

Factors Influencing Medical Tourism in India: A Critical Review

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Abstract

With the ascend of scientific and technical progression by developing economies of the world, transcontinental healthcare services have become a reality. Medical tourism attempts to entice tourists by intentionally promoting its healthcare services and facilities, in addition to its regular tourist comforts. The aim of the present study is to develop a conceptual model of factors influencing medical tourism and inclusive growth in India based on the evidence from past. The study is approached from the theoretical perspective, comprehensively assesses and analyzes the previous literature to discuss the role of medical tourism as a boon for inclusive growth. The present study develops a conceptual model on factors influencing medical tourism and discusses how the antecedents of medical tourism including individual-related and provider-related creates the value for a destination. The dimensions of medical tourism are basic resources which are indispensable for attaining inclusive growth. An apparent limitation of the present study was the non-existence of the contributions based on the empirical data.

Keywords: Inclusive Growth, Medical Tourism, Medical Tourism Market, Travel Behavior

JEL Classification: Z0, Z3, Z32, Z39.

1. Background

With the ascend of scientific and technical progression by developing economies of the world, transcontinental healthcare services have become a reality (Reddy & Qadeer, 2010). Opportunities in healthcare services are not restricted to any region, rather considered to be a global phenomenon. In a recent scenario, globalization happened to take place under our very eyes. Globalization helped the economies to elevate out of their isolated reality and helped them to be a part of knowledgeable society. Globally, medical tourism market was valued at the U.S. \$ 61.172 billion in 2016 and forecasted to be U.S. \$165.34 billion markets by 2023, there by registering the Compound Annual Growth Rate (CAGR) of 15 percent from 2017 to 2023 (Sumant & Shaikh, 2017). Globalization and the accelerating liberalization of

healthcare services contribute to the flaring medical tourism in Asia. Medical tourism has augmented in various Asian countries *viz.* India, China, Indonesia, Singapore, Malaysia and Thailand (Lunt & Carrera, 2010; Sharma *et al.*, 2016). These economies have emerged to be the finest alternative for healthcare services and primarily preferred destination for medical tourism internationally. Reddy and Qadeer (2010) concluded that healthcare services in Asian countries cost 20 percent of the total treatment cost in contrary to the United States of America (USA) and United Kingdom (UK) where cost of treatment was quite high, further stating medical tourism in Asian countries has been escalating at annual growth rate of 20 to 30 percent.

Amongst fifty Asian countries, India is considered as the contemporary global center for medical tourism and publicized itself as the initiator of ayurvedic therapy to

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coronary bypass, cosmetic surgery, hip resurfacing and other areas of advanced medication. With the emergence of economic liberalization in mid-1990's both public and private hospitals have diversified themselves by importing the cutting-edge technology and other medical amenities, thus bringing infrastructure in the finest hospitals equivalent to overseas medical destinations (Planning Commission, 1992). In 2003, Govt. of India framed policy for integrating medical expenditure and tourism which was inaugurated by NDA lead government under Jaswant Singh, Minister of External Affairs and Defense at that time. Highly successful IT industries link in the medical field has also helped India in the growth of medical tourism. Medical tourism is considered to be the most promising industry because of its noteworthy economic prospective *viz.*, trade in service and signifies the amalgamation of medication and tourism (Bookman M, 2007). Medical tourism in India accounted to be U.S. \$ 3 billion market by 2015 and was estimated to touch U.S. \$ 7-8 billion by 2020 (FICCI Heal, 2008). According to MTI (2016), "*The number of Foreign Tourist Arrivals (FTAs) in India on medical visa grew 15.9 per cent year-on-year to an estimated 495,056 in 2017 from 427,014 in 2016 and medical visas were 1,34,344 in 2015*". An enormous upsurge in foreign tourists is witnessed because of government backed "*Incredible India Campaign*", India stands to be fifth in "*Medical Tourism Index*" globally (MTI, 2016).

NITI Aayog, India's think tank acknowledged medical tourism as the chief growth driver and source of forex earning (GOI, 2018). According to Thornton (2015), SAARC nations *viz.* Bangladesh and Afghanistan report for 34 percent of the foreign patient followed by Russia with 30 percent share and other chief sources of foreign patients are from the Middle East and Africa. Therefore, India has been a preferred destination for Medical Value Travel (MVT) in comparison to other Asian economies. Keeping in view the recent trends, India should diversify its economic and political aspects, as well as, it should identify the focus area in short and long-term to emerge as the preferred global leader for medical tourism.

