Assessment of the Importance of Partnership Factor in the Provision of Medical Tourism Services Pattern

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ABSTRACT

Purpose: This paper considers the importance of partnership in the tourism marketing pattern. **Design**: The statistical population of the study consisted of all staff of medical centers and active medical tourism in the universities of medical sciences in Iran, of which 630 were selected using a simple sampling method as a statistical sample. **Methodology**: Data were collected by a questionnaire. Data analysis was carried out by confirmatory factor analysis, structural equation modelling, and Lisrel software. **Approach**: The pattern of marketing health tourism and its findings can be beneficial to hospital managers and policymakers in a scientific way, comprehensive their weakness and planning for improving their functions of the health tourism industry, and to be able to improve the satisfaction of international patients. **Finding:** Our results indicate that according to the standard estimates of path coefficients, the partnership factor with a score of 0.48 consisted of 6 components ranked among others was determined. **The originality of research**: Considering the importance of the partnership, planners, policymakers, and decision-makers in the field of medical tourism to develop this industry, special attention should be paid to it.

Key Words: *Medical tourism, Marketing, Pattern, Partnership.*

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INTRODUCTION

The tourism industry is one of the largest and most diverse industries in the world. Many countries consider this dynamic industry to be the main source of revenue, profitability, job creation, growth for the private sector, and whether the revenues generated by this sector have contributed to economic growth and other parts of the country. Tourism is one of the few areas that have developed the right context for profit for all the countries of the world and has therefore been interpreted from tourism to industry. Medical tourism is almost a new concept where patients travel to a foreign destination to get quality medical treatments, which is much better or comparable, and also available at a significantly lower cost.[1] Today, the medical tourism industry has a predicted growth rate of up to 25% year-over-year for the next 10 years and it is estimated that 3–4% of the world's population will travel internationally for healthcare.[2] Health tourism (medical tourism and preventive tourism), as one of the world's most revenue-generating industries, attracts many countries, and this industry is considered to be rapidly growing worldwide as a tourism product and market.[3] Medical tourism versus 'travel for medical treatment' largely centers on the role of voluntary leisure.[4] Medical tourists may also travel to developing or developed countries, and this serves as a growing

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health care market. In addition to traditional travel health recommendations, medical tourists have unique health requirements and should be advised accordingly.[5] Medical Tourism has been favored by health care providers in other countries around the world trying to attract and accommodate medical travelers. As a result, there has been a growing concern for the development of professional standards to protect the quality and safety of patient care and the types of business opportunities that are available in this novel industry.[6] In Iran, in order to solve the problems caused by dependence on oil exports, it is necessary to invest in the production and export of those products and services that can create foreign exchange earnings. In some cases, the country has a set of defined products and services that can be converted into the capital by investment and can be used as a source of currency income.[7] Different industries use various marketing strategies to attract clients and make more profit. Although the nature of marketing of tourism services is different from those of other services such as banking or transportation, all the P10 items of McCarthy (1975) including product, price, location/distribution and promotion, individuals, physical evidence and processes, participation, and personalization can be extended to the medical tourism industry.[8] According to the 2017 World Economic Forum (WEF), with 5.2 million international tourists entering Iran, about $ 3.5 million has been paid by them.[9] There are many advantages in medical tourism in Iran, among which the most important ones are providing low-cost health care, short waiting times, the highest quality of services and care, the most experienced specialists, the most up-to-date technologies, as well as access to biotechnology, biological drugs, stem cells, and restoration.[3] However, the lack of coverage of health insurance, the lack of transparency of costs, and the lack of medical packages that are barriers to medical travel have been weak in providing facilities such as hoteling facilities, interpreter, transportation, tourist tours, and defects of the hospitals surveyed.[10] Moreover, poor marketing efforts to attract foreign patients in Iran, inappropriate coordination between the organizations responsible for medical tourism, the lack of a comprehensive system for collecting information on the arrival of medical tourists to Iran, the inadequacy of information systems about the tourism capabilities of Iran, and the lack of infrastructure necessary for the development of this industry are of the most important reasons that have led to the undesirable position of Iranian health tourism industry. By recognizing the ability of hospitals, their deficiencies and their potential for gaining access to foreign patients has been studied, taking into account the opportunities for improving it, and has succeeded in achieving global tourism therapies.[11] Considering the importance of medical tourism in the health service-providing section, there are a few studies on its status in Iranian health tourism marketing. This research studied the role of participation factor and its variables as one of the nine effective factors in the proposed tourism marketing pattern. Also, this study aimed at investigating of partnership factor of the pattern for improving marketing of health tourism.

