Patients’ intent to revisit with trust as the mediating role:
lessons from Penang Malaysia

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Abstract
Purpose – This study aims to examine hospital image, perceived medical quality, relationship marketing and word-of-mouth as the determinants of patients’ intent to revisit private hospitals in Penang, based on the theory of planned behaviour.

Design/methodology/approach – A quantitative study comprising a self-administered questionnaire was distributed to domestic and international patients at the airport, private hospitals and hotels located in Penang. The partial least squares structural equation modelling (PLS-SEM) approach was used to analyse and test the research hypotheses.

Findings – The results show that cognitive components (i.e. hospital image and perceived medical quality) do not have any significant influence on patients’ intent to revisit, while affective components (i.e. relationship marketing) and behavioural components (i.e. word-of-mouth) are important in increasing patients’ intent to revisit private hospitals in Penang, Malaysia. Trust has no significant mediating effect between predictor variables and patients’ intent to revisit, but it has significant association with affective and behavioural components.

Practical implications – The findings provide insights to medical marketing teams in promoting and increasing patients’ intent to revisit their respective hospitals and for the governments to sustain and enhance medical tourism in their countries.

Originality/value – This study is one of the few studies that looks at the relationship between hospital image, perceived medical quality, relationship marketing, word-of-mouth and patients’ intent to revisit private hospitals in Penang, Malaysia. This study also explored the direct and indirect effects of trust on patients’ intent to revisit that was still limited.

Keywords Theory of planned behaviour, Relationship marketing, Word-of-mouth, Medical tourism, Hospital image, Patient’s intent to revisit, Perceived medical quality

Paper type Research paper

Introduction
Medical tourism has grown remarkably since the 1990s, as a result of globalisation, whereby people travel to developed nations to seek medical care such as annual health screenings, cosmetic surgery, coronary bypass and dental treatment from less developed nations. Reasons such as high costs of treatment and long waiting lists in home countries, affordable international air travel with the introduction of budget airlines, favourable economic exchange rates and a growing number of aging and affluent post-war baby-boomers have stimulated the demand and supply of medical tourism, especially in Asia (Connell, 2013, 2006; Cham et al., 2016; Ormond et al., 2014; Ormond and Sulianti, 2017; Al-Amin et al., 2011). Different definitions of medical tourism can be found in the study conducted by Connell (2013), but in this study, medical tourism refers to patients who travel to and seek medical services in Penang, Malaysia.

According to Weekly (2016), “medical tourism globally has a value exceeding USD 439 million with a projected growth rate of up to 25 per cent year-over-year for the next 10 years.”
Medical tourism contributes 0.4 per cent of Thailand’s gross domestic product (GDP), while tourism overall accounts for around 6 to 7 per cent and is considered the third most important economic driver in Thailand. India receives over 500,000 international patients every year and is expected to become a US$9bn worth medical tourism destination by 2020 (Times, 2017). In Malaysia, after the 1998 Asian financial crisis, the government embarked on the promotion of medical tourism to achieve economic diversification (Connell, 2013). This is reflected in the increase of the number of hospital facilities from 35 in 2009 to 78 in 2014 (Tang and Nathan Abdullah, 2016). Malaysia Healthcare Travel Council (MHTC) expects the medical tourism industry in the country to grow a further 20-30 per cent and generate US$330mn in revenue in 2017 (FMT, 2017). Numerous efforts have been made by the multiple countries to promote medical tourism. For instance, the Malaysia government included medical tourism in the country’s five-year development blueprint, 11th Malaysia Plan, 2016-2020 (Seow et al., 2017), Dubai built Healthcare City (DHCC) to capture the Middle Eastern markets and Saudi Arabia paired medical tourism with pilgrimage (Hajj) visits to the city (Connell, 2013). For Penang, tourism is the second main source of income after manufacturing. Medical tourism accounted for 10.6 per cent of the total tourism as of 2016 (Monthly, 2017).

In view of its significant contribution to economic development, it is of interest for academics and professionals to identify factors that contribute to increasing patients’ intent to revisit and to provide insight to medical tourism authorities implementing effective medical tourism marketing. Fischer (2014) stated that healthcare management is looking for approaches to overcome the obstacles of growing consumer and market pressures. Even though there is much literature on medical tourism, research that focuses on patients’ intent to revisit started only around 2010 (Fan et al., 2010; Serirat, 2010). Past studies focused on factors such as medical service quality, satisfaction, empathy and assurance, word-of-mouth (WOM), social media, hospital brand image, ethical conduct and pricing in relation to patients’ intent to revisit (Lee and Kim, 2017; Choi et al., 2017; Abubakar et al., 2017; Cham et al., 2016; Hwang and Sim, 2016; Lan et al., 2016; Ko and Kim, 2011; Al-Refaie, 2013; Seow et al., 2017; Han and Hyun, 2015). However, the study of the effect of trust on intent to revisit for patients was still limited. This study is intended to bridge this gap in current literature by focusing on trust as the mediating role in the relationship between these factors and patients’ intent to revisit. As mentioned in the study conducted by Connell (2006, p.1094):

The biggest hurdle that medical tourism has had to face, and continues to face, is the challenge of convincing distant potential visitors that medical care in relatively poor countries is comparable with that available at home, in outcome, safety and even in dealing with pain thresholds.

