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India as a Medical Tourism Hub in SAARC – a geographical analysis

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Abstract

Founded in 1985 South Asian Association for Regional Cooperation (SAARC) serves as a basis for economic co-operation, development and is availing opportunities for trust building among its member nations through the process of strategic partnership and joint agreements in areas of mutual interest. Among its promising segments where stakeholders observe commercial opportunities with potential regional integration and co operation, medical tourism industry is recently identified. On a regional scale thousands of patients from neighbouring SAARC nations like Afghanistan, Bhutan, Bangladesh, Nepal, Sri Lanka, Maldives and Pakistan visit every year to admit themselves in Indian hospitals. Such patients find medical care in India attractive due to its cost, quality, cultural and geographical proximity. In this context present study is designed to investigate the scope of India's medical tourism industry in respect of SAARC market availing an opportunity to access better quality health care services within South Asian region

Introduction

One of the most important political and economic initiatives in the South Asia region is the South Asian Association for Regional Cooperation (SAARC). SAARC was founded in 1985 by seven South Asian countries the People's Republic of Bangladesh, the Kingdom of Bhutan, the Republic of India, the Islamic Republic of Pakistan and the Democratic Socialist Republic of Sri Lanka. It emerged from the emerging need for intra-regional transactions to promote the welfare of the individual South Asian nations. It not only provides a basis for economic co-operation and development between various countries in South Asia but also avails opportunities for trust building among member nations. In fact the region as a whole has evolved through the process of strategic partnership and joint agreements in areas of mutual interest and has made a number of landmark achievements including the *South Asian Free Trade Agreement* in 2006 *(SAFTA)*, *SAARC Food Bank (2009)*, *South Asian University* and *SAARC Agreement on Trade in Services (SATIS)* in 2010. A long way to go ahead however in this context as intra-regional trade within South Asia accounts for approximately 5.7% only of all international trade in the region as compared to European Union (EU)'s 61.8% and Association of South East Asian Nations (ASEAN)'s 25.9% in approximation (FICCI, 2014). In fact the composition of intra regional trade in the beginning was concentrated in few commodities such as textiles, agricultural products, iron and steel and products made of plastic, rubber and light electrical. With advancement of time, intra-regional trade in services has been prioritized.

As services have been the key drivers of overall economic growth in South Asia since the 1990s and now accounting for more than half of the Gross Domestic Product (GDP) in the region, stakeholders of economy have realized that it is a high time to encourage the growth and integration of trade in services which will lead to more economic and socio cultural interdependence among people of member nations. Such realization further led to the SAARC Agreement on Trade in Services (SATIS) which was signed at the 16th SAARC Summit held in Thimphu in April 2010 where

member nations have made commitments to liberalize trade in services. Medical tourism is one of the sectors that experienced a boom capitalizing its advantages. India's medical tourism industry availing better quality health care among the South Asian nations is the beneficiary with the emergence of such new opportunities. Nevertheless, being a driving engine of South Asian economy, the large part of intra regional integration processes would be driven by India's performance (Hall and Page, 2000).

Objectives of the Study The prime objectives of the present study are as follows—

:1. To investigate the status of India as a medical tourism destination on SAARC's platform.
2. To highlight the further scope of promoting India's medical tourism industry in market of SAARC nations.
3. To identify the bottlenecks in maintaining India as a medical tourism hub serving the SAARC nations.
4. To predict the trends of medical tourism scenario of SAARC countries to identify the future challenges to India's medical tourism industry.

Database and Methodology

To understand the present trend of medical tourism on regional as well as on global scale, extensive literature review has been conducted. Secondary data on tourism and related trend is gathered from annual reports and periodicals published by Ministry of Tourism, Government of India. A multistage purposive cum random sampling technique was used to collect the data from Google Keyword Planner Tool from January 2013 to January 2014 with an assumption that internet is a major source of information for medical tourists in conceptualizing the present and potential market structure of medical tourism in SAARC nations. At first based on select keywords, queries made for specified country (in all or specified languages) have been collected. In the next phase the similar keywords are grouped into themes based on various medical tourism products. As the SAARC countries are varying in population as well as people's access to internet due to complex socio economic situation prevailing in these countries the crude numbers of annual keyword searches are normalized and *coefficient of centralization* (i.e. the quotient of share of total medical tourism queries or searches made online to the internet penetration rate of the respected nation) is calculated for respective SAARC countries.