METHODOLOGY

The present research was performed as a descriptive-correlational and cross-sectional study. The statistical population consisted of all the people working in the medical universities of the country in the field of health tourism. 630 active people in the field of health tourism were selected by simple random sampling. A researcher-made questionnaire was used to collect the research data. The questionnaire was developed based on an interview with experts and tourism activists in the field of marketing and tourism with the Likert scale (completely opposite = 1, opposite = 2, neither agree nor disagree = 3, agree = 4, totally agree = 5). To assess the validity of the content of the questionnaire, from the viewpoint of professors, experts, and for determining the content validity, quantitatively, two content validity coefficients (CVR) were higher than 0.62 and Content Validity Index (CVI) was higher than 0.79. Cronbach's alpha coefficient (0.82) and test re-test and correlation (0.92) were used to assess the reliability of the questionnaire (N=40). After confirmation of validity and reliability, 630 questionnaires were completed. In order to verify the validity of the proposed conceptual pattern, factor analysis was used which was conducted in two exploratory factor analysis and confirmatory factor analysis (second-order). After performing the exploratory factor analysis, 9 components and 60 items whose factor load was above 0.3 were extracted. After the corrections were made in the original conceptual pattern, the validated factors were extracted from the confirmatory factor analysis of LISREL 8.8. Goodness-fit indicators for all components. The calculation of the suggested pattern for health tourism marketing was confirmed.

RESULTS

In order to prove or reject the research model, the following tests have been used:
  1. **Normal test data**
According to Table 1, because the significance level of the research variables is greater than 0.05 and the Kolmogorov-Smirnov statistic is between -1.96 and +1.96, the assumption zero is confirmed and the assumption of the normal distribution of these variables is accepted.[12]

Table 1: Analyzing the normalization of data

Variable	The statistics K-S	Significant level	Skidding	Elongation	Assuming being normal
Promotion	0.096	0.904	-0.518	-0.418	Normal
Procedures	0.127	0.873	-0.120	-0.835	Normal
Partnership	0.091	0.909	-0.175	-0.163	Normal
Evidence	0.095	0.905	-0.678	-0.306	Normal
Medical Package	0.123	0.709	-0.614	-0.411	Normal
Product	0.241	0.501	-0.299	-0.737	Normal
Medical and Cultural Sensitivity	0.652	0/352	-0.599	-0.120	Normal
Cost	0.11	0.89	-0.629	-0.146	Normal
People	0.255	0.602	-0.209	-0.531	Normal

2. Validation of measurement models (confirmatory factor analysis)

The model of the two-level confirmatory factor analysis was validated before and after the modifications in the case of estimating standard coefficients (independent of the unit of measurement and comparable coefficients). 60 questionnaire indicators were divided into 9 factors including promotion, process, and procedure, participation, evidence and symptoms, medical package, product, attention to cultural and medical sensitivities, costs, and staff. In this chart, numbers or coefficients are divided into two categories. All the measurement equations (first and second-order load factors) were determined using t statistics. According to this model, the factor load at the %95 confidence level is meaningful if the value of the t-test outside the range is -1.96 to +1.96. The calculated values of t for each factor load are greater than 1/96. Therefore, it can be shown that the questionnaire is compatible with measuring the concepts at this valid stage.[12]

3. Convergence and combined reliability

To assess validity and reliability, the following values were calculated. If the conditions in Table 2 are met, it can be claimed that the validity and reliability of the model are established.

