IMPACT OF QUALITY ON MEDICAL TOURISM IN INDIA

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ABSTRACT

India's healthcare industry is now one of the biggest in terms of jobs and income. Hospitals, medical equipment, clinical trials, outsourcing, telemedicine, medical travel, health insurance, and medical devices are all included in the category of healthcare. The robust coverage, services, and rising spending by both public and private entities are driving the rapid growth of the Indian healthcare sector. Medical tourism is a subset of healthcare tourism in which patients go outside of their home nation to receive treatment or rehabilitation from medical facilities. While the terms medical tourism and healthcare tourism are sometimes used synonymously, healthcare tourism is a broader concept that includes, in addition to medical tourism, thermal health tourism, spa-wellness tourism, and tourism for the elderly and disabled. The present paper tries to project the Medical tourism structure, a snapshot of Indian Healthcare, Quality Health Services, reasons for increasing Medical tourism etc.

Key Words: Medical Tourism, Health Services, Quality, Health Tourism & Tourists, Medical Value Travel (MVT), Perceived risk.

1. INTRODUCTION

Medical tourism, sometimes known as "medical travel" or "health tourism," is a quickly developing example of the worldwide commercialization of healthcare. The phrase refers to receiving medical care outside of one's home country for less money, to avoid having to wait a long period, or to get services that are unavailable there. In order to help international patients adjust to a new cultural setting and keep them occupied before and after surgery, this type of treatment is becoming more and more associated with travel-related activities. (Hopkins etal, 2010).

Medical tourism is defined as organized travel beyond national borders to enhance and restore the tourists' health (Kwan & Tavitiyaman, 2021). Travelling abroad for medical treatment has grown phenomenally in the twenty first century and is one of the healthcare has become one of India's largest sectors, both in terms of revenue and employment. Healthcare comprises hospitals, medical devices, clinical trials, outsourcing, telemedicine, medical tourism, health insurance and medical equipment. The Indian healthcare sector is growing at a brisk pace due to its strengthening coverage, services, and increasing expenditure by public as well private player's fastest growing exports of trade in healthcare services by the private corporate hospitals (Medhekar, 2014).

Medical tourism is a subset of healthcare tourism in which patients go outside of their home nation to receive treatment or rehabilitation from medical facilities. While the terms medical tourism and healthcare tourism are sometimes used synonymously, healthcare tourism is a broader concept that includes, in addition to medical tourism, thermal health tourism, spa-wellness tourism, and tourism for the elderly and disabled. Cardiovascular surgery, radiation therapy, organ transplantation, infertility and IVF procedures, cosmetic and plastic surgery, dialysis, dentistry, and ocular care are a few examples of medical tourism treatments. Patients who wish to combine treatment with vacation tend to favor medical tourism. (Usta & Asan, 2020).

Getting high-quality medical care at a fair price is the primary goal of medical tourists; to reduce costs, operational excellence and competitiveness must be prioritized within and externally. According to a prior study, Thailand, Singapore, and India account for 80% of the medical tourism business in Asia, making them the dominant players in the field. (Mishra & Sharma, 2021).

Figure 1: Medical Tourism Structure in India
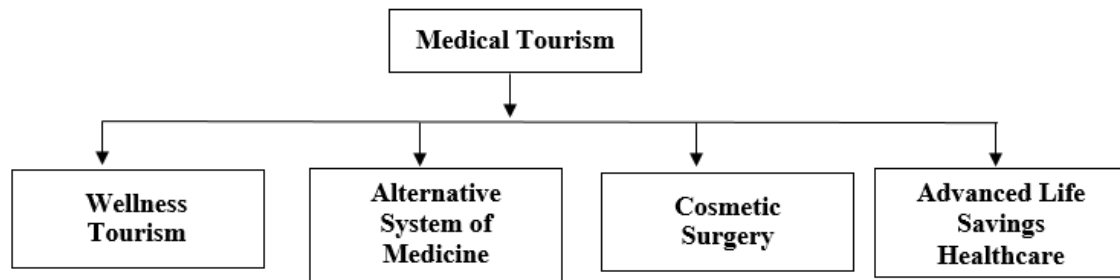
Source: Mishra & Sharma, 2021

A variety of important parties with financial interests are involved in the developing worldwide market of medical tourism, including brokers, insurance companies, hospitals, media outlets, website providers, and insurance providers. These commercial interests are summarised in Figure 1. (Lunt, 2011).