Therefore, this study assumes that trust plays an important role in mediating these relationships. Besides, Fischer (2014) concluded that the integration of patients’ feelings, thoughts and emotions about hospital positioning has the potential to reshape hospital marketing management. Thus, this study uses attitude towards behaviour in the theory of planned behaviour (TPB) as a foundation to explore the influence of patients’ attitude towards hospital image, perceived medical quality, relationship marketing and WOM on their intent to revisit. This study looks into three attitude components, which are cognitive (i.e. hospital image and perceived medical quality), affective (i.e. relationship marketing) and behavioural (i.e. WOM) (Ajzen and Fishbein, 2005). Thus, the objectives of this study are outlined as follows:

- to investigate the relationship between hospital image, perceived medical quality, relationship marketing, WOM and patients’ intent to revisit; and
- to identify whether trust has any mediating effect between hospital image, perceived medical quality, relationship marketing, WOM and patients’ intent to revisit.
This paper is organised as follows: the following section begins with a literature review, conceptual framework and hypotheses development with regards to hospital image, perceived medical quality, relationship marketing, WOM and patients’ intent to revisit. Then, it is followed by methodology and the results of this study. Finally, this paper ends with a discussion and conclusion on the significant findings and practical implications of this study.

## Literature review, conceptual framework and hypotheses development

### Integrated behavioural model

According to the TPB (Ajzen, 1985, 1991), intention is shaped by attitude towards the behaviour (AT), subjective norms (SN) and perceived behavioural control (PBC) over the behaviour. TPB is the extension of the Theory of Reasoned Action (TRA). AT is described as a personal judgement in favour of or opposed to performing a certain behaviour and it is a function of behavioural beliefs and the outcome of evolution (Lee et al., 2012). SN refers to an individual’s perception of social approval or disapproval for performing the behaviour. PBC refers to an individual’s perception of ease or difficulty of performing the behaviour of interest. The model of TPB has been applied in various studies such as dietary supplement consumption (Azila Mohd Noor et al., 2014), alcohol consumption (Cooke et al., 2016), entrepreneurial intention and action (Kautonen et al., 2015), and thus, it is a powerful tool used to predict and explain individual behaviour.

The influence of attitude on behaviour is guided largely by TRA that assumes that an individual’s behaviour follows reasonably from their beliefs, attitudes and intentions (Ajzen and Fishbein, 2005). Attitude is the predisposition of an individual to evaluate an object in a positive or negative manner. Attitudes, thus, include affective, behavioural and cognitive components (Ajzen and Fishbein, 2005; Katz, 1960). According to Katz (1960), the affective component refers to an individual’s feeling of like or dislike for the object; the behavioural component refers to an individual’s action or behaviour towards the object; and the cognitive component describes the attitude of the object such as its characteristics. Various studies have explored these three components to understand the behavioural intent to revisit such as in tourism (Zhang et al., 2014; Tosun et al., 2015; Xu et al., 2018), brand loyalty (Ahn and Back, 2017), online shopping (Fang et al., 2016) and consumer’s augmented reality application (Javornik, 2016). However, the study on attitudes on the revisiting intention of patients was still limited (Wu et al., 2016). Thus far, Han and Hwang (2016) investigated the impact of cognition, affect and conation images on healthcare hotel travellers, while Kim and Um (2016) studied the influence of perceived values and risks and their relationship in affecting medical tourists on their attitudes towards medical tour services in terms of cognitive and affective judgment.

**Intent to revisit.** Intent to revisit in this study refers to the willingness of patients to return to the same hospital for their healthcare service. Intent to revisit is usually explained by TPB in literature. It is believed that patients will only revisit the hospital if they believe:

- such behaviour will lead to an outcome they value (AT);
- their important social connections will value and approve of the behaviour (SN); and
- they have the necessary resources, abilities and opportunities to perform such behaviour (PBC) (Lee et al., 2012).

Different predictor variables have been used by the latest scholars to study the determinants of patients’ intent to revisit such as medical service quality (Al-Refaie, 2013; Hwang and Sim, 2016; Lee and Kim, 2017; Das and Mukherjee, 2016; Loureiro, 2017; Juhana et al., 2015),
WOM (Abubakar et al., 2017), hospital brand image (Cham et al., 2016; Loureiro, 2017; Juhana et al., 2015), nursing service (Choi et al., 2017), brand awareness and authenticity (Das and Mukherjee, 2016; Loureiro, 2017) and patients’ demographic factors (Lan et al., 2016). The study investigates the predictor variables in terms of patients’ attitudes towards affective components (i.e. relationship marketing), behavioural components (i.e. word of mouth) and cognitive components (i.e. hospital image and perceived medical quality). Measurement scales for the variables were adopted from previous studies. The following explains four predictor variables and one mediating variable selected in this study and their respective reasonings.

