Theme: *'The Global Pandemic Outbreak 2020: Multidisciplinary Speculation on Impacts and Responses'*

Crossref

A COMMENTARY ON SHIFT IN BUSINESS STRATEGIES OF INDIAN HEALTH CARE INDUSTRY WITH COVID-19 AS A TRIGGER

Anindya Basu[1]✉, Lopamudra Bakshi Basu[2]

Abstract:

Medical tourism has become a booming industry in the recent past. People from all around the world cross the borders for better medical treatment. The leading destinations with markets for medical tourism include Malaysia, Thailand, India, Singapore, Turkey, and United States. Latest medical technology, high-quality services, insurance are a few of the criteria medical tourists seek for. As public-funded well-being insurance is unable to keep pace with the increasing demands of a growing aging population, patients from the United Kingdom and Canada travel to India to beat the huge waiting period for the routine procedures. The unprecedented COVID-19 outbreak has forced the market to observe diminishing growth. The pandemic is predicted to have a negative impact on this growing industry. The organizations, involved in the development of the medical tourism, stare at a dark future. It is, therefore, necessary to streamline the industry in view of this dismal scenario. However, with the growing technological development, one such platform that can bridge the distance in the health sector is telemedicine. This paper is an attempt to study the growing importance of telemedicine in a developing country like India. The research is based on both primary and secondary data along with a thorough literature review. Post lockdown telemedicine is likely to grow, and telemedicine is probably the future of the healthcare industry.

1.0 Introduction:

The health care industry, or in popular parlance, the medical industry is a sector that offers diverse goods and services ranging from curative, preventive, rehabilitative to palliative care. In India, a highly populous developing country, health care is vital in terms of revenue and employment. This evolving sector comprises infrastructures like buildings, devices, equipment, and services like insurances, clinical trials, medical tourism, and telemedicine, to name a few, involving both public and private players with an eye to profit maximization. There has been a rising demand for affordable and modern healthcare with the emergence of super-specialty 'bouquet hospitals' with lenient foreign direct investment and involvement of global players for the well-offs along with 'budget hospitals' for the middle class through national start-ups. The

1 [Author] ✉ [Corresponding Author] Assistant Professor, Diamond Harbour Women's University, Diamond Harbour Road, Sarisha, South 24 Parganas, West Bengal, INDIA. E-mail: putush2009@gmail.com

2 [Author] Assistant Professor, Heramba Chandra College, 23 / 49, Gariahat Road, West Bengal, INDIA

entire world took a novel turn with the emergence of the deadly coronavirus. The life-threatening virus by now has braced its roots all across the globe. Coronavirus has compelled the entire world to slow down and has hit every possible sector of the economy. Even medical tourism, which gained much importance in the recent past, was not spared. But the health care industry took little time to adjust to the situational demands and strengthened a nascent branch of it, though its clientele is entirely different. The ongoing digital revolution, which had a tryst with the health care industry too, made telemedicine come up in a big way in this critical juncture, with the government emphasizing this segment to provide medical facilities for the rural interiors too apart from the cities.

2.0 Rationale of the study:

The study aims to focus on the two moderately new branches of the health care industry, namely – medical tourism and telemedicine, both of which were present in the pre-COVID 19 era, but the former held a more promising future while the latter was in its very early stages. But due to the global pandemic, there has been a sudden paradigm shift in the health care sector. The present study is significant in identifying the main health care stream adopted by the patients both overseas and local in the Indian context during the pandemic situation. It also tries to gauge that in the 'new normal' scenario, which branch will become more robust or whether there is a possibility of the health care system itself shall become versatile with the admixture of both of these avenues.

3.0 Objectives:

The present study made an effort:

- To evaluate the situation of two recent business strategies of the Indian health care system – medical tourism and telemedicine in the critical juncture of the global pandemic
- To carry out perception surveys of both foreign medical tourists visiting India in the pre-COVID 19 times and the local patients taking resort to telemedicine in the post-COVID 19 times
- To create a blueprint on how the hybrid business strategies in the Indian health care system would take the system forward in the 'new normal'

4.0 Materials and Method

The entire paper is based on both primary and secondary sources of data. A survey was conducted with people seeking medical treatment at home and abroad. Secondary data has been derived from various reports, books, and journals relevant to this sector. A questionnaire was prepared, including checklists, Likert Scale, and open-ended questions to ensure randomness and quantity of data. This paper is based on a literature review and is explanatory in nature. A total 172 patients have been surveyed. A structured interview has been conducted for the primary data on the basis of purposive sampling. The survey adopted a written scenario method, and the scenarios have been described to reduce as much variance as possible. Conversation with the service providers along with doctors is the basic scenario that has been taken into consideration.