Indian Healthcare System

Healthcare has become one of India's largest sectors, both in terms of revenue and employment. Healthcare comprises hospitals, medical devices, clinical trials, outsourcing, telemedicine, medical tourism, health insurance and medical equipment. The Indian healthcare sector is growing at a brisk pace due to its strengthening coverage, services, and increasing expenditure by public as well private players.

India's healthcare delivery system is categorised into two major components - public and private. The government, i.e. public healthcare system, comprises limited secondary and tertiary care institutions in key cities and focuses on providing basic healthcare facilities in the form of primary healthcare centres (PHCs) in rural areas. The private sector provides majority of secondary, tertiary, and quaternary care institutions with major concentration in metros, tier-I and tier-II cities (IBEF, 2022).

Figure 2: Healthcare Sector Growth Trend (US$ Billion)
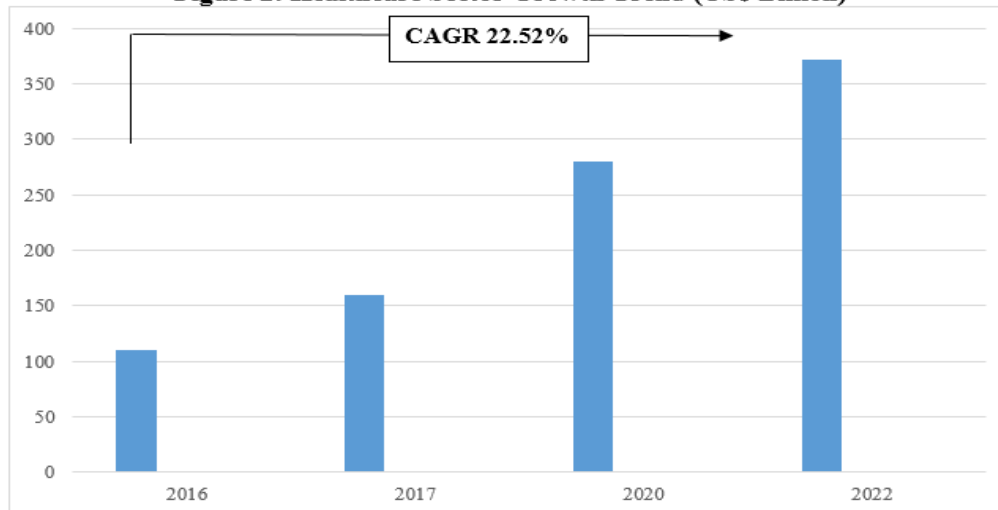
Source: IBEF Healthcare Sector Presentation June, 2022

Table 1: State/UT wise Number of Doctors Possessing Recognised Medical Qualifications (Under I.M.C Act) Registered with State Medical Councils/Medical Council of India from the year 2010 upto 2020 (As on 31st December of concerned year)

#	State/UT	Upto 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total Up to 2019
1	Andhra Pradesh	66109	4370	4498	5737	5415	4973	2654	3075	3756	2337	1961	105795
2	Arunachal Pradesh	334	80	12	29	29	108	145	116	193	97	99	1270
3	Assam	19147	561	487	611	611	564	661	990	752	181	877	25522
4	Bihar	37368	969	464	1282	1282	970	575	1253	1332	1153	1691	48192
5	Chhattisgarh	3224	882	595	812	812	542	653	733	774	787	465	10020
6	Delhi	6748	1006	946	1713	1713	2179	2549	2379	2801	3605	3127	28130
7	Goa	2828	119	136	126	126	150	109	47	193	50	145	4035
8	Gujarat	47231	1795	2197	2188	2188	2427	2455	2890	3608	2802	1601	72405
9	Haryana	5356	361	754	500	500	1112	1355	1452	1458	1678	1164	15683
10	Himachal Pradesh	913	310	459	276	276	363	437	113	NR	1	536	5037
11	Jammu & Kashmir	11360	635	471	473	67	495	484	430	805	339	780	16891
12	Jharkhand	3245	490	355	283	285	314	310	320	402	594	393	6926
13	Karnataka	87734	3727	4207	4772	833	4251	4434	5002	5301	6306	5339	131906
14	Madhya Pradesh	26669	947	1507	1298	1409	1417	1585	1792	1556	1991	2431	42596
15	Maharashtra	138303	3157	3433	3682	4938	5485	5271	5755	6320	7499	4697	188540
16	MCI	37300	3730	4864	5603	1169	NR	NR	NR	NR	NR	*	52667
17	Mizoram	NR	NR	0	0	5	15	23	15	16	23	59	156
18	Nagaland	0	0	0	0	0	20	50	21	25	18	7	141
19	Odisha	16786	460	380	719	2402	934	840	879	NR	1380	1234	26924
20	Punjab	39291	1128	1083	1234	1270	1418	840	1392	1544	1458	1028	51686
21	Rajasthan	28797	1146	1442	1468	1963	2040	1821	2186	2525	2865	1977	48229
22	Sikkim	608	69	74	73	109	91	138	115	128	9	87	1501
23	Tamil Nadu	86822	3476	4182	9218	5064	5088	7997	6960	7167	8763	3479	148216
24	Kerala	40007	2008	3451	1482	2500	3352	4567	1695	2814	3809	4948	72964
25	Uttar Pradesh	58168	2081	2247	2253	594	2914	3025	3549	3669	3799	4726	89286
26	Uttarakhand	3394	307	527	169	660	748	743	833	928	659	893	10241
27	West Bengal	59264	1230	917	1419	953	1586	1766	2337	2544	2038	1747	77664
28	Tripura	NR	NR	227	64	391	236	235	212	NR	NR	241	2681
29	Telangana	0	0	0	0	0	1	2354	2587	2989	NR	3624	14986
	Total	789706	31314	35048	40641	36395	43793	48076	48728	53600	54238	49356	1300290