Hospital image. Brand image is a set of beliefs held about a specific brand. Based on TPB, brand image can be classified as behavioural beliefs that might create a favourable or an unfavourable attitude towards the brand. It is part of the cognitive components because it is the characteristics of an object. The medical tourists’ perceived image of any destination depends on the utilitarian benefits like a particular type of treatment a hospital is famous for versus the cost of treatment in that place (Das and Mukherjee, 2016). Hospital image is suggested as a combination of patients’ perception and attitude towards a hospital (Gay, 1986). It is believed that hospital image is a compilation of results from an evaluation process that include customer’s thoughts, feelings and previous experiences in the hospital, then this turning into a spiritual impression in the customer’s memory (MacInnis and Price, 1987; Yuille and Catchpole, 1977). Hospital image is important for the hospital to stay sustainable and competitive (Wu, 2011).

Al-Refaie (2013) studies hospital image in terms of how its performance and facilities affected patient satisfaction and, thus, intent to revisit. Loureiro (2017) explores hospital image in terms of its servicescape on customer’s emotions, perceived quality, image and feeling of pleasure. In Malaysia, Cham et al. (2016) link WOM and social media to hospital brand image and tested this relationship with perceived service quality, satisfaction and behavioural intention, while Seow et al. (2017) look at perceived benefits, perceived costs and resource availability with intent to revisit. Based on the past studies, hospital image had significant effect on patient satisfaction and behavioural intention. Thus, H1 has been developed as follows:

H1. Hospital image positively influences patients’ intent to revisit.

Perceived medical quality. Perceived quality refers to an individual’s evaluation of the overall quality of a product or service compared with alternatives. It is a perception of the customer on the characteristics of an object and, therefore, affect the cognitive component in AT. In medical tourism, perceived medical quality is related to the state-of-the-art infrastructure, modern equipment, friendly procedures and safety of the hospital, privacy and confidentiality of the patients and the natural assets of the hospital (Das and Mukherjee, 2016). Perceived medical quality in the context of paramedic staff, healthcare professional and services have a significant effect on patients’ intent to revisit (Han and Hyun, 2015). Al-Refaie (2013), Hwang and Sim (2016) and Lee and Kim (2017) study the influence of hospital service quality on patients’ satisfaction and intent to revisit, while Das and Mukherjee (2016) investigate the quality from the aspect of ambiance, food and accommodation, people, infrastructure, facility and safety. Because of its significance, H2 was developed as follows:

H2. Perceived medical quality positively influences patients’ intent to revisit.

Relationship marketing. Relationship marketing is adopted from customer relationship management (CRM) that focuses on improving customer interaction to foster better brand loyalty. Companies which stress on relationship marketing focus on customer loyalty and long-
term customer engagement instead of short-term customer acquisition and individual sales (Berry, 1983; Grönroos, 1994). According to Huang et al. (2013), hospitals increasingly adopt a patient-focused marketing orientation. Sornsri (2015) highlights the importance of relationship marketing in developing sustainable medical tourism. Relationship marketing is one of the affective components in AT because it refers to an individual’s feeling of like or dislike for the staff in the hospital. Patients’ attitude towards a hospital’s relationship marketing affects their intent to revisit. If the hospital can create a strong, even emotional connection with patients, then it can lead to intent to revisit and promotion by WOM (Berry and Parasuraman, 2004). So far, limited studies investigated the relationship between relationship marketing and intent to revisit in medical services (Han, 2013; Han and Hwang, 2013; Lee et al., 2012; Lai et al., 2016; Al-Refaie, 2013). Price et al. (1995) also show that customer satisfaction on medical quality is affected by interaction with service personnel, and Lin and Lu (2010) find that relationship marketing has a positive impact on trust and, thus, consumer’s purchase intention. Based on these past findings, this study tested H3 as follows:

**H3.** Relationship marketing positively influences patients’ intent to revisit.

**Word-of-mouth.** There are many definitions of WOM as outlined by Goyette et al. (2010); most scholars considered WOM as an informal and a non-commercial exchange of post-purchase information (Martin, 2017). In this study, WOM is considered as an important source of information (Hinz et al., 2012; Allsop et al., 2007; Soares et al., 2012) that has a significant influence on consumer attitude and behaviour (Mazzarol et al., 2007; Gajendra et al., 2012; Soares et al., 2012). WOM is explored as a behaviour component in AT, as it is the outcome or patients’ behaviour towards the hospital after their visit. Limited number of published studies have confirmed the positive relationship between WOM and intent to revisit a hospital (Abubakar et al., 2017; Cham et al., 2016; Yeoh et al., 2013). Ko and Kim (2011) suggest the hospital should avoid negative WOM to enhance customer loyalty. Yeoh et al. (2013) and Kim and Lough (2007) focus on outpatients’ demographic characteristics, and Cham et al. (2016) study WOM as a predictor variable for hospital brand image. Lin and Lu (2010) suggest that WOM shows positive effect on the influence of trust on generating purchase intention. Recent studies even emphasise the importance of eWOM compared with face-to-face WOM (Martin, 2017; Abubakar and Ilkan, 2016). WOM was examined in this study because of its powerful influence on healthcare behaviour that can help to reduce patients’ cost by avoiding doctor shopping (Hether et al., 2014; Otani et al., 2009). Recognising the importance of WOM, the following H4 was tested:

