

Medical Tourism in Pakistan: Current status, Opportunities and Challenges to its growth

By

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Abstract

Tourism Development Corporation of Pakistan has identified Medical Tourism as a niche market in which Pakistan can achieve substantial market share. This paper examines the current position of tourism in Pakistan as well as its healthcare infrastructure and intellectual capital. Pakistan's current healthcare position is benchmarked against other nations of the world. Existing Literature on Medical tourism, data from government sources and case study approach is adopted to determine Pakistan's position in the Medical tourism market. What are the benefits and key Drivers of Medical Tourism? Whether Medical Tourism can improve efficiency of the medical sector in Pakistan and contribute to growth and employment? These are some of the questions answered in the paper. Pakistan's thriving private healthcare system with a large number of internationally qualified doctors, combined with unmatched tourist attractions, indicates potential for development as a major Medical Tourism hub. Opportunities and strengths in various sectors of Medical tourism are identified. Constraints are identified and mitigating factors are ascertained. Strategic product placement and promotion in selected segments of the market are identified for Pakistan. The paper recommends guidelines that can be adopted by stakeholders in the Medical Tourism sector to promote growth in the sector.

Glossary

PMDC	Pakistan Medical and Dental Council
PTDC	Pakistan Tourism Development Corporation
Homeopathy	Alternative Medicine
TOHOTO	Transplantation of Human organs and Tissues ordinance
GOP	Government of Pakistan
IFC	International Finance Corporation
PNC	Pakistan Nursing College
Tibb-i-Unani	Greco Arabic System of Medicine
HOTA	Human Organ Transplant Authority
SBP	State Bank of Pakistan
TAAP	Travel Agent Association of Pakistan
WHO	World Health Organization

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Introduction

Pakistan Tourism Development Corporation (PTDC) is the authority that promotes tourism in Pakistan and preserves the nation's cultural heritage. PTDC has identified Medical Tourism as one of the areas it wants to promote. It would not only generate growth and employment in Pakistan by utilizing existing medical facilities but also promote Pakistan's cultural and natural heritage. The synergy created from combining health and tourist infrastructure can earn substantial foreign exchange for the nation and stimulate employment generation. Some researchers are of the view that this objective is merely a wishful thinking (Kabani n.d.), given the security situation the nation has faced in the last decade and the low spending on healthcare by the government. The paper ascertains whether Pakistan can succeed in developing a niche for itself in the Medical Tourism market or would this remain an elusive dream. Current status of Tourism and Healthcare helps determine core strengths as well as limitations and how these can be used to position Pakistan to cater to Medical Tourists.

Review of Literature

(Laura Hopkins 2010) are of the view that there is a lack of hard data on the size of Medical Tourism both in terms of number as well as revenues. Most of the data is based on Anecdotal evidence and conjectures. World wide there is no reliable hard data on patient numbers, flows, treatment types and success rates (Connell 2011). There is no agreed upon definition of Medical Tourist even. Is he just the patient or the accompanying family members? As it stands, there are conflicting estimates of patient numbers, with magnitudes of difference between them that likely stem from definitional issues of what comprises medical tourism. Given lack of data on the subject of Medical Tourism some specific examples of companies that have served patients from abroad are studied in detail to determine the requirements for successful medical tourism.

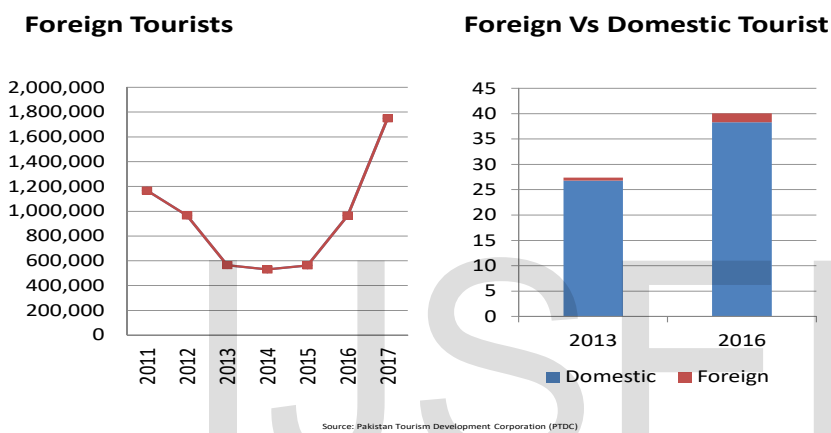
Methodology

Given limited resources on Medical Tourism, particularly in the Pakistani context, interview schedule was established to gather information on a case by case method. These specific examples serve as qualitative insights into the scope of Medical Tourism in Pakistan. Medical tourism is in fact several businesses, that are inter connected in some manner. A holistic approach is required to understand where the business stands and how it can be developed further in Pakistan. Thus the research has to identify all areas connected with the business of Medical Tourism and add their perspective to the

study. Legal fraternity's view on Mal practice and Medical Negligence liability need to be incorporated into the study. Finally the recommendation for government and regulatory bodies is given based on strategic marketing management concepts.