Source: National Health Profile – 2022

Table 2: State/UT wise Number of Sub Centres, PHCs & CHCs Functioning in India as on 31st March, 2020 States/UT

#	State/UT	Sub Centres	PHCs	CHCs
	India	157921	30813	5649
1	Andhra Pradesh	7458	1385	198
2	Arunachal Pradesh	363	124	60
3	Assam	4680	1002	192
4	Bihar	10280	2027	64
5	Chhattisgarh	5569	837	174
6	Goa	218	59	6
7	Gujarat	9162	1795	362
8	Haryana	2617	485	131
9	Himachal Pradesh	2104	588	92
10	Jammu & Kashmir	2492	972	77
11	Jharkhand	3848	351	177
12	Karnataka	9435	2534	208
13	Kerala	5410	932	227
14	Madhya Pradesh	10226	1476	330
15	Maharashtra	10649	2675	418
16	Manipur	418	93	17
17	Meghalaya	443	143	28
18	Mizoram	370	65	9
19	Nagaland	415	137	21
20	Odisha	6688	1377	384
21	Punjab	3047	527	155
22	Rajasthan	13530	2477	614
23	Sikkim	153	25	2
24	Tamil Nadu	8713	1884	400
25	Telangana	4841	885	95
26	Tripura	1001	112	22
27	Uttarakhand	1847	295	68
28	Uttar Pradesh	20778	3473	723
29	West Bengal	10357	1369	348
30	A & N Islands	124	27	4
31	Chhattisgarh	0	48	2
32	D & N Haveli	97	13	4
33	Daman & Diu	258	546	23
34	Delhi	238	32	7
35	Lakshadweep	11	4	3
36	Puducherry	81	39	4

Source: National Health Profile – 2022

The following table depicts the some of the key programmes launched from 2014 to 2023.