**H4.** Word-of-mouth positively influences patients’ intent to revisit.

**Mediating effect: Trust.** The initial studies of trust in healthcare have focused on the patients’ interpersonal trust in their physician (Anderson and Dedrick, 1990; Thom and Campbell, 1997; Thom et al., 2004). Interpersonal trust is defined as a person’s belief that the physician’s words and actions are credible and can be relied upon (Anderson and Dedrick, 1990). This study conceptualises trust as “existing when one party has confidence in an exchange partner’s reliability and integrity” (Morgan and Hunt, 1994, p.23). Trust plays an important role in sustaining customer-provider relationships (Chiu et al., 2012; Han and Hyun, 2013) and within organisations and their members (Kramer, 1999). Furthermore, trust will lead to loyalty regardless of the magnitude of the level of relationship between customer and provider (Agustin and Singh, 2005). Morgan and Hunt (1994) study the importance of trust and commitment on the effectiveness of relationship marketing, where Garbarino and Johnson (1999) conclude that trust and commitment are the main determinants of intent to
revisit of those high relational customers. Trust also plays a vital role in determining customer’s intention to WOM and repurchase (Cristiane and Kenny, 2012). A positive significant relationship has been confirmed between trust and intent to revisit in other contexts, such as hotels’ (Kim et al., 2009), brand trust by customers (Jung et al., 2014; Chaudhuri and Holbrook, 2001; Limbu et al., 2012) and online group buying (Che et al., 2015; Chiu et al., 2012). Trust also has been studied as a mediator in other fields such as within business incubators (Vedel and Gabarret, 2014), ethical leadership and organisational citizenship behaviour (Lu, 2014), hotel website quality and online booking intention (Wang et al., 2015) and corporate social responsibility and firm performance (Yu and Choi, 2014). In healthcare studies, trust is significant in wholesaler and pharmacy relationship (Jambulingam et al., 2009) and in medical tourism (Moliner, 2009; Han, 2013). Mellina and Cristiane (2013) confirm the positive impact of affect and cognition on patients’ trust in high consequences exchanges in healthcare settings, and Han and Hyun (2015) find that trust and satisfaction acted as significant mediators between perceived quality and intention to revisit Korea for medical care. Overall, these previous empirical studies support the notion that trust plays a vital role in the behavioural intention formation. The following hypotheses have been developed to test the relationship between patients’ attitude towards behaviour and trust, trust and patients’ intent to revisit and trust as the mediating effect. Figure 1 shows the research conceptual framework:

**H5.** Hospital image positively influences trust.

**H6.** Perceived medical quality positively influences trust.

**H7.** Relationship marketing positively influences trust.

**H8.** Word-of-mouth positively influences trust.

![Figure 1. Research conceptual framework](image-url)
H9. Trust positively influences patients’ intent to revisit.

H10. Trust mediates the relationship between hospital image and patients’ intent to revisit.

H11. Trust mediates the relationship between perceived medical quality and patients’ intent to revisit.

H12. Trust mediates the relationship between relationship marketing and patients’ intent to revisit.

H13. Trust mediates the relationship between word-of-mouth and patients’ intent to revisit.

Methodology

Research sample
The study used the random sampling method. A total of 250 individual domestic and international patients at Medical Healthcare Travel Council’s lounge (Penang International Airport), 6 private hospitals and numerous hotels in Penang were approached to answer the questionnaire. The study used G*Power 3.1.9.2 software (Faul et al., 2007) to suggest the sample size and the analysis showed that the statistical power for 250 subjects was 0.99 for the detection of moderate effect size ($p < 0.05$). The study tried to perform cluster sampling by selecting different geographic locations such as the airport, hospitals and hotels. Penang was chosen because hospitals in Penang, in addition to hospitals in Kuala Lumpur, are among Southeast Asia’s first recipients of the US prestigious Joint Commission International (JCI) certification. This paper focused on patients who visited private specialised hospitals in Penang such as Bagan Specialist Centre, Carl Corrynton Medical Centre, Hospital Lam Wah Ee, Island Hospital, Loh Guan Lye Specialist Centre and Gleneagles Penang Medical Centre. Domestic patients refer to Malaysian citizens who are from the other states of Malaysia such as Kedah, Perak, Kelantan, Terengganu, Perlis, Kuala Lumpur and Johor but come to Penang for medical services. International patients refer to non-Malaysian citizens who travel to Penang for medical services.

