

# “Globalization, medical travel and healthcare management in Bangladesh”

## AUTHORS

Muhammad Mahboob Ali  
Anita Medhekar

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Muhammad Mahboob Ali (Bangladesh), Anita Medhekar (Australia)

## Globalization, medical travel and healthcare management in Bangladesh

### Abstract

There is an increasing evidence of people from Bangladesh travelling to neighboring countries of Asia, such as India, Thailand, Malaysia and Singapore for medical treatment due to poor quality of healthcare services, high cost, and non-availability of speciality medical treatment and facilities. Medical travel is a practise where patients travel to other countries for diagnostic, pathological and complex invasive surgeries due to various push factors in their home country which prevents them for getting affordable, accessible and accredited quality of medical treatment in a timely manner, due to high cost of surgery, uninsured, long waiting period, non-availability of treatment, lack of medical facilities and proper care, lack of trained doctors and nurses, ethical and regulatory reasons, corruption and inadequate public or private medical facilities. This study is based on qualitative and quantitative analysis to examine why people are travelling from Bangladesh to India for medical treatment. Quantitative data were randomly collected from six divisional cities of Bangladesh: Dhaka, Chittagong, Sylhet, Rajshai, Barisal and Khulna and two districts Comilla and Bogra. A total of 1282 participants, out of 1450 returned the questionnaires. Data were analyzed using regression analysis. The results concluded that the pull factors that motivated Bangladeshis to travel to India for medical treatment were: low cost of surgery, qualified experienced doctors, quality of nursing care, non-availability of treatment in Bangladesh, and state of the art medical facilities and treatment in India, which concurs with the literature.

**Keywords:** globalization, medical travel, India, Bangladesh, healthcare management.

**JEL Classification:** F60, I11, L83.

### Introduction

Due to globalization of healthcare, Asian countries like Thailand, Singapore, Taiwan, Indonesia and Malaysia are exporting healthcare services, and are popular medical tourism destination for Bangladeshi patients for medical treatment. Patients from developed, as well as developing neighboring countries, also travel to India due to its affordable quality and state of the art medical facilities and technology, joint commission international (JCI) accreditation of medical facilities and skilled medical professionals, which is on par with the USA, UK, Canada and other developed countries in Europe (Bookman & Bookman, 2007; Turner, 2007 & 2008; Horowitz & Rosensweig, 2007; Veerasoontorn, Beise-Zee & Sivayathorn, 2011; Singh, 2012; Medhekar, Wong & Hall, 2014; Pande, 2014). Medical travel is also known as medical tourism (Connell, 2008; Jones & Keith, 2006) or global medical outsourcing (Smith & Forgione, 2008; Dasgupta & Dasgupta, 2014; Gerstlberger & Schneider, 2013) due to the potential of affordable values and quality of cross-border healthcare (Wang, 2012; Medhekar, 2014). "Medical tourism involves travelling across the border nationally or internationally for urgent elective medical surgeries, cosmetic, dental, and reproductive and other specialized treatment" (Medhekar, 2010, p. 1).

In 2003, an estimated 150,000 people travelled to India for medical treatment (Lancaster, 2004), and since then these numbers have been growing about 15

percent per year (RNCOS, 2010). KPMG-FICCI (2014) reported that by 2012 revenue from medical tourism will be worth US\$2.2 billion and reach up to 4 billion by the end of 2015. The global medical travel industry was worth US\$ 10.5 billion and it is expected to grow up to US\$ 32.5 billion by 2019. In 2012, South Asian countries were the main source of medical travellers to India. Further, nearly 22% of Bangladeshi travelled in 2012, to Chennai, Bangalore, Delhi and Calcutta for medical treatment, which was the highest compared to other nationalities due to lack of medial manpower, specialities and infrastructure and familiarity with language, culture and food (KPMG-FICCI, 2014). Further, nearly 500 Bangladeshi patients travel daily to India for affordable quality of pathology and diagnostic treatment (Hasib, 2015), besides other complex surgeries, which is also supported by Mamun and Andaleeb (2013).