1. Construct Reliability(CR) and Cronbach alpha
2. AVE (Average Variance Extracted)
3. Maximum Shared Squared Variance(MSV)

Table 2: Conditions for establishing convergent reliability and validity

Indicator	Allowed range
Reliability	CR> 0.7
Convergent Validity)	t>1.96 The standard factory loads should be greater than 0.5 and if possible larger than 0.7 CR>AVE AVE>0.5
Divergent Validity	AVE>MSV

Hier and et al(2006) [12]

Factor loads have been used to analyze the structure of the questionnaire and to discover the constituent elements of each construct. The results of factor loadings of the first and second-order models are summarized in Tables 3 and 4.

Table 3: Convergent validity (second-order factor loads and AVE index) and reliability (Cronbach's alpha and CR)

Main variable	Component	Convergent Validity					Reliability	
		Second-factor analysis	Rank in model	R²	t-value	AVE	CR	Cronbach's alpha
Marketing of medical tourism services in Iran	Promotion	0.98	1	0.96	20.65	0.64	0.966	0.941
	Procedures	0.88	4	0.77	17.50			
	Partnership	0.48	9	0.23	9.82			
	Evidence	0.83	5	0.69	16.13			

Medical Package	0.77	6	0.59	16.74
Product	0.91	2	0.83	17.83
Medical and Cultural Sensitivity	0.55	8	0.30	9.65
Cost	0.75	7	0.56	14.75
People	0.91	3	0.83	22.79

The study results indicated that nine factors (promotion, procedures, and methods, partnership, physical evidence, medical package, product, paying attention to cultural and medical sensitivities, cost, and employees) were found effective in the Iranian version of medical tourism pattern on the development of the health tourism services offering. Based on the results, the factor of partnership with 6 components (Table 4) ranked 9 in the proposed pattern and, according to Table 4, has indicators (AVE:0/635, CR: 0/912 and Cronbach's alpha: 0/884). Therefore, our data, based on fitness indicators, have confirmed the role of the participation factor in the proposed pattern, and the proposed structure is confirmed.

Table 4: Effective variables on partnership factor in the Marketing of medical tourism services

Hidden variable	Indicator	Apparent variable	Convergent Validity				Reliability	
			λ	R2	t-Value	AVE	CR	Cronbach's *alpha*
partnership	C1	In Iran, there are proper and practical rules for eliminating the brokers.	0.59	0.25	-	0.635	0.912	0.884
	C2	There are specific rules codified to determine the tariffs of the diagnostic services receivable from foreign nationals.	0.68	0.46	14.17			
	C3	There is inter-sector cooperation between various organs (Cultural Heritage Organization, Ministry of Health, Ministry of the Interior, medical sciences universities and treatment centers).	0.78	0.61	15.92			
	C4	In Iran, there is a proper supportive legal framework for the activities of tourism companies and treatment centers in the area of health tourism.	0.73	0.53	15.17			
	C5	There are specific rules exercised as an incentive and motivational mechanisms and tax deductions for centers active in health tourism.	0.82	0.67	16.55			
	C6	There is a specific system with appropriate efficiency for referrals with non-Iranian citizenships.	0.81	0.66	16.46			

The results of Table 5 confirm the divergent validity of all variables in the model. It is deserving to mention that divergent validity is calculated for variables that are directly measured by the questions of the questionnaire and do not include the second to the top.[12]

Table 5: Correlation coefficients and discriminant validity

Hidden variable	1	2	3	4	5	6	7	8	9	AVE root	MSV
Promotion	1.000									0.770	0.498
Procedures	0.610	1.000								0.760	0.567
Partnership	0.341	0.318	1.000							0.797	0.323
Evidence	0.706	0.663	0.258	1.000						0.800	0.498

Medical Package	0.647	0.663	0.414	0.569	1.000					0.792	0.439
Product	0.590	0.753	0.521	0.601	0.599	1.000				0.802	0.567
Medical and Cultural Sensitivity	0.476	0.475	0.285	0.573	0.449	0.461	1.000			0.758	0.328
Cost	0.508	0.715	0.395	0.678	0.641	0.671	0.561	1.000		0.794	0.512
People	0.620	0.571	0.568	0.530	0.476	0.683	0.540	0.646	1.000	0.832	0.467

According to Table 6, estimated values for pattern fitting indices show that research data with factor structure and theoretical basis of the research is appropriate to fit, which indicates that the questions are consistent with the theoretical constructs; therefore, the proposed pattern can be confirmed.