Research design
This paper was a quantitative study that used the cross-sectional method to explain the relationship between dependent variable and independent variables with a mediating effect. A self-administered structured questionnaire was used to collect the data from the respondents. Two sets of data were collected based on demographic characteristics of the respondents and structured answers from the respondents to test the research hypotheses. The questionnaire was prepared in two languages (i.e. English and Bahasa Indonesia) because most of the international patients in Penang are from Indonesia. The questionnaire in Bahasa Indonesia was translated and reviewed by two reviewers who originated from Indonesia to ensure the fluency and accuracy of the questionnaire before distributing to the respondents. Respondents were given the objective and definition of key terms listed in the questionnaire to ensure their understanding before answering the questionnaire. This was to ensure the validity of the collected data. The study used five-point Likert scale ranging from (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree). The data collection period was about three months. Table I shows the measurement of variables used in this study. Revisit intention was used to measure the patients’ intent to revisit that
had strong impact on sustainable medical services and medical tourism and trust was used to understand the factors underlying them.

Data analysis method
The data analysis method used in this study was based on Sekaran and Bougie (2016). First, descriptive analysis was used to breakdown the characteristics of respondents to gain a better understanding of respondents’ distribution. Then, a measurement model and a structural model were used to test the construct validity and research hypotheses. IBM SPSS software (Version 22) was used for data entry and preliminary analysis, while Smart PLS (Version 3.2) was used to test the measurement and structural model.

In this study, factor loading, average variance extracted (AVE), composite reliability (CR) and Cronbach’s alpha were used to test the indicator, convergent and reliability validity,
while Heterotrait-Monotrait (HTMT) ratio was used to test the discriminant validity. Convergent validity is important to confirm the degree of confidence the study has that a trait is well measured by its indicators, whereas discriminant validity is the degree to which measures of different traits are unrelated in the model. Bootstrapping procedure was also used in this study to allow assigning measurement of accuracy, in terms of bias, variance, confidence intervals and prediction errors to sample estimates. Finally, structural equation modeling (SEM) was used to test the hypotheses.

Results

Respondents data
The response rate was 96 per cent or 240 questionnaires, which were completed and returned by the respondents on the same day and, thus, contributed to the high response rate. Table II summarises the respondents’ demographic characteristics.

Measurement model

Table III presents the results of indicator, internal consistency, convergent and discriminant reliability. Indicator reliability analysis was conducted by examining the factor loadings of each item on their respective variable. The factor loading of all six variables used in this study exceeded the rule of thumb ranging from 0.75 to 0.95. In terms of internal consistency, the results of CR and Cronbach’s alpha of each variable are high (i.e. from 0.80 to 0.95), which exceeded the minimum threshold of 0.70. Thus, the model demonstrated internal consistency and reliability. As for the convergent validity, the variables were tested to analyse the degree of agreement of each indicator in measuring the same variable. The AVE values for the six variables ranged from 0.61 to 0.90 and exceeded the minimum threshold of 0.5, indicating that the model demonstrated convergent validity.

The last step in assessment of the measurement model was to test the discriminant validity by measuring the Heterotrait-Monotrait (HTMT) ratio. Discriminant validity typically measures the distinctiveness between each variable and it should be less than 0.90 to be acceptable. The results of the HTMT ratio in this study were ranging from 0.718 to 0.767, indicating that the items measured are distinct from each other and established discriminant validity.

Structural model

Variance Internal Factor (VIF) measurement showed that there is no potential collinearity problem in this study because all the variables have a VIF value lower than 3.3 (Diamantopoulos and Siguaw, 2006). The Coefficient of Determination ($R^2$) was used to measure the goodness of fit of the model. Hair et al. (2016) has set the range value of the impact of $R^2$ as 0.25 for weak, 0.5 for moderate and 0.75 for substantial. The $R^2$ for the direct effect (first stage) was 0.522, meaning that 52.2 per cent of the variance in the intent to revisit can be explained by hospital image, perceived medical quality, relationship marketing and WOM. The $R^2$ for the indirect effect (second stage) was 0.588 after the mediating effect of trust.

Effect size analysis ($f^2$) is a method to measure whether there is a substantive impact of a particular exogenous variable on an endogenous variable. Cohen (1988) has set up the range value of the impact of $f^2$ as 0.02 as a small effect, 0.15 as a medium and 0.35 as a large effect at the structural level. Table IV presents the results of $f^2$ and VIF assessment. Table IV indicates that variable WOM has moderate effect size on intent to revisit.