5.0 Literature Review:

Mukherjee and Mookerji (2004) highlight the status of some of the Southeast Asian countries in this medical industry. They cited that India might be the next multimillion-dollar Asian medical

industry after Singapore and Thailand, with several private units like Apollo hospitals, Escorts, Wockhardt, Fortis, Hinduja, and Breach Candy tying up with the tourism sector. Tie-ups with Hyatt, Kuoni Bangladesh carrier, and Indian Airlines carrier account for customized packages to international medical tourists to India. Rao et al. (2005) highlight that a considerable number of foreigners are visiting India to avail of quality medical treatment at a cost much lower than the developed countries of the world. The major fields of treatment include cardiac surgery, joint replacement, ophthalmology, and the Indian system of medicine. Connell (2006) says that the rise of medical tourism has emphasized the privatization of health care. This has been because of the accelerated globalization of both health care and tourism. He highlighted that medical tourism had shown rapid growth in the recent past. Various Asian countries play a significant role in this industry. This has resulted in the growth of conventional tourism. Jain (2006) states that the cheap pricing option of advanced treatment in 'Incredible India' is the most important factor for becoming the popular destination for medical tourism. Mohanty and Madhav (2006) opined that the Indian health care industry emerged as a prime destination because of its upgraded technology along with western medical practices and refining its image in terms of quality and cost. Laing and Weiler (2008) highlighted the other determinants like wait time apart from the medical cost that has helped medical tourism gain importance, especially in the developed countries. Mishra and Shailesh (2012) found that there are differences in opinion regarding medical tourism's popularity. The industry is being followed and endorsed by numerous responsible administrations, including the Medical Tourism Association (MTA), the Deloitte Center for Health Solutions, and the Joint Commission International. Medical Tourism in India has been dominated by the private sector, especially from corporate houses. These authorities must firmly establish the facts, figures, and the importance of medical tourism. Trivedi (2013) talked about yoga which was introduced some 5000 years ago, still attracts medical travelers to India to learn the basics. He also pointed out that India has a rich resource of alternative medicine has remained the most favourite destination for global medical tourists even after the popularity and acceptance of clinical medicine. In their research article, Kumar and Raj (2015) highlight the effect of medical tourism in complimenting the growth of the hotel business in India. The paper highlights the work of Hirschman, who defined complementarity as a situation where the growth of one sector complements the growth of another. Through their article, Sharma et al. (2020) attempted to study the impact of the pandemic on the medical tourism industry. They highlighted the economies that entered this crisis in a vulnerable state with sluggish growth and high debt levels. They have also tried to suggest necessary steps to recover from this grave situation. Tatum (2020), in her article, predicted that the global medical tourism market, worth up to $87.5 billion annually, is anticipated to shrink until 2021 as patients would minimize travels as far as practicable. Financial Express (2020), in its report, stated that the Covid-19 pandemic, in all likelihood, would affect the number of patients coming to India for treatment. But it also provided the ray of hope by showing a slow yet steady recovery of the medical tourism industry in India amidst the Coronavirus pandemic with gradual opening up through travel bubbles and emergency service provisions. Cook et al. (2018) harped on the importance of Information Communication Technology (ICT) for improving healthcare effectiveness through smart computing technologies improving telemedical effectiveness. Mathur et al. (2017) suggested that telemedicine can be an effective tool for medical tourists and the rural population section who reside in far-flung areas. The effective role of telemedicine during the COVID-19 pandemic period was highlighted by Garg et al. (2020) where routine check-ups, follow-up care were possible for many in a populous, developing country like India where social distancing is difficult to maintain.

6.0 Medical Tourism – The Foreign Exchange Earner:

Health tourism is an age-old concept that was formally recognized as a commercial activity by the International Union of Travel Officials only in 1973 (Yim, 2005). With the spread of globalization, outsourcing of business has proliferated worldwide, and the destination healthcare industry joined the bandwagon (Laws, 1996). Tourism which primarily involves traveling due to recreational or leisure purposes and, over time, has evolved as a popular foreign exchange earning activity globally is not only limited to relaxation (Goodrich and Goodrich, 1987; Lee and Spisto, 2007). Medical tourism or wellness tourism- a more comprehensive term, is one such facet where two sectors, health care, and tourism comes together catering a wide range of products to the patients and expectations having high stake at both employment and foreign exchange, which has become a thriving industry in the recent past (Yim, 2005). In simple words, medical tourism is the activity of traveling to other countries to receive superior medical treatment or health care facilities at affordable costs by highly skilled doctors which has been termed as 'shopping for doctor' by Bookman and Bookman, 2007. The global medical tourism industry has enormous economic implications as opined by WHO (Woodward et al., 2002) was estimated at $10.5 billion in 2012 (Business Standard, 2013) and was valued at $44.8 billion in 2019 and is expected to grow at CAGR of 21.1% from 2020-27 (Grand View Research, 2020).

The leading countries from the developing world offering such facilities include Malaysia, Thailand, Singapore, Turkey, and India (Trivedi, 2013). In this context, the four Ss of tourism by Connell (2006) can be cited "sun, sea, sand, and surgery". The comparative advantage of the increasing Indian medical sector lies with the presence of well-trained medical practitioners and competitive cost in comparison to the Western world (Rollyson, 2010; Mochi et al., 2013). So, apart from the internal market, the market for medical tourism is increasing rapidly, and it was touted that in 2019-20 India will come up as one of the most preferred destinations for offshore treatments (ET Health World, 2019). Professional management of treatment and tourism created a huge scope for the Indian economy. Globalization has helped open up this segment, where personal healthcare choices have widened, and restrictive movement policies have been done away (Reddy and Qadeer, 2010). India managed to have a formidable advance as a health care destination with state-of-art facilities by opening up its economy and liberalizing its market (Connell, 2013). Pollard (2020) tried to reason for the growth of medical tourism and enlisted factors like ease of journey, cultural familiarity or attraction, a positive image about the destination region, presence of infrastructural amenities, conducive weather, provision of safety measures, and last but not the least lucrative pricing policy.

