stimulate favourable BI among healthcare tourists. This study used the quantitative research-based deductive approach, where hospitals in Malaysia were the target sector. The results demonstrated that accessibility, cost, and a good web presence influenced hospital marketing for medical tourism. Furthermore, the characteristics of safety and security and effective advertising enhance trust. Moreover, patient satisfaction is critical to reduce the divide between service standards and BI, which emphasises the necessity of prioritising patients in medical facilities. Nevertheless, the findings were time-sensitive and not adjusted for healthcare tourism sector alterations or customer habit variations over time.

Introduction

The term "medical tourism" slightly diverges from normal tourism, as it primarily focuses on the medical services obtained from tourism or moving to distant regions with the desired medical facility. A tourism medical index reported that Malaysia is one of the most prominent medical tourism countries.[1] Characteristically, Malaysia provides several services. Reportedly, 850 thousand medical tourists have visited different regions of Malaysia for medical services. The Malaysian Healthcare Travel Council (MHTC) facilitated these visitors by conducting several initiatives by recruiting registered doctors and encouraging public and private industry collaboration.[2]

Medical tourists have been discussed as a substantial revenue source in Malaysia given that the Malaysian medical tourism sector has a stronger competitive advantage than other Asian counterparts. The advantages of Malaysia include a favourable exchange rate, highly qualified and trained health workers and doctors, political and effective economic stability, increased population literacy rate, high-demand medical facilities, and economical medical treatments.[3] Malaysian medical tourism is a significant and vital revenue source for the economy, which contributed 1.3 billion Malaysian Ringgit in the financial year 2022. Nonetheless, this figure remains far lower than the total 2019 revenue of 1.7 billion Malaysian Ringgit. Malaysian medical tourism is witness to this substantial difference, as the after-effect or supplementary effect of the COVID-19 pandemic.[4] Additionally, the MHTC requested that the medical tourism sector take advanced steps and adopt different practices to become an international hub providing optimal tourist medical services.[5] To fulfil this dream, hospitals in Malaysia must embrace tourists' expectations and focus on the factors boosting their service quality and branding. These factors include knowledge of the country, social media, price reasonableness (PR), safety and security (SSA), accessibility (ACC), advertisement (ADM), and medical tourists' word-of-mouth. These factors were reported in a recent study on Chinese medical tourists' behavioural intentions (BI).[1]

Perceivably, hospitals in Malaysian regions such as Sarawak should improve their service quality and client satisfaction. This improvement would enhance their brand image and visitors' BI.[6-7] The aforementioned studies used the concepts of brand image, service quality, satisfaction, and BI. Accordingly, this study combined an original empirical model and suggestions to design the following research objectives: i) to investigate the influence of factors associated with hospital branding on defining medical tourists' BI in Malaysia, ii) to elucidate the mediation of hospital brand image (HBI) and trust (HBT) to increase medical tourists' BI in Malaysia and, iii) to evaluate the catalytic influence of medical tourists' perceived quality and satisfaction ' to enhance their favourable BI to visit.

To fulfil these research objectives, the researcher targeted hospitals in a specific Malaysian region (Sarawak). The target popu-

lation was medical tourists from Indonesia. Data were collected using a self-administered questionnaire. A total of 344 valid responses were obtained.

This study will be an important information source for formulating strategies and means of conduct for Sarawak hospitals to identify, enhance, and increase their services. Consequently, all factors triggering HBI and HBT will increase. Hence, reputations of the hospitals will flourish among medical tourists, who will demonstrate a greater tendency for visiting BI. Furthermore, this study enhances current theoretical knowledge of the factors facilitating medical tourists' mindset. Increased convenient service features would increase HBI and HBT in Malaysia and maximise BI.

Literature review

Theoretical background

This study is based on Berry's relationship marketing theory.[8] The theory emphasises building and maintaining strong, long-term relationships with customers and other stakeholders. Furthermore, the theory promotes a customer-centric approach and centres the customer in all marketing efforts. Moreover, the theory states that understanding the customer's needs and preferences is a key determinant of long and sustainable relationships. This focus on building long and sustainable relationships with consumers represents a long-term approach to nurturing and retaining consumers. The principles of this theory were applied to this study on the factors influencing hospital branding and its relationship with medical tourists' BI. Regarding healthcare centre branding efforts, the relationship marketing theory encourages prioritising patient, directing all marketing efforts towards building a strong and positive brand image, and positively influencing the patient's perceived service quality (PSQ) and BI.

