Strategic Insights into Patient Satisfaction in Medical Tourism: A Blueprint for Global Healthcare Strategy

Yamini Sharma[1*], Sajjad Alam[2], Meenu Shant Priya[3]

[1*]Department of Physiotherapy, Ph D Scholar of Galgotias University, Uttar Pradesh, India.
[2]Department of Physiotherapy, Faculty of Galgotias University, Uttar Pradesh, India.
[3]Department of Management, Faculty of Galgotias University, Uttar Pradesh, India.

Abstract:

This study examines patient satisfaction in the medical tourism sector, with a focus on India's growing role in Asia's medical tourism market. Despite the sector's growth, research on the determinants of patient satisfaction remains limited. To address this, the study develops a strategic conceptual model that links patient satisfaction with financial, technical, interpersonal, and environmental factors related to Medical Value Travel (MVT). Study included articles based on Asian Medical Tourism. A review of 49 selected articles informed the model's development. The findings of the study reflects that patient satisfaction is heavily influenced by both clinical and non-clinical aspects, including effective communication, accessibility, and the overall patient experience. These factors directly impact the medical tourism's perceived value and the reputation of healthcare providers. The study suggests that healthcare systems in leading medical tourism destinations should align their strategies with international patient expectations to boost satisfaction. By integrating these insights, the proposed model offers a framework for improving service delivery and enhancing global reputation. The study concludes by emphasizing the need for empirical validation of the model in different cultural contexts and suggests that enhancing patient satisfaction can significantly contribute to the sustainable medical tourism industry grwoth.

Keywords: Patient satisfaction, Public health, Quality of care, Medical Tourism, Strategic Model Development

I. INTRODUCTION AND BACKGROUND

Patient satisfaction is conceptualised and expressed in different ways. Therefore, the perspectives of different researchers about patient satisfaction vary. The apparent discrepancy between pre- and post-performance expectations was defined as the patient's level of satisfaction(Chahal & Mehta, 2013). Jackson et al. defined it in terms of five factors: medical care, visitation convenience, nursing care, helpful staff conduct, and accessibility of urgent aid. Patient satisfaction is one such outcome that can be used to compare various health care programmes or systems, identify service area that needs to be changed in order to improve patient satisfaction, and assist organisations in identifying clients who are most likely to abandon the initiative (Jackson et al., 2001). Despite the fact that each person defines patient satisfaction with healthcare services differently based on facts, expectations, experiences, and knowledge (Bowers et al., 1994), some standards are universally acknowledged and accepted in the literature on healthcare. The promotion of medical health and well-being depends on satisfaction (Bruce et al., 1999).

Health care must be sustainable in nature, and research shows that patient satisfaction is a crucial aspect that is directly related to all pillars of sustainability. The three pillars of sustainability are intertwined and mutually supportive. The first pillar is social, which deals with equal access to resources; the second is economic, which addresses financial security; and the third is environmental, which deals with the effective and efficient use of resources (Numerisation - wwwnumerisationch, n.d.). Patients might be classified as medical tourists or patients from the same country. Medical tourists are those individuals who travel abroad for elective medical procedures (Borman, 2004). International medical tourists have been travelling to India more frequently over the years, so it is crucial to evaluate the gap at the service provider level in order to assess the level of satisfaction among medical tourists. It not only helps to boost a country's image but also improves its economic situation.

Due to the lack of a solid conceptual framework and trustworthy assessment tools for medical tourist's satisfaction, there have been a rising number of surveys over the past ten years that are only focused on patient experience. Consequently, the goals of this research are:

1. To investigate numerous variables that may impact international medical tourist satisfaction.
2. To compare these patient satisfaction indications to those reported in the literature as well as those that haven't been reported in the literature.
3. To discuss the relationship between patient satisfaction and medical value in tourism.

