

# Analysis of Marketing Mix Element Affecting Medical Tourism

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## ABSTRACT

Medical tourism sector, for third world nowadays, is a multifactorial sector that has slowly risen to the point of becoming one of the industries that produces income and pretty competitive in the world, and also has been considered as sophisticated tourism in modern field. This study aims to investigate the elements of the marketing mix and other factors that influence medical tourism. Preferred Reporting Items for Systematic Reviews and Meta Analyses (PRISMA) was used in this study From 11 articles reviewed, it's found that almost all of the marketing mix element were related to medical tourism in a country. Some of the articles stated that factors like product offered, price, place, and promotion were related to medical tourism in a country. The conclusion from this study is that marketing mix element in general and other factors like regulations, number and skills of medical staffs and health services affected medical tourism significantly.

**Keywords:** marketing mix, medical tourism, skills of medical staff.

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## INTRODUCTION

Using marketing mix techniques helps the stakeholders to make optimal decisions about product features, prices, places, promotions, and promotion processes and to successfully implements marketing strategies chosen based on environmental conditions and the unit of determination and market definition. In fact, the number of factors determining which marketing mix to consider (4, 6, 7, 10, etc.) is not important, what is important is that there will be a framework for marketing to manage its activities and strategies.

## THEORETICAL REVIEW

Medical tourism sector, for third world nowadays, is a multifactorial sector that has slowly risen to the point of becoming one of the industries that produces income

and pretty competitive in the world, and also has been considered as sophisticated tourism in modern field. Because of this, a lot of countries are trying to develop this type of tourism and one of the strategies used is to use marketing mix elements.

Factors that increase medical tourism are as follows: high costs of health services in industrialized countries, increased the ease of international travel, profitable currency exchange rates in the world economy, rapid advances in medical technology and standards of care in the most countries, and access to the Internet.

At present, the number of patients who travel from developed countries to third world countries due to medical reasons is increasing. These patients are not included in the upper class, but they seek high-quality medical care with reasonable prices.

So far, various estimates have been made regarding this problem. For example, McKinsey reported that the revenue gotten from medical tourism in the global market reached around 100 billion dollars in 2012. He also believed that well-known international hospitals, such as Brumrungrad in Thailand and Apollo in India, earned 2.3 billion dollars in 2012 and Singapore hopes can serve one million patients in the same year. Overall, 10% of patients in EU countries seek treatment outside their country and it is estimated that they must pay around 12 billion Euros for this purpose.

According to World Health Organization's annual statistics, around 50 billion dollars are spent each year for treating patients in European and American countries and withdrawing a percentage of this amount, it can have a significant impact on the Asian countries' economics. Medical tourism can be considered as one of a major source of income and job creation for some countries and its achievements can help private sectors to grow, develop infrastructure, and improve the quality of health services.

## RESEARCH METHODOLOGY

This study used Preferred Reporting Items for Systematic Reviews and Meta Analyses (PRISMA) as evidence-based methods for conducting systematic reviews.

### Data Source Relevant

English articles published in the last ten years have been sourced using three databases (EBSCOhost, Google Scholar, and Proquest). The combination of terms used in multi-field searches relating to the relationship of marketing mix and factors that influence medical tourism.

Eligibility criteria for inclusion are the research journal articles that cover the relationship of marketing mix or the factors that influence medical tourism. Eligible studies are restricted to articles with full-texted access published in English for the past ten years. Qualified studies are those from Asia or the Middle East. This is considering how medical tourism is one of the main sources of tourism for third world countries now. Articles are excluded if they do

not meet the criteria above. Exclusion criteria are any studies that do not fit the criteria about.

### Study Selection and Data Extraction

The electronic database was reviewed for one week by the authors independently and collectively filtered. The authors review the titles and abstracts produced by search engines to assess their eligibility for further review based on the selection criteria, and select relevant articles for possible inclusion. The findings on the writings are synthesized in narrative synthesis around the research objectives.

## RESULTS AND DISCUSSION

After carry out screening carefully, there were 11 articles that could be reviewed for the purpose of this study:

1. Magatef (2015) examined the impact of the tourism marketing mix and analyzed its impact on tourism in Jordan. Jordan, as stated, has several places for people who wanted to treat their body and soul. The research found that there was a linear relationship between independent variable (all tourism marketing mix elements) and dependent variable (foreign tourists' satisfaction). products and promotions had the strongest effect on foreign tourist satisfaction, while price and distribution were significant effective factors.
2. Al-Azzam (2016) in his research analyzes how marketing mix elements affect medical tourism sector in Jordan. This study also evaluates the actual potential of foreign patients as represented by the cost, quality and recognition aspects of the role of government and other relevant bodies in this market. The results show that Jordanian medical facilities in certain circumstances can offer great potential for medical and health tourism and Jordan can become a medical tourism hub in the area in the future.

