International Journal of Reliable and Quality E-Healthcare
Volume 11 • Issue 2

A Systematic Review on Determinants Inciting Sustainable E-Medical Tourism

Sumit Oberoi, Symbiosis School of Economics, India*
https://orcid.org/0000-0002-9989-2875
Pooja Kansra, Lovely Professional University, India
S. L. Gupta, Birla Institute of Technology, India

ABSTRACT

Medical tourism attracts medical vacationers by promoting its uniform vacation ease, healthcare know-how, proficiency, and comprehensible amenities. With the upsurge in COVID-19 cases and no therapeutic treatment, non-pharmaceutical intrusions are the utmost priority. Unprecedented travel limitations and homestay restrictions are posing a huge economic burden to the tourism industry. The present study aims to identify determinants inciting sustainable e-medical tourism post COVID-19 pandemic. The study is advanced from the theoretical outlook, systematically determining and scrutinizing the prior literature to discuss the determinants which encourage e-medical tourism. The results of the study highlight that resource and management assistance, electronic supporting facilities, demand issues, technological intervention, and situational glitches act as major aspects of perseverance of e-medical tourism. An apparent limitation of the present study is the absence of contributions based on empirical data.

KEYWORDS

Blockchain Technology, Conceptual Model, Determinants, E-Infrastructure, E-Medical Tourism, Sustainable Tourism, Systematic Review, Technological Intervention

INTRODUCTION

In the era of transcontinental healthcare services, medical tourism and technical progression in telemedicine intelligence, understanding the prominence of sustainable medical tourism (SMT) is the utmost priority from both national and global perspectives. Sustainable medical tourism (SMT) signifies tourism as the industry which encounters the prerequisites of the present, without negotiating the wants and desires of the forthcoming generation. Similarly, according to World Health Organization (Kelley, 2013), "*Sustainable medical tourism refers to delivering optimum healthcare services under legal and ethical principles, without being subject to any patient bias*". Medical tourism attracts medical vacationers by promoting uniform vacation ease, healthcare know-how, proficiency and comprehensible amenities (Oberoi & Kansra, 2019). The medical tourism industry is the most budding and promising in all the major economies of the world such as Indonesia, India, Malaysia, Thailand, the United Kingdom, the United States of America and Singapore (Gautam & Bhatta, 2020). According to the Business Research Company Report (2020), Medical tourism is the largest export sector and accounts for 37.72 billion dollars of global trade in 2019. The unprecedented

DOI: 10.4018/IJRQEH.299962 *Corresponding Author

arrival of the Covid-19 pandemic is witnessed as a watershed instance for the tourism industry (Higgins-Desbiolles, 2020). Early, the industry was struggling with the issue of excess tourists, but a sudden collapse of the medical tourist is experienced in 2020. A decline of 17.92 billion dollars is expected from the global medical tourism market at a negative compound annual growth rate (CAGR) of - 47.5 percent. The sudden outbreak of pandemic acts as a major limitation for the progression of the medical tourism industry for 2020-21. Travel prohibitions and stay-at-home remits will impede the progress and advancement in medical tourism till the predictable future. Thus, persuading the medical tourist to choose for electronic and telemedicine services. The study aims at identifying determinants inciting sustainable E-medical tourism post Covid-19 pandemic. The inferences of the study deliver a theoretical and conceptual base for constructing and designing the decision towards the comprehension of sustainable medical tourism globally, as well as regionally.

METHODOLOGY

The present systematic review is accomplished in congruence with the "*Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) framework*". According to Oberoi and Kansra (2020), "*The article suggests a minimum set of guidelines and procedures of writing items to enhance the quality of the systematic review*". Exploration and accumulation of reliable literature was executed from August 2020.

Search Strategy

An all-inclusive literature review on sustainable medical tourism and determinants inciting sustainable e-medical tourism (SeMT) was executed under different databases *viz.* Academia, EBSCO, Google Scholar, ProQuest and Research Gate. Additionally, backward referencing of the included studies was also done to identify supplementary articles. Various search phrases and combinations of keywords such as "Sustainable Tourism", "E-Healthcare", "E-Tourism", "Medical Vacation", "Determinants", "Covid-19", "Pandemic", "Tourist Behaviour", "Conceptual Models" and "Systematic Review" were applied for acquiring preferred outcomes. A total of 373 studies (comprising duplicate) were found after employing the search criteria. Therefore, 267 articles were recognized to be identical and eliminated instantaneously.

Inclusion Strategy

Of the remaining 106 items, a limited number of studies managed to achieve eligibility criteria grounded upon the "*Population Intervention Comparison Outcome Study*" (PICOS) procedure (Oberoi & Kansra, 2020). Further, the remaining 106 articles were evaluated to determine their relevance based on the title, abstract and keywords. Only those articles were included which managed to clear the inclusion criteria (a) studies published in English; (b) full-text articles; (c) cohort and observational articles; (d) indexed under defined databases. Later, 32 duplicate studies were removed and the remaining 27 articles were scrutinized in accordance with the inclusion criterion. This assessment resulted in a selection of 27 studies, whose full-text version was obtained.

