International Patients’ Travel Decision Making Process- A Conceptual Framework

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Abstract

Background: Role of information source, perceived benefits and risks, and destination image has significantly been examined in travel and tourism literature; however, in medical tourism it is yet to be examined thoroughly. The concept discussed in this article is drawn from well established models in tourism literature.

Methods: The purpose of this research was to identify the source of information, travel benefits and perceived risks related to movement of international patients and develop a conceptual model based on well-established theory. Thorough database search (Science Direct, utmj.org, nih.gov, nchu.edu.tw, palgrave-journals, medretreat, Biomedcentral) was performed to fulfill the objectives of the study.

Results: International patients always concern about benefits and risks related to travel. These benefits and risks form images of destination in the minds of international patients. Different sources of information make international patients acquaint about the associated benefits and risks, which later leads to development of intention to visit. This conceptual paper helps in establishing model for decision-making process of international patients in developing visit intention.

Conclusion: Ample amount of literature is available detailing different factors involved in travel decision making of international patients; however literature explaining relationship between these factors is scarce.

Keywords: Information sources, International patients, Affective image, Medical tourism

Introduction

Medical tourism is illustrated as occurrence in which individuals travel abroad to receive healthcare services (1). It is a multi-billion dollar industry and countries like India, Thailand, Singapore, Malaysia, Belgium, Costa Rica, Cuba, Dubai, Hungary, Israel, Jordan, South Africa and many others are being benefited in their economy by this recent phenomenon (2, 3).

The prime driving factors in medical tourism are increased medical costs, increased insurance premiums, increasing number of uninsured or partially insured individuals in developed countries, long waiting lists for procedures in countries having public healthcare system, availability of high quality services at affordable price, and cheaper airfare. Increased communication and internet access in developing countries are other supporting factors, which help patients to develop awareness about international travel for medical care (4-7).

Medical tourism industry is rapidly growing and diversified. Estimations can vary but still some of reliable sources claim; gross medical tourism revenue worldwide was more than US$ 40 billion in year 2004 and reached up to US$ 100 billion by year 2012 (8). In year 2007, it was estimated that
around 750,000 US residents traveled abroad. Accordingly, the base case estimated form 2007 to 2010 for the annual growth rate for outbound patients was 100 per cent in US (9). Forbes Business estimated around 1.25 million Americans were expected to travel outside for medical treatment in year 2014 (10).

After thorough review it was found that there is huge gap in literature available in medical tourism. Accounts detailing size and market of the industry are large in number yet there is scarcity of literature detailing about role and significance of different variables and linking them to form conceptual and theoretical framework which reflects decision making of international patients for taking part in medical tourism. Available literature explore various factors related to patients travel such as source of information, perceived risks, benefits of medical tourism and attributes of medical tourism destinations in sufficient amount but almost all of these related accounts are exploratory in nature and do not provide conceptual frameworks for testing. Many researchers (2,6,11,12) made calls to explore more about the decision making process based on conceptual models and test them empirically, so managers in medical tourism industry will be more acquainted about the needs and requirements of patients and design their future strategies accordingly and at the same time patients will also be benefited by receiving more quality services from the providers.

This article will draw a conceptual model based on patients’ source of information, perceived benefits, perceived risks, and medical tourism destination image with available literature that will be helpful to managers to draw their future course of action for competitive advantage and at the same time fulfill the gap in available literature.

Literature Review

International Patients’ Source of Information

The information sources also known as ‘stimulus factors’ or ‘image formation agents’ are the factors which control the perception and evaluation of image (13). Researchers addressed amount and diversity of information sources that expose individuals including information related to destination acquired through visiting particular place. Various studies performed on destination selection behavior of tourists explored that with combination of other different factors, information sources explored by individuals determined certain destinations as possible alternatives (13-17). Consumer behavior studies have already established the effects of source of information on purchase behavior (18). Amount and type of different information sources directly influence in development of cognitive image formation of destination (19). Source of information is a vital antecedent of destination image formation and destination choice intention (20).

There are four (i) professional advice (tour operators, travel agents, airlines) (ii) word of mouth (friends, relatives, social media) (iii) advertisement, and (iv) news/books/movies, different categories of type of information sources usually consider responsible for destination image formation (13), this article use these four categories of source of information for medical tourism destinations image formation.