Flow chart the paper formulation:
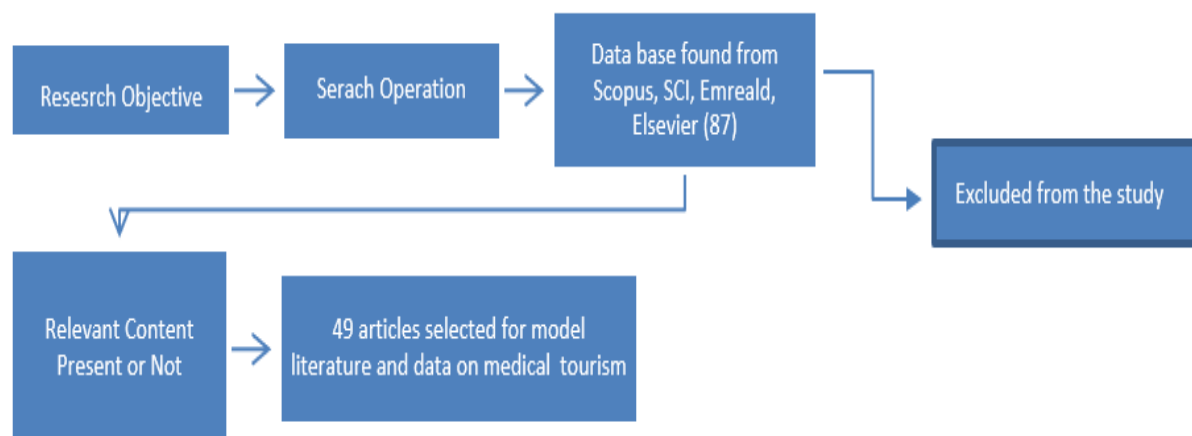
Study included Full text Medical Tourism papers focusing on Asian Countries and other researches were excluded from data set. The paper is divided in 3 parts first describing about Medical Tourism and and its potential factors, second part talks about how patient satisfaction is potentially contributing in Medial Tourism enhancement and lastly paper concludes with theoretical modal for patient satisfaction.

Studies show that medical tourism (MT), which started in the late 20th century, has recently and rapidly grown. Tourism is one industry that has seen substantial growth in terms of revenue and the creation of ground-breaking technology. This sector contributes to local growth by creating jobs and utilizing local resources sustainable, and it has a substantial impact on global economy(Mao et al., 2014). The impact can be direct or indirect. In medical tourism, people from developed countries go to less developed parts of the world rather than using facilities available in their own countries.

The fusion of social, industrial, and economic trends in both developed, and developing nations increased cross-border medical tourism especially due to globalization, escalating competitiveness, and developing transportation, communication, and information technology (Chuang et al., 2014). It must handle trade-offs among industrial sectors, society, and ecosystems must be managed by it. Each relevant party, such as citizens, farmers, public servants, developers, and endangered animals must be considered while planning a tourism project (Petrov et al., 2009). The number of medical tourists seeking medical treatment in Asian countries has increased over the past few decades. Early in the 1970s, medical tourism increased in nations like Singapore, Thailand, and India (Connell, 2013). According to the literature, Singapore, Malaysia, Thailand, and India are the top competitors for medical patients (Mathew, 2021). This rise in medical tourism in Asian countries is a result of globalization and commercialization (Chuang et al., 2014). The government of these host countries actively promote them as destinations for international patients (Anne Jenner, 2008). When referring to receiving medical care abroad, the term "medical tourism" is replaced with "medical value travel" (MVT). Medical tourism includes a variety of medical services. According to the literature, a medical tourist may encounter many problems during the visit, which are termed as tourist trip design problem (TTDP). A comprehensive analysis by Jose Ruiz-Meza et.al for assessing work done for TTDP demonstrates the necessity for sustainable tourism, and the impact of the environment on tourists (Ruiz-Meza & Montoya-Torres, 2022).