Table 3: Some of the Key Programmes launched from 2014- 2023
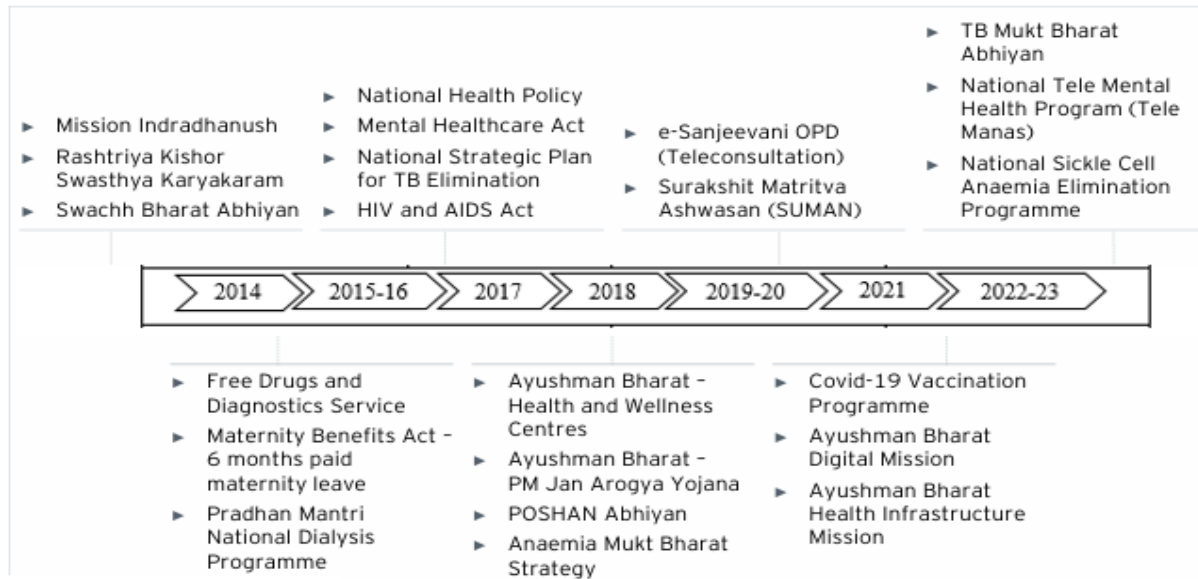

Source: FICCI, April, 2024

The Meaning of Quality in Health

The quality of healthcare is one of the most frequently mentioned concepts in health policy principles and is currently high on the agenda of policy makers at national, and international level. At the national level, addressing the issue of the quality of healthcare can be raised for several reasons, characteristically by the general commitment to provide high quality healthcare, because health is a public good

A new conceptual framework for high quality health systems with three key domains: foundations, processes of care, and quality impacts (figure 3). This framework stems from our definition of high-quality health systems and is informed by past frameworks in the fields of health systems and quality improvement, including Donabedian's framework, WHO's building blocksand maternal quality of care frameworks, Judith Bruce's family planning quality framework, Getting Health Reform Right, the Juran trilogy, and the Deming quality cycle (Kruk & etal, 2018).

Health services are that part of the health system, which focuses specifically on the provision of health care services in the society. A health system includes a complex set of structural relationships between populations and institutions that have an impact on health (Lambrini Kourkouta, 2021).

Figure 3: High-Quality Health System framework
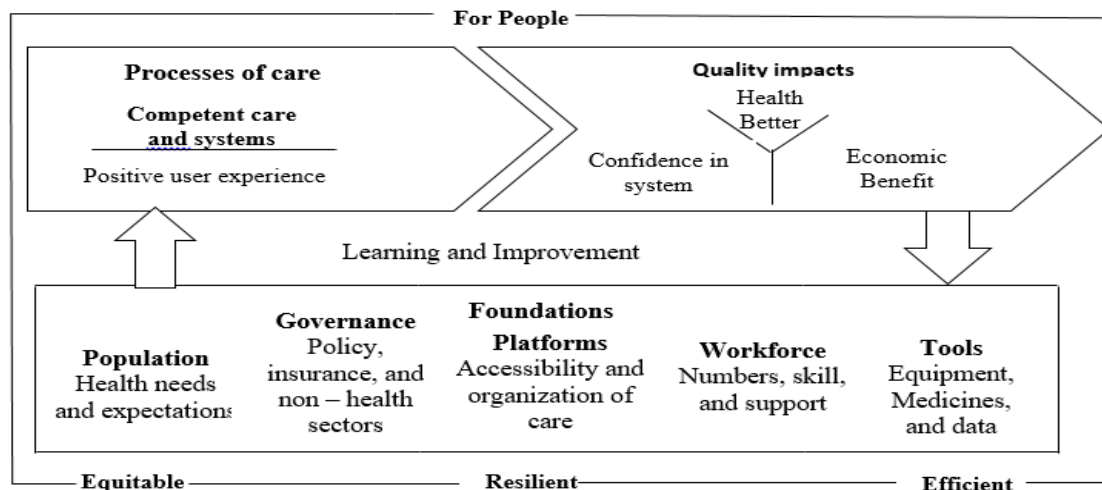
Source: The Lancet Global Health Commission, November, 2018

Six Pillars of High-Quality Care

One of the most widely accepted classifications of health care quality was developed by the US National Academy of Medicine. It defines six pillars of high-quality care: safety, effectiveness, patient-centeredness, timeliness, efficiency, and equity. Despite this apparent consensus, in practice these domains are considered unevenly. Many quality assessment programs only focus on effectiveness and safety, a few include timeliness and patient centeredness, and still fewer address the efficiency and equity of care (Annegret F. Hannawa & etal, 2022).