3. Reddy (2017) conducted a study in Saudi Arabia related to the possibility of applying the method in attracting media travel to hospitals that have been accredited in Saudi Arabia and analyzing the usefulness of the marketing mix elements for Saudi Medical tourism. Two factors that are considered most attractive to the tourists are the treatment of patients and the requirements that must be met by patients before coming to do health care. The results of correlation and regression analysis show that there is a positive correlation between the marketing mix variables except place-price, promotion-price, promotion-price.
4. Ganguli dan Ebrahim (2017) who conducted a qualitative analysis of the competitiveness of Singapore's medical tourism found that Singapore's competitive advantage stems from its outstanding and synergic performance around seven pillars that synthesize what is meant by Singapore's medical tourism as model of competitiveness: **enabling tourism sector** (tourism to tie strategically in services from healthcare through revenue generating schemes shared between the sectors while creating value-added benefit for medical tourist), **strategic planning** (integrating approach, through bridging the gaps between strategies and the implementation to successfully develop medical tourism), **PPPs framework** (existence of integration between Singapore's government and private enterprises across the different pillars of medical tourism sector), **marketing and branding strategies** (Singapore promoted the quality and safety their country had for their medical services rather than the price), **technology and innovation** (combining healthcare and biomedicine), **accreditation and governance** (ensuring that the medical services provided are all based on international standards and regulations), and **human capital development** (Singapore has built robust and integrated human resource development system to strengthen industry competencies and to respond to the challenges of the global market).
5. Jabbari, et al. (2019) observed that through the marketing mix elements, medical tourists could be attracted to visit third world countries. From the results of the study, it was found that there were significant differences between public and private hospitals in the price and promotion mix elements, but in the other elements it did not show a significant difference. Identifying the strengths and weaknesses of these hospitals can help health service managers succeed in attracting medical tourists by using hospital strengths and reducing their weaknesses.
6. Rokni et al. (2017) conducted a study of the determination of factors that might hinder medical tourism in South Korea. The results showed that South Korea was one of the top destinations for medical tourism in terms of high quality infrastructure and medicine which designed based on new emerged technologies, but the lack of specialism and expertise among health care practitioners in cross-cultural communication coverage, seems to be a major barrier to the development of medical tourism in Korea. The demand for easy and convenient promotional activities, policy making, and regulation of actions are other effective factors. Several strategies are needed to fight these barriers, such as government support for cultural training, collaborative efforts to encourage health practitioners to be involved in enhancing linguistic and cultural competence on an international scale.
7. The exploratory research conducted by Rerkrujipimol dan Assenov (2011) identifies the strengths of Thai health service providers and shows to several issues that might reduce growth opportunities in the industry. These factors include the lack of government policies related to medical tourism and other supporting regulations, the lack of organization as a center for cooperation aimed to promoting the medical tourism industry as a whole, the low awareness of the industry's opportunities among prospective foreign patients, and the lack of doctors and medical staff qualified.
8. Pocock dan Phua (2011) in their research provided a conceptual framework that provides an outline of the implications of the growth of medical tourism

policy for the health system, taken from cases in Thailand, Singapore and Malaysia. This framework provides a basis for empirical research that weighs the advantages and disadvantages of medical tourism on the health system, consisted of these variables: governance, delivery, financing, human resources, and regulation.

9. Zarchi et al. (2013) used marketing mix elements to optimize the use of resources and potential in hospitals and health care centers. This is due to increasing pressure on available funds in the health service sector especially in hospitals, thus renewing the need to analyze different strategies in economic terms.
10. Bazazo et al. (2016) in their research, investigated the impact of marketing mix elements on the quality of medical tourism services in Jordan. The study also investigates the satisfaction of tourists who come for treatment at Jordanian hospitals and shows the reasons behind Jordan's choice as a medical tourism destination, especially after good progress in medical services lately. One of the most important results of this study is that there is a statistically significant difference in Jordan's relative merits in providing its medical services, besides the significant differences in relative importance due to the presence of an marketing mix element based on economic factors.
11. Azimi et al. (2018) ranked the factors that attracted foreign medical tourists based on the marketing mix model. Staff, service and process factors got the highest score from the patient's perspective; while prices, facilities, and promotions got the lowest score among the parameters that influence the attractiveness of medical tourists to Mashhad hospital. Staff (96%) and price (66%) factors have the highest and lowest effects on tourist absorption respectively. To promote medical tourism, important factors like staff, services and processes must be emphasized and variable prices, facilities, and

promotional requests to be revised by authorities in the industry.