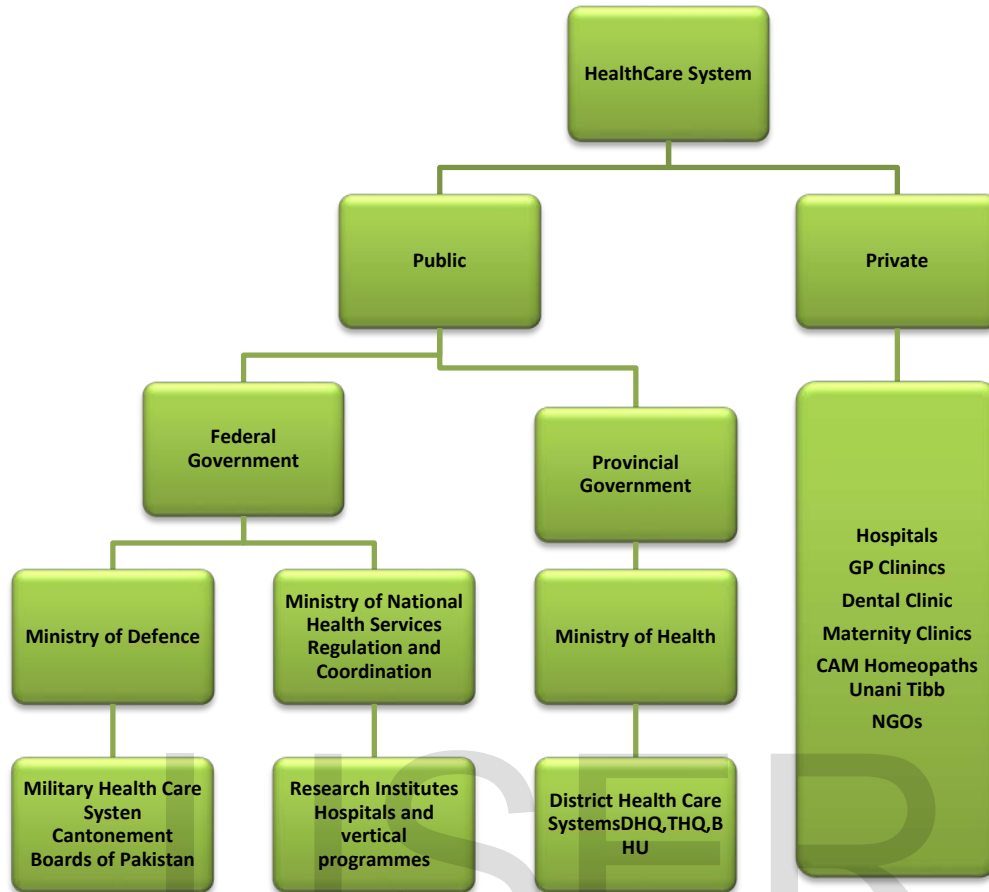
Current Tourism Status

According to the PTDC international tourists have more than tripled since 2013 to 1.75 million in 2016. However the main contribution to tourism comes from the large number of domestic tourists that have jumped 30% and stands at 38.3 mil-



Current Healthcare Status

Ministry of National Health Services Regulation and Coordination is the federal department responsible for harmonizing healthcare efforts in the nation. Provincial health departments are responsible for health related matters in their respective provinces.



Pakistan is a nation of 199.1 million and produces over 5000 doctors every year in high standard medical colleges. However density per 1000 people is less than 1. Pakistan has a mixed health system with both private and public sector facilities. Public sector has hospitals ranging from basic health units (BHU) in union councils, Tehsil Headquarter Hospital (THQ) and District Head Quarter hospitals (DHQ) to large specialized hospitals in Urban centres. Private sector has large number of clinics, hospitals as well as alternative medicine practitioners.

There are 107(41 Public Sector, 66 Private Sector) medical colleges; 49 (14 public and 35 private) dentistry colleges; 127 Nursing schools and 84 homeopathy schools of alternative medicine. A large number of Pakistani doctors are working in the developed nations. In the USA alone there are 12000 doctors of Pakistani origin. UK has over 5000 doctors of Pakistani origin. Many doctors return to Pakistan after qualifying or practicing in the west due to family commitments. This has generated high quality intellectual capital which is a prerequisite for development of Medical Tourism. Current Trump administration in the USA has put restriction on visa to Muslims and plans restrictions on H1 B visa

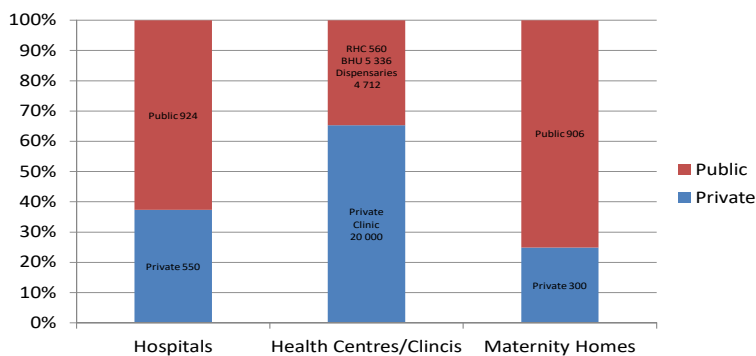
(Alicia 2017). This will result in many more Pakistani doctors training or working in the USA to return to home country.

2016-17	
Registered Doctors	195896
Registered Dentists	18333
Registered Nurses	99228
Population per Doctor	997
Population per Dentist	10658
Population per Bed	1584

Source: Pakistan Economic Survey 2016-17

Absence of social health insurance means that about 70% of the expenditure on healthcare is out of pocket expenditure which means a large demand for private healthcare facilities. People paying out of their pocket demand a higher level of service compared to those being served by government hospitals. Reports from WHO and Economic Survey of Pakistan 2007 indicate large prevalence of private sector medical practice.