The ministry of tourism released data on foreign tourist arrivals by purpose. According to the data, as shown in the graph below, 58.4% of tourists visited India in 2020 for leisure, holiday, and recreation activity,13.6% were from the Indian diaspora,11.8 % came for business and professional purposes, just 6.8% came for medical purpose, and 9.4 came for other purposes.
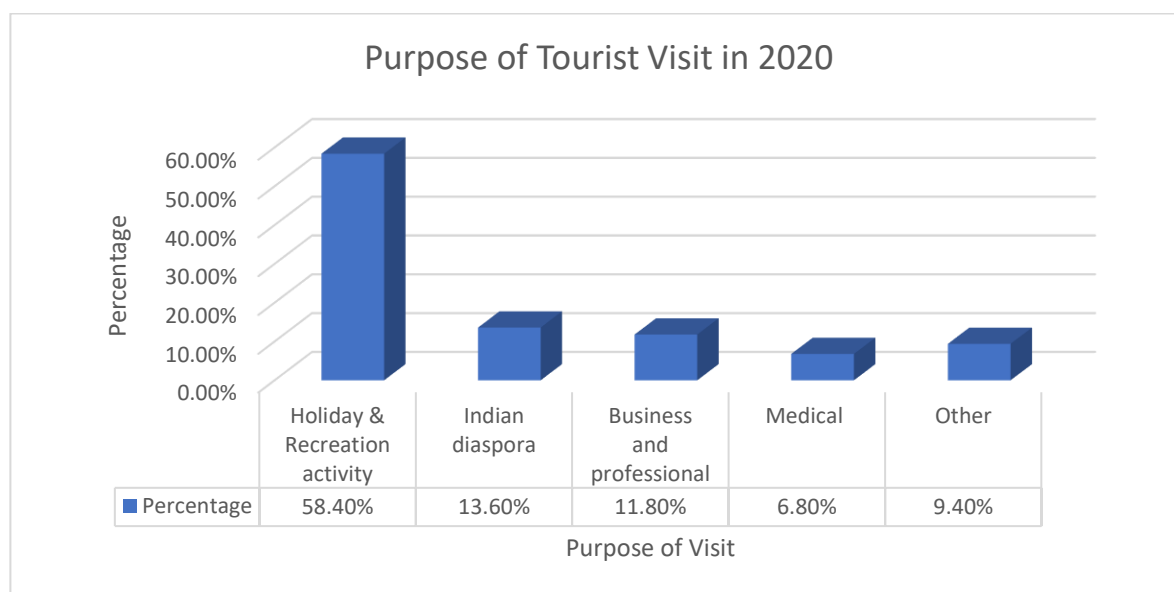
Purpose of Tourist Visit in 2020

Purpose of Visit	Percentage
Holiday & Recreation activity	58.40%
Indian diaspora	13.60%
Business and professional	11.80%
Medical	6.80%
Other	9.40%

Figure 1: Purpose of Tourist visit in 2020(Ministry of Tourism Report 2020)

FACTORS AFFECTING MEDICAL TRAVEL

The Factors can be divided into 2 categories (Dann, n.d.):

Push Factors: These factors include pushing medical travel on the demand side.

Country environment	*Industry factors*	*Quality factors*
• Country image(Dann, n.d.) • Political environment or political stability including low corruption and good rule of law (Smith & Forgione, 2007) • Favourable exchange rate changes(Connell, 2013) • Reasonable price of flights visiting overseas countries are, and travel convenience.(20) • Language Barrier in destination Country (Abadel & Hattab, 2014)	Strengthened medical infrastructure (Connell, 2013) Convenient pricing(Medical Toursim Climate Survey 2013)	• International standard of functioning in destination hospital.(22) • Service Quality at hospital (Medical Tourism Association, 2013) • Equipment facility(Connell, 2013) Expert health care., provider reputation of doctors (Heung et al., 2011) • Friendly health care workers (Bos et al., 2005; Horowitz et al., 2007; Ramayah et al., n.d.) • Cleanliness of hospital (Dwyer & Kim, 2003)

TABLE1: PUSH AND PULL FACTORS

The factors that drive the demand for medical travel are primarily consumer-related, and include features like socioeconomic and demographic or health-related elements that fuel the desire for medical travel.

Pull Factors: Pull factors emphasize the accessibility of medical travel. The majority of them relate to nation's healthcare industries, and tourism sectors, consistent with national environments, availability of health care service, and the efficiency of medical facilities and services.

India's Push and Pull factors:(Medhekar et al., 2019)

• Pull factors: The accessibility of medical visa, ease of service, improved international air connectivity, English speaking medical staff, top notch medical care, and cutting-edge technology and equipment, low-cost and affordable medical treatment, close proximity to one's own country (less time to travel), and cultural diversity are some of the pull factors.

• Push Factors: insufficient medical - insurance coverage, loner waiting times in their country, unaffordable health care cost.