Exclusion Strategy

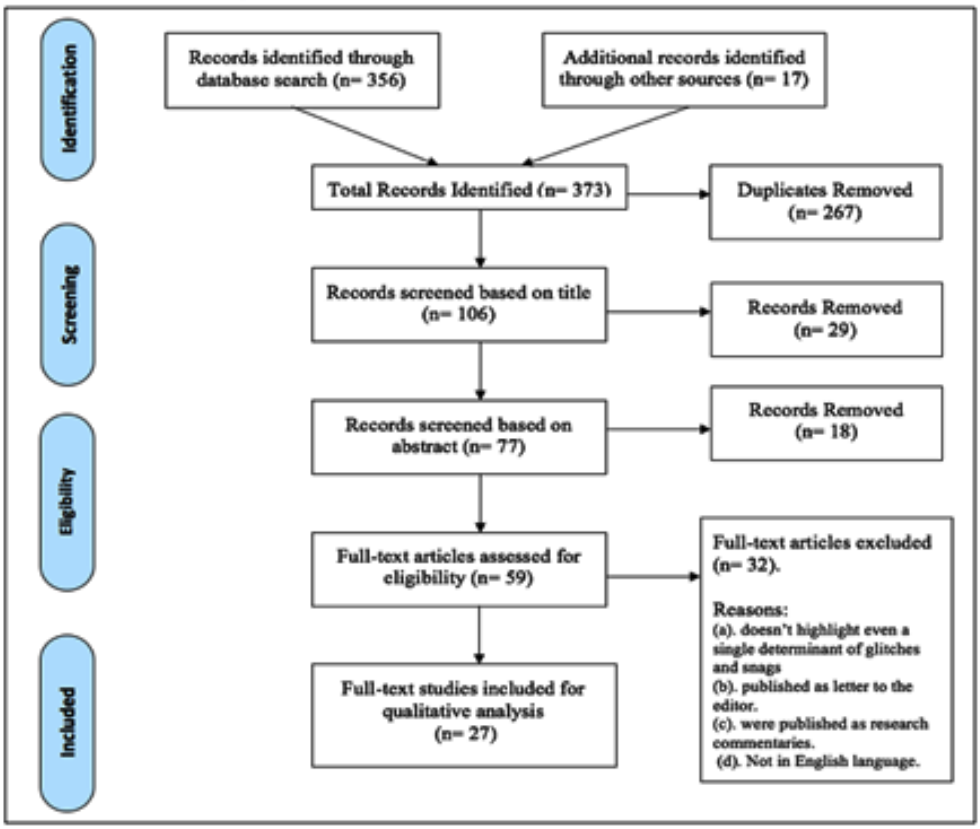
A large number of publications were excluded on the following rationale if they (a) doesn't highlight even a single determinant of glitches and snags (b) published as letter to the editor; (c) were published as research commentaries; (d) are not available in the English language. Therefore, all included studies were observed for sustainable medical tourism, determinants, methodology and conclusions. All aspects are highlighted in the "*preferred reporting items for systematic reviews and meta-analyses*" (PRISMA) framework.

Data Extraction and Quality Assessment of Included Studies

Copious statements have been used for quality assessment of the included twenty-seven studies and the majority of these studies stressed primary determinants of medical tourism. Therefore, the quality indicators advanced for this study are based on the standards proposed by previous literature (Oberoi & Kansra, 2020). A numerical value of '1' yes, '0.5' was partially available and '0' no was allocated to individual quality measures. The included study was considered to be genuinely flawed if it scores less than 5 'Yes'. Hence, all included studies certified the quality evaluation index and hold a low risk of bias selection.

The merits of the reviewed articles are broadly demonstrated in Table 1. Research questions and study outcomes were elaborately discussed and explained for all 27 included articles. The results of the studies were presented in absolute synchronization, highlighting the purpose and inferences derived from the manuscripts. It was established that 32 percent of the studies have meticulously outlined the key determinants of medical tourism. The major limitation witnessed by the large number of studies that restrained the quality of studies was the absence of an extensive explanation of medical tourism. Moreover, out of 27 reviewed articles only 06 studies coherently outlined the appropriate statistical analysis. Henceforth, depending upon the quality scores, eight articles scored 7 'Yes' on a 10-point Minors rating scale. Interestingly, only two research articles highlighted a slightly low score of 5 'Yes' of the total 27 included studies (Table 1).