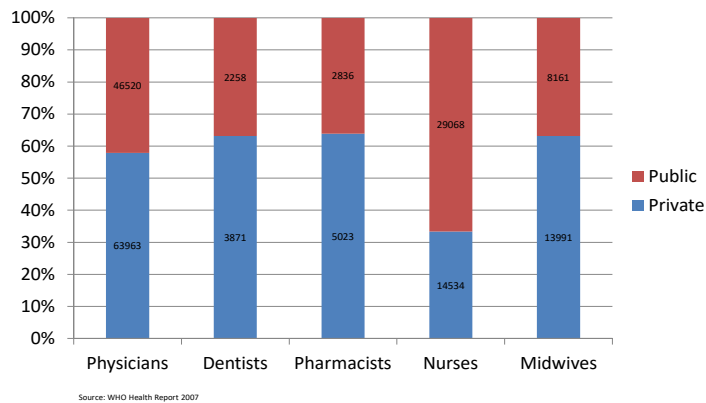
Health Infrastructure



Source: Economic Survey of Pakistan 2007

Majority of hospitals are public sector, however over 60% of smaller clinics are in the private sector. In terms of intellectual capital more of the doctors are available in private sector.

Private Vs Public Intellectual Capital



Alternative medicine has been integral part of Pakistan’s heritage. These include the *Tibb-i-Unani* (Greco Arab System of Medicine), Homeopathy and Ayurveda. These alternative sources provide cheaper alternative to allopathy and some ailments are traditionally believed to respond better to their use. Alternative medicine practitioners are generally the first available choice for most Pakistanis (WHO 2001). Pakistan is the source of many of the herbs used in these alternative medical systems and is ranked eighth in export of medicinal plants. The market for these is estimated at \$40 billion a year.

Complimentary Alternative Medicine 2016-17	
Homeopathic Colleges	139
Tibb Schools (including 4 universities)	38
Registered Homeopath	40 000
Registered Tibb Practitioner	130 000

Source: National Councils for Homeopathy and Tibb

Healthcare Regulation

The Pakistan Medical and Dental Council (PMDC) and the Pakistan Nursing Council (PNC) are the statutory regulatory and registration authority for medical and nursing practitioners in the country. Both the PMDC the PNC are independent of the government and are administered by the medical profession. They establish uniform standards of basic and higher qualifications in medicine and dentistry throughout Pakistan. Local doctor need to register with PMDC to begin practice. Foreign qualified doctors need to get equivalence from these regulatory authorities to become eligible to practice in the country.

Before practicing as a doctor, a medical student in Pakistan needs to complete five years of a bachelors degree in medicine and surgery referred to as MBBS. One year of clinical training referred to as House Job follows the MBBS degree. Thereafter Medical practice can be started while pursuing specialization from the College of Physicians and Surgeons (CPSP). Specialization requires passing two levels of exams on completing both levels the practitioner gains the qualification of Fellow College of physicians and surgeons (FCPS). A system similar to the British Royal Colleges of Physicians and Surgeons.

Complimentary Alternative Medicine (CAM) practitioners are regulated by their own authorities. National Council for Homeopathy and National Council for *Tibb*. Both regulate education and research as well as register practitioners. (GOP, 1965)

Medical Tourism in Pakistan

In the 90's Pakistan was world's leading transplant tourism destination. 2000 kidney transplants were performed in 2006 out of which 1500 were performed on foreigners. It was reported that poor donors were selling kidneys at a price of about \$1000. By 2007 an ordinance was promulgated called the Transplantation of Human organs and Tissues ordinance (TOHOTO) which was passed by parliament in 2010 to become an act of law. TOHOTO aimed to prevent exploitation of vulnerable poor segment of society by restricting transplant mainly to close blood relations only. TOHOTO creates a monitoring authority known as Human Organ Transplant Authority (HOTA). Authors (Mohsen Raza, Jolene Skordis-Worrall Jan 2012) pointed out that TOHOTO has laid the foundation for curbing organ trade however only an effective HOTA will prevent the trade from continuing underground.

Government of Pakistan has put in place rules and regulations for cadaveric donation and cadaveric organ transplant in order to put an end to transplant tourism. A total of 44 hospitals are authorized by HOTA to perform organ transplant of which half are in private sector. HOTA regulates Kidney, liver, bone marrow, Cornea and Heart transplants. Between 2007 and 2013 a total of 4033 kidney transplants have been performed, out of which 300 were unrelated donors and 4 deceased donors. SIUT is the leading institute in the country that performed 2185 transplants over half the total amount. Medical Tourism in Pakistan would exclude transplant tourism in the future.

Pakistan does not appear on the list of leading Medical tourism destinations in a market that is estimates at anywhere from US \$ 19 billion to US \$439. In the past kidney transplant visitors thronged to Pakistan. This has changed after legislation in 2008. However there is a large domestic 'Medical Tourist' that travels from smaller towns and rural areas lacking in medical facilities to the metropolitan hubs of

Karachi, Lahore and Islamabad. Large number of domestic Medical Tourist has led to development of healthcare clusters in large cities with high quality medical infrastructure. Low government spending on healthcare; lack of facilities in rural areas as doctors prefer to practice in Urban centres combined with out of pocket expenditures have created demand for quality private healthcare.

In addition to these local healthcare seekers Pakistani Diaspora living in the west and Middle East regularly visits home country to visit family, enjoy vocations, and medical treatment. According to foreign office 90% of visiting Afghan Patients cite medical treatment as the reason for visit and are estimated to spend around \$1300 on average visit. These sources have remained persistent despite the terrorism issue faced by Pakistan.

Comparative Medical Costs

Cost differential is one of the major reasons for travelling abroad for medical procedure. The following table shows Pakistan is one of the least cost providers of medical services.