Table 4: Six Pillars of High-Quality Care

Pillar # 1	**Safety** - High-quality care avoids preventable harm to patients.
Pillar # 2	**Effectiveness** - High-quality care is based on scientific knowledge and given to all who could benefit / not given to who is not likely to benefit (i.e. avoiding underuse and misuse, respectively).
Pillar # 3	**Patient-centeredness** - High-quality care is respectful of and responsive to individual patient preferences, needs, and values and ensures that patient values guide all clinical decisions.
Pillar # 4	**Timeliness** - High-quality care minimizes wait times and harmful delays for both those who receive and those who provide care.
Pillar # 5	**Efficiency** - High-quality care avoids waste of any kind (e.g. equipment, supplies, ideas, energy).
Pillar # 6	**Equity** – High-quality care does not discriminate care recipients based on their personal characteristics (e.g. gender, ethnicity, geographic location, socioeconomic status).

Source: Annegret F. Hannawaa, 2022

The following table depicts the Price comparison of medical producers.

Table 5: Comparison of prices of common medical procedures in India with other nations for Medical Value Travel (MVT) (in US$)

Medical Procedures	India	High	Low
Heart Bypass	7,900	26,000	7,900
Angioplasty	5,700	17,700	4,200
Heart Valve Replacement	9,500	39,990	9,500
Hip Replacement	7,200	21,000	7,200
Hip Resurfacing	9,700	19,500	9,700
Knee Replacement	6,600	17,500	6,600
Spinal Fusion	10,300	16,900	6,000
Dental Implant	900	2,700	900
Lap Band	7,300	11,500	7,300
Gastric Sleeve	6,000	12,900	6,000
Gastric Bypass	7,000	16,800	7,000
Hysterectomy	3,200	10,400	3,200
Breast Implant	3,000	8,400	3,000
Rhinoplasty	2,400	3,980	2,200
Rhytidectomy	3,500	6,700	440
Liposuction	2,800	3,000	2,500
Abdominoplasty	3,500	5,300	3,500
Lasik (both eyes)	1,000	3,800	1,000
IVF Treatment	2,500	14,900	2,500

*High and Low prices are across major destinations for MVT including Thailand, Malaysia, Singapore, Turkey and South Korea

Source: *India Emerging as a Medical Tourism Hub | IBEF*

In a recent Hastings Center Report, Cohen suggested separating medical tourism into three types:

- Services that are illegal in both the patient's home country and the destination country, such as organ sales.

- Services that are illegal in the patient's home country but legal in the destination country, such as some stem cell therapies.
- Services that are legal in both the patient's home country and the destination country, such as joint replacement (Lee & Taggart, 2013).
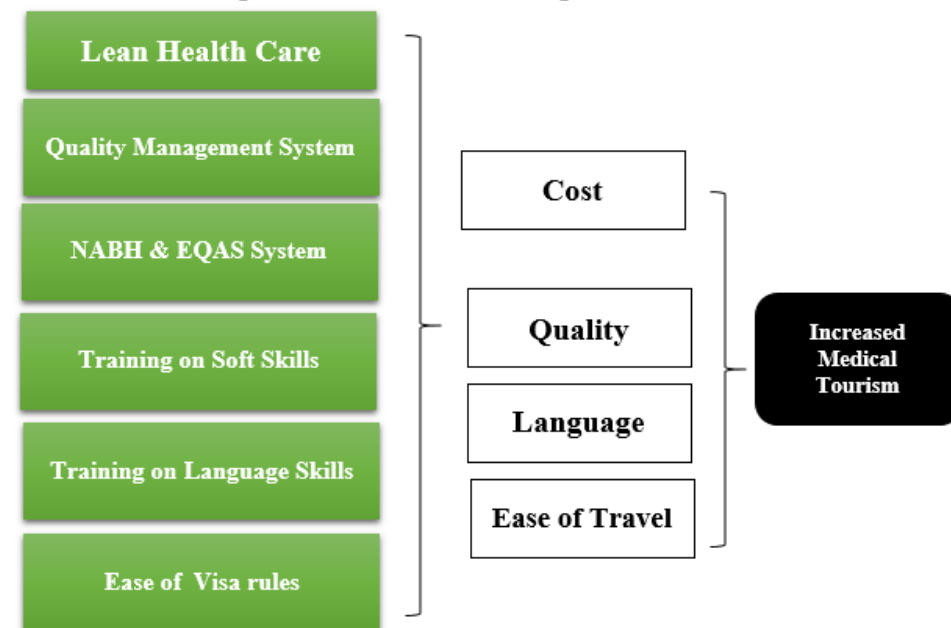
Table 6: Terms used to describe travelling for receiving medical treatment