Medical tourism facilitators are specialized in promotion of medical services abroad and offer supportive services such as assisting in selection of country and hospital, correspondence with doctors, travel arrangements, and arrangements of required paper work (21,22). Judgment of agent related to travel of their clients has high influence on decisions of clients (23). These facilitators serve as motivators also due to providing much-needed assistant to those unenthusiastic potential international patients who do not want to make their trip arrangements by their own. Many hospitals and clinics linked themselves with airlines to promote their services and offer discounts (2,5,24-26). Literature on medical tourism also reveals the role of practitioner in promotion of medical tourism mainly in underdeveloped countries due to various reasons such as lack of resources, unavailability of equipment, unavailability of infrastructure, unavailability of specialized manpower, and unavailability of medication (27-30).
Word of mouth and recommendation also has high influence in decision making of international patients in selection of destinations, hospitals, and doctors. Studies revealed large numbers of patients visit different countries for medical services were received recommendations from family members, friends, relatives, and colleagues (31-34). Websites and online forums created by experienced international patients to share their experiences with medical tourism are also considered as decisive source of information for those planning to take medical services abroad (35, 36). Printed materials are also used to promote the services by hospitals and clinics, for example Air Mauritius in-flight magazine provides details about procedures and services provided by the hair grafting clinics in Mauritius (2). Major medium of promotion of services by destination countries are trade fairs, travel markets/travel fairs, exhibitions, seminars and conferences to make potential patients informed about products and services offered by destinations. Some of these fairs and exhibitions are organized in collaboration with government agencies like TAT, Ministry of Foreign Affairs and Department of Export Promotion but some providers organized these events by their own in cooperation with local institutes, medical schools and universities (37).

Print media play an important role in promotion and advertising medical tourism in major source countries, publish attractive and evidence based stories in their different segments related to health and travel. Los Angeles Time first examined about the growth of medical tourism and marked it as trend. Later on New York Times and Los Angeles Times published stories of satisfied patients. Fox, CBS’s “60 Minutes” and CNN aired their segments on patients traveling to medical services. Magazines like Forbes and Wall Street Journal analyzed the business aspect of medical tourism as ‘brokers assertively marketed medical tourism to consumers, employers, and insurers’ (38).

International Patients’ Perceived Travel Benefits

Literature revealed that not every physical attribute of a destination has influence on image formation process. There is substantial inequality between descriptive dimensions of image and the attributes which are considered important for decision making within individuals (39). It is generally presumed in marketing that products with similar characteristics will be equally preferred by the consumers, however, attributes, which make the product similar to other products, will not be necessarily same at the time of actual purchase. The importance of attributes will be change according to the need of consumer (40). Wish (1971) cited in (40) found that despite have many similarities individual like one country and dislike another one. This is due to dimensions of liking may not be agree with the dimensions of similarity. Literature revealed that many researchers made distinction between physical and beneficial aspect of a product. Few researchers explained it as ‘Characteristic’ and ‘benefits’ to the physical and beneficial aspect of product respectively (41). Others explained physical attributes as ‘product offering’ and the benefits of products as ‘core product’ (42). In nutshell, the typology of different attributes of product has been proven fruitful because by this a product’s features can be segments into three groups as characteristic, beneficial, and imagery. There are three components of vacation destination image formation; (i) based on awareness: rely on the information sources, tourist believes about what a destination possesses, (ii) based on attitude: feelings and beliefs about destination, and (iii) based on expectations: expected benefits obtain from a tourist product (43).

The above mention discussion clearly indicates that process of image formation is not just emphasis on physical attributes of destination but also depends on benefits or consumption values of product or service consumers hold in their minds. Benefits offered by a product or service are considered as consumption value of the same (44). Sheth, Newman and Gross (1991) developed a theory known as theory of consumption values, which focuses on consumption values of products and services (45). The consumption value theory explains five components which influence the choice behaviour of consumers. These five components are ‘functional value’, ‘social value’, ‘emotional value’, ‘epistemic value’, and ‘conditional value’. The decision making of consumer choice...
behaviour can be based on all five or any of the five consumption values.