The multiple Year Growth Rate or Average Annual Growth Rate has been computed to identify the trend of MTAs from source countries. The formula applied for computation is as follows –

$$P = \left[\left(f/s\right)y^{-1}\right] - 1$$

P = Annual Growth Rate over multiple years; f = number of medical tourists recorded in last observation; s = number of medical tourists recorded in first observation; y = number of years observed

On the basis of this growth rate estimated value for 2013 and 2014 is calculated Further Curve Fitting and Regression trend is applied. Type of curve is selected by optimising the value of the coefficient of determination (R^2). It is observed that the fourth order polynomial emerges as the best fit curve.

Medical Tourism

Desire of healthy life, rise in income level, access to advanced technology, liberalization in health service sector, increased availability of information and communication to consumers worldwide, have all contributed to increased consumption of medical care beyond political borders of nations. As a result recent years have witnessed a growing number of patients out migrations, who are categorised as medical tourists. On the demand side regional disparities in accessing medical opportunities have spurred the migration of patients while on supply side many countries and service providers have dramatically improved the quality of care they can offer through international market of migrating patients as major source of foreign exchange (Rai et. al. 2013). As a result medical tourism has become a truly global phenomenon a niche market which is further characterized by an industry approach (ESCAP, 2009).

Among other destinations, which varies over individual's preference varying from ability to afford to rapid accessibility to quality healthcare services to availability of more specialized niche service product in host countries; Asia is the major region receiving medical tourists across the globe (Ehrbeck et.al., 2008). A Renub Research report titled *'Asia Medical Tourism Analysis and Forecast to 2015'* states that among other nations, India was one of the first countries to recognise the potential of medical tourism. From 2009 2011, the number of medical tourists in India grew by 30 % and it is estimated that by 2015, India will receive nearly half a million medical tourists annually (Renub Research, 2012). Such report clearly reveals the prospects of India's medical tourism industry on a global scale. Assurance from SAARC market has helped a lot to build its medical infrastructure.

Medical Tourism Industry The Indian Scenario

Medical tourism industry comprises the set of enterprises, establishments and other organizations (hospitals/travel agencies) one of whose principal activities is to provide goods and/or services to medical tourists. Combining *'health'* and *'tourism'*, two entirely different sphere of life together with some niche service product; it is one of the fastest growing service sector of

21st Century. The International Trade Commission in Geneva estimated that medical tourism would reach US$ 188 billion global business by 2013. The reality is not very much differing from such estimate. India represents the fastest growing market among more than 130 countries competing in this business around the world (Prakash et. al. 2011). In fact Medical Tourism Climate Survey Report 2014 conducted by IMTEC states that India is second largest country after Thailand in accommodating foreign patients. It also estimated that in next five years the patient number would increase by 5% and India may top in the rank accommodating a large number of patients from South Asia, West Asia, Africa, Europe, North America and Australasia. From the records of Ministry of Tourism, Government of India on purpose of visits of foreign tourists, the followings are noteworthy:

1. In 2012 about 3% of total Foreign Tourists Arrivals (FTAs) were for medical treatment.
2. Recent years have witnessed increasing share of European countries and
3. SAARC nations constitute the highest proportion since 2010 followed by West Asia and Africa (Fig.1).

Such high proportion of SAARC's share in total medical tourist arrivals or MTAs in India throws light on potential medical tourism market available among neighbours which urges for further investigation on market dynamics in order to explore the untapped potential of great economic value.