II. PATIENT SATISFACTION

The most frequently assessed factors for patient satisfaction with hospitals are – the individual patient's health condition, quality of treatment they received, the cost of their stay, the standard of the hospital's services, the hospital environment, the attitudes of the staffs on the whole, and the ease of post-discharge (follow-up) facilities(Lee et al., 2012; Ramayah et al., n.d.; Ruiz-Meza & Montoya-Torres, 2022). Patients come to the hospital with distinct expectations, and their actual experience determines whether they were satisfied or not. In the 1980s, following the bio-psychosocial model of healthcare system of patient satisfaction, numerous attempts were made to objectively quantify patient satisfaction using questionnaires or scales in various environments including hospitals and primary care (Satpathy et al., 2022). Patient satisfaction is commonly measured using patients exit interviews and population-based surveys (Aydin, 2018).

Patient exit interview- In these, a questionnaire regarding services was given to the patients which needs to be filled out in a clinical appointment or healthcare institution. Population based survey-A population-based study recruits a group of test volunteers using survey sampling techniques. Surveys are frequently used to assess people's overall satisfaction with healthcare system by asking respondents how satisfied they were with it (Chahal & Mehta, 2013). The term "health system" needs to be defined clearly to assess the population's level of "satisfaction" with the healthcare system. A health system's primary goal is to promote health, which can be categorised into fairness & goodness. Fairness indicates that the health system serves well to all populations without favoritism, whereas goodness implies that it responds well to people's hope (Aydin, 2018). The number of patient satisfaction surveys for evaluating health care from the patients' point of view has increased over the past few decades. The validity and reliability of patient satisfaction surveys must be evaluated, much like other assessment tools(Quintana et al., 2006).

III MODEL DEVELOPMENT FOR INTERNATIONAL MEDICAL TOURIST:

There is a need to look back at earlier models that dealt with patients and customer satisfaction in order to develop model. Zeithaml and Bitner identified three different types of expectation(Zeithaml & Berry, n.d.). The first is called desired service, related to level of performance the client want to experience, combining what the customer thinks "can be" and "should be." The second is lower-level expectation, competent service, which is the "minimum tolerable expectation" or the lowest degree of acceptable performance. customers strive to attain their service desires, but they are aware that this is not always achievable. The third is anticipated service refers to the standard of service that consumers anticipate receiving and entails an objective assessment of the likelihood that a given performance will occur.

FINDINGS AND GAPS IN MODELS OF CUSTOMER/PATIENT SATISFACTION

1. No specific theory is developed for international medical tourist which connects patient satisfaction and MVT.

2. Because patient satisfaction is multifaceted, it cannot be estimated in same way for all patients.

3. Social variables, interpersonal factors, language barriers, and patient safety are not considered in models currently in use.

4. Social and health scientists must add a global level of analysis in their studies of healthcare systems, patient mobility, and patient decision-making. This is because patients are travelling across borders in quest of healthcare.

5. Every hospital has a different pattern to assess patient satisfaction as there is no definite model available. Therefore, no uniformity of content collected by them. A definite model helps in producing uniform output of satisfaction, and also it becomes easy to assess.

6.India's economic development is significantly influenced by health tourism. The health tourism industry is poised for significant expansion as a result of the growing global demand that is being driven by numerous factors. If properly utilised, health tourism can make a significant contribution to India's economic and social development. Thus, a model development will be beneficial for academicians, and health care industries.

S.No	Factors affecting medical tourist satisfaction	Author
1.	Lack of insurance	Borman(Borman, 2004)
2.	Familiarity, affordability, accessibility, bioethical law, and quality, Services & long waiting list	(Linder-Pelz, 1982; Ramayah et al., n.d.)
3.	The demand for privacy and the desire to link traditional tourist destinations, climate, environments, and cultures of the host country, the availability of care elsewhere and the high cost of medical care at home, the specialists, more affordable care, and quicker recovery times.	(Crooks et al., 2011; Wang, 2012)
4.	Waiting times	(Connell, 2013; Crooks et al., 2010; Wang, 2012)

5.	Quality of service and facilities, Political situation, Technology, Patient Testimonial, Spacious wards and accommodations, Skilled and knowledgeable team	(Connell, 2013; Fetscherin & Stephano, 2016)
6.	Cost	(Connell, 2013)
7.	Service provider, Staff behavior with patients, Medical facilities	(Alelaiwi, 2019; Ramayah et al., n.d.)