The New National Tourism Policy (Government of India, 2002a), the Eleventh Five Year Plan (Government of India, 2008), and the Draft Approach to the 12th Five Year (Government of India, 2013) reported highlight the importance of the tourism sector in terms of its contribution to GDP and employment generation and proposed to focus on the creation of adequate tourism infrastructure along with the promotion of alternative tourism avenues like community tourism, heritage tourism, eco-tourism, medical tourism, wellness tourism and the like. With its diverse physical and cultural attributes, India has been a conventional popular tourist destination, and with affordable, up-to-date medical facilities in the offing – the combination has become lucrative for many (John and Chelat, 2013). India not only offers to the medical tourists advanced lifesaving treatments and surgeries, especially cardiology, orthopaedic, ophthalmology, gynaecology, and dentistry (Kalshrtti and Pillai, 2008) but also extends specialized conventional medical branches like Ayurveda, Homeopathy, Naturopathy, and Yoga for holistic wellness (Pani and Das, 2014). These forms of indigenous treatments are deep-

rooted in the Indian system of health care (Dawn and Pal, 2011), and currently, these therapies like panchakarma, shirodhara etc. are being promoted as a part of wellness package, mostly through exclusive resort-spa like establishments (Ramesh and Kurian, 2012). People from all around the world cross the borders for better medical treatment offered here. Bulk of medical tourists come from the neighbouring countries, like Pakistan, Maldives, Nepal, Bangladesh, a section is from Gulf countries like Yemen, Oman, Saudi Arabia, Qatar, the formidable number comes from undeveloped African countries (IMTJ, 2018), and rest even from the developed part of the world from countries like USA, Canada, European nations like UK, Germany, Australia, and the Middle East as there in spite of the provision of medical insurance either the waiting time is too long even for routine procedures as the system fails to cope with the rising demands of the increasingly aging population or the premium is too high and the rate of paid medical treatments are excessively high to afford (Glinos and Baeten, 2006). For many, becoming a medical tourist is a chance to include a tropical vacation along with medical treatments. Besides, a large section of the Indian diaspora opted for medical treatment at their ancestral homeland as they felt a kind of cultural affinity and used the health-related trip for visiting friends and family too.

There are several agencies, platforms both on-line (like websites) and offline (like airline magazines) in India who customize package deals including flights, transfers, stays as per budget, hospitals as per needs, and postoperative vacations to judiciously mixing leisure with health care. There are referral agencies too in foreign countries which help in disseminating knowledge among the interested parties. There is encouragement from the governmental side, too as there are provisions for hassle-free medical visas (even on-arrival ones for 180 countries), tax breaks for the participating health care institutions (Kalshrtti and Pillai, 2008). In the National Health Policy, 2002 (Government of India, 2002b), medical tourism rightly made its own place eying to merge medical expertise and tourism. The notable private sector top-ranking hospitals in the medical tourism sector which have set up high-end facilities are -Apollo, Escorts, Wockhardt, Fortis, Max, Tata, and many more.

Technology has made the trans-continental movement for medical consultations a reality. India is one of the destination countries which have developed rapidly in the field of medical tourism. From Fig. 1 it is clear that the number of medical tourists has been increasing steadily. The number of tourists increased to nearly 3 million in India (OĞUZ et al., 2020). The inflow of a large number of tourists will provide some insight into the economic importance of medical tourism. This growing economic endeavour is because of the ability to provide facilities and treatment at a comparable rate offered by the high-income generating countries. The revenue from medical tourism is estimated to range from 543 million US$ to 3.8 billion US$ (OĞUZ et al., 2020). India, too, shows a good economic future in this sector. In 2019 India had a revenue of around 1.65 billion US$ from medical tourism (Government of India, 2020a). This implies that medical tourism, notwithstanding the severe crisis, does show excellent growth potential. Post-2021, regardless of the rate of growth, it is apparent that medical tourism will be different from the paradigm known till 2019. Post-pandemic patients seeking surgical procedures need more assurance and information regarding health and safety. As a result of the pandemic, the number of Joint Commission International-accredited hospitals are likely to increase.

India is one of the key destinations for medical tourists in Asia. Above five lakhs of patients visit the country seeking treatment. India's medical value travel which was around 3 billion US$ in 2015, started to grow at a rate of 15% (IMS Health India, 2020). The developed markets of US and Western Europe contribute to a large share of foreign tourist arrival. However, the share of

medical tourists traveling to India for treatment is fairly low compared to the total tourist inflow. Bangladesh has a high share of medical tourists. It acts as an outlier mainly due to the proximity to India as well as the inadequate availability of domestic healthcare infrastructure. SAARC countries like Bangladesh, Afghanistan, Maldives are the major sources of medical value travel (Government of India, 2016). Proximity, cultural connections, and connectivity are some of the key reasons for the inflow of tourists from these regions in India.