India as a Medical Service Provider on SAARC Platform

Healthcare is one of the significant sector in which the potential for regional integration and co-operation has been well recognised and also nursed from the very beginning. In recent years an important promising segment is evolved in medical tourism business where stakeholders discover commercial opportunities is in medical tourism. On a regional scale thousands of patients from neighbouring Afghanistan, Bhutan, Bangladesh, Nepal, Sri Lanka, Maldives and Pakistan are applying for visa to seek cures in Indian hospitals. Such patients travel because of the following push factors in the countries of their origin:

1. Perception on less efficiency of specialized treatments in home country;
2. Lack of well trained human resources in healthcare management;
3. High cost of treatment compare to India;
4. Politico socio cultural factors like political disturbances, religious constraints etc.

Chart 1 illustrates the demand and supply scenario in this context. To be very brief these migrating patients find medical care in India attractive due to cost, quality, cultural and geographical proximity (Chanda, 2011). It is estimated that more than 50, 000 Bangladeshis enter India every year for medical treatment (Cotrez, 2008). Despite political tensions with India Pakistani are frequent visitors at Indian hospitals. Everyday at least 200 Maldivian visit India for healthcare. Social and cultural ties with Open border facility huge number of Nepalese and Bhutanese patients to get treatment in India.

Market Structure

Numerically, it is noticed that among SAARC nationals the medical tourist arrivals in India is led by Bangladesh followed by Maldives, Afghanistan and Sri Lanka (Fig. 3). Bhutan and Nepal are however excluded due to paucity of their immigration data. As there is no restriction in the border to enter, Nepalese and Bhutanese are not waiting for visa and this creates confusion in understanding the market dynamics of India's medical tourism. To solve this problem, Google Keyword Planner Tool for the period 2013 14 is used to identify potential target market with an assumption that Internet is a major source of information for patients who are looking for available treatments abroad. Analysis of the crude number of keyword queries made about various medical treatment reveals that maximum number of queries are made in this respect by Bangladesh, followed by the Pakistan, Nepal, Sri Lanka, Maldives, Afghanistan and Bhutan.

The importance of India as medical tourist destination among the SAARC nations is not easy to interpret as SAARC countries are varying in population as well as in access to information technology. A coefficient of centralization is undertaken to evaluate the relative value to get the actual situation of dependency on India's medical infrastructure among the SAARC nations which reveals that India's importance as medical tourism destination among internet user is highest for Maldives followed by Bangladesh and Afghanistan (Fig. 4). In fact more than 60 per cent of Maldivian tourists visit India for medical treatment (Table 1). From the standpoint of geopolitics, this study has been undertaken because SAARC is a platform satisfying the interdependence of its member nations and in this platform ideologically a small country like Maldives has equal status and importance as any of the more significant nations within SAARC.

In order to give same weight to countries having varying population and internet user, this exercise has been undertaken and the outcome throws light on the importance of Maldives' demand which otherwise remain neglected due to small number of its population. For the survival of SAARC as a platform of cooperation in South Asia, which is very important from the stand point of political geography, the outcome of the present study is vital and thought provoking from planning perspectives.On product level, analysis of Google keyword search data indicates that the market of India's medical tourism product is highly diversified. On an average there are more than sixteen different modern medical treatments except the traditional ones are in

demand among SAARC nations. However maximum demand for eye care and cancer treatment is registered followed by neurology, cosmetic and plastic surgery, hair care, cardiology and so on (Fig. 5). With nineteen JCI accredited and more than two hundred NABH accredited healthcare facilities, India represents quality healthcare hub within SAARC region. The major market players are Apollo Hospitals, Manipal Hospital, BM Birla Heart Research Centre, Sri Ganga Ram Hospital, Medanta Narayan Hrudalaya and many others (Chart 1).