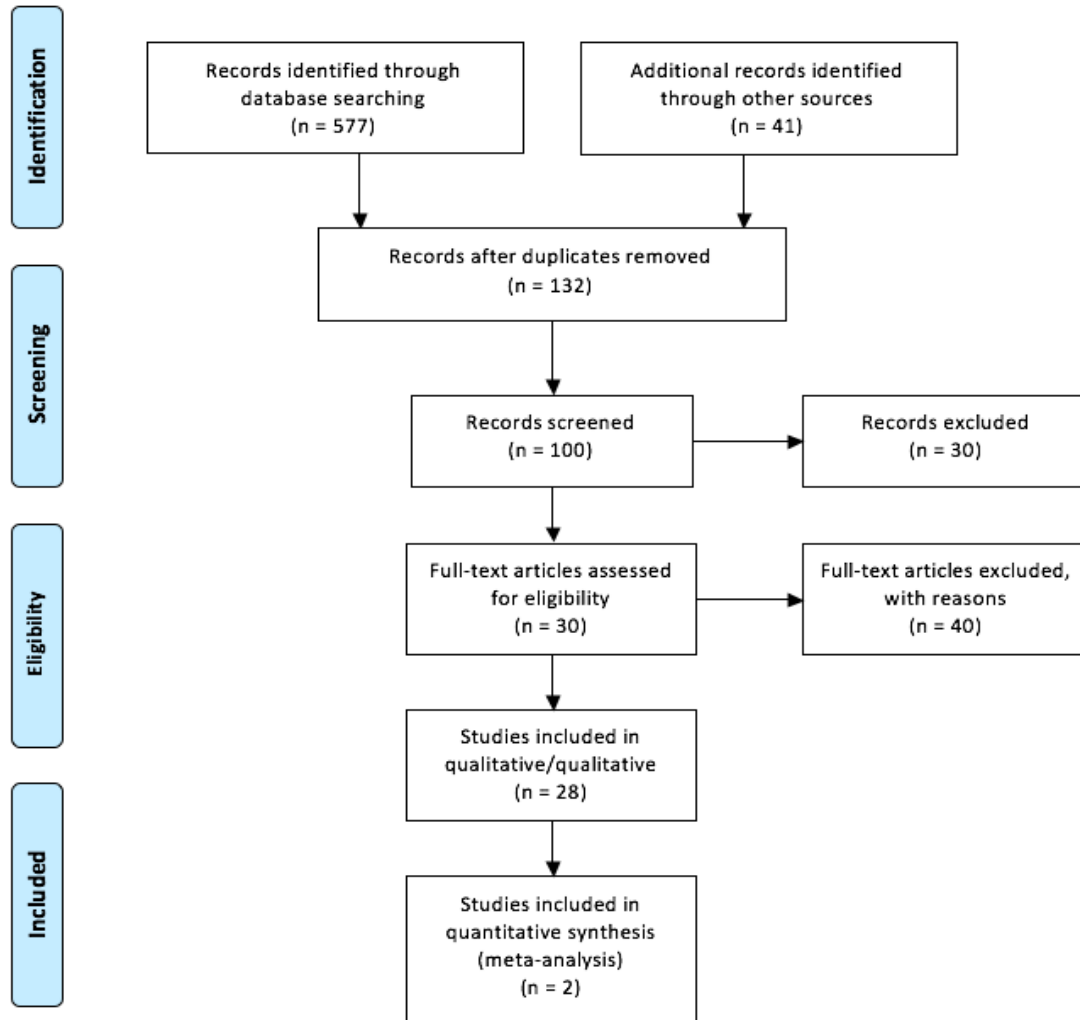
2. Methodology

A comprehensive review of literature on the medical tourism and growth of medical tourism in India was conducted in December 2016 following the desired