Fig. 1: Unabated growth of medical tourism in India.
(Source: Ministry of Tourism, Government of India, 2018)
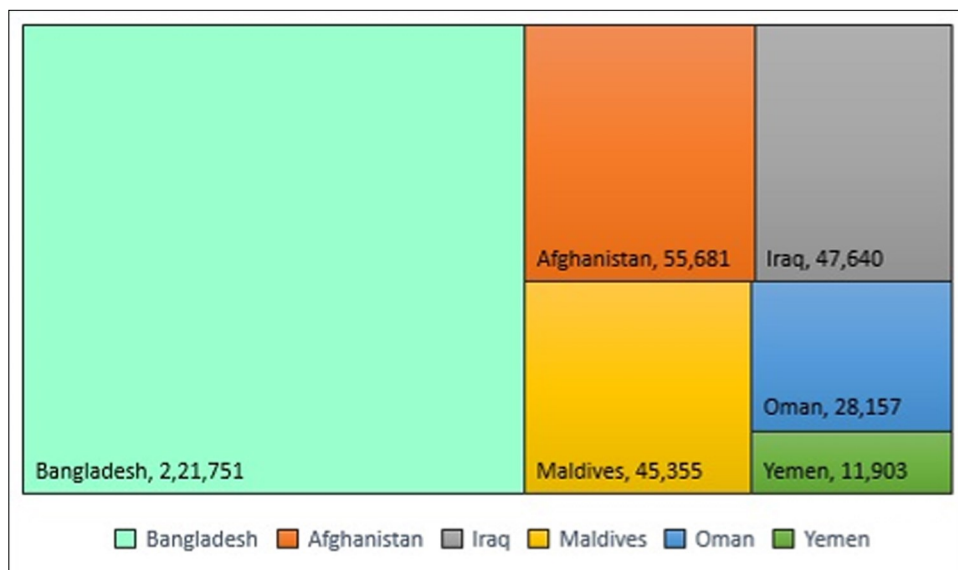
Fig. 2: Overview of international medical tourist inflow to India.
(Source: Ministry of Tourism and Bureau of Immigration, Government of India, 2016)

From Fig. 2 it can be derived that proximity, cultural connections, and connectivity are some of the key reasons for the inflow of tourists from these regions in India. Countries like Pakistan, Kuwait, Seychelles also act as sources of medical tourists in India. An appreciable number of patients come from western countries like UK (755), USA (649), Germany (109), France (97) to India for medical treatment (Government of India. (2020a). This is mainly because of the long waiting time in these countries.

7.0 The Turning Point:

The growth of telemedicine in India initiated with the international arena; the medical tourists often before and after their surgical procedure fell back on telecommunications and information technology for consultations, diagnosis, treatment, and post-care through emails, video calls etc. The unprecedented COVID 19 outbreak has forced the market of medical tourism to observe a diminishing growth. The pandemic is predicted to have a negative impact on this growing industry. It was estimated that if the coronavirus pandemic was not disrupting the status quo, then the medical tourism space was predicted to grow up to 9 billion dollars (Roy, 2020). The organizations involved in the development of medical tourism stare at a dark future. But according to many intellectual medical tourism is not at a very steep loss as it would be able to recuperate from it post the lockdown faster than any other economic industry would. It is, therefore, necessary to streamline the industry in view of this dismal scenario.

8.0 Telemedicine – The Game Changer:

Telemedicine developed in the late 1950s and has been regarded as of immense value in providing the health care system of any nation (Ekeland et al. 2010). WHO, while defining telemedicine, emphasized that it is the provision of health services from a distance using information and communication technology (WHO, 2010). Electronic health records (EHRs) and personal health records (PHRs) made an appearance in the early 2000s and even influenced government decisions on where to invest healthcare funds (Atherton, 2011). While doctors do not typically analyze real-time streaming e-health data, data mining these historical records allows physicians to examine conditions common across entire subpopulations and understand health trends (Jensen et al., 2012). Care providers can use the pre-recorded information to overcome geographic and temporal barriers and thus more effectively prescribe medical treatments and behavioural changes (Silva et al., 2015). At present, the average annual rate of telemedicine services growth is 19% (Scott, 2015). According to Chamberlin (2016) by 2020, around four million patients in the world will carry out remote monitoring of their health. As an example, statistics data show that the frequency of health-related web pages increased from 2010 to 2011 by 134% (Scott, 2015). Internet of Things is the network concept consisting of interconnected physical devices that have built-in sensors, as well as software allowing to transmit and exchange data between the physical world and computer systems by means of standard communication protocols, but there is a concern about the security control and fear of unauthorized access to the information leading to the breach of privacy (Lee et al., 2013). In India, access to in-person physician consultation is often difficult due to geographical distance, infrastructural inaccessibility. But the major issues that this nascent initiative is facing are – data security concerns, ethical prejudice, limited broadband connectivity etc. (RRSR, 2020).

But in spite of several hiccups during the pandemic, many had to opt for telemedicine services for emergency and regular health care facilities. The dimensions are taken for analyzing the satisfaction level, and degree of acceptance obtained from telemedicine are:

- Efficiency: efficiency highlights the travel time for both patients and nurses. Our research, mainly based on preliminary focus group discussion and pilot study, the travel times in the purview of telemedicine service process are identified as the time spent searching for

telemedicine services. The patients' level of agreement is based on whether telemedicine reduced needless waiting time and improved healthcare service efficiency.