**Consumption Value of Medical Tourism**

Consumption value model define the characteristics of ‘functional value’ as price, credibility, and durability. Medical tourism destinations offer very low price for medical services to international patients in comparison to developed countries, and most of the time price of a procedure in India and other Asian destination is equal to $1/10^{th}$ of price in US or European countries (4, 46-48). Quality of medical services is one of the aspects which drive medical tourism high towards success. Most of the hospitals in India provide medical care services to international patients are certified by JCI which has reputation for hospital safety and regulatory management and recognized worldwide (49). High procedure success rate also forms image as quality medical tourism destination of various destinations at South Asian, African and Latin America (48, 49).

Although availability of literature explain ‘social value’ in medical tourism is less, little available literature clearly define the ‘social value’ factor with-in the patient groups especially from less developed regions. Social value aspect has been clearly observed in Yemeni patients travel abroad for treatment (27, 50). Senior male members of the household consider it as opportunity to increase their reputation in society. Availing expensive and prestigious medical care service in foreign countries and the associated sacrifices with it would make stories full of pride to tell to others (51). Kangas also observed ‘epistemic value’ hidden in motives of patients in Yemen to travel abroad. Most of the citizens of Yemen do not obtain resources to go for leisure travel at different parts of the world therefore traveling to foreign country for medical services provide chance to explore new territory, meet new people, and experience different social culture (27, 50). However, the concept of social value and epistemic value may not be associated with patients from developed regions.

Example of ‘emotional value’ is also available in literature related to medical tourism. Many researchers found in their studies that patients were highly motivated to travel to a particular destination due to emotional attachment with doctor, hospitals or destination (6, 50). Such as, many Omani patients visit Shiraz in Iran for treatment due to religious and cultural familiarity (52). This show ‘emotional value’ is also associated with international travel for medical care. ‘Conditional value’ can be considered as major factor pushes patients to travel abroad because medical needs are crucial and considered as unavoidable so have great conditional value.

**International Patients’ Perceived Travel Risks**

Perceived risks is defined as perception of an individual about the probability that a particular action will lead them to a situation exposed with danger more than acceptable limit, and will lead to influence travel decision-making (53). Security and safety at the destination is major issue of concern by the potential travelers. In travel decision, making perception of risks has utmost importance due to its tendency to alter destination selection (54). Researchers argued in favor of conducting study on perceived risks and destination image together (55).

In tourism literature, authors considered safety and security at destination as one of the pull factors caused destination image formation (13, 14, 56). However, in general cognitive image of destination does not engage with varied range of travel specific risks at destination and consider safety and risks as one of the many other attributes associated with destination (54). In addition, at the same time perceived risks are considered as potential inhibitors of travel (57). Researchers argued that using cognitive image to understand the dimensions of travel risks will be a conceptual mistake (58). Hence, perceived risks and cognitive image should consider individual variables for image related studies in travel.

Medical services are considered as ‘credence goods’ as the quality of these good cannot be assessed accurately even after consumption. This specific quality makes medical services as associated with high level of risk. Patients may vulnera-

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ble to many risks if consider to take medical services at medical tourism destinations. Researchers described six dimension of risks associated with health travelers visited Israel as ‘human-induced risks’, ‘financial risks’, ‘service quality risks’, ‘socio-psychological risk’, ‘natural disasters and car accident risk’, and ‘food safety problems and weather risk’ (59). After thorough literature review, authors categorized medical tourism destination perceived risks into three categories, as ‘physical-health related risks’, ‘service related risks’, and ‘destination related risks’.

Physical risks are considered as possibility of physical danger or injury detrimental to health where as health risks are considered as possibility to becoming sick while traveling or at destination (54). In medical tourism, international patients can be exposed with different diseases, so risk of contracting with a different kind of disease is even higher such as blood borne infection and infection due to improper screening and storage of blood, Deep-Vein Thrombosis (DVT) to those patients returning home after surgery, Language related risks and lose of money can also be a matter of concern while involved in medical tourism. Health risks for patients travel for organ transplant is even higher due to ignorance of standard protocol in donor selection (12, 60-62).

Literature revealed Few American Patients came in contact with non-tuberculous mycobacterial infection while taking treatment in hospitals abroad (63, 64). Researchers consider terrorism and kidnapping of rich patients and unstable economy of the destination as other risks associated with medical related travel. Apart from physical-health and service related risks, every destination have its own associated risks; risks of terrorism, crime, and personal safety are associated with medical tourism destination due to falling in middle and lower middle-income countries in development status (63).