Path analysis was used to examine the developed hypotheses and bootstrapping analysis was used to validate the theoretical model that was developed using smart PLS. This study
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nationality</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indonesian</td>
<td>105</td>
<td>44.00</td>
</tr>
<tr>
<td>*Malaysian</td>
<td>120</td>
<td>49.80</td>
</tr>
<tr>
<td>Japanese</td>
<td>3</td>
<td>1.20</td>
</tr>
<tr>
<td>Britain</td>
<td>3</td>
<td>1.20</td>
</tr>
<tr>
<td>Others</td>
<td>9</td>
<td>3.80</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
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</tr>
<tr>
<td>Male</td>
<td>92</td>
<td>38.30</td>
</tr>
<tr>
<td>*Female</td>
<td>148</td>
<td>61.70</td>
</tr>
<tr>
<td><strong>Age (year old)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;20</td>
<td>7</td>
<td>2.90</td>
</tr>
<tr>
<td>20-30</td>
<td>61</td>
<td>25.30</td>
</tr>
<tr>
<td>*31-40</td>
<td>73</td>
<td>30.30</td>
</tr>
<tr>
<td>41-50</td>
<td>56</td>
<td>23.20</td>
</tr>
<tr>
<td>51-60</td>
<td>33</td>
<td>13.70</td>
</tr>
<tr>
<td>&gt;60</td>
<td>10</td>
<td>4.10</td>
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<tr>
<td><strong>Monthly Income (RM)</strong></td>
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</tr>
<tr>
<td>&lt;2,000</td>
<td>53</td>
<td>22.00</td>
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<td>*2,000-5,000</td>
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<td>52</td>
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<td>7,501-10,000</td>
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<tr>
<td>&gt;10,000</td>
<td>26</td>
<td>10.80</td>
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<tr>
<td><strong>Expenditure amount of your last medical bill (RM)</strong></td>
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<td></td>
</tr>
<tr>
<td>*&lt;1,000</td>
<td>83</td>
<td>34.40</td>
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<td>1,000-5,000</td>
<td>77</td>
<td>32.00</td>
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<td>39</td>
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<tr>
<td>&gt;10,000</td>
<td>41</td>
<td>17.00</td>
</tr>
<tr>
<td><strong>Last time you visited private hospital for treatment/healthcare</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Within 1 month ago</td>
<td>80</td>
<td>33.20</td>
</tr>
<tr>
<td>Within 6 months ago</td>
<td>63</td>
<td>26.10</td>
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<tr>
<td>Within 1-2 years ago</td>
<td>53</td>
<td>22.00</td>
</tr>
<tr>
<td>Within 3-4 years ago</td>
<td>23</td>
<td>9.50</td>
</tr>
<tr>
<td>Within 5 years ago or more</td>
<td>21</td>
<td>8.70</td>
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<tr>
<td><strong>Referral channel for the medical services at the hospital</strong></td>
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<td></td>
</tr>
<tr>
<td>*Family/relatives</td>
<td>90</td>
<td>37.30</td>
</tr>
<tr>
<td>Friends</td>
<td>33</td>
<td>13.70</td>
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<tr>
<td>Family/relatives, friends</td>
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<td>13.70</td>
</tr>
<tr>
<td>Physician referral</td>
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<tr>
<td>Family/relatives, friends, physician referral</td>
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<td>4.10</td>
</tr>
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<td>Family/relatives, friends, website</td>
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<td>3.75</td>
</tr>
<tr>
<td>Website</td>
<td>7</td>
<td>2.90</td>
</tr>
<tr>
<td>Agent</td>
<td>6</td>
<td>2.50</td>
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<tr>
<td>Others</td>
<td>42</td>
<td>17.50</td>
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<tr>
<td><strong>Type of patients</strong></td>
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</tr>
<tr>
<td>*Operation/Surgery</td>
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<td>18.75</td>
</tr>
<tr>
<td>General check-up</td>
<td>37</td>
<td>15.42</td>
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<tr>
<td>Woman disease</td>
<td>19</td>
<td>7.92</td>
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Table II.
Demographic characteristics of respondents
ran the structural model in two stages. The first stage was to test the direct effect of independent variables (i.e. hospital image, perceived medical quality, relationship marketing and WOM) on intent to revisit (H1 to H4 and H9) and on trust (H5 to H8). The second stage tested the indirect effect of independent variables on intent to revisit with trust as a mediator (H10 to H13).

Based on Table V, relationship marketing (H3: t-values = 1.98, p < 0.05) and WOM (H4: t-values = 6.78, p < 0.05) showed significant direct positive relationship with intent to revisit, whereas perceived medical quality (H6: t-values = 3.02, p < 0.05), relationship marketing (H7: t-values = 4.66, p < 0.05) and WOM (H8: t-values = 4.51 and p < 0.05) have strong and direct positive association with trust. WOM played the most important role in patients’ intent to revisit the hospital. There is no direct relationship found between trust and intent to revisit (H9: t-values = 1.11, p < 0.05). There is no significant mediating effect of trust on hospital image, perceived medical quality, relationship marketing and WOM and intent to revisit (i.e. H10 to H13).