- Cost: Includes all the facets that have reduced financial costs in the process of telemedicine service, like the cost of travel, registration, and medical services. Respondents' perception of the cost was measured likewise.

- Reliability and perceived usefulness: this denotes service outcome reliability, service providers, and service safety. It also defines respondents' belief in improved performance or better outcomes with new technology.

- Use of technology: the use of technology is defined as respondents' perception of using the technology system effortlessly. In the telemedicine service process, energy is possibly required in getting access to telemedicine services, understanding and learning new technology and definite use of telemedicine facilities.

- Communication: Patients' satisfaction of availing telemedicine facilities, various aspects that are related to communication incidence have been considered including accessibility, frequency of answered calls, medical help, the attitude of doctors.

- Willingness for future use: aims to measure the strength of willingness to use telemedicine after reviewing the entire service process.

Post covid-19, the medical sector showed a profound change. Telemedicine has become a new alternative for potential users to access medical services quickly with the introduction of technology. To study the potential use of this technique and the application of telemedicine in the tourism industry has been the main focus. The six factors mentioned above have been taken into consideration to get an image of the overall service perception.
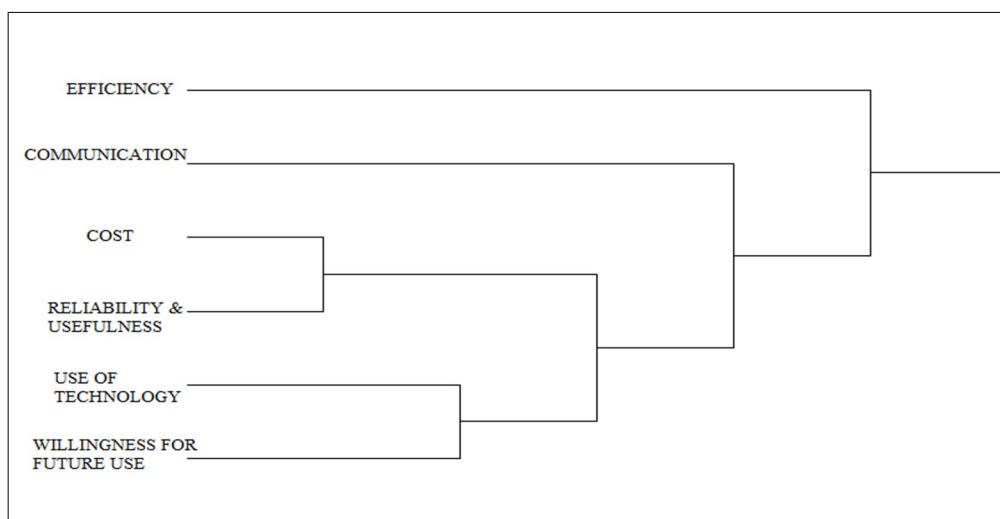
Fig. 3: Dendrogram analyzing the key factors involved in generating perception about telemedicine. (Source: Primary Survey, 2020)

The dendrogram drawn is bi-folious one (Refer Fig. 3). It highlights two distinct chunks comprising efficiency and communication. These are substantially different from the other two chunks. People find this telemedicine efficient enough for consultations due to restrictions in traveling in this new normal phase. The doctors and the hospitals are communicating with the patients on a regular basis which otherwise was not the same before the pandemic. Cost,

reliability, and usefulness show a similar character. The cost of traveling has been waived. As most of the patients banking on medical tourism is above 60, they prefer less traveling so telemedicine act as a better substitute. People are giving thought to this technique of medical assistance and are thus relying on telemedicine. Though this age group is technically lagging behind, they prefer to use telemedicine during this new normal phase. The online payment method, proper searching techniques, and online booking assistance are few of the patients' challenges. Though there is a preference for telemedicine, people especially above 60 years of age, still wish for a physical visit to the doctors. Here where telemedicine can be linked up with the tourism industry so that medical tourism can see a better future during the post-COVID phase.

9.0 The Balancing Act:

For an efficient health care business model to flourish in India, a judicious mix of public and private initiatives, local and global clients, traditional and contemporary methods and medical tourism, and telemedicine will be needed. For charting the way forward, the SWOT framework has been structured to identify the areas where some lacunae are there and take note of the areas that hold much promise.

9.1 Strengths:

- Low cost of medical treatment compared with global standard with an experienced pool of medical professionals, often trained from abroad.
- English as the primary communication language helps to converse with foreigners as well as with the diverse linguistic groups within the country.
- Interest shown by private players to diversify to accommodate all categories of patients and support from the government in the form of incentives, tax rebates for earning FDI, and initiation of schemes to provide health facilities for all citizens even in subsidized rates.

9.2 Weaknesses:

- Lack of adequate budgetary support for the health sector to materialize all the plans. In terms of GDP, the government spends only a meager 1.6% for healthcare in the FY20 budget (Union Budget, 2020).
- Marketing of tourism avenues is a weak point which makes India a weak competitor in the global field, and the local marginals are not aware of the schemes which are beneficial to them.
- Unregulated privatization, the corporate boom can jeopardize the health aspect by emphasizing more on business (Reddy and Quadeer, 2010).