Determinants of HBI

Brand image refers to the consumers' perception of a specific brand or product.[9] The HBI refers to patients' perceptions of the quality of services offered at a hospital. This study focused on the three determinants of HBI: ACC, PR, and hospital-generated social media (HSM).

The ACC

The ACC is considered a key HBI component. Talarposhti[10] conducted a mixed study to investigate healthcare branding in healthcare centres in Iran. Reportedly, brand accessibility was a key determinant of healthcare branding. Easy access to healthcare services encourages consumers to use healthcare services and maintain their health. Moreover, socio-economic circumstances significantly influence a person's access to healthcare services. Therefore, healthcare branding should focus on providing fair accessibility to all community members. Similarly, Erlinda and Ratnawati[11] analysed the influence of ACC on HBI in hospitals in Indonesia. The authors reported that ACC also significantly influenced HBI and considered it the dominant factor among the observed variables in forming the HBI. Thus, the following hypothesis (H) was proposed.

H1: The ACC significantly influences HBI

The PR

Most consumer markets perceive higher prices as a determi-

nant of high quality. Nevertheless, the healthcare industry frequently challenges this notion of price–quality relation. Thus, interpreting price and quality in the healthcare industry is typically challenging. Therefore, there is a lack of consensus on the costs, prices, and quality of healthcare services offered the healthcare industry in Malaysia. Beauvais et al.[12] reported that higher pricing was not associated with high-quality service, thus implying that PR is a desired factor by healthcare facility consumers. Havidz and Mahaputra[13] reported the significant influence of perceived price on the brand image of any product, which implied that better price perception leads to a better brand image. Therefore, the following hypothesis was suggested:

H2: The PR significantly influences HBI.

Social media platforms offer opportunities for consumers to exchange brand-related opinions.[14] Cham et al.[15] analysed the factors influencing HBI in the Malaysian medical tourism industry. The authors reported the significant influence of HSM on HBI, which suggested the significant influence of social media on consumer perception regarding HBI. Nonetheless, the authors also reported the substantial influence of both HSM and user-generated social media (USM) on hospital branding. The findings supported the notion that medical tourists rely on social media platforms to obtain information on healthcare facilities. Similarly, Cham et al.[3] reported the significant influence of HSM on medical tourists' perception of HBI. Accordingly, the following hypothesis was formulated.

H3: The HSM significantly influences HBI.

Determinants of HBT

Brand trust represents the brand's promise to meet its consumers' expectations and enhances customer loyalty. Brands build trust with consumers by proving their potential to meet consumers' expectations. Brand trust also represents brand reliability.[16] The healthcare sector is responsible for providing high-quality services to its consumers. Consumers prefer to obtain sufficient information on the services offered at hospitals before visiting them, which demonstrates the importance of the honesty and sincerity of hospitals in establishing their consumers' trust.[17] This study focused on the three determinants of HBT: SSA, ADM, and USM.

The SSA

Elizar et al.[18] studied the interplay between customer satisfaction, service quality, customer trust, and customer loyalty in Indonesian hospitals. While the authors did not exclusively investigate the influence of SSA on customer trust in hospitals, the findings considered prioritising patients' comfort and safety as a key customer satisfaction determinant. Building trust is a significant factor in sustaining a positive relationship with consumers. Healthcare centres must assure customers of the safety of the procedures offered to gain their trust.[19] The World Health Organisation (WHO)[20] reported that ~1 in every 10 patients is harmed in healthcare facilities. Furthermore, an unsafe environment within hospitals leads to over three million deaths annually. The common reasons underlying these outcomes are the use of unsafe equipment and procedures, medical errors, and mismanagement. As such, the healthcare sector should focus on medical tourists' SSA. The following hypothesis was suggested as follows.

H4: The SSA significantly influences HBT.

The ADM

Mohamed[21] delineated several means by which the healthcare sector could build trust with patients. A key factor influencing the trust between the hospital and its consumers was the use of emotional advertisement campaigns. The author suggested that hospitals should use persuasive and emotional advertisements to arouse empathy and hope among patients. This approach could aid the hospitals in building trust with the patients. Cham et al.[3] investigated the influence of advertisements on HBT in Chinese medical tourism and reported a positive influence of advertisements on medical tourists' HBI. The aforementioned influence positively affected medical tourists' trust in the hospital brand. Heskiano et al.[22] also reported the significant influence of social media advertisements on brand loyalty and trust in the Indonesian healthcare sector. Thus, the following hypothesis was proposed.