TABLE 2: EVIDENCE OF FACTORS AFFECTING MEDICAL TOURIST SATISFACTION

IV. RESULTS AND DISCUSSION

Proposed Conceptual Model:

After reviewing data on patient satisfaction, it was observed that due to the absence of a theory to describe what patient satisfaction means is the specific issue. Therefore, it is challenging to determine satisfaction evaluation or interpretation of survey results without a clear theory. There is a need to develop holistic model for international medical tourist satisfaction. As suggested by the literature, numerous nations, especially those from Asia, have expressed interest in medical tourism around the world and India is also one of the prime destinations for medical tourists.

This model associates patient satisfaction to enhance the medical value tourism in India (28). India became a popular location for outsourcing for medical care, as a result of its economic growth that began in the 1990s. Medical tourism in India has therefore evolved from a trend to an economic sector.

Gaps in the literature on medical tourism in India, and patient satisfaction were used to create the conceptual framework for the study. The postulated model, as presented and elaborated below has patient satisfaction as its core construct.

As suggested the literature, patient satisfaction is affected by many factors such as clinical care, nursing care, first impression, communication, food and housekeeping services (45).

This model is derived from various models which are discussed above, and existing literature available on factors affecting patient satisfaction and medical tourism. This model explains how patient satisfaction is affected by diverse factors which in turn can impact medical value in tourism. Model emphasizes that the profession of medical tourism relies on effectively educating prospective patients about procedure alternatives, medical facilities, travel arrangements, tourism opportunities, and destination nations.

Independent variables for this patient satisfaction model of international medical tourists are presented in figure 7.
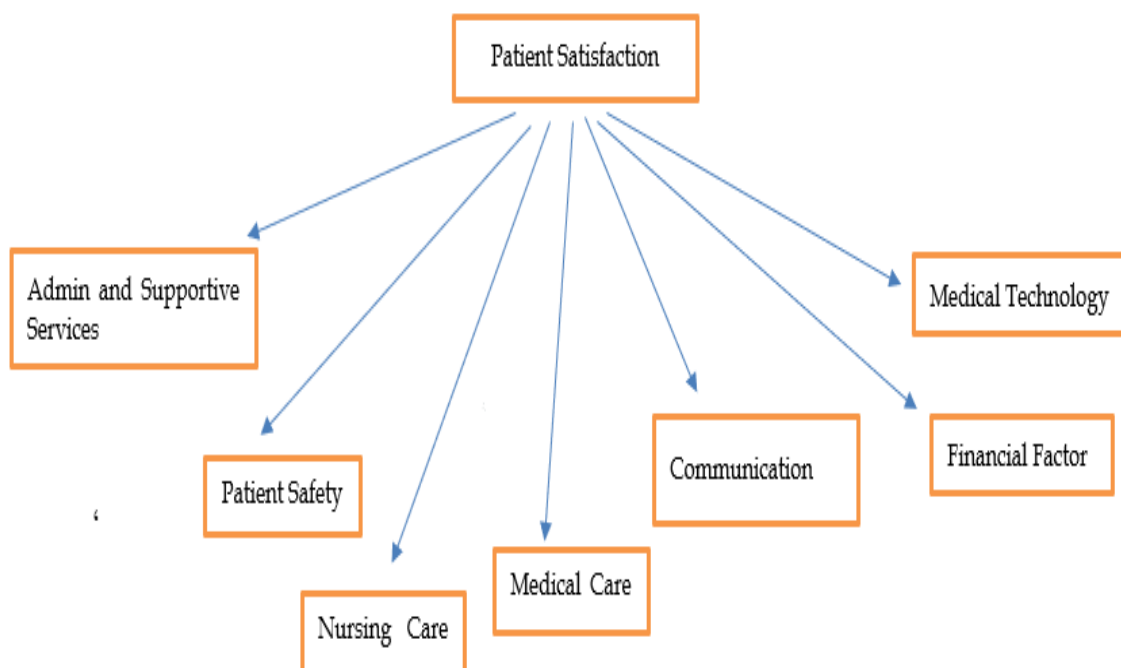

Figure2: Patient satisfaction is a dependent variable in this model for above mentioned dimensions.