9.3 Opportunities:

- The increased interest of private agencies in setting up internationally accredited hospital chains and providing insurance services.
- Initiation of several national health programs with a scope of providing better health infrastructure and service to many.

- Rise in digital health care with more people having access to the 'online world' facilitated through telemedicine channel.
- Government can also strengthen the quick visa processing system, more flight connectivity to attract more forcing patients cum tourists.

9.4 Challenges:

- To bridge the gap between rural-urban medical infrastructure and allocate more funds in the government's health sector (Qureshi, 2001).
- To curb unethical profit-making related to medical tourism and telemedicine like charging unnecessary high rates, promoting surrogacy illegally to the medical tourists (Reddy & Qadeer, 2010).
- To provide more emphasis on insurance and preventative care.
- To prepare a holistic plan for the medical tourists with an eye to maximize return by providing them satisfactory service.

10.0 Ways Ahead:

Telemedicine has expanded in India since 2018. It has undertaken an innovative way for doctor consultations. This sector is at an ever-growing platform with the high possibility of development. Identifying issues related to medical health can be traced in the future with the help of technology. With the introduction of IOT (internet of things) perspective medical emergencies like Asthma attacks, heart failure, diabetes can be monitored via connected devices. Telemedicine is, thus, the roadmap for enhanced medical care for a developing country like India. This might help in connecting the rural areas also. According to NITI Aayog, the National Health Stack (NHS) is a virtual digital platform that will embrace the country's health management system. NHS study proposes to have digital health accounts for all citizens by 2022 to make telemedicine and E-Health easy (Government of India, 2018). With the introduction of the Ayushman Bharat Scheme in 2017, a chief health financing scheme, the Indian government has come up with the ICT (Information and Communication Technology) focusing on the expansion of the health sector in the country. This scheme embraces Telehealth development ideology, especially for long-distance medical care, to make a safe, effective, efficient, patient-centered, and timely health management environment (Government of India, 2019). During COVID-19, the Indian Ministry of Health and Family, along with NITI Aayog, has fostered guidelines on telemedicine to face the unprecedented crisis and lent a kind of legal validity (Government of India, 2020b).

This integrated market of telemedicine platform will have a mixed approach in the coming years. In a developing country like India, there is immense scope for development. As the communication industry sprouting at such a rapid pace, it is obvious that the telemedicine sector will develop too.

The initiatives should be taken in creating a unique brand for the Indian health care system under a single umbrella, which is vibrant, sustainable, ensuring quality service through private-public partnerships, involving the hospital, hospitality industry, and technological services together. Development of effective marketing plans and strategies needs to be made to sensitize

people about the niche areas' facilities. As highlighted by Gupta (2008), the Cuban example can be followed where revenue generated from foreign exchange in lieu of providing standard medical facilities at just market price is plowed back for the public health care system strengthening the modern infrastructure and facilities for common people.

References:

Atherton, J. (2011). Development of the electronic health record. AMA Journal of Ethics, 13(3), 186–189. doi: 10.1001/virtualmentor.2011.13.3.mhst1-1103

Bookman, M., Bookman, K. (2007). Medical Tourism in Developing Countries, Palgrave Macmillan, New York. doi: 10.1057/9780230605657

Business Standard. (2013). Indian economy has bottomed out; GDP at 5.7% in Dec 2013: ZyFin Research. https://www.business-standard.com/article/news-cm/indian-economy-has-bottomed-out-gdp-at-5-7-in-dec-2013-zyfin-research-114022500806_1.html

Chamberlin, B. (2016). Healthcare Internet of Things: 18 trends to watch in 2016. IBM Center for Applied Insights. https://ibmcai. com/2016/03/01/healthcare-internet-of-things-18-trends-to-watch-in-2016

Connell, J. (2006). Medical Tourism: Sea, Sun, Sand and … Surgery. Tourism Management, 27(6), 1093-1100. https://doi.org/10.1016/j.tourman.2005.11.005

Connell, J. (2013). Contemporary medical tourism: Conceptualisation, culture and commodification. Tourism management, 34, 1-13. https://doi.org/10.1016/j.tourman.2012.05.009

Cook, D. J., Duncan, G., Sprint, G., & Fritz, R. L. (2018). Using smart city technology to make healthcare smarter. Proceedings of the IEEE, 106(4), 708-722. doi: 10.1109/JPROC.2017.2787688.

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), 185-202.

Ekeland, A.G, Bowes, A., Flottorp, S. (2010). Effectiveness of telemedicine: a systematic review of reviews. International Journal of Medical Informatics, 79, 736–771. https://doi.org/10.1016/j.ijmedinf.2010.08.006

ET Health World. (2019). Indian Healthcare Industry in 2018 and Forecast for 2019. https://health.economictimes.indiatimes.com/news/industry/indian-healthcare-industry-in-2018-and-forecast-for-2019/67286959

Financial Express. (2020) Medical tourism in India sees recovery amid Covid-19 pandemic https://www.financialexpress.com/lifestyle/travel-tourism/medical-tourism-in-india-sees-recovery-amid-covid-19-pandemic/2101384/

Garg, S., Gangadharan, N., Bhatnagar, N., Singh, M. M., Raina, S. K., & Galwankar, S. (2020). Telemedicine: Embracing virtual care during COVID-19 pandemic. Journal of Family Medicine and Primary Care, 9(9), 4516. doi: 10.4103/jfmpc.jfmpc_918_20

Glinos, I., & Baeten, R. (2006). A literature Review of Cross-Border Patient Mobility in the European Union, Europe for Patients Project. http://lekuvam.se/wp-content/uploads/2020/03/37.-WP12_lit_review_final.pdf

Goodrich, G., & Goodrich J. (1987). Healthcare Tourism-An Exploration Study. Tourism Management, 217-222. https://doi.org/10.1016/0261-5177(87)90053-7

Government of India. (2002a). National Tourism Policy, 2002. Department of Tourism, Ministry of Tourism and Culture, New Delhi.