H5: The ADM significantly influences HBT.

The USM

Agnisarman et al.[23] investigated the influence of USM on consumers' healthcare facility selection. Resultantly, user-generated anecdotal information on the healthcare facility significantly influenced consumers' choices. The findings implied that USM significantly influenced HBT. Abuhmeidan[24] investigated the influence of digital marketing on the brand equity of hospitals in Jordan. The authors considered two digital marketing dimensions (firm- and user-generated social media content) and reported the significant influence of user-generated content on hospital brand equity. Accordingly, the following hypothesis was formulated.

H6: The USM significantly influences HBT.

Influence of HBI and HBT on PSQ

Healthcare facility PSQ refers to visitors' views of the quality of services provided.[25] Cham et al.[15] analysed the influence of HBI on PSQ in the Malaysian healthcare sector and reported the significant influence of HBI on medical tourists' PSQ. The results suggested patients' heavy reliance on HBI to interpret the quality of service offered at hospitals. Thus, hospitals can utilise their brand image to positively influence medical tourists' PSQ. Similarly, Sukawati[26] analysed the influence of HBI on the PSQ of consumers of healthcare facilities in Bali, Indonesia, and reported the significant influence of HBI on PSQ. Thus, the authors reaffirmed the importance of maintaining a good HBI to sustain positive PSQ among medical tourists. Taneja[27] also reported the positive influence of HBI on healthcare facility PSQ. Gur[28] considered customer trust a key PSQ determinant in the healthcare sector and indicated the importance of nurturing trust between the hospital and its consumers to promote positive PSQ. There is a significant research gap on the influence of HBT towards PSQ. Thus, the following hypotheses were formulated based on these observations.

H7: The HBI significantly influences PSQ.

Influence of PSQ on BI

Cham et al.[15] reported the positive influence of PSQ on medical tourists' BI regarding healthcare centres in Malaysia. The authors suggested that PSQ significantly influenced consumers' intention to use specific healthcare facilities. The PSQ might also result in medical tourists repeatedly visiting a specific medical centre. Similarly, Liao et al.[29] reported the significant influence of PSQ on consumers' BI to purchase a product or service. Shahid Iqbal et al.[30] confirmed the positive influence of PSQ on consumers' BI in the Pakistani service sector. Similarly, Prentice and Kadan[31] reported the positive influence of PSQ on consumers' BI to re-visit and purchase a service in the service sector. Fatima etv al.[32] suggested the significant influence of PSQ on patients' behavioural attitudes and loyalty intentions. The authors indicated that the patients' decisions to re-visit a healthcare facility relied on their perception of the service quality at the facility. Agyapong et al.[33] examined the effect of PSQ on patients' BI in Ghana and reported a positive and significant correlation between the two variables. The authors suggested that hospitals should focus on designing consumer-driven strategies to meet their expectations on healthcare service quality. Therefore, the following hypothesis was proposed.

H8: The PSQ significantly influences BI.

Mediating effect of patient satisfaction (PS)

Zehra and Arshad[17] studied the mediating effect of customer satisfaction on the relationship between service quality and customers' intentions to use healthcare facilities. The authors reported a true mediation, which indicated that the patients' PSQ significantly influenced their intentions to use healthcare services when they were satisfied with the service offered. Therefore, PS is the outcome of their reception and perception of a healthcare service. The healthcare sector aims to achieve higher PS levels by providing high-quality healthcare services. Thus, a patient's perception is crucial in evaluating services and their satisfaction with these services. Patients frequently experience satisfaction and pleasure due to high-quality service and the hospital staff's positive demeanour. The higher satisfaction level will influence patients' loyalty and intentions to re-visit the hospital.[34] Similarly, Paradilla et al.[35] suggested that patients' satisfaction with service quality significantly influenced their loyalty, which represented their intentions to re-visit the hospital. Ajmal and Risal[36] confirmed the significant influence of PS on their loyalty to the hospital. The authors suggested that satisfaction with the service quality encouraged patients to re-visit the hospital. Cham et al.[15] highlighted the mediating effect of medical tourists' satisfaction on the relationship between PSQ and BI. The authors indicated that healthcare facilities should focus on providing high-quality services and achieving higher levels of PS to influence patients' BI to re-visit the hospital. Therefore, the following hypothesis was suggested

H9: The PS mediates the correlation between medical tourists' PSQ and BI.