## CONCLUSION AND RECOMMENDATIONS

### Conclusion

From the results of the study, it concluded that in general, most elements of the marketing mix significantly influence the medical tourism sector. Besides the general marketing mix elements, it also concludes several other factors such as government policy, the adequacy of medical staff, the expertise of health service providers, and so on.

### Recommendation

The medical tourism sector requires considerable intervention from various parties in order to grow successfully. Integrating diverse strategies for the development of media tourism with good country policies and proactive management practices will bring significant positive results to the tourism sector, health services, and other economic sectors.

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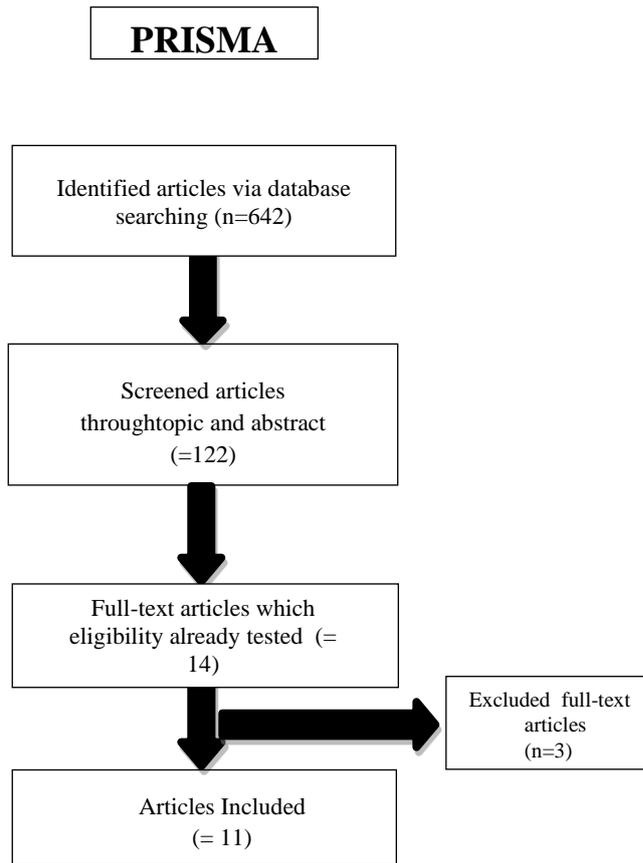
**Table 1. Resume of Research Results**

No.	Authors	Elements of the Marketing Mix that Affect Medical Tourism	Elements of the Marketing Mix that does not Affect Medical Tourism	The Relationship of Marketing Mix toward Customer Loyalty
1	Sima Ghaleb Magatef	Elements: product, promotion, price and distribution. Products and promotions have the strongest effect on foreign tourist satisfaction, while price and distribution are significant effective factors.		Positive
2	Abdel Fattah Mahmoud Al-Azzam	Elements: product, price, promotion and place. These four elements significantly influence the attractiveness of medical tourism in Jordan.		Positive
3	L. Kalyan Viswanath Reddy	Elements: product prices, places, promotions. It was found that there was a positive correlation between marketing mix elements and media tourism variables except places - prices, promotions - prices, promotions - places.	places - prices, promotions - prices, promotions - places.	Positive
4	Subhadra Ganguli, Ahmed Husain Ebrahim	Factors: integration of development strategies, government policies and proactive management practices.		
5	Alireza Jabbari, et al.	Elements: products, prices, places and promotions. There are significant differences between public and private hospitals in the price and promotion elements.	Products and places	Positive
6	Ladan Rokni, et al.	Factors: government support, the specialty and expertise of health service practitioner in cross-cultural communication, promotional activities, policy making, and regulation of actions.		
7	Jutamas Rerkrujipimol and Ilian Assenov	Factors: practical government policies and supporting regulations, the lack of organization as a center for cooperation, the lack-awareness of industry opportunities, and the lack of medical staff.		
8	Nicola S Pocock and Kai Hong Phua	Factors: its potential for the health system, economic benefits for the country		
9	Mohammadkazem Rahimi Zarchi, et al.	Elements: products, places, promotions, prices, personnel, promotions, physical attractiveness, and doctors		Positive
10	Ibrahim Kahlil Bazazo, et al.	Elements: service, price, accessibility, promotion. The relative importance of the impact of the marketing mix element on the quality of medical tourism services in attracting tourists is not significantly different.	service, price, accessibility, promotion	
11	Reza Azimi, et al.	Factors: staff, services, processes, prices, facilities, and promotions. Staff, services and processes get the highest score while prices, facilities and promotions get the lowest score in the parameters that affect the attractiveness of medical tourists.		