Identifying the Trend

In general India experiences positive growth in total medical tourist arrivals (MTAs) since 2009 but the regression curve indicates that the trend is fluctuating (Fig 6 and Table 1). The country wise details of multiple year growth rate in MTAs from SAARC during 2010 12 was maximum for Afghanistan (73.64 %) followed by Pakistan (68.11%) while from Nepal, Sri Lanka and Bhutan decline in medical tourist arrivals was observed. Close analysis on pattern of MTAs from SAARC nations since 2010 indicates that the scenario is unchanged for countries like Afghanistan, Nepal and Pakistan. In fact recently Afghanistan and Pakistan provide a steady flow of medical tourists. Bangladesh also exhibits the positive growth rate in medical tourist arrivals (2.34%) but the growth rate is comparatively smaller as well as fluctuating in nature. On another side, MTAs from Maldives, Nepal, Sri Lanka and Bhutan shows a significant decreasing trend (Fig 7 and Table 1) subjected to the identification and discussion on the major challenges or concerns responsible for this decline.

Challenges and Constraints

The medical tourism services sector is generally believed to be one of the most promising areas of India's contribution in SAARC platform, but significant declining trend of MTAs as already mentioned draws our attention to the followings —

1. **Strained political relation:** Political distance among the nations is affecting the mobility of patients within SAARC region. Better relation with Pakistan will result more medical tourist flow to India. Therefore strong formal understanding on movement of patients with their escorts between the governments of SAARC countries is desirable to explore the untapped potential market of medical tourism.
2. **Policy constraints:** Medical tourism has been incorporated as an extension of general tourism campaigns, like the *'Incredible India'* campaign, through which major hospitals have been linked with tourism but, there is lack of integrated government policy on regional co operation in this segment (Chanda, 2011).
3. **Insurance and cross border payments problem:** Insurance and cross border payment arrangements are another major bottleneck that patients have to face while travelling abroad. International insurance premiums are very high and many insurers do not cover cross border treatments. Most of the Indian insurers also do not cover international patient's treatment. In this context, some kind of regional insurance schemes could be designed in SAARC platform to cover treatment within the region as a useful mechanism to promote medical tourism. The experience of other regional blocks, such as the Common Market of the South (MERCOSUR) in Latin America, which has instituted such regional payment arrangements to promote medical tourism, could be a model in this context (Chanda, 2011).
4. **Visa hurdles:** Existing visa norms also hinder the ease of patients' travel to India. Patients have to visit an immigration office under India's special visa norms. This special M visa is generally valid for one year, but it requires to complete their registration within two weeks of arrival. Fulfilling such condition is not always feasible for a patient imposing tremendous pressure. This drives many patients away and motivates them to choose another destination for their trip like Thailand and Singapore where the procedure of entry for treatment purpose is much easier and smoother. In fact in Thailand it is even possible to apply for visa via a teleconference system, instead of going to immigration office (ESCAP, 2009). Visa processing time for Pakistani persons or persons of Pakistani origin and Sri Lankans and of Sri Lankan origin also take longer time, a minimum of six weeks due to political reason. Recently Maldivian tourists are also facing a visa hurdle which directly affects the MTAs to India. Additionally, a medical visa also costs higher than a tourist visa which varies over country to country. SAARC Visa Exemption Schemes which exempts tourists from requirement of a visa and police reporting is limited to only few categories of people such as dignitaries, government officials and participants of SAARC meeting, officials of SAARC secretaries and its regional centres (Bureau of Immigration, 2014). A liberalized M visa regime is desirable in this context to facilitate the intra regional patient movement. Success-stories of EU (Touzenis, 2012), ASEAN and MERCOSUR in this context may be considered as precedence while formulating policies in this direction to further enhance the India's medical tourism potential on SAARC's platform.

5. **Transport and connectivity:** Lack of an integrated transport infrastructure in SAARC nations is considered as one of the main obstacles in promoting medical tourism mainly suffered from the negative experiences in availing the cross border road and rail links especially between India Pakistan and India Bangladesh where preferable mode of travel is through land, which has been 86 % and 63.2 % respectively. Moreover, efficient and affordable air connectivity is indispensable of to promote India as more attractive medical tourism hub for SAARC nations.