Cost in US \$	USA	Thailand	Pakistan*	Poland
Heart By Pass	23,000	15000	6,542	14000
IVF	12400	4100	1,869	4900
Hair Transplant 3000 FUE	9000	8160**	3,000	12000****
Dental Implants	2800	1720	935	925
Liposuction	5500	2500	1,600	1800
Tummy Tuck	8000	5300	2336	3550
Cornea Per Eye	17500	3600	1869	NA

Source: Medical Tourism Association 2016.

*Pakistani costs are based on case studies and (Siddiqui 2012)

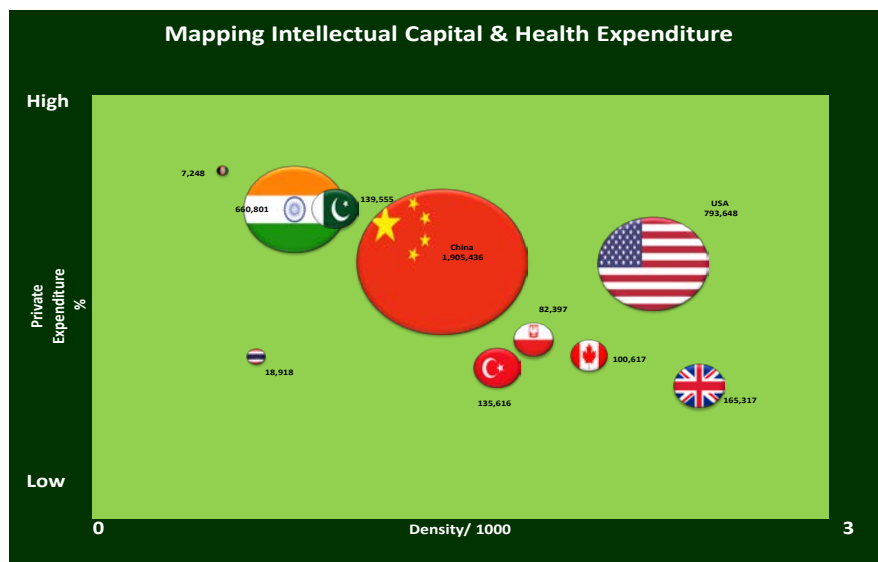
**Absolute Hair Clinic

**** Klinika Ambroziak

Benchmarking Pakistan's Intellectual Capital

Country	2000-2010		2008
	Physicians	Density Per 10,000	% Private Expenditure
Afghanistan	7 248	2.1	78.5
Canada	62 307	19.1	30.5
China	1 905 436	14.2	52.7
India	660 801	6	67.6
Pakistan	139 555	8.1	67.7
Poland	82 397	21.4	26
Thailand	18 918	3	25.7
Turkey	135 616	17	22.6
UK	165 317	27.4	17.4
USA	793 648	26.7	52.2

Source: WHO



Ironically Nations that have a high density of doctors per capita on the right side of the map USA, UK, and Canada are the ones that are the source of outbound medical tourist. Those with less density like India and Thailand are the ones attracting most Medical Tourists.

Pakistan has similar attributes as India, with low density of doctors per capita and high out of pocket private expenditure on healthcare. Both factors combined have led to development of a vibrant private healthcare sector with high quality infrastructure. Patients from western nations located on the right side of the map are used to getting medical treatment from doctors from the Sub continent and are comfortable with English speaking doctors of Indian or Pakistani origin.

As discussed earlier Pakistan like India has a large Diaspora living in these English speaking industrialized nations as well as oil rich Middle East. Expatriates visit country of origin to meet family and friends and at the same time seek healthcare that matches western standards and yet is at a fraction of the cost. Diasporic Medical tourist is less likely to be scared away by security and cultural reasons.

Benefits of Medical Tourism

(Rory Johnston 2010) identified effects of Medical tourism on both departure and destination countries. According to them development of medical Infrastructure is the major benefit of Medical Tourism. Use of this medical infrastructure is not limited to tourists but benefits local population also. Access to international standard medical facilities encourages people who may travel abroad for treatment to seek care at home, saving foreign exchange. Developed private medical infrastructure in Pakistan is the result of large domestic demand and most Pakistanis do not have to travel abroad for Medical treatment. Liver transplant is one exception and patients travel to countries like India and China. The government has started registration of Hepatitis C patients and initiated liver transplant facilities. Developed private medical infrastructure has attracted Afghan, Diasporic and Transplant tourism in the past.

Secondly tourists bring hard foreign currency and make direct and indirect contributions to the economy.. Medical tourists spend twice compared to ordinary tourists. On the one hand they spend on medical facilities and secondly on mainstream tourism and hospitality facilities that leads to generation of revenue for host country. All the above can be used to promote public healthcare systems.

Thirdly Medical Tourism leads to retention of health human resources, even reversing external brain drain. Better salaries and work environment may encourage medical professionals to stay in the

country. Conversely Medical tourism may exacerbate trend of migration of medical talent to urban centres an Internal brain drain. Subsidized doctors end up serving foreign patients rather than the well being of local population. Incentives to medical tourism direct funds to expensive tertiary care rather than primary health. Pakistan has faced both internal and external brain drains. Intellectual capital has migrated from rural to urban areas as well as to foreign countries primarily North America, UK and the Middle East. Both trends have shown reversal in recent years. Development of million population towns has led to boom in private practices in rural environments and international situation particularly in the USA after 9/11 has encouraged many doctors to return to home country. Availability of high quality healthcare in smaller towns combined with reverse brain drain would create access capacity in mega city health clusters that can be used to cater to foreign Medical Tourist.