**Medical Tourism Destination Image**

According to researchers, destination image is the total of ideas, beliefs, and impressions individuals possess about the attributes of destination and or activities available at a destination after processing information from various sources over a period of time (39, 65). Destination image as overall imagery picture individual obtains in his mind (66). In the early studies on travel, researchers used the concept of stereotypic image of a travel destination (67, 68). Later on, to understand the destination image formation process researchers developed an alternative framework and argued destination image consist of two components i.e. attribute based and holistic (66). Attribute based component refers to the perception of individual based on destination features and holistic component refers to imaginary mental image of destination.

Later on, a bi-dimensional model was presented by researchers to represent destination image, consist of cognitive and affective image component (13, 69). The cognitive component of destination image develops on knowledge and beliefs of destination based on tangible attributes, whereas affective component of image develops on emotions and feelings about the destination (70, 71). Researchers further studied affective image of destination and illustrate a four semantic differential scale to evaluate the affective component of destination image based on arousing-sleepy, pleasant-unpleasant, exciting- gloomy, and relaxing-distressing (70). Furthermore, cognitive component of destination image is an antecedent of affective component (72). Thus, a distinctive image of a destination forms in tourists’ mind based on strength and weakness of attributes of cognitive and affective components.

Image of destination formed in consumer’s mind is defined as aggregate of attributes and beliefs (73). It means if tourist has enough level of positive beliefs about attributes of destination it is expected that s/he has developed favorable attitude towards destination. Negative feelings towards beliefs and attributes form negative attitude towards destination. The process of destination image formation is described as mental construct of representation of destination based on information cues transmitted by image inducing agents chosen by individual (19).

After thorough literature review authors identified four dimension of cognitive medical tourism destination image based of different attributes pro-
jects by different medical tourism destinations, as; ‘medical amenities’, ‘general infra-structure’, ‘tourism attractions’, and ‘social environment’. Most of the hospitals’ websites are dominated with images stressing on sophistication, advanced technology, cleanliness and efficiency. Majority of these sites are in English highlight the variety of procedures, price, accreditation of hospitals, and affiliation of doctors, qualified and smart staff, lavishly furnished accommodations, and testimonials of past patients, and efficiency with different languages of staff. Command on technology is rarely missed in any form of marketing (12, 46, 74, 75). Based on mentioned qualities, medical tourism destinations project themselves as most suited destination for potential travelers (28, 32, 76).

To nullify the quality related concerns of international patients hospitals and medical tourism facilitators/brokers emphasis on the markers of quality services. Physicians’ trainings in world reputed institutes like National Institute for Health, Johns Hopkins University, University of Birmingham, and other reputed universities are highlighted in the profiles of physicians. Prominent display of training and expertise of doctors achieve two goals; established trustworthiness and mitigate concerns related to risk. The accreditation awarded by JCI is promoted by hospitals as mark of offering medical care of American standards (2, 28, 77). Collaboration with prestigious hospitals in US and Europe in also indicate seriousness towards providing quality services to patients by medical tourism hospitals at different destination (21, 78).

Distinguishing that major market drivers such as lack of health insurance and unaffordability are influencing patients to take procedures abroad, websites of brokerages predominantly display the comparative cost charts and price schedules. Most of the destinations claim providing significant cost services through different sources of promotion (5, 79, 80). Most the promotions and advertisements show smiling, well-dressed and empathetic medical staff taking care of international patients. Many hospitals focus on multi-lingual staff providing services to patients speaking different major languages of the world. Language is also an influencing factor in decision making in selection of destination (11, 37).

Facilities and quality of accommodation to international patients and their companions play important role in attracting the foreign patients. Essential supportive services like local transportation services, food, communication, and others are also important in attracting the patients to a destination. Thailand for example attracts more patients from developed countries because of already established quality tourism infrastructure offer excellent accommodation and hospitality services to international patients (81). Despite offering excellent medical care to international patients by hospitals in India most of the international patients visit India worry about accommodation quality, food hygiene, and personal safety (82, 83). Tourism and vacation aspect is also a pull factors for international patients. Potential tourists prefer to receive medical services to the places where they are also interested for holidaying (75, 84). After focusing on cost and reliability the third focus in medical tourism website is tourism opportunities.