Materials and Methods

Figure 1 indicates the research framework of the present study.
This study used the quantitative research-based deductive approach, with the target sector being hospitals in Malaysia. Data were obtained using a self-administered questionnaire survey. The data were obtained using non-probability sampling. Medical tourists at various hospitals in Malaysia were invited to participate in the survey.

Sampling and data collection

This study strictly followed all research ethics and guidelines during data collection. For example, all the individuals were requested to participate voluntarily. The research information and the purpose of data collection were first communicated to the participants. Subsequently, data were only collected from the volun-

tary participants upon ensuring their trust, confidentiality, and anonymity. Given the involved data sample, the sample size was 340 as suggested previously.[37] Typically, surveys record a low response rate. Furthermore, some collected responses have > 25% missing values. Therefore, the desired sample size was achieved by distributing a total of 500 questionnaires in person to the respondents. The questionnaire contained demographic questions related to the respondent's age, gender, education, marital status, number of visits to Malaysia, and how they arranged their visit to Malaysia. Key questions on the study variables are described in the following section. As this study focused on Indonesian medical tourists, the researcher translated the questionnaire into Malay and obtained data via convenience sampling.

Measures of the constructs

The main questionnaire body was designed following previous empirical studies, which included the complete phrases of variable items. The ACC was measured using four items,[15] PR was measured using three items,[38] HSM was measured using a three-item scale,[39] SSA was measured using a five-item scale,[15] USM was measured using three items,[39] and ADM was measured using six items.[40] The mediators HBI, HBT, PSQ, and PS were measured using three items,[15] four items,[41] a five-item scale,[15] and four items,[42] respectively. Lastly, the dependent variable BI was measured using a three-item scale.[43] Data were analysed by using the SPSS and CB-SEM.

Results

Respondents' demographic profile

Table 1 presents the 344 respondents' demographic profile. Most respondents were male (52.3%), between 25 and 30 years old (52.3%), married (61%), and visited the hospitals for clinical treatment options (58.1%).

Multicollinearity analysis

In a multiple regression model, a higher correlation between multiple independent constructs results in the issue of multicollinearity.[44] In a regression analysis, the variance inflation factor (VIF) is a measure of multicollinearity.[45] The VIF threshold is 3 or 5.[46] Table 2 presents the VIF results. The resultant values against all construct items were under both threshold ranges, thus indicating the absence of multicollinearity in the dataset.

Confirmatory factor analysis

The estimated linkages in the reflective measurement model were outer loadings. The outer loadings indicate the direction from the latent constructs to their indicators.[47] In structural equational modelling analysis, the outer loadings value ranges from 0 to 1, and the cut-off value is 0.6.[48] Table 3 presents the outer loading results, where all values in the table were >0.60. One ACC item, two ADM items, one PS item, two SSA items, and one PSQ item were deleted following low factor loading values. The reliability of variables was measured using Cronbach's alpha (α). The Cronbach alpha threshold value is >0.70. Table 3 presents the internal consistency reliability results. The ACC, ADM, BI, HBI, HBT, HSM, PR, PS, PSQ, SSA, and USM alpha value was 0.88, 0.59, 0.83, 0.90, 0.87, 0.68, 0.84, 0.92, 0.81, and 0.85, respectively. Therefore, the dataset was reliable. Convergent validity is used to examine how closely the measurement tests are associated with the tests used to measure identical variables. Convergent validity is mea-

sured with two indicators: average variance extracted (AVE) and composite reliability (CR). The AVE and CR value should be >0.50 and >0.70 to ensure the existence of true reliability in the dataset.[49] Table 3 presents the convergent validity results. All resultant values met the standard criteria, thus indicating that the data were reliable, normally distributed, and accurate.