Term	Definition
Medical Travel	A patient travel from home to a different country for invasive medical treatment
Domestic Medical Tourism	A patient travels between the states for the treatment
Cross-border Medical Tourism	A patient travel to a nearby country for treatment
International Patients	A patient may be expatriate or people on vacation and who seek medical treatment
Transplant Tourism	A patient travelling to another country for the organ transplant

Source: Theoretical Economics Letters, 2018, 8, 1368-1390

India has positioned itself as a medical centre. India's private hospitals have skilled doctors, nurses, and cooperative staff who attract medical tourists from all over the world. All of these factors are likely to increase the number of medical visitors to India (Patil, 2021).

Figure 4: Framework for increasing Medical Tourism

Lean Health Care
Quality Management System
NABH & EQAS System
Training on Soft Skills
Training on Language Skills
Ease of Visa rules

Cost
Quality
Language
Ease of Travel

Increased Medical Tourism

Source: Mishra & Sharma, 2021

Figure 4 summarizes the framework using enablers and factors to increase the medical tourism in the region. It can be seen that ease of Travel and Language are environmental factors and external to the control of business whereas Cost and Quality are within the control of the business. Cost and Quality are interlinked and emphasis on quality can reduce the cost of operations thereby achieving operational excellence (Mishra & Sharma, 2021).

Different types of demands in medical tourism market and different laws applied in different countries create an environment of too many information, fear and uncertainty especially in relation to the aftermath, which is reasonable to expect to happen in some of the situations. Thus, the reasons why patients make the decision to use medical tourism is very important, especially for studying the possible implications related to (Alexandra Nola and Zdeslav Radovčić , 2021).

Nevertheless, medical tourism is part of a broader term, known as health tourism, which was defined by Carrera and Bridges as "the organized travel outside one's local environment or restoration of an individual's well-being in mind and body". Thus, apart from the medical treatment, health tourism includes prevention, relaxation or convalescence, as well as wellness and spa industry (Klimova & Kusa , 2020) .

Figure 5: Key Components of Health Tourism
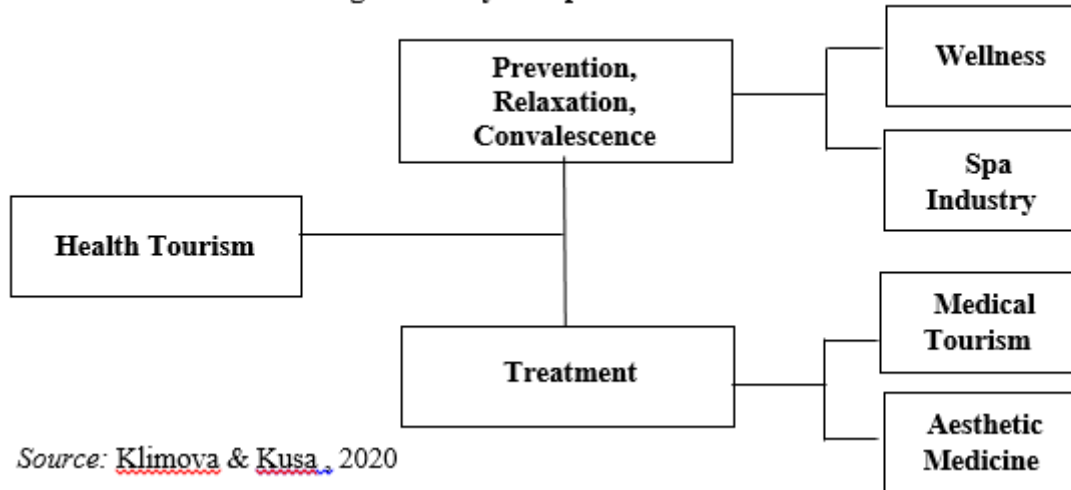
Source: Klimova & Kusa , 2020

Medical Value Travel in India

India has been successful in establishing a reputation as a top location for top-notch clinical care for both critical and non-critical illnesses over the years. From 2020 to 2027, Medical Value Travel in India is projected to expand at a compound annual growth rate of 21.1% (EY, 2023).