Figure 1. PRISMA framework for study selection



Source: PRISMA framework based on Oberoi and Kansra (2020)

Table 1. Quality Index of the Included Studies

References	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1. A thorough definition was given?	0	1	0.5	0	1	1	0.5	0	0	0.5	1	0	1	0	1	0	0.5	0	0	0	1	0	1	0.5	0	0.5	1
2. Objectives were lucidly defined?	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	1	1
3. Incorporation of associated risk factor?	1	0.5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	1	1	1	1	1	1
4. Study location was clearly stated?	0	0	0	1	1	1	0	1	0	1	1	1	0	1	1	1	0	0	0	0	1	1	1	1	1	0	1
5. Results were relevant to the aim of the article?	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	1	1	1	1	0.5	1	1	1	1	1	1	1	1
6. Unbiased assessment of the study conclusion?	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7. Follow-up period appropriate to the aim of the study?	1	0.5	0.5	0.5	1	0.5	1	0.5	0.5	1	1	1	0.5	1	0.5	0	1	1	1	0.5	1	1	1	1	1	0	1
8. Appropriate selection of control group?	0.5	0.5	0	1	0.5	1	0.5	0.5	0	0	0	1	0	0.5	0.5	0	0	0	0	0	1	0.5	0.5	0	0	0	0.5
9. Appropriate statistical analysis?	1	1	1	1	1	1	1	1	0	0	0.5	1	1	1	1	0.5	1	1	1	0.5	1	1	1	1	0.5	1	1

References	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
10. Study Outcomes were elaborately discussed?	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total Score of the Studies Reviewed																											
Yes (1)	7	6	6	8	9	9	7	7	5	7	8	9	7	7	8	6	7	7	6	5	9	8	9	8	6	6	9
No (0)	2	1	2	1	0	0	1	1	4	2	1	1	2	1	0	3	2	3	3	3	0	1	0	1	2	3	0
Partially Available (0.5)	1	3	2	1	1	1	2	2	1	1	1	0	1	2	2	1	1	0	1	2	1	1	1	1	2	1	1

Source: Based on authors compilation

OVERVIEW OF MEDICAL TOURISM

Gradually, over a period of time the increasing accessibility of E-healthcare facilities and services is turning out to be a boon for medical tourism and it encompasses both biomedical and travel procedures (Dawn & Pal, 2011). Either traveling domestically or internationally for better medical care has seized the much attention of numerous academicians (Connell, 2006; Bookman, 2007; Balaban & Marano, 2010). A large number of scholars have also distinctively expressed E-medical tourism, according to Goodrich and Goodrich (1987), "*an effort to upgrade tourist facilities or to entice medical vacationers by purposely fostering healthcare amenities and capabilities, in addition to its consistent tourist comforts*". Gupta (2004), described medical tourism as subsidizing medical amenities to the patients in coalition with the sight-seeing. Also setting up a mass culture, where people visit far distances to obtain treatment, surgery and ancillary care while being on vacations (Connell, 2006). According to Carrera (2006), *"An prearranged voyage outside of someone's healthcare dominion to boost health*".

According to Whittaker (2008), health tourism was defined as the synonym to medical tourism. Though it is easy and evident to understand the difference between the two, on one hand, health tourism indicates visiting the tourist center for unconventional treatments and quite the reverse medical tourism was contemplated as visiting foreign nations for the biological treatments only. Analogously, Glinos and Boffin (2006) portrayed medical tourism as an overseas vacation to pursue better healthcare facilities and services by the medical tourist, over the domestic healthcare system because of comparative shortcomings. In a similar study by Gupta and Das (2012), medical tourism was defined as a pursuit in which people tour alternative republics for healthcare assistance viz. ancillary care, surgery, medical assistance, mental health, yoga & ayurvedic practices, etc. which are either not attainable or extremely high-priced. Henceforth, medical tourism is simply described as a tour to an overseas destination for attaining enhanced medical and health facilities.

THEORETICAL SETTING

Preceding literature highlights the medical tourism and healthcare market as a budding and emerging business opportunity for third-world economies. For establishing an integrated conceptual model, a meticulous investigation of the previous theoretical background and literature on medical tourism was taken into consideration as highlighted in Table 2. Though accumulating adequate data on determinants affecting sustainable e-medical tourism (SeMT) remains to be a big problem. Therefore, more empirical efforts are needed in this area of study (Behrmann & Smith, 2010; Hopkins et al., 2010; Hanefeld et al., 2014).

According to Smith and Forgione (2007), determinants that influence the decision-making of the medical tourist to pursue healthcare assistance overseas are broadly defined to be E-infrastructural development and availability of adequate supporting services. Similarly, Kim (2017) inferred that medical tourists initially consider the following determinants before selecting destinations are the availability of medical health expertise, adequate e-supporting services, E-infrastructural development and lastly destination management. According to Caballero-Danell and Mugomba (2007), determinants such as adequate supporting services, infrastructure, availability of efficient health experts is the prerequisite to attract medical travelers, dearth or any hindrance could affect the sustainable development of medical tourism. A similar study by Ye et al., (2008) acknowledged determinants *viz.* destination management, cost-effectiveness, certified and accredited healthcare avenues, accessibility and language certainty and development of tourism resources encourages the medical tourists to travel such destinations and vice-versa. Heung *et al.* (2010), "*advanced a conceptual model on medical tourism and highlighted the determinants which straightforwardly affects the choice of the potential medical tourists*". According to Sankar (2019), both demand and supply aspects of the medical traveler were considered such as economical healthcare utilization, economic background of medical visitors, accessibility & language certainty and foreign recommendations collectively determined to