Figure 3: Patient satisfaction model

The study theoretically confirmed that all patient satisfaction characteristics are important for assessing patient satisfaction, which was also seen with conclusions of previously available data from other studies (Alelaiwi, 2019; Bos et al., 2005; Lee et al., 2012; Linder-Pelz, 1982; Ramayah et al., n.d.; Zarei & Maleki, 2019). Additionally, the model testing offers fresh understanding of the association between the aspects of patient satisfaction and medical value tourism. The model suggests that the interactions between patients and staff (doctors, nurses, administrative staff, and supportive staff) and their effects on satisfaction and travel behaviour are crucial for understanding patient satisfaction behaviour, enhancing the hospital's reputation, and influence the perception of the nation as a destination for medical tourists. Moreover, the patient-centered approach will assist Indian healthcare providers in connecting their scientific and non-technological aspects to the unmet needs of the patients, which will aid to raise international patient satisfaction levels. These recommendations of the model from the present study will not only enhance the overall environment for overseas medical tourists seeking healthcare, but also include a built-in method to track the system's overall performance in providing healthcare.

Despite some noteworthy outcomes, there are some significant limitations to the study. First, the model developed is proposed on the basis of other theoretical model, also needs to be validated with sample population. So, more studies are warranted to test the model in future. The study would determine the causal connections between the various independent variable in this model and the patient satisfaction measures. Second, the model was developed only on treatment-oriented factors, so there is a need for future general satisfaction to be incorporated which includes other components of international patient such as visa issue, hotel accommodation, OPD visits post discharge, currency issues, long term follow-up etc. Third, the research's focus on consumers, opinions of doctors, medical assistants, nurses, technicians, laboratory assistants, and other employees were not taken into account. Fourth, this model did not included the cons affecting the medical tourist such as travel dangers following surgery, privacy, returning microbes from destination countries, and unfamiliarity with the environment. Although, the study's conclusions are based on patients' overall satisfaction, no comparison has been conducted between people seeking treatment from different public hospitals. Future studies must be conducted to assess the gaps in satisfaction levels among different hospital thus, we can find the areas of weakness in care provided. As satisfaction of international patient is directly related to medical value tourism.

V. CONCLUSION
A prototype theoretical model for patient satisfaction among medical tourists was developed in the present study, along with a number of other variables that may have an impact on patient satisfaction, such as financial variables, improvements in technical services, interpersonal and communication variables, social and environmental variables, and health care workers' professional competence.

VI. ACKNOWLEDGMENT

Author contributions: Concept – Y.S.; Design – Y.S.; Supervision – Y.S.; Resources – Y.S., M.S.; Materials – Y.S.; Data Collection and/or Processing – Y.S.; Analysis and/or Interpretation – Y.S.; Literature Search – YS.; Writing – Y.S; Critical Reviews – Y.S., M.S.

VII. CONFLICT OF INTEREST STATEMENT:

"The authors declared no conflict of interest" in the manuscript..