reporting items for the present study. A search was performed for all published studies up to 2017 in appropriate databases *viz.* Google Scholar, J-Store, ProQuest and Research Gate. Further, backward referencing or reference lists of the studies included in the literature review were also explored to identify additional eligible studies. Search terms and their combinations using the following keywords are "Medical Tourism", "Healthcare", "India", "Treatment abroad", "Growth", "Medical Tourists", "Individual-related factors", "Provider-related factors", "Medical Tourism Market", "Travel Behaviour" and "Conceptual Models" were used in obtaining desired results. A total of 618 articles (including duplicates) were obtained. Later 486 duplicate articles were removed, titles and abstracts of the remaining 132 articles were examined to measure their relevance as per the inclusion criteria (a) articles only in English language; (b) from beginning onward; (c) covering at least Asian country or Indian nation; (d) cohort and observational studies; (e) indexed under ProQuest, EBSCO and SCOPUS was selected. This screening led to the selection of 132 articles and a further literature search was executed using the backward referencing in the selected articles. Ultimately, a total of 30 articles were acknowledged, whose full-text version was acquired. Hence, each of these articles were observed for information on medical tourism, factors affecting medical tourism, methods and results. These details are presented in the PRISMA framework (Figure 1).

3. Medical Tourism an Overview

Travelling throughout the planet for medical treatment has captured the attention of various academicians (Connell, 2006; Bookman, 2007; Balaban & Marano, 2010). Many researchers have defined medical tourism in a different manner, Goodrich and Goodrich (1987), defined healthcare tourism as "*the attempt on the part of a tourist facility or destination to attract tourists by deliberately promoting its health-care services and facilities, in addition to its regular tourist amenities*" (pp. 217). Gupta (2004), well-defined medical tourism as the endowment of the cheap medical facility to patients in alliance with the tourism industry. Establishing a form of mass culture whereby individuals tour long distances to attain medical, surgical and dental services while being holidaymakers (Connell, 2006). In simple words, medical tourism was outlined as "organized travel outside of someone's



Source: Moher et al., (2009).

Figure 1. PRISMA framework for detailed methods.

healthcare jurisdiction to enhance health” (Carrera, 2006, p. 1453).

According to Whittaker (2008), medical tourism is considered as the synonym with health tourism. One could, however, differentiate the health tourism to medical tourism, where health tourism is indicated as travelling to resorts for alternative therapies and on the contrary medical tourism is considered to be moving for the biological procedure only. Glinos and Baeten (2014) “*medical tourism as the patient’s activity who moves overseas to seek healthcare services because of some relative disadvantage in their own nation’s healthcare system*”. Further, Gupta and Das (2012) justified medical tourism as an activity where individuals travel other countries for healthcare services viz. surgical, medical, dental care etc. which are either not available or highly expensive

in comparison. Therefore, medical tourism could be explained as the movement of the patients to an overseas destination to receive medical treatment and facilitation.

4. Current Status of Medical Tourism in India

Medical tourism accounts to be one of the fastest growing sub-sectors of the tourism industry. India’s healthcare facilities and surgical procedures are comparatively more satisfactory than other South-Asian nations. India positioned to be the third most preferred destination for medical tourism amongst 184 countries of the world and the GDP growing by 7.9 percent per annum (India Brand Equity Foundation, 2017). The Quality of services

provided in India was much low budgeted with respect to the western economies. The price differential for various medical procedures provided by India, Malaysia, Thailand and U.S.A has clearly revealed the monetary advantage offered to the foreign patients. Table 1, explains the cost comparison between India, Malaysia, Thailand and U.S.A on the basis of various medical procedures.

The price disparity between India and other foreign countries for different medical procedure exhibits that India possesses a greater economic advantage. For instance, heart bypass surgery cost 18 times more in the United States and approximately twice in Thailand which exhibits India's comparative advantage over other foreign destinations (India Tourism Report, 2010). According to Connell (2006), India publicizes itself as the global centre of medical tourism by offering alternative ayurvedic therapy to coronary bypasses and cosmetic surgery. Institutes such as Breach Candy, Hinduja, Fortis Escort, Apollo and Yashoda Hospitals along with Hyatt, J.W. Marriot, Ayurvedic Village, Carnoustie Ayurveda and Wellness Resort in Kerala are well known for their high-end healthcare services at Pan-India and global level for safety, trust and excellence (India Brand Equity Foundation, 2017).

5. Theoretical Background

Previous studies highlighted healthcare and medical tourism to be a trending and emerging niche market. To develop an integrated theoretical model, detailed examination of the prior theoretical framework and review of literature on medical tourism was taken into consideration.