Conclusion

The preceding discussion reviews the importance and present scope of India as a medical tourism hub among SAARC nations. To tap potential market Indian medical tourism industry should adopt an integrated approach for facilitating ease of patient's mobility convincing the government. Simple and easy regional visa policy and better transport connectivity with stable political connections among nations are the pre requisites of medical tourism promotion in this context. Insurance and cross border payment arrangements, telemedicine facilities and relaxation on cross border practise by physicians and specialist, instituting follow up facilities in the home country of the patients and introduction of regional medical tourism packages particularly for SAARC nationals are among the suggested measures to further strengthen the base of India's medical tourism industry on platform of SAARC.

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Table – 1: Recent Trend and Pattern of Medical Tourist Arrival, 2010 - 2012

Country	Share and Estimated Number of Medical Tourists (based of % of FTA)						Change in Trend		Identified Trend of MTAs
	2010		2011		2012				
	(%)	No.	(%)	No.	(%)	No.	2010 -11	2011 - 12	
Afghanistan	7.1	5211	12.5	11201	16.5	15713	+ +	+ +	Steady and increasing
Maldives	63.1	36694	56.6	30563	59.3	29904	- -	+ -	Fluctuat-ing
Nepal	1.3	1357	1.0	1191	0.9	1128	- -	- -	Decreas-ing
Pakistan	0.9	466	1.6	778	2.2	1317	+ +	+ +	Steady and increasing
Bangladesh	8.3	35853	7.5	34766	7.7	37530	- -	+ +	Positive but fluctuating
Sri Lanka	1.9	5064	1.6	4894	1.6	4752	- -	0 -	Fluctuat-ing
Bhutan	6.4	771	6.5	1007	4.9	748	+ +	- -	Decreas-ing
Total	8.56	85415	7.86	84400	8.06	91091	- +	++	Positive but fluctuating

Source: India Tourism Statistics, 2010 – 2012.

Fig. 1: Share of Individual Regions in Total International MTAs in India, 2010 12
Note: Iran is included in West Asia

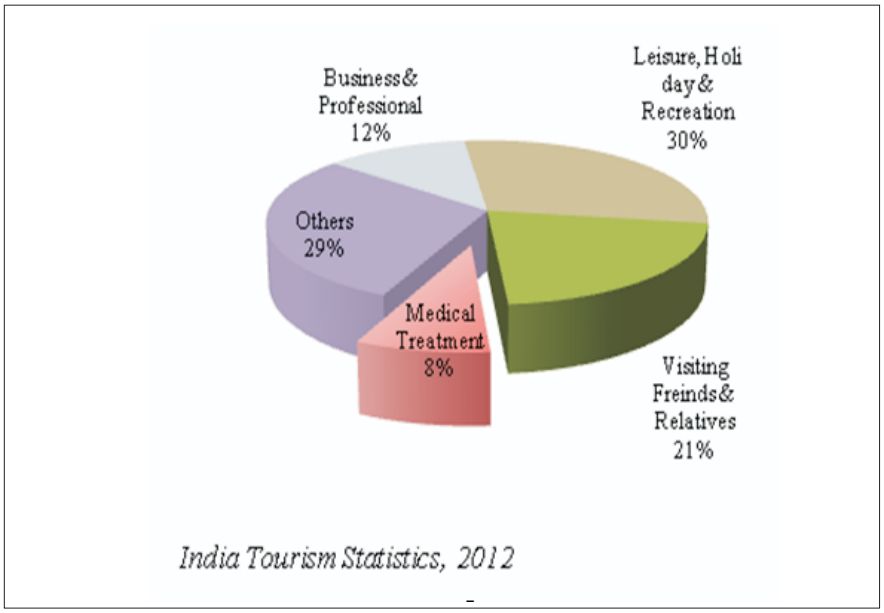

Fig. 2: Classification of FTAs in India from South Asia based on Purpose of Visit, 2012