REFERENCES

1. Anne Jenner, E. (2008). Unsettled borders of care: medical tourism as a new dimension in america's health care crisis. In *Research in the Sociology of Health Care* (Vol. 26, pp. 235–249). https://doi.org/10.1016/S0275-4959(08)26011-4
2. Aydin, S. (2018). *Factors Affecting Patient Satisfaction With Healthcare System Of Turkey*. https://scholarcommons.sc.edu/etd/4946
3. Borman, E. (2004). Health tourism. *BMJ*, *328*(7431), 60–61. https://doi.org/10.1136/bmj.328.7431.60
4. Bowers, M. R., Swan, J. E., & Koehler, W. F. (1994). What attributes determine quality and satisfaction with health care delivery? *Health Care Management Review*, *19*(4), 49–55. https://doi.org/10.1097/00004010-199401940-00006
5. Bruce, T. A., Bowman, J. M., & Brown, S. T. (1999). Factors that influence patient satisfaction in the emergency department. *Journal of Nursing Care Quality*, *13*(2), 31–37. https://doi.org/10.1097/00001786-199812000-00005
6. Chahal, H., & Mehta, S. (2013). Modeling patient satisfaction construct in the Indian health care context. *International Journal of Pharmaceutical and Healthcare Marketing*, *7*(1), 75–92. https://doi.org/10.1108/17506121311315445
7. Chuang, T. C., Liu, J. S., Lu, L. Y. Y., & Lee, Y. (2014). The main paths of medical tourism: From transplantation to beautification. *Tourism Management*, *45*, 49–58. https://doi.org/10.1016/j.tourman.2014.03.016
8. Connell, J. (2013). Contemporary medical tourism: Conceptualisation, culture and commodification. In *Tourism Management* (Vol. 34, pp. 1–13). Elsevier Ltd. https://doi.org/10.1016/j.tourman.2012.05.009
9. Crooks, V. A., Kingsbury, P., Snyder, J., & Johnston, R. (2010). What is known about the patient's experience of medical tourism? A scoping review. *BMC Health Services Research*, *10*. https://doi.org/10.1186/1472-6963-10-266
10. Crooks, V. A., Turner, L., Snyder, J., Johnston, R., & Kingsbury, P. (2011). Promoting medical tourism to India: Messages, images, and the marketing of international patient travel. *Social Science and Medicine*, *72*(5), 726–732. https://doi.org/10.1016/j.socscimed.2010.12.022
11. Dann, G. M. S. (n.d.). ANOMIE, EGO-ENHANCEMENT AND TOURISM. In *Annals of Tourism Re~arch: Vol. IV* (Issue 4).
12. Dwyer, L., & Kim, C. (2003). Destination competitiveness: Determinants and indicators. *Current Issues in Tourism*, *6*(5), 369–414. https://doi.org/10.1080/13683500308667962
13. Fetscherin, M., & Stephano, R. M. (2016). The medical tourism index: Scale development and validation. *Tourism Management*, *52*, 539–556. https://doi.org/10.1016/j.tourman.2015.08.010
14. Heung, V. C. S., Kucukusta, D., & Song, H. (2011). Medical tourism development in Hong Kong: An assessment of the barriers. *Tourism Management*, *32*(5), 995–1005. https://doi.org/10.1016/j.tourman.2010.08.012
15. Jackson, J. L., Chamberlin, J., & Kroenke, K. (2001). Predictors of patient satisfaction $. In *Social Science and Medicine* (Vol. 52).
16. Mao, X., Meng, J., & Wang, Q. (2014). Modeling the effects of tourism and land regulation on land-use change in tourist regions: A case study of the Lijiang River Basin in Guilin, China. *Land Use Policy*, *41*, 368–377. https://doi.org/10.1016/j.landusepol.2014.06.018
17. Mathew, M. M. (2021). *A study on Health Tourism in India* (Vol. 8). JETIR. www.jetir.orgb911
18. Numerisation - wwwnumerisationch, I. (n.d.). *WORLD CONSERVATION STRATEGY Living Resource Conservation for Sustainable Development*.
19. Petrov, L. O., Lavalle, C., & Kasanko, M. (2009). Urban land use scenarios for a tourist region in Europe: Applying the MOLAND model to Algarve, Portugal. *Landscape and Urban Planning*, *92*(1), 10–23. https://doi.org/10.1016/j.landurbplan.2009.01.011
20. Quintana, J. M., González, N., Bilbao, A., Aizpuru, F., Escobar, A., Esteban, C., San-Sebastián, J. A., De-La-Sierra, E., & Thompson, A. (2006). Predictors of patient satisfaction with hospital health care. *BMC Health Services Research*, *6*. https://doi.org/10.1186/1472-6963-6-102

21. Ruiz-Meza, J., & Montoya-Torres, J. R. (2022). A systematic literature review for the tourist trip design problem: Extensions, solution techniques and future research lines. *Operations Research Perspectives*, *9*. https://doi.org/10.1016/j.orp.2022.100228

22. Satpathy, S., Wundaville, L. T., Satapathy, S., Malik, A., Singh, S., Singh, A. R., Chadda, R., Barre, V. P., & Tiwari, S. K. (2022). A Systematic Review of Patient Satisfaction Scales and Their Applicability to Covid-19 Hospitalized Patients: Gaps and Emerging Needs. *Journal of Patient Experience*, *9*. https://doi.org/10.1177/23743735221079132

23. Smith, P. C., & Forgione, D. A. (2007). Global Outsourcing of Healthcare: A Medical Tourism Decision Model. *Journal of Information Technology Case and Application Research*, *9*(3), 19–30. https://doi.org/10.1080/15228053.2007.10856117

24. Wang, H. Y. (2012). Value as a medical tourism driver. *Managing Service Quality*, *22*(5), 465–491. https://doi.org/10.1108/09604521211281387

25. Zeithaml, V. A., & Berry, L. L. (n.d.). SERVQUAL: A multiple-Item Scale for measuring consumer perceptions of service quality. https://www.researchgate.net/publication/225083802