Discriminant validity

Discriminant validity determines whether theoretically unrelated variables are actually unrelated.[50] In this study, discriminant validity was measured using Fornell-Larcker's (1981) criterion. Discriminant validity is evaluated by comparing the AVE square root of each variable.[51] The results in Table 4 demonstrate that the AVE square root value of each variable was higher than the latent construct correlations. Thus, the results established discriminant validity.
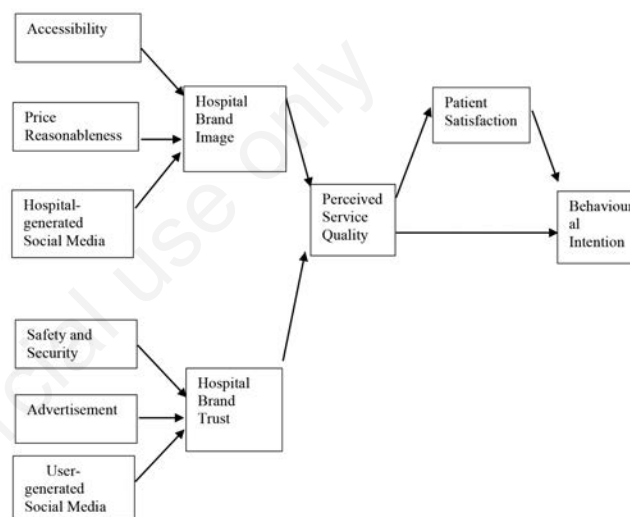
Figure 1. Proposed research model.

Table 1. Respondents' demographic profile.

Characteristic	Frequency	Percentage
Gender		
Male	180	52.3
Female	164	47.7
Total	344	100.0
Age (years)		
25–30	110	34.7
31–35	80	24.2
36–40	90	26.1
40–45	48	14.05
> 45	16	0.05
Total	344	100.0
Marital status		
Married	210	61
Unmarried	134	39
Total	344	100.0
Treatment type		
Clinical	200	58.1
Surgical	94	27.4
Other	50	14.5
Total	344	100.0

R²

The R² results in Table 5 demonstrate that BI, HBI, HBT, PS, and PSQ contributed 25.8%, 31.4%, 54.8%, 23.3%, and 46.5% to their relevant variables, respectively.

Measurement model

Figure 2 depicts the measurement model of the study.

Model fitness

The goodness of model fit was measured using the indicators SRMR and NFI. SRMR is defined as, "the difference between the observed correlation and the model implied correlation matrix."[52] NFI is defined as "NFI is given by the relative location of the current model between the saturated model with TS=0 and the independence model TI."[53] According to Dijkstra and Henseler (54), "d_ULS (*i.e.*, the squared Euclidean distance) and d_G (*i.e.*, the geodesic distance) represent two different ways to compute this

Table 2. Multicollinearity analysis.

	VIF
ACC2	2.363
ACC3	2.714
ACC4	2.386
ADM3	1.369
ADM4	2.678
ADM5	3.436
ADM6	2.506
BI1	1.823
BI2	1.97
BI3	1.942
HBI1	2.548
HBI2	3.642
HBI3	3.358
HBT1	2.217
HBT2	3.319
HBT3	3.417
HBT4	3.015
HSM1	2.245
HSM2	2.981
HSM3	2.304
PR1	1.353
PR2	1.321
PR3	1.326
PS2	1.859
PS3	2.051
PS4	2.212
PSQ2	3.057
PSQ3	3.856
PSQ4	3.608
PSQ5	3.257
SSA1	1.423
SSA2	2.54
SSA3	2.406
USM1	2.058
USM2	2.202
USM3	2.023

Table 3. Outer loading values.

	Items	Alpha	CR (rho_a)	CR (rho_c)	AVE
ACC2	0.902	0.882	0.887	0.927	0.808
ACC3	0.904				
ACC4	0.891				
ADM3	0.715	0.859	0.86	0.906	0.707
ADM4	0.875				
ADM5	0.904				
ADM6	0.858				
BI1	0.859	0.831	0.831	0.898	0.747
BI2	0.869				
BI3	0.864				
HBI1	0.904	0.909	0.909	0.943	0.846
HBI2	0.933				
HBI3	0.922				
HBT1	0.852	0.913	0.913	0.939	0.793
HBT2	0.91				
HBT3	0.906				
HBT4	0.895				
HSM1	0.872	0.876	0.88	0.924	0.801
HSM2	0.924				
HSM3	0.889				
PR1	0.77	0.686	0.693	0.826	0.613
PR2	0.766				
PR3	0.812				
PS2	0.857	0.800	0.843	0.905	0.762
PS3	0.874				
PS4	0.887				
PSQ2	0.891	0.843	0.927	0.948	0.819
PSQ3	0.918				
PSQ4	0.907				
PSQ5	0.904				
SSA1	0.819	0.926	0.818	0.888	0.726
SSA2	0.878				
SSA3	0.858				
USM1	0.888	0.813	0.859	0.91	0.77
USM2	0.874				
USM3	0.871				

Note: ACC, accessibility, PR, price reasonableness, HSM, hospital-created social media, SSA, safety and security, USM, user-generated social media, ADM, advertisement, HBI, hospital brand image, HBT, hospital brand trust, PSQ, perceived service quality, PS, patient satisfaction, BI, behavioural intention.

discrepancy". The SRMR should be < 0.08,[55] while the NFI should be ≥ 0.90.[56] Table 6 demonstrates that the values of the model were not a good fit overall. The NFI value was < 0.90, as the sample size was small according to item-to-response theory. The small sample size primarily resulted from item deletions based on low factor loading values.