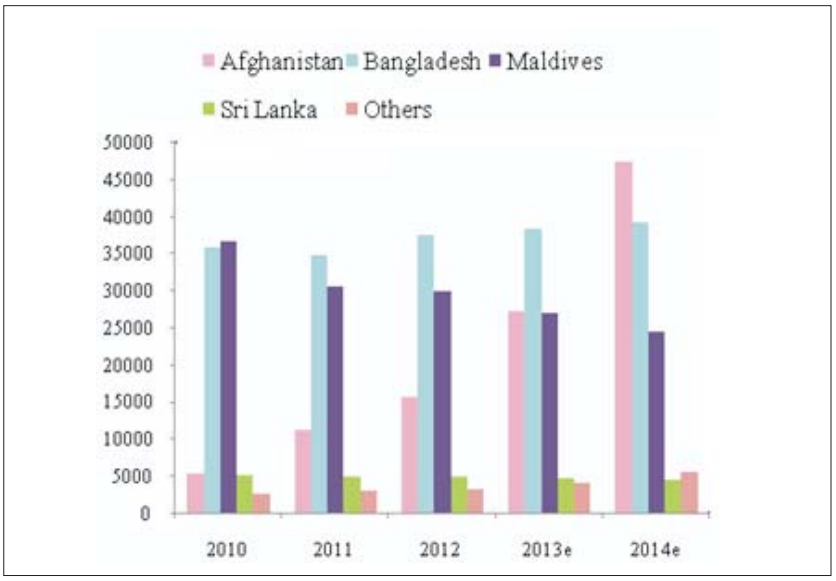

Fig. 3: SAARC National Arrivals in India for Medical Treatment 2010 - 2014e
Note: Others include Pakistan, Nepal and Bhutan.

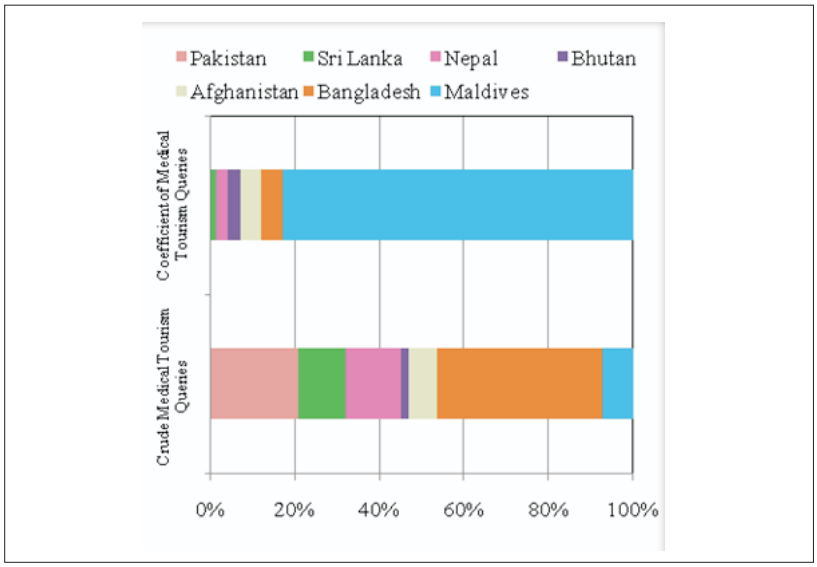

Fig. 4: Comparative Share of Annual Google Keyword Crude Medical Tourism Queries & Coefficient of Centralization of Queries, 2013 - 2014