It is also argued that Medical Tourism would encourage further a two tier system comprising of public health system and a private system for the wealthy that have ability to pay. Turning healthcare into a commodity and preventing reform because Medical Tourism takes away the pressure for improved healthcare in the public sector. In Pakistan's case the private sector has succeeded in plugging the gap in healthcare provision created by inefficient public sector institutions and low government spending on healthcare due to scarce resources. The two tier system is already entrenched and medical tourists can help utilize the duplicated facilities and generate revenue and growth. Government in Pakistan has initiated public private partnership in both education and healthcare sectors. District head quarter hospitals are attached to private sector universities to enhance their efficiency with positive results.

Government medical colleges and hospitals, ranging from primary units to teaching hospitals serve the general public. Limited resources mean that work environment in these facilities is not up to standard. Free treatment means over load on the facilities. Medical tourism would encourage this public sector to improve efficiency and hospitality to attract some of the foreign tourists. Private medical colleges and hospitals are already serving on the basis of ability to pay. Access to these high end customers would help them improve their facilities further. Medical Tourism by bringing in foreign exchange can set right past distortions of two tier system.

As far as the departure country is concerned. Competition from cheap labour emerging markets may increase patient's expectations as well as distort healthcare system at home. Absence of data means that post op facilities may not be anticipated by the healthcare system at home. Complications can strain the facilities of the home country healthcare system. Reforms may be delayed as no pressure forthcoming from people travelling abroad instead. Malpractice in a foreign country means that patients

may have little recourse to fall back on. Authors (Farhana Muzzafar 2007) are of the view that foreign medical tourist may not have the same protection against professional negligence that they are used to in their home country.

In conclusion economies of scale would improve the quality and quantity of medical service in the existing two tier Pakistan market. With a large number of foreign tourists overhead costs of hospitals and healthcare professional would be spread. Furthermore tourist from developed world would demand the high standards they are used to in their home country leading to improved hospitality and efficiency at local hospitals.

Key Drivers

Having determined that Medical Tourism would be beneficial in the case of Pakistan we need to look at the main factors that drive Medical tourists to a destination.

Expenditure

Under insurance is a key reason that leads patients to seek cheaper alternatives in the emerging markets (Siddiqui 2012). This is especially true when insurance companies in home country accept claims from hospitals abroad.

The fact that you can save anywhere from forty to sixty percent on medical procedure costs in Pakistan compared to the USA, is extremely attractive. The savings sound very attractive, but a good new hip and a nice new face is not the sort of thing one would want to bargain with. Patients are concerned about how those saving rewards balance against risks involved. They are interested in qualification and success rate of the doctors as well as the standard of hospitals and technology used in the procedures.

Facilities

Other than cost the most important driver of tourism to a destination is the quality of its intellectual and infrastructure capital. Patients look for doctors and facilities with the most experience, latest medical technology. Support staff smiles are important but not the main reason for choosing a facility abroad. Patients are concerned about mortality rates, complication rates, infection rates, and re-admission rates. Want to know if the procedure required is a specialty at the chosen hospital and that it performs a high volume of these types of procedures.

Doctor's credentials are important to patients and one of the main reasons why large number of Pakistani Diaspora visits for treatment. Stringent PMDC rules and large number of foreign qualified doctors increases trust in the local healthcare.

To further improve infrastructure the State Bank of Pakistan SBP in collaboration with the IFC has published a report identifying the need of financing of private sector hospitals by commercial banks.

Facilitators

Facilitators play an important role in bringing together patients and destination hospitals. Currently Pakistan lacks in this field and clinics and hospitals either directly market to patients or are directly approached by patients themselves.

Agha Khan Hospital has an App through which patients can contact hospital and make appointments. Other establishments use WebPages and social media to market their services. A large number of travel and tour operators exist in the country which can be encouraged to achieve certification in Medical Tourism niche. Travel Agent Association of Pakistan (TAAP) is a forum that advocates to airlines, government, regulatory authorities and diplomatic missions to promote travel and tourism in the country.



TAPP has associate and corporate members numbering a total of 1157. Government could encourage training some of them for Medical Tourism purpose.

Accreditations

Accreditations are important to assure foreigners of quality of local medical facilities. (Farhana Muzzafar 2007) suggest mandatory conformity with ISO 9000 standards at least. Pakistan has two hospitals accredited by JCI namely Shifa Hospital in Islamabad and Agha Khan Hospital in Karachi. Several establishments are accredited with ISO 9000. Local accreditation from PMDC is mandatory for hospitals.

While accreditation does not guarantee a perfect medical experience, it does signal that a particular hospital or clinic has invested significant time and resources in perfecting quality of care processes and patient safety protocols that, over time, will promote successful surgical outcomes. Partners & Medical Equipment suppliers e.g. trusted brand for dermal fillers, laser technologies also play a role in a patient's choice of hospital and destination.

Quick Access

Local health systems in nations with large public sector healthcare funded programs cannot schedule procedures quickly enough. This can be a common occurrence in countries with social healthcare systems such as Canada or Great Britain. Patients in these countries may have to wait weeks or months to have a diagnostic procedure or meet with a specialist. And this will drive them to developing nations where out of pocket expenditures mean quick access to private healthcare. Many countries like Canada and UK have large government provided healthcare systems which can lead to delays in access to healthcare. Another reason for seeking treatment abroad is to avoid queues in host nations (Farhana Muzzafar 2007). Patients in these countries want to avoid long waiting periods in their home nations for treatment.