Structural equation modelling (SEM)

The hypotheses were evaluated using SEM. Table 7 presents the SEM results, where the hypotheses were supported with a p-value < 0.05. There was support for the association between ACC and HBI (p=0.00), ADM and HBT (p=0.007), HBI and PSQ (p=0.00), HBT and PSQ (p=0.00), HSM and HBI (p=0.00), PR and HBI (p=0.048), PS and BI (p=0.00), PSQ and BI (p=0.00), PSQ and PS (p=0.00), and SSA and HBT (p=0.00). Nevertheless, the relationship between USM and HBT was not supported (p=0.436). The PS mediation of PSQ and BI was supported (p=0.00).

Discussion

This study examined the aspects that influence hospital branding and its relevance to medical tourists' BI. The examination of multiple hypotheses clarified the complicated dynamics of medical service quality and its influence on patients' intentions. The first three hypotheses were supported and addressed the influence of ACC, PR, and hospital-created social networking sites on HBI. This result indicated that these variables are important in determining medical tourists' opinions of the reputation of a hospital. The findings highlighted the necessity of hospitals having quick access, affordable pricing, and a strong internet presence to develop a favourable reputation, which is critical for recruiting medical tourists. The H4–6 focused on the influence of SSA, ADM, and USM on HBT. The H4 and H5 were supported whereas H6 was not. This finding suggested that SSA measures and efficient advertising initiatives contribute to the development of trust among
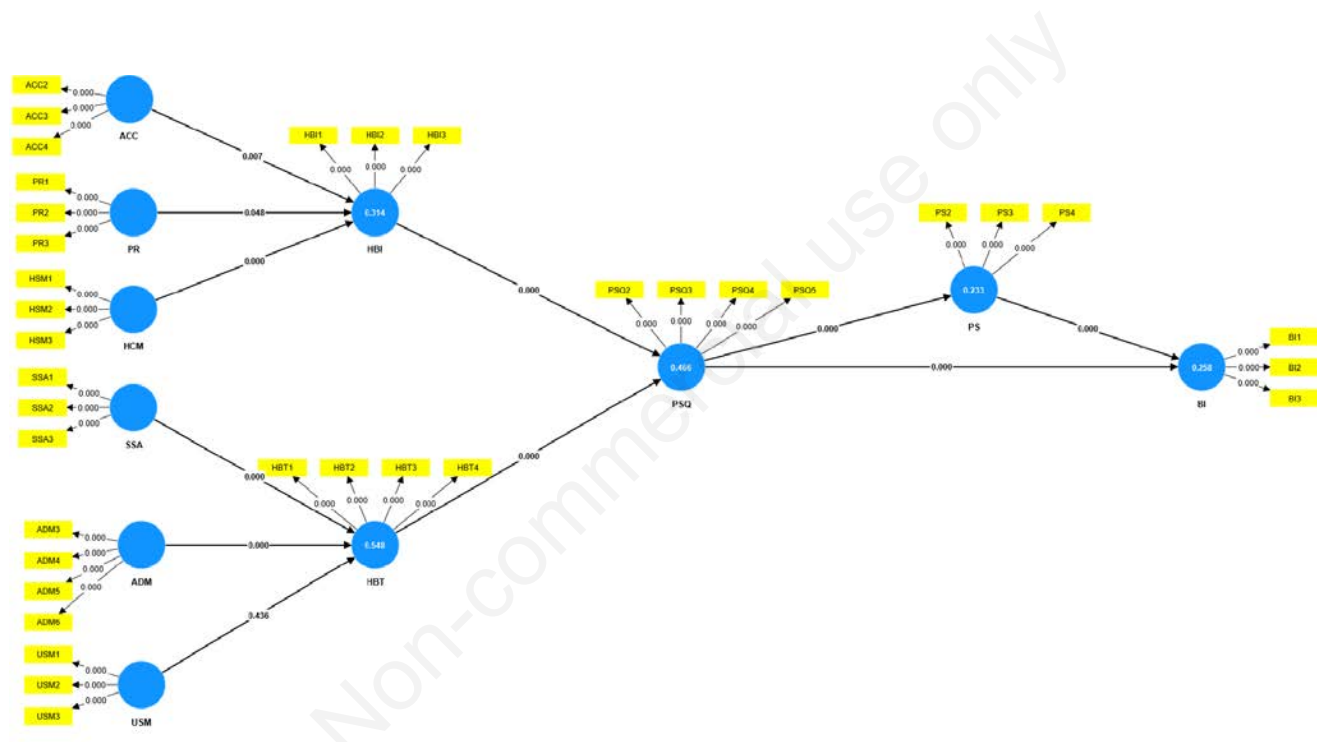