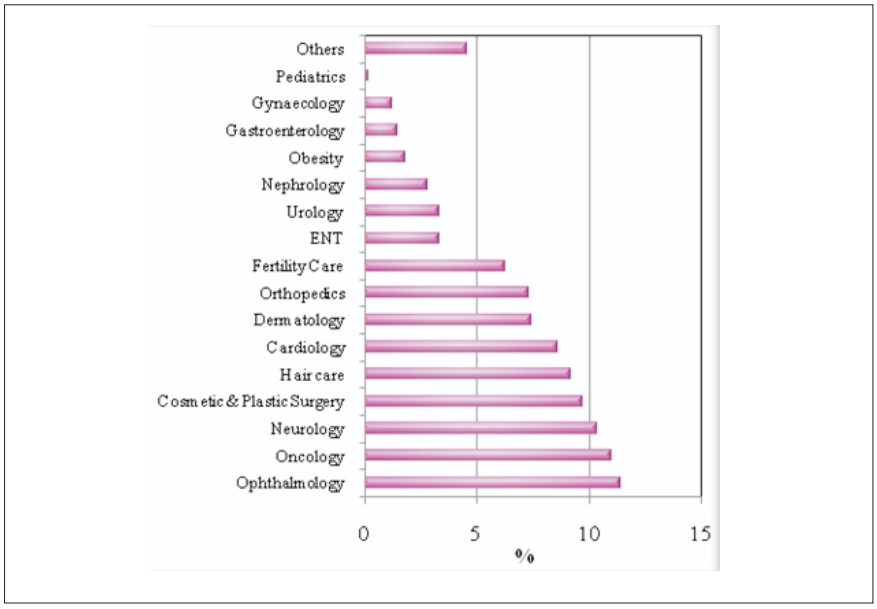

Fig. 1: Major Medical Sector in Demand, Google Keyword Search Tool, 2013 - 2014

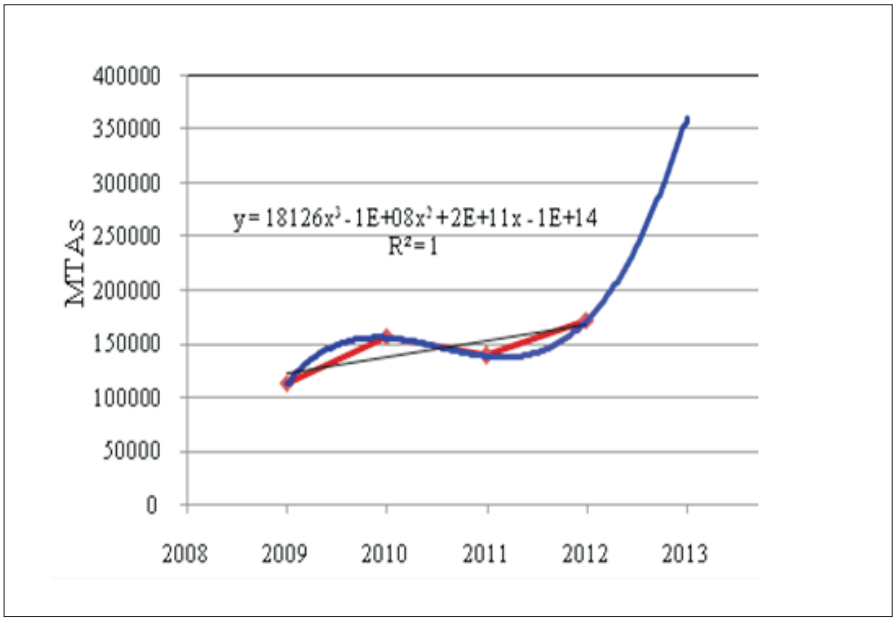

Fig. 6: Trend of Growth of MTAs with 4th Order Polynomial Curve Fit

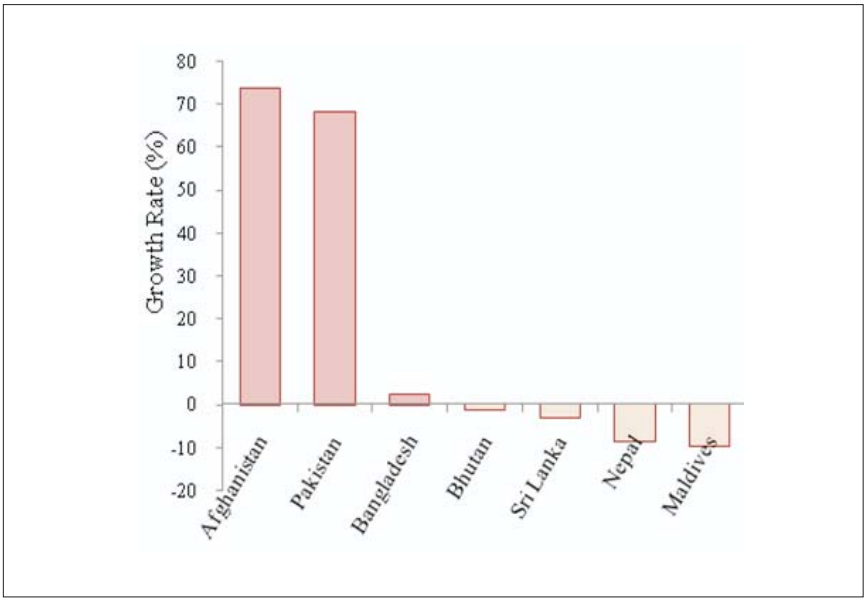

Fig. 7: Growth Rate of MTA in India from SAARC Nations, 2010 - 2012

Chart – 1: Medical Tourism Scenario

Source/Country of Origin	Factors Responsible for Patients Migration	Top 5 Medical Treatments in Demand*	Preferred Destinations
Maldives	Small Island Country Entirely Dependent on India In All Respect Including Medical Treatment	Ophthalmology, Fertility Care, Hair Care, Orthopaedics and Dermatology	Manipal Hospital, Bangalore; Apollo Hospital, Chennai; Kerala Institute Of Medical Science; Columbia Asia, Bangalore.
Bangladesh	Inefficient of Human Resources; Low Quality or Absence of Requisite Medical Technology; Corruption In Health Management; Hospitals And Doctors Involvement In Malpractices; High Cost of Treatment; Poor Performance of Diagnostic Centres & Interference of Middle Man	Oncology, Neurology, Cardiology, Ophthalmology and Orthopaedics	Manipal Hospital, Bangalore; Apollo Gleneagles Hospital, Kolkata; Apollo Chennai; BM Birla Heart Research Centre, Kolkata; AMRI Hospitals, Kolkata; MIOT Hospital, Chennai; Columbia Asia, Bangalore; Narayana Hrudayalaya, Bangalore.
Afghanistan	Lack of Basic And Emergency Medical Care; Insecurity, Inaccessibility to Medical Centres; Malfunctioning of Health Facilities; Political Tension With Pakistan and Iran	Cosmetic & Plastic Surgery, Hair Care, Ophthalmology, Neurology and Oncology	Max Hospital, New Delhi.