Government of India. (2002b). National Health Policy, 2002, Ministry of Health and Family Welfare, New Delhi.

Government of India. (2008). Eleventh Five Year Plan (2007–2012). Planning Commission, Oxford University Press, New Delhi.

Government of India. (2013). Twelfth Five Year Plan (2012–2017). Planning Commission, Sage Publications India Pvt Ltd, New Delhi.

Government of India. (2016). India Tourism Statistics at a Glance, 2015. Market Research Division, Ministry of Tourism, New Delhi.

Government of India (2018). National Health Stack Strategy and Approach. NITI Aayog, New Delhi. http://www. niti. gov. in/writereaddata/files/document_publication/NHS-Strategy-and-Approach-Document-for-consultation. pdf

Government of India. (2019). Ayushman Bharat Pradhan Mantri Jan Arogya Yojana, National Health Authority (NHA), New Delhi.

Government of India. (2020a). India Tourism Statistics at a Glance, Ministry of Tourism.

Government of India. (2020b). Telemedicine Practice Guidelines 2020, MoH&FW Board of Governors (in supersession of the Medical Council of India). Ministry of Health and Family Welfare, New Delhi. https://www.mohfw.gov.in/pdf/Telemedicine.pdf

Grand View Research. (2020). Global Medical Tourism Market Size, Industry Report, 2020-2027 https://www.grandviewresearch.com/industry-analysis/medical-tourism-market/toc

Gupta, A. S. (2008). Medical tourism in India: winners and losers. Indian Journal of Medical Ethics, 5(1), 4-5. http://www.issuesinmedicalethics.org/articles/medical-tourism-in-india-winners-and-losers/?galley=print

IMS Health India. (2020). Medical Value Travel In India Enhancing Value in MVT. FICCI Knowledge Paper. http://www.ficci.in/Medical-Value-Travel-Report.pdf

IMTJ (2018). Analysis of 2017 India Medical Tourist Data, International Medical Travel Journal. https://www.imtj.com/news/imtj-analysis-2017-india-medical-tourist-data/#:~:text=While%20233%3C918%20medical%20tourists%20went,2017%20and%20427%2C014%20in%202016.&text=While%20120%2C388%20Bangladeshis%20went%20to,increased%20to%20221%2C751%20in%202017

Jain, N (2006). Health Tourism In India. http://EzineArticles.com/?expert=Nakul_Jain

Jensen, P.B., Jensen, L. J., & Brunak, S. (2012). Mining electronic health records: towards better research applications and clinical care. Nature Review Genetics, 13(6), 395–405. https://doi.org/10.1038/nrg3208

John, J., & Chelat, S. (2013). Medical tourism and inclusive growth: Significance of Ayurveda sector. Atna Journal of Tourism Studies, 8(2), 19-35. https://doi.org/10.12727/ajts.10.2

Kalshrtti, P., & Pillai, D. (2008). Tourism products development and management medical tourism: A shifting paradigm. India. In Proceedings of the 1st Conference on Tourism in India, 15, 418-423. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.525.4160&rep=rep1&type=pdf

Kumar, G. S., & Raj, R. K. (2015). Status, Growth and Impact of Medical Tourism in India. International Journal of Pharmaceutical Sciences Review and Research. 46, 284-291. https://nanopdf.com/download/5b16b101938d6_pdf

Laing, J., & Weiler, B. (2008). Mind, body and spirit: Health and wellness tourism in Asia. In J. Cochrane (Ed.), Asian tourism: Growth and change (pp 379-389). Elsevier, Amsterdam. http://educatererindia.com/wp-content/uploads/2017/04/Asian-Tourism-Growth-And-Change.pdf#page=400

Laws, E., (1996). Health Tourism: A Business Opportunity Approach. In S. Clift & S.J. page (Eds.) Health and the International Tourist, (pp 199-214). Routledge, London.