Availability

If the procedure or treatment you are seeking is not available due to a lack of technology, expertise or local regulatory reasons, you may need to seek care abroad. In some cases, your local healthcare provider may not have the equipment or medical expertise to treat certain conditions. In other instances, a certain procedure may not be authorized in your home country. Thus easy availability is another driver of Medical Tourism.

Unavailability of certain treatments at home may also lead them to other countries where those treatments are readily available. Some procedures may not be allowed in home country due to stringent regulation. A major reason for seeking medical treatment abroad is that the procedure may not be available or restricted in the seekers home country. (Farhana Muzzafar 2007) cite the example of stem cell therapy. HOTA prescribes international guidelines for use of stem cells in regenerative medicine. Termination of pregnancy to obtain fetus for stem cells will not be permitted. The main source of embryonic stem cells is IVF clinics dealing with infertility treatment where spare embryos may be

available for regenerative medicine. HOTA prescribes that no embryo should be created for the sole purpose of obtaining stem cells.

Privacy and confidentiality is often sought in procedures such as cosmetology and infertility related matters. A Medical destination abroad would be discrete as well as enjoyable. Low labour costs of developing world would mean excessive care after procedure.

Malpractice Protection

It is argued that the costs are lower in developing nations because of lax malpractice protection. Lack of Mal Practice protection may discourage many prospective tourists to proceed to a destination for treatment. If a destination in addition to all the above requisite drivers was to enforce strict professional standards and ethics it would drive patients to that destination. Main laws governing medical practice in Pakistan are

- Pakistan Medical and Dental Council Ordinance, 1962 (Amendment Pakistan Medical and Dental Council Ordinance 2015)
- Allopathic System (Prevention of Misuse) Ordinance, 1962
- Punjab Health Care Commission Act 2010
- Code of Ethics of Practice for Medical And Dental Practitioners 2010 (“Regulations”)
- Fatal Accidents Act (1855)
- Pakistan Penal Code 1860
- The Code of Criminal Procedure 1898
- The Code of Civil Procedure 1908
- Pakistan Registration of Medical and Dental Practitioners Regulations 2008

Pakistan has the British tradition of common law based on case precedents. Tort law covers civil wrong committed by an individual against another. Medical Negligence comes under the category of tort law whereby legal liability results regardless of a contractual relationship. A patient must establish four factors of the tort of negligence for a successful medical malpractice claim. Fact that a duty was owed, duty was breached, the breach caused an injury and the doctor caused the damage due to failure to live up the required standard.

- **NEGLIGENCE AND DUTIES OWED TO PATIENTS:**“A person who holds himself out as ready to give medical advice or treatment impliedly undertakes that he is possessed of skill and knowledge for the purpose. Whether or not he is a registered medical practitioner, such a person who is consulted by a patient owes him certain duties, namely a duty of care in deciding whether to undertake the case; a duty of care is deciding what treatment to give, a duty of care in administration of that treatment and a duty of care in answering a question put to him by a patient in circumstances in which he knows that the patient intends to rely on his answer. A breach of any of these duties will support an action for negligence by the patient”

In the case of *Sikander Shah vs Dr Nargis Shamsi* (2014 MLD 149) Karachi High Court ruled that ‘The Hospital is vicariously liable for negligence of its staff. The Hospital may also be negligent where they failed to adequately supervise or train their doctors, nurses or where hygiene standards have not been maintained properly.....Neither a doctor/surgeon can simply shift his responsibility upon the administration in case of happening of any event nor can the hospital lay off its hands by throwing away the responsibility upon the doctors.’

The Punjab Healthcare Commission Act 2010 is the latest regulation concerned with malpractice. According to this Act a hospital may be guilty of medical negligence if the Hospital does not have the requisite human resource and equipment's which it professes to have possessed. Negligence would also be committed if a hospital or any of its employee did not, exercise reasonable competence, the skill which he or his employee did possess (Section 19 Punjab Healthcare Commission Act 2010).

Thus options available to a complainant are:

- i) Filing complaint in the PMDC against the medical practitioner and removal of name from register;
- ii) Suit for compensation for Medical Negligence and Damages under the Fatal Accidents Act 1855;
- iii) Criminal Case under section 302 of PPC
- iv) Punjab Healthcare Commission Act 2010 (Section 18) says that license of a healthcare establishment may be suspended if repeated cases of medical negligence of same nature are proved.

Opportunities for Pakistan

China's one belt one road initiative includes a China Pakistan Economic corridor (CPEC). This would connect Pakistan to China with all weather road and rail infrastructure running from Xinjiang, in West China to Gawadar, on the mouth of oil rich Persian Gulf, in Pakistan. Fiber optic cables between Pakistan and Western China are also being laid. It would reduce the 45 day long sea journey to China, of goods from Africa and Middle-East, to a 10 day long land journey through Pakistan. CPEC entails an investment of \$80 billion and has promise of becoming a Health Corridor. According to estimates, some 125,000 trucks and long-haul cargo vehicles as well as 25,000 passenger vehicles will run every day on the roads between Gawadar and Kashgar, China under the CPEC. (The express tribune 21 August 2016). Over 10 000 Pakistani medical students are expected to graduates from Chinese universities (Shahbaz May 2017) which would be an asset that would transform the medical sector. Improved infrastructure and availability of doctors in rural health centres would relieve pressure on urban healthcare facilities. This excess capacity could be utilized for patients from abroad. Apart from industrial cities and energy projects; hospitals along the route of the CPEC would cater to the needs of increased traffic from China and Central Asia.



We now look at some specific examples of current medical practitioners who have managed to attract medical tourists to Pakistan.