Pakistan	High Cost of Treatment; Fertility Related Religious Constraints; Lack of High – End Cardiac Related Treatments	Cardiology, Ophthalmology, Neurology, Oncology and Dermatology	Manipal Hospital, Bangalore; Indraprastha Apollo Hospitals, Delhi; Apollo Gleneagles Hospital, Kolkata; MIOT Hospital, Chennai; Medanta Gurgaon.
Bhutan	Lack of Basic Health Infrastructure; Inefficient Human Resources in Health Care Sector	Ophthalmology, Hair Care, Cosmetic & Plastic Surgery, Dermatology and Fertility Care	BM Birla Heart Research Centre, Kolkata.
Sri Lanka	Cultural Proximity to South India, Not Satisfactory High – End Health Infrastructure	Ophthalmology, Cosmetic & Plastic Surgery, Oncology, Hair Care, Fertility Care	Manipal Hospital, Bangalore; Apollo Chennai; MIOT Hospital, Chennai; Columbia Asia, Bangalore.
Nepal	Social and Cultural Ties With India, Ethnic and Linguistic Similarities Combining with an Opportunity to Avail Better Medical Care	Cosmetic & Plastic Surgery, Hair Care, Ophthalmology, Oncology and Neurology	Manipal Hospital, Bangalore; Apollo Gleneagles Hospital, Kolkata; MIOT Hospital, Chennai; Tata Cancer Centre, Mumbai.

*Source: Information collected from various newspaper articles, journal and field survey, 2013 – 14 *Google Keyword Planner Tool, 2013 – 14*

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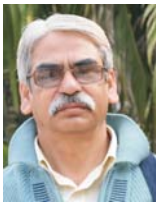

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