**Table 2. The Research Results**

No.	Authors/Year	Title	Research purpose	Methods	The Marketing Mix Elements that affect Medical Tourism	The Marketing Mix Elements that does not affect Medical Tourism
1	Sima Ghaleb Magatef 2015	The impact of tourism marketing mix elements on the satisfaction of inbound tourists to Jordan	Identify the impact of tourism marketing mix and analyze its impact on tourism in Jordan	Quantitative with survey methods	Elements: product, promotion, price and distribution. Products and promotions have the strongest effect on foreign tourist satisfaction, while price and distribution are significant effective factors	
2	Abdel Fattah Mahmoud Al-Azzam 2016	A study of the impact of marketing mix for attracting medical tourism in Jordan	Analyzes how the marketing mix elements affect medical tourism sector in Jordan	Quantitative study	Elements: product, price, promotion and place. These four elements significantly influence the attractiveness of medical tourism in Jordan.	
3	L Kalyan Viswanath Reddy 2017	Evaluating Medical Tourism Prospects of Joint Commission International Accredited Hospitals in the Kingdom of Saudi Arabia	Conduct research in Saudi Arabia related to the possibility of applying methods in attracting media travel to hospitals that have been accredited in Saudi Arabia and analyzes the usefulness of the marketing mix elements for Saudi Medical tourism	Quantitative with statistic approach	Element: product price, place, promotion. It was found that there was a positive correlation between marketing mix elements and media tourism variables except places - prices, promotions - prices, promotions - places.	place – price, promotion – price, promotion – place.
4	Subhadra Ganguli, and Ahmed Husain Ebrahim 2017	A qualitative analysis of Singapore's medical tourism competitiveness	Carry out a qualitative analysis of the competitiveness of Singapore's medical tourism	Qualitative with holistic approach	Factors: integration of development strategies, government policies and proactive management practices.	
5	Alireza Jabbari, et al. 2013	Medical tourism in Shiraz	Observe that through the marketing mix element, medical tourists can be attracted to visit third world countries	Descriptive quantitative, analytics, and cross-sectional	Element: product, price, place and promotion. There are significant differences between public and private hospitals in the price and promotion elements.	Product dan place
6	Ladan Rokni, et al. 2017	Barriers of developing medical tourism in a destination: A case of South Korea.	Conduct research on determining factors that might hinder medical tourism in South Korea	Qualitative with exploratory approach	Factors: government support, the specialty and expertise of health service practitioners in cross-cultural	

No.	Authors/Year	Title	Research purpose	Methods	The Marketing Mix Elements that affect Medical Tourism	The Marketing Mix Elements that does not affect Medical Tourism
					communication, promotional activities, policy making, and regulation of actions.	
7	Jutamas Rerkrujipimol and Ilian Assenov 2008	Medical tourism in Thailand and its marketing strategies	Identify the strengths of Thai health care providers and show some of the problems that might reduce growth opportunities in the industry	Qualitative approach	Factors: practical government policies and supporting regulations, the lack of organization as a center for cooperation, the lack-awareness of industry opportunities, and the lack of medical staff.	
8	Nicola S Pocock and Kai Hong Phua 2011	Medical tourism and policy implications for health systems: a conceptual framework from a comparative study of Thailand, Singapore and Malaysia	Provide a conceptual framework that provides an outline of the policy implications of medical tourism growth for the health system	Qualitative with framework development	Factors: its potential for the health system, economic benefits for the country	
9	Mohammadkazem Rahimi Zarchi, et al. 2013	Preparation and designing a checklist for health care marketing mix, with medical tourism approach	Use the marketing mix elements to optimize the use of resources and potential in hospitals and health care centers	Qualitative and cross-sectional	Elements: products, places, promotions, prices, personnel, promotions, physical attractiveness, and doctors	
10	Ibrahim Kahlil Bazazo, et al. 2016	Exploring the Effect of Marketing Mix Elements on the Quality of Medical Tourism Services in Jordan	Investigate the impact of marketing mix elements on the quality of medical tourism services in Jordan	Quantitative with statistic method	Elements: service, price, accessibility, promotion. The relative importance of the impact of the marketing mix element on the quality of medical tourism services in attracting tourists is not significantly different.	Service, price, accessibility, promotion
11	Reza Azimi et al. 2018	Ranking Factors Affecting the Attraction of Foreign Medical Tourists in Hospitals Affiliated to Mashhad University of Medical Sciences Based on Marketing Mix Model	Ranking the factors that attracted foreign medical tourists based on the marketing mix model	Descriptive quantitative	Factors: staff, services, processes, prices, facilities, and promotions. Staff, services and processes get the highest score while prices, facilities and promotions get the lowest score in the parameters that affect the attractiveness of medical tourists.	



**Figure 1. PRISMA's Systematic Review**