Case Studies

Rehman & Rehman Dental Associates

Harvard qualified Dr Rehman set up Rehman and Rehman Dental clinic in Pakistan based on international standards. In recent years R&R has gone transnational and has presence in the USA, UK as well as Dubai Healthcare City. Dubai Healthcare City is a specialized cluster of healthcare providers developed recently meant to attract Medical companies to this cluster to serve as a medical hub of the region. As discussed above Pakistan has medical clusters in metropolitan cities not intentionally designed that have evolved due to peculiar healthcare system in the country.

In the section on CPEC opportunity large inflow of traffic from China is anticipate along the CPEC route. R&R has recently opened its flagship clinic right at the mouth of this route in the picturesque northern areas of Pakistan. It would also serve other mountaineering related tourists as well as other visitors. The company has posted the following in its advertisement campaign highlighting the attraction of this destination for medical tourists given tremendous alpine scenery.



*Introducing the
newest member of the
R & R family*

Set in the beautiful
backdrop of the
worlds highest
peaks.

R & R Hunza is the
crown jewel of the
R & R Global
Network

**RAHMAN & RAHMAN
DENTAL SURGEONS**

Hunza

**Peaks Visible from Rahman & Rahman
Hunza**

- Nanga Parbat (8611 M)
- Raka Pooshi (7,788 M)
- Lady Finger (7,500 M)
- Golden Peak (7,000 M)

Facilities offered include Same Day Implants a process pioneered by Dr Rehman himself. 'Immediate loading' is now available to patients who require an implant procedure. Cosmetic dentistry includes Invisalign for patients who want a straighter smile and Tooth Contouring to treat crack, chips, stains, and other cosmetic flaws in their smile using Non invasive techniques. R&R Signature Whitening, Dental

Scaling and Polishing are performed by certified panel of ARETA Doctors. Whitening is performed using laser technology that takes under an hour to complete. Dental Crown and Tooth Colored Fillings are also provided.

Hair Transplant

Hair transplant Lahore is another example of a foreign qualified doctor cum entrepreneur Dr. Ahmad Chaudhry. He is a visiting associate professor Claude Bernard University Lyon France and has several diplomas from France in addition to his MBBS from King Edward Medical College in Lahore. He is Active member of international Society of hair restoration surgery (ISHRS).

The clinic provides Hair Transplant solutions both the modern Follicular Unit Extraction (FUE) method as well as Hybrid -combo hair transplant –FUT and FUE Together. The clinic also provides eyebrow hair transplant. Dr Chaudhry has introduced stem cell hair loss therapy to treat baldness as well.

The cost for FUE is Rs 100 less than a dollar for single graft. So 3000 FUE would cost about \$3000 at Dr Chaudhry's clinic while the same would cost \$9000 in the USA. Incentive enough for someone from the USA to visit sunny Lahore for hair transplant.

The clinic provides testimonials of past foreign patients on their website to market their clinic in an effort to pull clients to Lahore. Absence of facilitators or medical tourism companies that companies have to make efforts to pull clients on their own.

Shifa International Hospitals Ltd

Shifa is one of the two JCI accredited hospital in Pakistan, the other one being Agha Khan Hospital. To deal with security concerns due in the last decade and to deal with absence of medical facilitators the hospital has established patient facilitation center at Dubai. Since 2014 the centre has catered for over a 1000 patients from more than 27 countries. The aim is to network with international insurance companies and corporate organizations to attract steady flow of patients to Shifa Hospital.

Currently the hospital has relationship with Aetna, Allianz, Daman, Daman Qatar, almadallah, Dubai Insurance, MSH International, Noor Takaful, Saudi Enaya, Whealth International, Noor Takaful. They also provide add on services, claims management and patient assistance for Bupa, MetLife and AXA.

Patient Facilitation Centre Dubai provides guideline to patients regarding appointments, costing of services, travel arrangements and pick & drop from airport to Shifa International hospitals Ltd.

Facilitation centre assists in connecting international patients to Shifa International Hospitals Ltd for treatment in following major areas:

- Liver Transplant
- General surgeries
- Orthopedic Surgeries
- Bone marrow Transplant
- Kidney Transplant

Standard of treatment is comparable to any international facility as gauged by success rates in Kidney transplants. Shifa has so far performed more than 300 Renal Transplants. In contrast Sind institute of Urology and transplantation (SIUT) a government institution performs 300 renal transplant every year and done 2000 plus transplants.

Khewra Asthma Clinic

Khewra asthma clinic is an example of complimentary alternative medicine practice that has attracted foreign patients. Khewra is world's second largest salt mine and was discovered in 320 BC by Alexander the Great's troops. It was developed during the British Raj in 1872. It is a complete tourist attraction with a salt mosque and an electric train.

Since 2007 a Clinic offers asthma therapy in a chamber of the mine, is attracting patients from all over the world. It has treated 500 asthma sufferers so far. Examples of such clinics exist in other parts of the world. In Bochnia, Poland a similar sanatorium with 140 bunk beds exists. This mine also has gym and jogging facilities within the mine

Patient spends 110 hours in Khewra clinic to breathe air from the mine. Lungs detoxify due to electric fields existing in the salt mine. It relieves asthma without taking any medicines or inhalers. Cost of treatment is only \$62 for spending 11 days at the mine. There is an expansion plan under consideration to turn it into a hospital of 100 beds.

Nearby Katas Raj Temples is a pilgrimage site for Hindus. The main festival occurs in December however rests of the year tourists visit the area because of close proximity to the motorway and nation's capital Islamabad.