Table 7: India's Advantage and Key MVT Growth Factor

Source: EY 2023

Inbound MVT- Indian Market

Below is a percentage distribution of foreign tourists' arrivals (FTAs) to India in 2021 for medical purposes from the top source countries.

Figure 6: Source Country wise percentage distribution of FTAs for Medical Purposes to India 2021
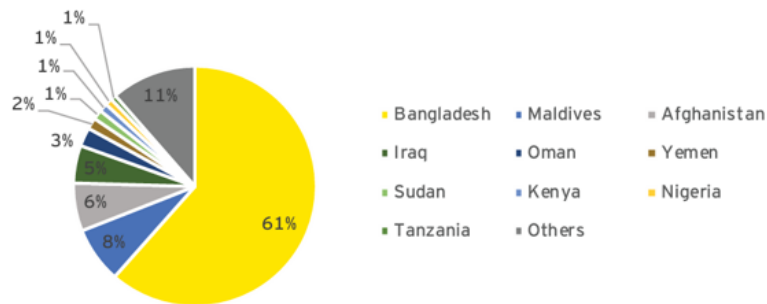
Source: Ministry of Tourism

**Perceived Risk Dimension in the Medical Tourism Context**

According to the World Tourism Organization, every country should conduct a risk-benefit analysis and decide on its priorities. The WHO also believes that essential emergency travel and humanitarian assistance should be prioritized in this regard. Cargo transportation should also be a priority to provide essential medical resources. As for passengers, elderly patients and those with chronic or underlying diseases should be prioritized (Mosazadeh & etal. 2022).

Table 7: **Perceived Risk Dimension in the Medical Tourism Context**

No.	Perceived Risk Dimension	Definition
1.	Psychological Risk	Medical tourists' expectations and evaluation of the suffering caused by mental stress and tension.
2.	Financial Risk	Medical tourists' expectations and evaluation of waste the money
3.	Health Risk	Medical tourists' expectations and evaluation of corona-virus transmission probability through travel
4.	Legal Risk	Medical tourists' expectations and evaluation of lack of the supportive laws in case of possible transmission
5.	Performance Risk	Medical tourists' expectations and evaluation of low-quality medical tourism providers' services due to travel
6.	Facilities Risk	Medical tourists' expectations and evaluation of possible negative outcomes related to facilities, equipment, and technologies
7.	Time Risk	Medical tourists' expectations and evaluation of time lost

Source: World Tourism Organization

Figure 7: Visual model of medical tourists' perceived risk new conceptualization
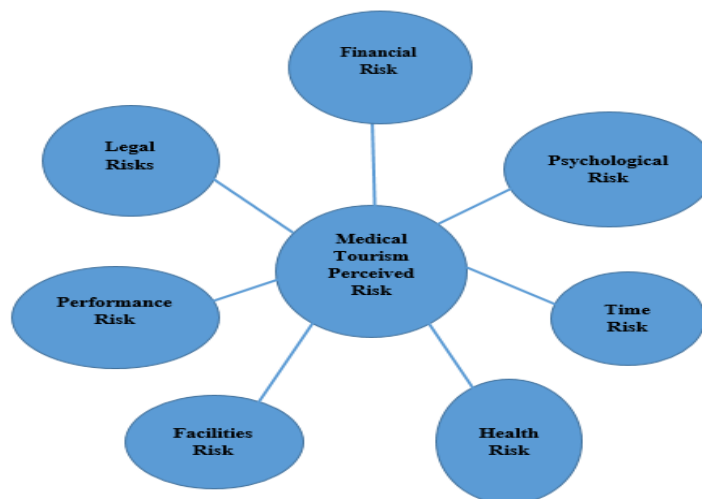
Source: Mosazadeh & etal. 2022

2. CONCLUSION

Quality of health care at the system level requires a focus on governance issues, including improving public-sector management, building institutional capacity, and promoting a culture of data-driven policies. Setting performance

standards and expectations is another essential element to improving patient safety. From a sociotechnical point of view a quality system is an association, a network of humans and artefacts, formed with a view to some good purpose, e.g. improving the quality of medical practice by internal reflexivity of medical professionals in health care organisations and (a valid) external accountability to patients or society.

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