Figure 2. Measurement model.

Table 4. Discriminant validity.

	ACC	ADM	BI	HBI	HBT	HSM	PR	PS	PSQ	SSA	USM
ACC	0.899										
ADM	0.598	0.841									
BI	0.597	0.468	0.864								
HBI	0.382	0.611	0.374	0.92							
HBT	0.441	0.593	0.386	0.532	0.891						
HSM	0.461	0.583	0.421	0.529	0.866	0.895					
PR	0.196	0.301	0.211	0.261	0.326	0.298	0.783				
PS	0.772	0.653	0.471	0.511	0.558	0.493	0.242	0.873			
PSQ	0.445	0.615	0.394	0.533	0.644	0.687	0.45	0.482	0.905		
SSA	0.403	0.547	0.35	0.557	0.694	0.721	0.419	0.487	0.81	0.852	
USM	0.373	0.419	0.373	0.741	0.355	0.354	0.272	0.379	0.371	0.367	0.878

healthcare visitors. Nonetheless, user-generated social networking content had limited influence, which indicated that hospitals should emphasise other aspects to increase trust. The H7 and H8 referred to the influence of HBI and HBT on PSQ, and both were supported. This result suggested that a favourable HBI and HBT positively influence PSQ. Medical visitors tend to correlate these aspects with the standard of medical services, which emphasises the necessity for brand image management and trust development. Additionally, H9 stated that PSQ substantially influences healthcare tourists' BI. The H9 suggested that a favourable impression of service standards leads to a greater desire to return or recommend the hospital facility. The H9 emphasises the importance of service standards in influencing healthcare tourists' behaviour. Lastly, H10 stated that PS mediated PSQ and BI. This hypothesis suggested that patient happiness is key to narrowing the disparity between PSQ and medical tourists' aspirations. A satisfied customer is more inclined to display good BI, which highlights the need for hospitals to prioritise patient happiness. The current findings coincided with previous study outcomes on healthcare tourism and medical service standards. The validation of the influence of ACC, PR, and hospital-created online platforms on HBI paralleled previous research. Cham *et al.*[15] emphasised the importance of these aspects

in determining patients' views and preferences when selecting healthcare facilities. Similarly, accepting the assumptions of security and protection and the efficacy of commercials corresponded with Yasui[57] emphasis on the importance of trust-building and marketing methods in healthcare environments. Furthermore, the established ideas on the influence of HBI and HBT towards PSQ correlate with Cham[3] study, which demonstrated the interdependence of these factors. Moreover, the findings supported a previously documented association between PSQ and client happiness in assessing medical tourists' BI. Rahman[6] emphasised the significance of these elements in anticipating healthcare tourists' intentions. The author highlighted that enhanced service experiences and satisfied customers increase the probability of return visits or recommendations.

Implications

This study provided the following theoretical contributions and practical implications.

Theoretical contributions

This study on the variables affecting hospital branding and its association with medical tourists' BI clarified the key variables influencing medical tourists' decision-making procedures, which eventually affect the healthcare sector and hospital administration. The study underscored the significance of hospital advertising in the healthcare tourism framework. This finding highlighted the importance of hospital credibility, image, and overall quality of offerings when attracting medical visitors. This insight would aid hospitals in recognising the necessity of good branding initiatives to succeed in the international medical tourism industry.