Lee, C., & Spisto, M. (2007). Medical Tourism, the Future of Health Services. In Proceedings of the 12th International Conference on ISO (Vol. 9000, pp. 1-7). https://d1wqtxts1xzle7.cloudfront.net/55733431/medical_tourism_is_our_future.pdf?1517951288=&response-content-disposition=inline%3B+filename%3DMedical_Tourism_the_Future_of_Health_Ser.pdf&Expires=1617037864&Signature=YbOwoEalXXnEfMLE7DPbLKj1PKnf0268quMdTuOvefbya7OIJJ5ygtLVHizDkb6u6sZQk9j9Mj0d0w-Gdpenca5E5UCgrMC3CE5Yy9djtBgwmmiQ~IenLh3raMXcMN1fxzGIxoCRm8lhMJAqqZx6QHKzWYnHoC~jUmZtPDJ35D-ppp4irCPmcDQV2F~BrG2ZflSV~mEKLwQ~bRQBGcYR28v7NujvZ5z~1ovNZkudOhlYccKocPsjcmhdFsVAvJsttDmSx4A6r7D4BUW3MquCwPD00Sr6l1zvVY0A6xxdLMGAkRmjJvOUM6FgarfTwktsN~dUxrHr2O-lY3z5wtSF0Q__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA

Lee, J. H., Phaal, R., & Lee, S. H. (2013). An integrated service-device-technology roadmap for smart city development. Technological Forecasting and Social Change, 80(2), 286-306. https://doi.org/10.1016/j.techfore.2012.09.020

Mathur, P., Srivastava, S., Lalchandani, A., & Mehta, J. L. (2017). Evolving role of telemedicine in health care delivery in India. Prim Health Care, 7(260), 2167-1079. doi: 10.4172/2167-1079.1000260

Mochi, P; Shetty, N., & Vahoniya, D. (2013). Medical Tourism-Destination. Indian Commerce and Management, 2 (3), 29-39.

Mohanty, D. & Madhav, T. P. (2006). Medical Tourism: India's Competitive Advantage. In Health tourism an Introduction, ICFAI University Press. 73.

Mukherjee, W., & Mookerji, M. (2004). Hospitals busy tying up with Hospitality Inc. The Economic Times, 6.

OĞUZ, Binhan, Gordan, Godfrey, & Cruz, Henry H. (2020). Medical Tourism in The Time of Covid-19, Global Political Trends Center. https://www.jstor.org/stable/resrep25188.

Pani, A., & Das, B. (2014). Role of hotels and resorts to promote ancient ayurveda through health tourism: a special reference to Odisha. PURUSHARTHA-A journal of Management, Ethics and Spirituality, 7(2), 114-123. http://journals.smsvaranasi.com/index.php/purushartha/article/view/157/147

Pollard, K. (2020). Merging Healthcare and Health Insurance. International Medical Travel Journal (IMTJ). Available at https://www.imtj.com/articles/merging-healthcare-and-health-insurance/

Qureshi, A. S. (2001). High Level Committee for Hospitals in Delhi: Enquiry Report. Maulana Azad Medical College and Government of National Capital Territory of Delhi, New Delhi.

Ramesh, U., & Kurian, J. (2012). A Study to Develop an Advanced Marketing Strategy for Wellness Tourism in Kerala based on the Prevailing Scenario. IOSR Journal of Business and Management, 2(4), 23-28.

Rao, K.S., Nundy, M., & Dua, A. S. (2005). Delivery of health services in the private sector. Financing and delivery of health care services in India. National Commission on Macroeconomics and Health–Background papers (pp 89-124). Ministry of Health and Family Welfare, Government of India.

Reddy, S., & Qadeer, I. (2010). Medical tourism in India: Progress or predicament? Economic and Political Weekly, 45 (20), 69-75. http://www.epw.in/special-articles/medical-tourism-india-progress-or-predicament.html

Rollyson, S. (2010). The globalization of healthcare: A study of medical tourism. The Globalization of HealthCare, http://globalizationhealthcare.net/wp-content/uploads/2010/ 08/GlobHC_1st_ed.pdf

Roy, S. (2020). Impact of coronavirus on Medical Tourism. Inventiva. https://www.inventiva.co.in/stories/impact-of-coronavirus-on-medical-tourism/

Scott, M. (2015). Telehealth Industry Trends 2015. http://slideplayer.com/slide/9933303/

Sharma, A., Vishraj, B., Ahlawat, J., Mittal, T., & Mittal, M. (2020). Impact of COVID-19 outbreak over Medical Tourism. IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), 19(5), 56-58. https://www.researchgate.net/profile/Abhimanyu-Sharma-5/publication/341708845_Impact_of_COVID-19_outbreak_over_Medical_Tourism/links/5ecfc3e945851529451b2257/Impact-of-COVID-19-outbreak-over-Medical-Tourism.pdf

Silva, B. M. C., Rodrigues, J. J. P. C., Torre Diez, I. de la, Lopez-Coronado M., and Saleem, K. (2015). Mobile-health: A review of current state in 2015. Journal of Biomedical Inforatics., 56, 265–272. https://doi.org/10.1016/j.jbi.2015.06.003

Tatum, M. (2020). Will medical tourism survive covid-19? The BMJ, 370. doi: https://doi.org/10.1136/bmj.m2677

Trivedi, M. (2013). Medical Tourism in India. Philica article, 387.

WHO (World Health Organization). (2010). Telemedicine: Opportunities and Developments in Member States. Global Observatory for eHealth series - Volume 2, Geneva.

Woodward, D., Drager, N., Beaglehole, R., & Lipson, D. (2002). Globalization, global public goods and health. Trade in health services: global, regional and country perspectives, 3-11. http://www.cualtos.udg.mx/sites/default/files/adjuntos/23._globalization_and_health_0.pdf

Yim, C. K. (2005). Healthcare destinations in Asia. Asia Case Research Centre, University of Hong Kong.