Table 2. Profile of the included studies

S. No	Title	Source	Journal	Study Type	Location	Key Determinants
1	Medical tourism research: A systematic review	Balaban & Marano, 2010	Intl. Journal of Infectious Diseases	Systematic Review	-	More availability of denominator information for transplant tourism and less survivorship bias.
2	Top 7 issues in medical tourism: challenges, knowledge gaps, and future directions for research and policy development	Behrmann & Smith, 2010	Global Journal of Health Science	Review Based Study	Canada	Emerging technology, more industry tie ups and more of comparativeness
3	Medical Tourism Market Global Report 2020-30: Covid-19 Growth and Change.	-	Business Research Company	Review Based Study	-	Less travel bans, development of electronic health records.
4	Medical tourism	Carrera, 2006	Health Affairs	Review Based Study	-	Study identified spas and other rejuvenation as significant determinant of medical tourism
5	Medical tourism: Sea, sun, sand and… surgery	Connell, 2006	Tourism Management	Review Based Study	Asia	Low cost, less waiting time, technology, less transport costs and internet marketing play significant role in medical tourism development
678	Medical tourism and its entrepreneurial opportunities- A conceptual framework for entry into the industryMedical tourism in India: issues, opportunities and designing strategies for growth and developmentSeeking health care through international medical tourism	Caballero-Danell & Mugomba, 2007Dhawan & Pal, 2011Eissler & casken, 2013	-International Journal of Multidisciplinary ResearchJournal of Nursing Scholarship	-Review Based StudyConceptual	SwedenIndia-	Study observed pricing as a major strategy for medical tourism growthStudy identified development of infrastructural facilities, abundant trust, more of capital, easy accessibility, good communication, less complex and visa procedure as significant factors.Study inferred low cost, higher satisfaction level, accessibility (logistics) and technology as primary determinant of medical tourism
9	Medical Tourism in India: Possibilities and Problems of Alternative Medical Treatment	Gautam & Bhatta, 2020	International Journal of Health Management and Tourism	Review Based Study	India	To realize the potential, the medical tourism industry in India must standardize medications, improve e-infrastructure, technology and sufficient training.
10	Health-care tourism — an exploratory study	Goodrich & Goodrich, 1987	Tourism management	Empirical Study	United Kingdom	Study inferred promoting the variety of attractions, convention centres, competitiveness, market segmentation, modern accommodation.
11	Medical tourism and public health	Gupta, 2004	People democracy	Review Based Study	-	Study focused on preserving of resources, development of cultural and natural heritage
12	Medical tourism in India	Gupta & Das, 2012	Clinics in Laboratory Medicine	Review Based Study	India	Study identified translation, currency conversion, travel, visa, post-treatment care and accommodation as key factors.

Table continued on next page

Table continued

S. No	Title	Source	Journal	Study Type	Location	Key Determinants
13	What Do We Know About Medical Tourism? A Review of the Literature With Discussion of Its Implications for the UK National Health Service as an Example of a Public Health Care System	Hanefeld et al., 2014	J Travel Med	Review Based Study	United kingdom	Not only cost considerations or clinical outcomes. Care, less waiting times, and others depending on the type of treatment, trust and availability of latest procedures
14	A conceptual model of medical tourism: Implications for future research.	Heung et al., 2010	Journal of Travel & Tourism Marketing	Empirical Study	China	Infrastructure/superstructure, promotional activities, quality assurance and communication facilities
151617	Medical tourism development in Hong Kong: An assessment of the barriersTourism and HospitalityA multi-level approach to a purchasing decision of foreign medical service.	Heung et al., 2011India Brand Equity Foundation, 2017Kim, 2017	Tourism Management-International Information Institute (Tokyo). Information	Empirical StudyEmpirical StudyReview Based Study	ChinaIndiaTokyo	Costs, government support, travel facilitation, policies & plans, investment, internet and communications. Availability of supporting services, development of e-infrastructure, low cost and adept doctors.Purchasing decisions of medical tourists are driven by medical infrastructure and medical institutions' service quality factors.
18	Factors influencing medical tourism in India: a critical review	Oberoi & Kansra, 2019	Samvad	Review Based Study	India	Certified and accredited healthcare avenues, e-connectivity with experts, adept doctors and transactional/process limpidity.
19	Can blockchain technology help promote new tourism destinations? The example of medical tourism in Moldova	Pilkington, 2017	The Example of Medical Tourism in Moldova	Review Based Study	Moldova	Adoption of blockchain technology could be paramount in order to promote decentralized travel solutions and better manage EHRs.
20	The impact of blockchain on medical tourism	Rejeb et al., 2019	In Workshop on E-Business	Review Based Study	-	Blockchain technology can benefit medical tourism in various ways.
21	Medical tourism in India: Issues, opportunity and designing strategy for growth and development	Sankar, 2019	Sociology of Medical Tourism	Review Based Study	India	Study identified government support, medical infrastructure, accreditation, hygienic and strong competition as key determinant.
22	Global outsourcing of healthcare: a medical tourism decision model	Smith & Forgione, 2007	Journal of Information Technology Case & Application Research	Conceptual	-	Cost, political stability, regulatory standards, accreditation, physician training and quality of care as key determinants of medical tourism.
2324	Perceptions of the Ethics of Medical Tourism: Comparing Patient and Academic PerspectivesLooking at the Future of Medical Tourism in Asia	Snyder et al., 2012Barat, 2021	Public Health EthicsInternational Journal of Tourism and Hospitality Management in the Digital Age	EmpiricalConceptual	CanadaAsia	Accessibility & connectivity, safety & security, affordability of care abroad, access to treatments and digitalized patients dataPrice differential of medical procedures, physicians reputation, reputation of facility, location reputation and referral/ recommendations