Discussion and conclusion
The study first investigated the relationship between hospital image, perceived medical service, relationship marketing, WOM and patients’ intent to revisit, followed by examining the mediating effect of trust on these relationships. Based on the results, first, we notice that hospital image is not positively related to patients’ intent to revisit. The result from this study demonstrates a negative relationship between hospital image and patients’ intent to revisit. This contradicted with existing findings (Cham et al., 2016; Lan et al., 2016; Hwang and Sim, 2016). A possible reason is because the sample in this study included domestic patients who might not put so much emphasis on hospital image. The second observation from this study is that there is no significant positive relationship between perceived medical quality and patients’ intent to revisit. The result is consistent with past literature (Berry Characteristic Frequency (%) Ear, nose and throat 17 7.08 Hypertension/Heart 16 6.67 Stomach problem 15 6.25 Cancer treatment 10 4.17 Dental 9 3.75 Nerve problem 9 3.75 Diabetes 9 3.75 Cosmetic surgery 5 2.08 Others 49 20.41

Table II. Notes: Others in Nationality refers to American, Australian, Bangladeshi, Dutch, Filipino, Iraqis, Korean and Pakistanis (i.e. one respondent). *means the dominant category under each item
It is noticed that when patients feel that hospital employees are honest and trustworthy, they want to build a continuous relationship with the hospital, thereby exhibiting stronger intent to revisit. This study also demonstrates that patients have a higher intent to revisit when they are more willing to recommend the hospital to their friends and relatives, which is consistent with the findings from Yeoh et al. (2013), Cham et al. (2016) and Abubakar et al. (2017). This study concludes that patients put more focus on affective and behavioural components in their decision-making on intent to revisit.

In terms of the effect of cognitive components on trust, the study finds no significant relationship between hospital image and trust but significant relationship between perceived medical quality and trust. There is strong association between affective and behavioural components with patients’ trust. The results are in-line with Lien et al. (2014),
where they find interaction quality and outcome quality influence patients’ trust but not environmental quality. The positive association between relationship marketing and trust is also supported by past studies (Jambulingam et al., 2009; Moliner, 2009; Han and Hwang, 2013; Mellina and Cristiane, 2013).

However, the insignificant relationship between trust and patients’ intent to revisit is contradicted with past studies (Agustin and Singh, 2005; Garbarino and Johnson, 1999; Cristiane and Kenny, 2012). One of the possible explanations is because respondents might have past experiences with the private hospitals. Therefore, the element of trust might become less significant if the patients already built up good relationship with the medical staffs and willing to WOM. This phenomenon can be explained by the trust tipping point (Liu and Goodhue, 2012). It means when patients already convinced themselves that the private hospital is trustworthy enough, which could be based on their past experiences, patients will drop trustworthiness from their concerns and only consider other characteristics of the hospital in determining their revisit intention. Guassora and Gannik (2010) also confirm that trust is built when doctors and patients have demonstrated good

### Table IV.
**Assessment of $f^2$ square and variance internal factor**

<table>
<thead>
<tr>
<th>Exogenous variable</th>
<th>Endogenous variable</th>
<th>$f^2$</th>
<th>VIF</th>
<th>$f^2$</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital image</td>
<td>Revisit Intention</td>
<td>0.000</td>
<td>1.772</td>
<td>0.000</td>
<td>1.772</td>
</tr>
<tr>
<td>Perceived medical quality</td>
<td>Revisit Intention</td>
<td>0.006</td>
<td>2.333</td>
<td>0.047</td>
<td>2.228</td>
</tr>
<tr>
<td>Relationship marketing</td>
<td>Trust</td>
<td>0.018</td>
<td>2.533</td>
<td>0.129</td>
<td>2.243</td>
</tr>
<tr>
<td>Word-of-mouth</td>
<td>Trust</td>
<td>0.222</td>
<td>2.349</td>
<td>0.121</td>
<td>2.095</td>
</tr>
<tr>
<td>Trust</td>
<td></td>
<td>0.006</td>
<td>2.426</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table V.
**Summary of hypotheses results**