The study also identified and examined the characteristics influencing medical visitors' decision-making. These characteristics include service quality, confidence, word-of-mouth, and hospital online presence. Understanding these characteristics would allow hospitals to focus on specific elements that connect their branding efforts with potential healthcare tourists. Additionally, this study examined the relationship between hospital advertising and medical tourists' BI. The findings demonstrated that the favourable perception of a brand to attract medical travellers and increase their desire to select a specific healthcare facility. Such selection has important consequences for hospitals aiming to engage in the healthcare tourism industry.

Table 5. The R² values.

	R²	Adjusted R²
BI	0.258	0.254
HBI	0.314	0.308
HBT	0.548	0.544
PS	0.233	0.23
PSQ	0.465	0.462

Table 6. Model fitness.

	Saturated model	Estimated model
SRMR	0.061	0.163
d_ULS	2.497	17.683
d_G	2.632	3.667
Chi-square	4168.457	5178.151
NFI	0.664	0.583

Table 7. Discriminant validity.

Relationship	Original sample	Sample mean	Standard deviation	T statistic
ACC -> HBI	0.168	0.168	0.062	2.719
ADM -> HBT	0.292	0.295	0.058	5.03
HBI -> PSQ	0.264	0.265	0.066	3.972
HBT -> PSQ	0.505	0.503	0.061	8.32
HSM -> HBI	0.421	0.421	0.067	6.28
PR -> HBI	0.103	0.107	0.052	1.973
PS -> BI	0.366	0.368	0.055	6.69
PSQ -> BI	0.218	0.218	0.059	3.715
PSQ -> PS	0.482	0.483	0.046	10.425
SSA -> HBT	0.519	0.517	0.052	9.993
USM -> HBT	0.042	0.042	0.054	0.78
PSQ -> PS -> BI	0.177	0.178	0.031	5.751

Practical implications

This study presented useful recommendations for hospitals and healthcare organisations aiming to succeed in medical tourism. Hospitals can establish tailored branding and promotional strategies by identifying the factors influencing medical visitors' decision-making. Moreover, hospitals may invest to enhance service quality, establish trust, and increase internet presence, all of which are key to attracting and maintaining medical visitors. This understanding can increase patient influx and income. Additionally, the findings can aid healthcare tourism destinations and politicians in developing appropriate rules and laws. Politicians as well as healthcare tourism destination countries may use the data to promote and assist hospitals in successful marketing and service quality, which would strengthen the social economy and healthcare system. Conversely, underperforming hospitals may be guided on areas for development and result in broad expansion of the healthcare tourism industry. Moreover, the implications for medical tourism are extensive. Medical tourists can make educated decisions on their medical options with an awareness of the key factors influencing the reputation and service level of a hospital. Such consciousness can result in better outcomes, increased satisfaction, and a better experience for healthcare tourists, which would benefit the industry image.

Limitations and future directions

The findings are time-sensitive and not adjusted for healthcare tourism sector changes or customer habit variations over time. Continuous data and tracking were not conducted to precisely record patterns and shifts. Furthermore, cultural differences and changes in healthcare tourism were not adequately considered. Diverse cultural norms, demands, and healthcare systems reflected varying effects on the highlighted parameters. Future research should examine how cultural variations affect medical tourists' perceptions of hospital advertising and BI. Comparative research across diverse cultural settings could elucidate the complexity of healthcare decisions. Furthermore, the study overlooked external factors, such as political stability, socio-economic situations, and public health emergencies (pandemics), which could substantially influence medical visitors' decision-making. Moreover, future research should investigate the influence of new technologies, which include telemedicine, artificial intelligence, and machine learning, on modifying hospital marketing and healthcare tourists' selections. Future studies should examine the influence of these advances on the standard and perception of medical services. Lastly, future studies should investigate the influence of public–private collaborations on hospital marketing and healthcare tourist recruitment. Such studies should examine the effect of legislation in fostering such alliances.

Conclusions

This study investigated the elements influencing hospital branding and its association with healthcare tourists' BI. The tested hypothesis yielded useful insights into the mechanisms of healthcare marketing and its influence on medical visitors' decision-making processes. The findings indicated that ACC, PR, and HSM contribute to the establishment of a favourable HBI, which affects PSQ. Furthermore, SSA and ADM were key influencers of HBT, which then affected PSQ. Nevertheless, the findings did not support the idea that USM substantially influenced HBT, which emphasised the importance of hospitals prioritising regulated channels of communication. Reputation, trust, quality of service, and patient happiness were highly correlated, all of which were critical to attain healthcare tourists' goals. Then, the study discussed its implications, limitations and presented research directions to subsequent scholars.

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