Table continued on next page

Table continued

S. No	Title	Source	Journal	Study Type	Location	Key Determinants
25	Indian medical tourism industry to touch $8 billion by 2020	Thornton, 2015	India Times	Review Based Study	India	Cost effectiveness, infrastructural development, destination management and adept doctors are major determinants of medical tourism.
26	International hospital out shopping: a staged model of push and pull factors	Veerasoontorn & Beise-Zee, 2010	International Journal of Pharmaceutical and Healthcare Marketing	Empirical	Thailand	Innovation, organizational efficiency, emotional service quality and patient-doctor relationships
27	Motivation of medical tourists: An exploratory case study of Hong Kong medical tourists	Ye et a., 2008	Asia Pacific Tourism Association (APTA) Annual Conference	Empirical	Hong-Kong	Destination management, cost effectiveness, certified and accredited healthcare avenues, accessibility and language certainty and development of tourism resources encourages the medical tourists to travel such destinations

Source: Author's compilation based on review.

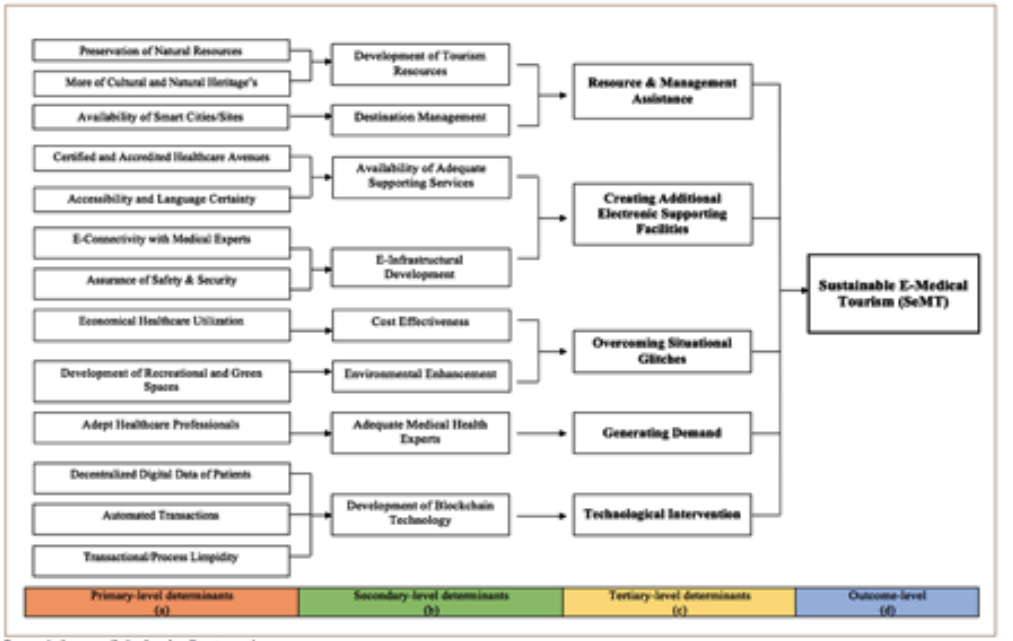
be demand aspects of medical tourists. Similarly, the supply aspect is jointly determined by various sub-factors such as decentralized digital data of patients, assurance of safety & security, destination management and lastly, development of tourism resources influence the tourist decision (Table 2).