Smith and Forgione (2007), identified the determinants which influenced the decision of patients to seek the healthcare assistance overseas. The model suggested that no individual determinant has laid a dominant effect on

the decision-making, rather both the factors medical facility and country location plays an equivalent role. Tourists initially select the country location and then look for a medical facility, infrastructure and service availability (Kim, 2017). Caballero-Danell and Mugomba (2007), considered the following factors *viz.* customer benefit, branding, communication channel, legal framework and infrastructure as dominant determinants which attracts the possible healthcare tourists. Similarly, Ye *et al.* (2008), identified the factors *viz.* marketing promotion programs, cost, communication, employee expertise and certification which motivates the medical tourists to visit the destination for healthcare services.

Heung *et al.* (2010), developed an integrated model to determine the factors which directly affects the decision-making of the potential medical tourist. The model takes into the consideration both the demand and supply aspect of the tourist. Demand aspect was mainly determined by the combination of various sub-factors *viz.* economic cost, distance/location, political stability, hospital reputation. The supply side was determined by sub-factors *viz.* infrastructure, promotion and quality of healthcare facility. Chanda (2013), concluded destination selection process as essential factor by medical tourists. The purpose for taking vacations may have different motive and may vary from person to person. Factors which motivates medical tourist for vacation is safety (economic and political), adventure, social interaction, low cost, hospital reputation and communication (Crompton, 1979; Mayo & Jarvis, 1981).

Previous studies mention a push and pull factor as fundamental components which determines the patient's decision to travel abroad. Veerasoontorn and Beise-Zee (2010), identified lofty cost and deteriorating condition of healthcare services in developed countries as push factors and pull factors *viz.* innovation, modernization, service quality and patient-doctor relationships as

Table 1. Cost comparison of medical procedure (2019) (US \$)

Medical Procedure	India	Malaysia	Thailand	U.S.A
Heart bypass	7,900	12,100	15,000	1,23,000
Angioplasty	5,700	8,000	4,200	28,200
Heart Valve Replacement	9,500	13,500	17,200	1,70,000
Knee Replacement	6,600	7,700	14,000	35,000
Spinal Fusion	10,300	6,000	9,500	1,10,000

Approximate retail cost. International figures based on named countries.

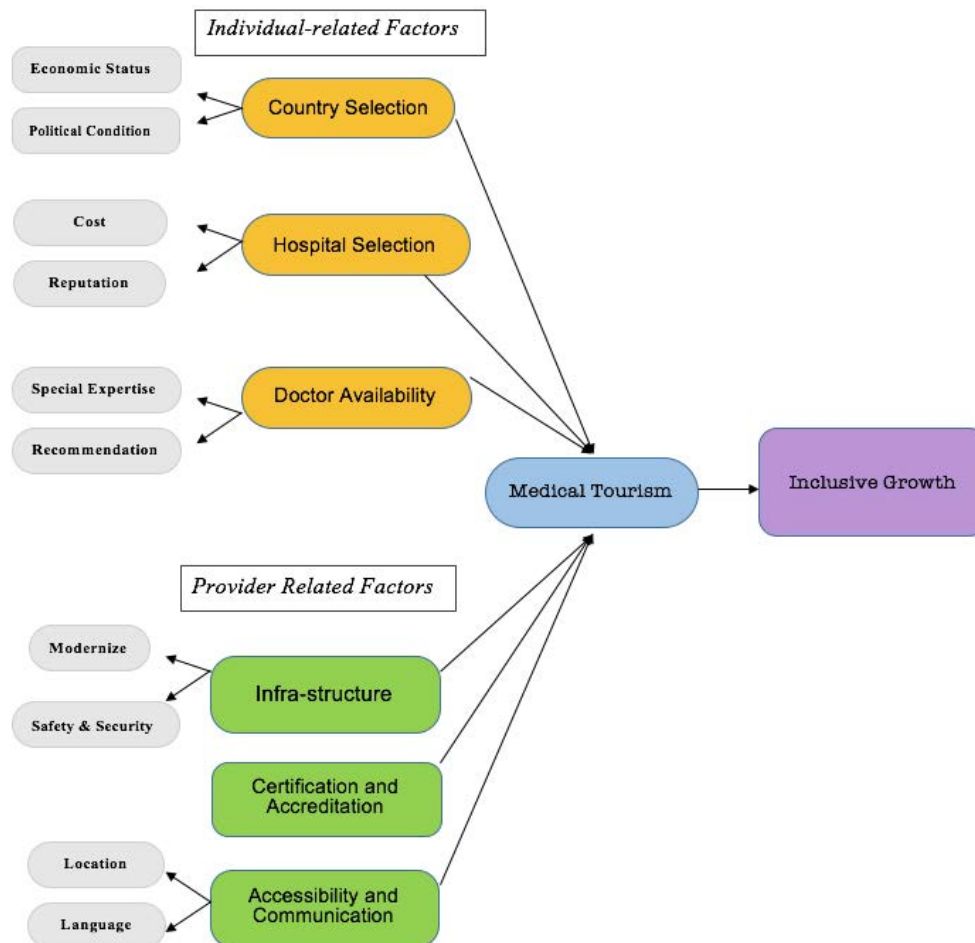
Source: Accessed on 11 May 2019: <https://medicaltourism.com/Forms/price-comparison.aspx>