Table 6: Indicators of fitting the factors of health tourism services pattern in Iran

Index name	Basic model	Modified model	Allowed range
χ^2	5.568	2.758	<3
(GFI)	0.78	0.85	>=0.8
(AGFI)	0.73	0.81	>=0.8
(RMSEA)	0.165	0.068	<0.10
(CFI)	0.85	0.96	>=0.9
(NFI)	0.84	0.90	>=0.9
(NNFI)	0.84	0.92	>=0.9
(IFI)	0.85	0.96	>=0.9

DISCUSSION AND CONCLUSION

According to the results of the current study, partnership factor with other 8 factors (i.e., promotion, procedures, evidence, medical package, product, attention to cultural and medical sensitivities, costs, and people) was confirmed, which indicated the importance of the factors mentioned in marketing medical tourism services. The results of the present investigation were somewhat similar to the research that indicated (public sector or charitable) providers of social tourism can offer the most tailored and potentially most cost-effective tourism product to each beneficiary by closely considering previous travel experience and uncertainty levels before departure.[13] Furthermore, the results of the research highlight the key role of travel inexperience, and associated uncertainty, in travel decisions made by this target group.[14] The results of Khan and et al. suggests that medical tourists' perceived risks about destination and travel motivations will have an effect on the image of medical tourism destinations.[15] There is a rising indication that medical tourists ask help from medical travel facilitators to prevent critical preparations in finding reliable providers and guaranteeing trouble-free travel arrangements. In medical tourism, these facilitators play an important role as moderator in engaging between the prospective patients in one country and medical facilities elsewhere around the world. To date, the literature in medical tourism has concentrated almost exclusively on patients and health care providers. Nevertheless, little is known empirically concerning the significance of medical travel facilitators and their participation in the medical tourism industry. Consequently, the moderating role of medical travel facilitators requires to be explored because of the increasing number of medical tourist.[16] The decision to join medical tourism, however, is more complex, driven by patients' unmet demand, the nature of services sought and how the treatment is obtained. To beneficially use the opportunities medical tourism offers, and include possible threats and harms, an informed decision is important.[17] The results revealed that external environment uncertainty has a direct negative influence on trust and resource reliance has a positive impact on inter-organizational partnership. Furthermore, trust has a key influence on partnership quality while resource dependence does not. Hence, medical travel agents should extend their network of reliable health care organization partners to increase performance, reduce their self-risk, collect information, and avoid missed opportunities.[18] According to Momeni et al., in order to obtain competitive advantages, Iran needs to implement long-term plans to strengthen infrastructures and cultural reforms. Further participation of the private sector is required to strengthen the infrastructures and plan for a more efficient application of mass media as well as local and provincial press in order to enhance awareness and cultural reform. Finally, systematic plans with broker phenomenon and enforcing hospitals from the perspective of international accreditation should be included in the agenda of medical tourism authorities.[19] Based on the present study, considering the importance of the role of partnership factor and its 6 components in the proposed pattern of medical tourism marketing, including drafting the law for the removal of speculators, setting tariffs for providing services to international patients, promoting intergenerational cooperation, creating incentive mechanisms for increasing the motivation of institutes and companies active in the field of medical tourism, and the development of appropriate procedures for the referral of non-Iranian patients along with other factors are important. It is expected that managers and planners will pay special attention to the factors influencing the development of tourism marketing and promotion of this

industry. In this study, we tried to explain the role of the participation factor along with other factors in the proposed pattern of medical tourism marketing. The pattern of marketing of health tourism and its findings can be beneficial to hospital managers and policymakers to complement their weakness and plan for improving their functions of the health tourism industry and to be able to improve the satisfaction of international patients.

Limitations

As research constraints, the relative collaboration of some respondents in completing the questionnaire was a time constraint for presence in order to explain how the questionnaire was completed, which was resolved by following several occasions in order to receive the opinion.

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