Preceding literature highlights push & pull determinants as a central section that helps patients to decide their decision to travel overseas. According to Veerasoontorn and Beise-Zee (2010), "*Overcoming economic menace and creating additional electronic supporting facilities in developed nations behaves as a push factor to motivate medical tourists*". Studies by Snyder et al., 2011; Eissler & Casken, 2013) concluded that prospective medical vacationers get encouragement from several treatment aspects to visit foreign nations such as inexpensive healthcare utilization services, adept doctors & surgeons, decentralized digital data of patients, transactional/process limpidity and low postponing interval for medical treatment. According to Heung et al. (2011), "*The results reveal that policies and regulations, government support, costs, capacity problems, and the healthcare needs of the local community are the main barriers to the development of such tourism*". Similarly, Government of India (2018), "*Certified and Accredited healthcare system, recreational spaces, adept doctors, low economic repercussions and fast-track "Zero Waiting" are the major determinants which rewards medical visitors traveling India*".

According to Oberoi and Kansra (2019), advancement of both individual and provider-related determinants such as technological intervention, hospital selection, creating additional electronic support facility, adequate medical health experts, E-infrastructure, certification and accessibility could induce the medical tourists to visit a destination, which is benign for the economy from both medical and destination viewpoints. According to Pilkington (2017) and Rejeb et al. (2019), "*adoption of blockchain technology can benefit medical tourism by promoting decentralized travel solutions and also better manage electronic health records*".

Investigation of the prevailing erudite literature on medical tourism highlights that the majority of research articles scrutinized the determinants which stimulate or dissuade the medical tourist's perception to pursue medical treatment abroad. Hence, Table 2 shows the available literature, it's easy to recognize and categorize the determinants broadly. The determinants that incite medical tourism are highlighted in Figure 2.

Figure 2. Conceptual Model on Determinants Triggering Sustainable E-Medical Tourism (SeMT)



Source: Authors compilation based on literature review

MECHANISM LINKING INDICATORS AND SUSTAINABLE E-MEDICAL TOURISM

The conceptual model manifested in Figure 2 of the study elucidates the potential pathway through which various determinants may halt medical tourism. The model also captures the acquaintance assessed through the literature review.

Primary-level Determinants

A total of 13 primary-level determinants were identified *viz.* availability of smart cities, development of natural resources, accessibility & language certainty, economical healthcare utilization, E-connectivity with medical experts, etc. which facilitates the development of sustainable e-medical tourism (SeMT) at the primary level. Determinants *viz.* preservation of natural resources, more of cultural and natural heritage collectively combine to form development of tourism resources indicator. Similarly, availability of smart cities/sites from destination management indicator. Certified & accredited healthcare avenue and accessibility & language certainty together form secondary-level indicator titled as availability of adequate supporting services. Likewise, E-connectivity with medical experts and assurance of safety & security mutually forms to make E-infrastructural development. Economical healthcare utilization and development of recreational and green spaces independently act as secondary-level indicators labeled as cost-effectiveness and environmental enhancement. Lastly, primary-level indicators *viz.* adept healthcare professionals, decentralized data and transactional/ process limpidity collectively form to cause secondary-level determinants that are directly related. Preposition 1: - Primary-level determinants are directly related to the secondary-level determinants which in turn leads to sustainable E-medical tourism (SeMT).

Secondary-level Determinants

Secondary-level determinants are broadly grounded from the primary-level hurdles. A total of eight secondary-level determinants were observed from the available literature, which augments the progression of E-medical tourism in major economies. Development of tourism resources and destination management collectively melds into resource and management assistance. Likewise, the availability of adequate supporting services and E-infrastructural development together forms tertiary-level indicators creating additional electronic supporting facilities. Further, cost-effectiveness and environmental enhancement jointly act as tertiary-level determinants designated as overcoming situational glitches. Lastly, determinants such as adequacy of medical health expertise and development of blockchain technology independently form to cause secondary-level developments and are directly related.

Preposition 2: - Secondary-level determinants are directly related to the tertiary-level determinants which in turn leads to sustainable E-medical tourism (SeMT).

Tertiary-level Determinants

The cumulative effect of all determinants of sustainable E-medical tourism (SeMT) has an enormous impression not only on tourists/travelers, relatively it leads to the comprehensive flourishment of socio-economic aspects of the economy (India Brand Equity Foundation, 2017). The ease of medical tourism unshackles the developing economies by boosting their healthcare amenities, enhanced infrastructure, fading economic repercussion, etc. and on the contrary, established destination for medical tourism takes benefit from being an obvious destination (Thorton, 2016). A total of five tertiary-level determinants were witnessed, which encourages the advancement of sustainable e-medical tourism in particular economy *viz.* resource & management assistance, creating additional supporting facilities, overcoming situational glitches, generating demand and technological intervention.

Preposition 3: - Tertiary-level determinants are directly related to sustainable E-medical tourism (SeMT), which facilitates the inclusive growth & development of an economy as a new tourist destination.