essential factors adopted by developing nations to attract medical tourists. According to Alsharif *et al.* (2010), medical tourists prefer traveling China, India, United Arab Emirates (UAE) and Jordan because of the following determinants *viz.* availability of doctors, economically viable, hospitals accreditation and certification. Potential medical tourists are motivated by various factors to travel overseas *viz.* affordable healthcare, doctors & physician availability and less waiting time for medical care (Snyder *et al.*, 2011; Eissler & Casken, 2013). According to GOI (2018), “Accredited hospitals, frontier technology, finest specialist, financial saving, fast Track-Zero waiting policy and warmth & hospitality is the list of factors that benefits medical tourist for travelling to India”.

Lastly, Musa *et al.*, (2012), investigated the motivation of the travel behaviour among inbound medical tourists. By conducting a survey and then using exploratory

factor analysis, the authors inferred that the primary determinants were worth for money, excellent medical services, support services and cultural similarity. A similar study by FICCI (2016) identified the major drivers for medical tourism in India are medical (*quality healthcare, reliability & credibility, adequate infrastructure*), economical (*insurance coverage, low cost*) and social & technological (*internet, privacy, cultural etc.*).

With the exploration of the existing scholarly literature, most of the studies examined the factors which encouraged the patient’s perspective to seek for international destination and also provider’s perspectives, which makes medical tourist visit abroad. Hence, from the literature, it has become easier to identify and categorize the factors broadly such as country selection, hospital selection, doctor availability, infrastructure, accreditation and certification and accessibility and communication. The



Source: Author's Compiled Model Based on Literature Review.

Figure 2. A conceptual model of medical tourism.

listed factors in (Figure 2) collectively form Individual-related factors and Provider-related factors which directly influence medical tourism.

6. Antecedents of Medical Tourism

The conceptual model of medical tourism was grounded on the Individual-related and Provider-related factors. The particular integrated model aims to consider each aspect of the medical tourism which influences the rising commercialization of Industry.

6.1 Individual-Related Factors

The individual-related factors are broadly sorted as country selection, hospital selection and doctor availability. The country selection by the potential medical tourist was determined on the basis of economic status, as well as, the political condition of the selected destination. Secondly, hospital selection was also dictated by the cost of medical procedures charged by the medical destination and also the reputation of the available medical institutes. Lastly, the third factor doctor/physician availability was the most crucial factor which comforts the medical tourist to travel abroad is determined by the availability of doctor possessing special expertise in the field of medicine and the recommendation proposed by the native physicians. Therefore, the nexus of these three factors combines to form the Individual-related factors which directly influence medical tourism in India.

Preposition 1: *Individual-related Factors are positively related to the medical tourism which in turn leads to Inclusive Growth of economy.*

6.2 Provider-Related Factors

Provider-related factors are broadly grounded in Infrastructure, Certification & Accreditation and Accessibility & Communication. World class infrastructure and the availability of amenities act as a vital factor from provider's perspective which attracts the potential medical tourist. The primary factor infrastructure and amenities are determined on the basis of how advanced the infrastructure is and how safety and security of the tourist are ensured. Secondly, certification and affiliation of the medical institute from the well-recognized agencies also boost the confidence of the medical tourist for traveling

to the selected destination. Finally, the accessibility to the hospital location and communication in the preferred language has been the most indispensable factor from provider viewpoint which eases the medical tourist both mentally and physically to move another nation. Hence, the agglomeration of three-factors combines to form the provider-related factors which unswervingly stimulate the medical tourism.