Recommendation

Pakistan needs to train facilitators who can coordinate between the several businesses that form the medical tourism ranging from hospitals to hospitality and aviation. These facilitators can market in countries with large number of Pakistani intellectual capital as well as patients that have had procedures done in Pakistan. Coordination with TAAP in training some of the existing travel agents in this special niche of tourism can prove beneficial. Appropriate packages developed by facilitators would reduce the burden on healthcare providers and the later can concentrate on the business of healing.

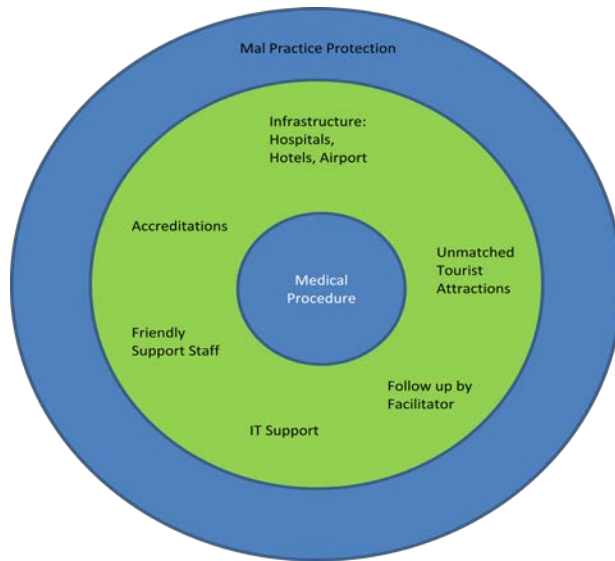
In addition to training facilitators the state can provide infrastructure at airports making them patient friendly. Work environment of Public sector hospitals can be improved and they can be made more hospitable to attract some of the medical tourists. The state can also strictly enforce the laws that protect patients whether local or foreign tourist against medical negligence. Pakistan has substantial experience in organ transplant. Cadaver donations encouragement to an extent that leads to surplus availability of cadaver organs can lead to eventually allow regulated transplant tourism.

Healthcare Clusters already exist all that is required is coordination between healthcare, hospitality, aviation, legal fraternity that pre exist in these clusters. A Facilitator by combining the high quality healthcare product, at competitive prices, combined with unmatched tourist attractions and protection against malpractice and negligence can offer a differentiated product to the customer. Medical facilitators can play a crucial role in pushing Pakistan as an attractive and reliable Medical destination and pull the discerning medical tourist to Pakistan.

Institutional links with insurance companies as well as national healthcare providers can be helpful not only in attracting a permanent flow of patients it will also lead to greater integration of healthcare systems. Global standardization and harmonization of medical practice can be achieved.

The product that ought to be offered is something that is beyond the patient's current expectations as it would have augmented features of protection from malpractice and negligence.

Augmented Product



Given Pakistan's mixed healthcare system it is uniquely placed to cater to a wide variety of medical tourists. Public sector hospitals provide the basic product based on core intellectual competencies. Low income groups can be accommodated here. Within private sector there is a wide variety of services available from posh hotel like hospitals to basic ones. Market can be segmented geographically as well as demographically to accommodate existing Diaspora and Afghan patients. New geographic segment opening in the form of China Pakistan Health corridor is a major opportunity. High end customers can be offered the full augmented product.

Conclusion

Pakistan is well placed to attract large number of Medical Tourists given the improving security situation. Main drivers of cost advantage and existence of high quality intellectual capital is present. Infrastructure capital is also available in the private sector encouraged by years of out of pocket healthcare expenditures. SBP has issued report for further encouraging commercial banks to finance private sector healthcare ventures. Furthermore it is expected that in the future more of the intellectual capital would return to Pakistan through reverse brain drain as opportunities and working conditions improve at home. CPEC is an added opportunity which can serve as a health corridor for the region. Providing healthcare services to large number of freight and passenger movers expected to use the economic corridor.

Bibliography

1. Act, Government of Pakistan. "THE UNANI, AYURVEDIC AND HOMOEOPATHIC PRACTITIONERS." 1965.
2. Alicia, Ault. "Trump immigration order causing chaos for medical centres : NEJM." *Medscape*, 2017.
3. Connell, J. *Medical Tourism*. CABI Publishing, 2011.
4. Farhana Muzzafar, Ijaz Hussain. "Medical Tourism: Are we ready to take the challenge?" *Jouranl of Pakistan Association of Dermatologists*, 2007: 17: 215-218.
5. Kabani, Owais. "Medical Tourism Wishful Thinking."
6. Laura Hopkins, Ronald Labonte, Vivien Runnels, Corinne Packer. "Medical Tourism today: What is the state of existing knowledge?" *Journal of Public Health Policy*, 2010: Vol. 31, 2, 185–198.
7. Mohsen Raza, Jolene Skordis-Worrall. "Kidney Trade: An overview of the 2007 Transplant of Human organs and Human tissue ordinance. To what extent will it curb the trade." *PMDC*, Jan 2012: Issue Vol 62 No 1.
8. Rory Johnston, Valorie A Crooks, Jeremy Snyder, Paul Kingsbury. "What is known about medical tourism in destination and departure countries? A scoping review." *International Journal of Equity in Health*, 2010: 9:24
9. Shahbaz, Dr Muhammad. "How the belt and road could become a 'Health Corridor'." *Chinadaily*, May 2017.
10. Siddiqui, Salman. "Untapped Market: Can Pakistan become a hub for Medical Tourism." *The Express Tribune*, 2012: 17 April.
11. WHO. "Legal Status of Traditional Medicine and Complimentary Alternative Medicine. A worldwide review." *WHO publication*, 2001.