CONCLUSION

Sustainable E-Medical Tourism (SeMT) is contemplated as an emerging and propitious sector, which is gaining the attention of new economies and perceived as an alternative to conventional businesses with a higher rate of returns on investments. Though tourism is regarded as a prosperous and revenue-generating industry, however, still there is a dearth of literature on the sustainable development of medical tourism, thereby, highlighting the determinants inciting sustainable E-medical tourism is both already existing and new area of research. The aim of the present study with the prior robust literature review is to attract existing knowledge to highlight the determinants stimulating sustainable E-medical tourism. The study proposes a conceptual research model that focuses to investigate the relationship between sustainable E-medical tourism (SeMT) and key determinants acting as moderators to twitch the development of the tourism industry in niche markets. Firstly, the model explored that primary-level determinants are directly related to secondary-level determinants for sustainable E-medical tourism. Secondly, the study suggests that secondary-level determinants *viz.* destination management, E-infrastructural development, adequacy of medical health expertise make-ups the tertiary-level determinants impact sustainable E-medical tourism (SeMT).

Future research should validate the conceptual model and examine the effect of Covid-19 restrictions on the perception of medical tourists. From the government's perspective, the proposed determinants should be measured holistically as to how the development of key predictors *viz.* e-infrastructure and blockchain technology is beneficial for sustainable medical tourism at the time of pandemic-like situations. Various research queries need to be discussed in future research such as, to what degree these technological interventions are beneficial for medical tourism? determinants were chosen prudently? Or do they develop as a consequence of preceding articles?

FUNDING AGENCY

Publisher has waived the Open Access publishing fee.

REFERENCES

Balaban, V., & Marano, C. (2010). Medical tourism research: A systematic review. *International Journal of Infectious Diseases*, *14*, e135. doi:10.1016/j.ijid.2010.02.1784

Barat, S. (2021). Looking at the Future of Medical Tourism in Asia. *International Journal of Tourism and Hospitality Management in the Digital Age*, *5*(1), 19–33. doi:10.4018/IJTHMDA.2021010102

Behrmann, J., & Smith, E. (2010). Top 7 issues in medical tourism: Challenges, knowledge gaps, and future directions for research and policy development. *Global Journal of Health Science*, *2*(2), 80. doi:10.5539/gjhs.v2n2p80

Bookman, M. (2007). *Medical tourism in developing countries*. Springer. doi:10.1057/9780230605657

Business Research Company. (2020). *Medical Tourism Market Global Report 2020-30: Covid-19 Growth and Change*. Retrieved at April 13, 2021, from https://www.thebusinessresearchcompany.com/report/medical-tourism-market-global-report-2020-30-covid-19-growth-and-change

Caballero-Danell, S., & Mugomba, C. (2007). *Medical tourism and its entrepreneurial opportunities: A conceptual framework for entry into the industry*. Academic Press.

Carrera, P. M. (2006). Medical tourism. *Health Affairs*, *25*(5), 1453–1453. doi:10.1377/hlthaff.25.5.1453 PMID:16966750

Connell, J. (2006). Medical tourism: Sea, sun, sand and… surgery. *Tourism Management*, *27*(6), 1093–1100. doi:10.1016/j.tourman.2005.11.005

Dawn, S. K., & Pal, S. (2011). Medical tourism in India: Issues, opportunities and designing strategies for growth and development. *International Journal of Multidisciplinary Research*, *1*(3), 7–10.

Eissler, L. A., & Casken, J. (2013). Seeking health care through international medical tourism. *Journal of Nursing Scholarship*, *45*(2), 177–184. doi:10.1111/jnu.12014 PMID:23489601

Gautam, P., & Bhatta, K. (n.d.). Medical Tourism in India: Possibilities and Problems of Alternative Medical Treatment. *International Journal of Health Management and Tourism, 5*(3), 181-207.

Glinos, I. A., R, B., & Boffin, N. (2006). *Cross-border contracted care in Belgian hospitals*. Academic Press.

Goodrich, J. N., & Goodrich, G. E. (1987). Health-care tourism- An exploratory study. *Tourism Management*, *8*(3), 217–222. doi:10.1016/0261-5177(87)90053-7

Government of India. (2018). *Ministry of tourism*. Retrieved at May 13, 2021, from https://www.indiahealthcare.org/home

Gupta, A. S. (2004). Medical tourism and public health. *People's Democracy*, *28*(19), 9.