Preposition 2: *Provider-related Factors are positively related to the medical tourism which in turn leads to Inclusive Growth of economy.*

6.3 Medical Tourism and Inclusive Growth

Onward momentum of medical tourism phenomenon has a whopping impact not just on the medical patients alone rather it has led to the inclusive growth of social, economic, business and medical sectors of the economy (India Brand Equity Foundation, 2017). Medical tourism as an instrument helps in shaping the society of a nation. The ascent of medical tourism helps the developing nations in enhancing the healthcare facilities, better infrastructure, increasing income and employment opportunities etc. and on the other hand, developed nations gain the advantage of being a prominent tourist destination (Arellano, 2007; Thorton, 2016). Medical tourism was not just confined to the particular sector; rather it extends its wide spectrum of benefits to other sectors viz. business and economics. Medical tourism significantly contributes to the foreign investments, informational technology services and business exports which presently act to be the largest and prominent contributor to the nations GDP (India Brand Equity Foundation, 2017). In India, tourism and medical hospitality sector's contribution to GDP are projected to grow at 7.9 percent per annum from 2016 to 2026. Tourism and hospitality sector in India report for 9 percent of total employment opportunities for the year 2016, delivering employment to around 38.4 million people.

Preposition 3: *Medical tourism has been positively and directly related to generate inclusive growth in the economy.*

7. Discussion and Conclusion

Medical Tourism is considered as trending and niche market, which is gaining the attention of the developing economies of the world. Although medical tourism

considered being a flourishing and profit-making industry, but still there is a dearth of literature in Indian context. The purpose of the study was to identify the various antecedents of Individual-related factors (*Country selection, Hospital selection and Doctor Availability*) and Provider-related factors such as (*Infrastructure, Certification and Accreditation and Accessibility and Communication*) and how these dimensions are related to medical tourism and inclusive growth.

Therefore, an extensive review of the scholarly article and various other academic sources helped to develop a conceptual model of medical tourism and defines how medical tourism relates to inclusive growth. The above-discussed model includes both individual-related, as well as, provider-related factors that give the comprehensive image of the medical tourism. The integrated model highlights the reasons such as economic status, cost, special expertise etc. which determine individuals need for country selection, hospital selection and doctor availability. Likewise, the model also states how medical tourist's choice is affected by the provider-related factors. Whether infrastructure has been modernized and secure, certification of the hospitals by renowned agencies and lastly, language as a barrier for communication purpose and accessibility for a selected destination and finally, the conceptual model of medical tourism defines how these factors moderate's the relationship between medical tourism and inclusive growth.

Hence, the finding of the study is dispassionate and analogous to the outcomes of the previous literature. The individual-related and provider-related factors positively relate to medical tourism which in turn has helped India to emerge as preferred destination from both medical and commercial point of view.

8. Future Research and Limitations

The future research should empirically validate the conceptual model and examine the mediating effect of medical tourism on the relationship between individual and provider-related factors and inclusive growth. To understand medical tourism from the government viewpoint, the study suggests that these factors should be studied holistically such as how these antecedents and determinants are connected as well as how they are developed over a period of time. Numerous research queries occur: To what extent these antecedents and

determinants estimate medical tourism? Are these determinants chosen prudently? Or they develop as a consequence of preceding articles?

Antecedents and determinants suggested must be studied independently in order to understand whether each determinant meaningfully contribute to medical tourism in India or not. The suggested conceptual model needs to be empirically validated in order to attain a sustainable competitive advantage. The future empirical research should meticulous focus on the micro and niche domains of medical specialties *viz.* coronary artery bypass, peripheral vascular disease, retinopathy, neuropathy, nephropathy and organ transplant. Medical tourists are also pondering medical ethics as a major perspective, witnessing at what motivates patients to travel and take risk. Therefore, forthcoming study should need to integrate various dimensions *viz.* robustness, focus on niche domains of medical specialties, medical ethics and post-healthcare utilization.

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Recommendations	Action Taken
1. Books, Reports (Government and Non-Government) could have been easily included in the review of literature, which could have given some new dimensions to the model and the research.	1. Government and Non-Government reports have been incorporated in the study such as FICCI Heal (2008); FICCI (2016); MTI (2016) and GOI (2018) both in introduction and updated literature review. After a thorough review, majority of reports also considered the same dimensions as suggested in the present model.
2. Area for further research suggests the empirical research; which is right, but based on the current secondary data base research, some detailed variables could have been listed for the same (empirical research).	2. Some detailed areas for empirical future research have been identified and mentioned in the future research and limitation section. As suggested future study should need to integrate various dimensions viz. robustness, focus on niche domains of medical specialities (neuropathy, nephropathy, organ transplant, etc.), medical ethics and post-healthcare utilization.