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Path Coefficient</th>
<th>t statistics</th>
<th>p-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H1$: Hospital Image $\rightarrow$ Revisit Intention</td>
<td>$-0.01$</td>
<td>0.23</td>
<td>0.409</td>
<td>Not supported</td>
</tr>
<tr>
<td>$H2$: Perceived Medical Quality $\rightarrow$ Revisit Intention</td>
<td>0.08</td>
<td>1.08</td>
<td>0.141</td>
<td>Not supported</td>
</tr>
<tr>
<td>$H3$: Relationship Marketing $\rightarrow$ Revisit Intention</td>
<td>0.15</td>
<td>1.98*</td>
<td>0.024</td>
<td>Supported</td>
</tr>
<tr>
<td>$H4$: WOM $\rightarrow$ Revisit Intention</td>
<td>0.50</td>
<td>6.78*</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>$H5$: Hospital Image $\rightarrow$ Trust</td>
<td>$-0.01$</td>
<td>0.12</td>
<td>0.452</td>
<td>Not Supported</td>
</tr>
<tr>
<td>$H6$: Perceived Medical Quality $\rightarrow$ Trust</td>
<td>0.21</td>
<td>3.02*</td>
<td>0.001</td>
<td>Supported</td>
</tr>
<tr>
<td>$H7$: Relationship Marketing $\rightarrow$ Trust</td>
<td>0.35</td>
<td>4.66*</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>$H8$: WOM $\rightarrow$ Trust</td>
<td>0.32</td>
<td>4.51*</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>$H9$: Trust $\rightarrow$ Revisit Intention</td>
<td>0.08</td>
<td>1.11</td>
<td>0.134</td>
<td>Not Supported</td>
</tr>
<tr>
<td>$H10$: Hospital Image $\rightarrow$ Trust $\rightarrow$ Revisit Intention</td>
<td>$-0.01$</td>
<td>0.09</td>
<td>0.464</td>
<td>Not supported</td>
</tr>
<tr>
<td>$H11$: Perceived Medical Quality $\rightarrow$ Trust $\rightarrow$ Revisit Intention</td>
<td>0.02</td>
<td>1.05</td>
<td>0.147</td>
<td>Not supported</td>
</tr>
<tr>
<td>$H12$: Relationship Marketing $\rightarrow$ Trust $\rightarrow$ Revisit Intention</td>
<td>0.03</td>
<td>1.02</td>
<td>0.154</td>
<td>Not supported</td>
</tr>
<tr>
<td>$H13$: Word-of-mouth $\rightarrow$ Trust $\rightarrow$ Revisit Intention</td>
<td>0.03</td>
<td>1.07</td>
<td>0.143</td>
<td>Not supported</td>
</tr>
</tbody>
</table>

**Note:** *Significant at $p = 0.05$ level
bonding. This could also explain why trust has no significant mediating effect on all the predictor variables and patients’ intent to revisit. Patients are willing to revisit the hospital if they have confidence that the medical professionals and employees at this hospital are very competent and friendly. The patients’ trust is built upon perceived medical quality, relationship marketing and their willingness to WOM. These results contributed to existing literature by implying the novelty of trust in hospital image, perceived medical quality, relationship marketing and WOM, that is still limited.

In conclusion, this study hopes to provide several insights to medical tourism authorities and also related authorities in improving medical tourism to achieve sustainable growth. It is noted that relationship marketing and WOM are significant factors to determine patients’ intent to revisit. Even though trust does not have significant mediating effect between hospital image, perceived medical quality, relationship marketing, WOM and patients’ intent to revisit, trust is still having direct relationship with perceived medical quality, relationship marketing and WOM. This study also opens up new avenues that can be included in future studies such as to include other states in Malaysia to gain a more in-depth and wider scope of patients’ intent to revisit and run separate results and comparison between domestic and international patients to provide a better analysis.

Theoretical, managerial and social implications

The theoretical implication of this study suggested that in forming patients’ intent to revisit the hospital, affective and behavioural components in attitude towards behaviour play a more significant role than cognitive components. Relationship marketing and WOM contributed significantly to the patients’ behavioural intention than hospital image and perceived medical quality. Trust has a strong relationship with affective and behavioural components in attitude towards behaviours.

The results also imply a number of managerial and social implications that should be discussed. First, the research provides an interactive, comprehensive and multidimensional model to assess relationship marketing and WOM in determining patients’ intent to revisit that will benefit private hospitals in sustaining their business. The study suggests that the marketing and managerial teams in hospitals should focus on patients’ attitude towards relationship marketing and WOM, in developing patients’ intent to revisit. For instance, private hospitals should continue to create strong, even emotional connections with patients (Berry and Parasuraman, 2004). Top management in private hospitals should also send their staff to attend training related to relationship marketing. Besides, medical professionals and staff in private hospitals need to ensure they are of high integrity and create positive WOM. WOM is an important source of information and has a powerful influence on patients’ attitude and behaviours (Hinz et al., 2012; Mazzarol et al., 2007). While the world is moving towards digital marketing, positive WOM is an important element to build sustainable medical tourism.

Second, trust still plays a vital role in patients’ intent to revisit even though the mediating results are insignificant. There is still a strong association between perceived medical quality, relationship marketing, WOM and trust. It is important for private hospitals to establish “trust” between patients and hospital staff including physicians. The private hospitals need to ensure that they deliver according to the information and quality they advertise in brochures, on TV, magazines and websites. Physicians need to gain the patients’ trust by being honest and delivering their best services.

Third, the findings also offer insights to governments and related bodies such as Ministry of Health, Ministry of Tourism, Medical Healthcare Council and Penang Centre of Medical Tourism in terms of effectively promoting medical tourism in other countries. For
instance, they can emphasise on emotional or social bonding in their marketing element other than hospital image and perceived medical quality. This will help to increase national income and job opportunities in many areas such as hotels, tourism, local businesses and, thus, improve overall quality of life.

References


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