Gupta, V., & Das, P. (2012). Medical tourism in India. *Clinics in Laboratory Medicine*, *32*(2), 321–325. doi:10.1016/j.cll.2012.04.007 PMID:22727009

Hanefeld, J., Smith, R., Horsfall, D., & Lunt, N. (2014). What do we know about medical tourism? A review of the literature with discussion of its implications for the UK National Health Service as an example of a public health care system. *Journal of Travel Medicine*, *21*(6), 410–417. doi:10.1111/jtm.12147 PMID:25156070

Heung, V. C., Deniz, K., & Song, H. (2010). A conceptual model of medical tourism: Implications for future research. *Journal of Travel & Tourism Marketing*, *27*(3), 236–251. doi:10.1080/10548401003744677

Heung, V. C., Kucukusta, D., & Song, H. (2011). Medical tourism development in Hong Kong: An assessment of the barriers. *Tourism Management*, *32*(5), 995–1005. doi:10.1016/j.tourman.2010.08.012

Higgins-Desbiolles, F. (2020). Socialising tourism for social and ecological justice after COVID-19. *Tourism Geographies*, *22*(3), 1–14. doi:10.1080/14616688.2020.1757748

Hopkins, L., Labonté, R., Runnels, V., & Packer, C. (2010). Medical tourism today: What is the state of existing knowledge? *Journal of Public Health Policy*, *31*(2), 185–198. doi:10.1057/jphp.2010.10 PMID:20535101

India Brand Equity Foundation. (2017). *Tourism and Hospitality*. Retrieved on March 15, 2019, from https://www.ibef.org/download/Healthcare-June-2017.pdf

Kelley, E. (2013). *Medical tourism: WTO Patient Safety Programme*. Retrieved on March 18, 2021, from https://www.who.int/global_health_histories/seminars/kelley_presentation_medical_tourism.pdf

Kim, M. S. (2017). A multi-level approach to a purchasing depision of foreign medical service. *International Information Institute Information*, *20*(6B), 4243–4254.

Oberoi, S., & Kansra, P. (2019). Factors influencing medical tourism in India: A critical review. *SAMVAD*, *17*, 9–16.

Oberoi, S., & Kansra, P. (2020). Economic menace of diabetes in India: A systematic review. *International Journal of Diabetes in Developing Countries*, *40*(4), 464–475. doi:10.1007/s13410-020-00838-z PMID:32837090

Pilkington, M. (2017). Can blockchain technology help promote new tourism destinations? The example of medical tourism in Moldova. SSRN *Electronic Journal*, 1–8 10.2139/ssrn.2984479

Rejeb, A., Keogh, J. G., & Treiblmaier, H. (2019, December). The impact of blockchain on medical tourism. In *Workshop on E-Business* (pp. 29-40). Springer. doi:10.2139/ssrn.3521841

Sankar, P. (2019). Medical tourism in India: issues, opportunities and designing strategies for growth and development. *Sociology of Medical Tourism*, 227.

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. doi:10.1080/15228053.2007.10856117

Snyder, J., Crooks, V. A., & Johnston, R. (2011). Perceptions of the ethics of medical tourism: Comparing patient and academic perspectives. *Public Health Ethics*, *5*(1), 38–46. doi:10.1093/phe/phr034

Thornton, G. (2015). Indian medical tourism industry to touch $8 billion by 2020. *India Times*, 1.

Veerasoontorn, R., & Beise-Zee, R. (2010). International hospital out shopping: A staged model of push and pull factors. *International Journal of Pharmaceutical and Healthcare Marketing*, *4*(3), 247–264. doi:10.1108/17506121011076174

Whittaker, A. (2008). Pleasure and pain: Medical travel in Asia. *Global Public Health: An International Journal for Research, Policy and Practice*, *3*(3), 271–290. doi:10.1080/17441690701463936

Ye, B. H., Yuen, P. P., Qiu, H. Z., & Zhang, V. H. (2008). *Motivation of medical tourists: An exploratory case study of Hong Kong medical tourists*. Paper presented at Asia Pacific Tourism Association (APTA) Annual Conference, Bangkok, Thailand.

Sumit Oberoi is working as Assistant Professor at Symbiosis School of Economics, Pune. His areas of interest embrace health economics, medical tourism, international trade, blockchain technology, research methodology and microeconomics. He has published papers in high indexed journals such as IJQRM (Emerald), Economic and Political Weekly, IJDDC (Springer), International Journal of Commerce, Economics and Policy, Int. J. Trade and Global Markets, IGI global etc. Sumit is also a reviewer for various international journals, viz. International Journal of Emerging Markets (Emerald), Int. J. of Diabetes in Developing Countries (Springer), ClinicoEconomics and Outcomes Research (Dove), etc. Sumit Oberoi can be contacted at profsumitoberoi@gmail.com.

Pooja Kansra, Professor at Mittal School of Business, Lovely Professional University, Jalandhar. She has over thirteen years of teaching and eleven years of research experience. Her areas of interest include econometrics methods, microeconomics, macroeconomics, managerial economics, quantitative techniques and health economics. She has to her credit various research papers published in refereed national and international journals of repute. She has published several books on various health economics issues and health insurance. She has been a regular writer for India's Insurance Regulatory and Development Authority. She is an editorial board member/reviewer in several national and international journals.S. L. Gupta is working as Director & Professor at Birla Institute of Technology, Noida in the Department of Management. He has an excellent record to his credit right from the very beginning. His experience into academics has been very long. He has been teaching Marketing Management, Marketing Research, Sales and Distribution Management and Service Marketing since 1992. He believes in upliftment of deserving through micro finance.