**Methods**

Prominent databases (2013, 2014, 2015) have been searched to obtain desire literature related to medical tourism including Science Direct, utmj.org, nih.gov, nchu.edu.tw, palgrave-journals, medretreat, Biomedcentral and so on and the keywords used are medical tourism, information sources, medical travel, health travel and so on. Google search was performed to get latest data related to medical tourism. To know in detail about the variables used in the framework scientific research databases were searched such as sciencedirect, sagepub, jcu.edu.au, tamu.edu, etc. The key words used to find out research variables as well as relationship between research variables were destination image, destination information sources, beneficial image, perceived travel risks, cognitive image, affective image, consumption values and so on.

To obtain data about medical tourism various types of available literature were reviewed such as
industry reports, market research reports, media reports and internet sources, however for identification and explanation of variables scientific literature published in reputed journals only were included.

Results

The theory of planned (TPB) is an established and comprehensively tested model details the relationship between beliefs, attitude, intention, and actual behavior of consumers (85). The model is perfectly applied in a variety of studies including leisure and tourism travel, and hospitality (36, 86-88). These research studies emphasize on the factors such as motivations, information sources, attitudes, and visit intentions, thus authors argue that attitudinal theory provides a sound foundation to understand travel intentions of international patients and underpin the conceptual model discussed in this article. Studies explained that consumers access more information in case of high association of risks or benefits or both in a particular act (89, 90) and perform rigorous information search in case of planning first time trip (91) because first time trip is associated with unknown risks as well as unknown leisure activities. In general consumer behavior practices risk-handling activity increases in case of high level of perceived risks. Importance of risk handling activity also determines by associated benefits gained after engaging with risk taking activity (92). The benefits of information search includes possibility of finding superior alternative to those already considered and the reduction in risk achieved from eliminating inferior, but a priori uncertain, alternatives (93). With the discussion of above literature related to tourism it could be assumed that medical tourism information sources will have positive influence on perceived travel benefits of international patients. Whereas, information sources of medical tourism will negatively influence perceived travel risks of international patients.

Destination image is considered as perceptions or impressions of destination held by tourists with respect to the expected benefit or consumption values. The benefits sought by the travelers are highly associated with the image of destination and the affective image of destination is largely highly influenced by the motivations/benefits sought by individuals (13, 44). Attributes of a tourist destination are represented by its characteristics (94). The affective image of a destination is more positive in individual's mind when emotions evoked by the place coincide with the benefits sought (95). Risks and constraints associated with travel have significant impact on destination image formation at the time of early decision-making process (96). According to researchers, two dimensions significantly influence cognitive and affective image of destination (58). On the basis of previous studies in tourism literature it can be assumed that perceived travel benefits of international patients will positively influence the destination image, whereas perceived travel risks of international patients will negatively influence the destination image.

Intention of visit related to travel is considered as tourists’ perceived likelihood to visit particular destination within a specific time period (97). Thus, to be closely correlated to the travel behavior intention of visit believes as an important outcome variable in tourism research (16, 97). Intention to visit a destination is highly influenced by cognitive/perceptual and affective evaluation (98). Destination image is a direct antecedent of perceived quality, satisfaction and revisit intention and recommendation (99). According to researchers, there is significant theoretical and empirical link between cognitive destination image and behavioral intention (100). Based on above discussion it could be assumed that image of medical tourism destination will positively influence visit intention of international patients.
Fig. 1: Conceptual Framework – International Patients’ Travel Decision Making

Conclusion

The article is a sincere effort by authors to establish conceptual framework which explains decision-making process of international patients. Though, there has been advance in explaining different factors play important roles in international patients travel, however, there is scarcity of literature conceptualizing these factors into a framework and test it empirically. Literature reveals about associated benefits and risks related to travel abroad for medical purposes but do not conceptualize it in the process of decision-making. Sources of information in medical tourism play significant role in development of attitude as well as intention, has already been established in consumer behavior. However, need is to test its significance in medical tourism decision-making process. The proposed framework will encourage future researchers to test different variables empirically and establish the model of international patients travel behavior.

Ethical considerations

Ethical issues (Including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc.) have been completely observed by the authors.

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