Medical tourism (MT) is one of the most cost-effective ways of getting international JCI accredited quality of medical treatment abroad (JCI, 2015) at 'third world prices' (Turner, 2007, p. 1). On the one hand, with increasing surgical cost, health insurance cost, long waiting period for surgery in developed countries such as USA, Canada, Europe, Australia and UK, more and more people are travelling to countries in Asia such as India, Thailand, Singapore and Malaysia for complex medical treatment and surgery (Medhekar et al., 2014; Pocock & Phua, 2011). On the other hand, people from developing poor countries are also travelling across border to countries such as India, Thailand, Singapore and Malaysia due to high health care cost, non-availability of medical treatment, poor quality of

medical and nursing care, delays in surgery, poor diagnostic results and corruption in healthcare service delivery (Ali, 2012). India is the preferred choice of an attractive destination (Sultana, Haque, Momen & Yasmin, 2014) for patients from developing countries in Africa, Middle-East, as well as neighboring South-Asia such as Sri-Lanka, Bangladesh, Nepal, Pakistan, Bhutan and Burma in terms of low travel cost across border, affordable surgery, no waiting period, climate, English language, familiarity with culture, history, food, local language, attractive destination, international and government accreditation (Ali, 2012; Crooks, Turner, Snyder et al., 2011; Kshetri, 2011; Mamun & Andaleeb, 2013; Medhekar & Haq, 2015).

Government of India has also realized the positive economic potential and challenges of developing trade in healthcare services (Chanda, 2002; Vijaya, 2010; Burns, 2015) by attracting foreign medical tourists to India for consuming health-care services and benefiting from affordable cost, JCI accredited state of the art medical facilities, qualified medical and nursing professionals, along with no waiting period, quality of pre-post-surgery care and possibility of having a holiday at an exotic destination before or after the medical surgery for recovery. Government has considered medical travel as export earnings and introduced medical tourists (M-Visa), medical escort visa, marketing and promotional campaigns, subsidised prime land for hospital construction, provided incentives for attracting foreign direct investment and depreciation allowances for medical equipment and technology (GOI, 2003, 2008; Medhekar et al., 2014).

Government has also made provision for visa on arrival (VoA) scheme in 2010 to attract foreign tourists without any bureaucratic delays (The Hindu, 2012a). Medical tourism facilitators are now connecting patients with hospitals which are JCI accredited providers of medical procedures. The key private hospital players in India's medical tourism market are Apollo, Wockhardt, Fortis Healthcare, All India Institute of Medical Science New Delhi, and Max India (Brotman, 2010; RNCOS, 2010; JCI, 2015). MT who travel to India given the advantage of English language are from developed countries such as USA, UK, Europe, Middle East oil rich countries and the affluent expatriate Indian sub-continent diaspora including Indian, Singaporean, and other nationals. Further, patients from neighboring South-Asian countries are also coming to India for medical treatment. In Bangladesh, the costs of medical procedures and surgeries is high along with long waiting period and non-availability of certain treatment and poor quality of healthcare facilities, professionals and medical malpractice along with endemic corruption in healthcare provision (Ali, 2012).

All the capital cities in India are popular destinations for medical tourism, given the infrastructure facilities, tourist attractions, as well as corporate privately managed hospitals, with state of the art medical facilities and qualified and accredited professionals. Besides, Indian government is now promoting Indian as a global healthcare destination based on medical talent, tradition, technology, tourism and trade (KPMG-FICCI, 2014). According to Debashis Sen, responsible for Urban Development in West Bengal, said, "There is a great possibility of turning Kolkata into a health tourism hub for South East Asian countries, Bangladesh and Nepal, with the rapidly growing healthcare infrastructure in the city" (The Hindu 13-August, 2012b), such as Chittaranjan National Cancer Institute, Shankara Eye Hospital, and a global organ transplant hospital, trauma care center and school of paramedical science and a Tata Memorial Centre for cancer research at Rajarhat New Town to attract not only domestic, but also medical patients from neighboring Bangladesh, Burma and Bhutan.

This research study investigates the broad research question reviewing the healthcare situation in Bangladesh and to identify the key reasons as to why people from Bangladesh travel to India for medical treatment. The rest of the paper is structured as follows. First part provides the introduction followed by a brief background to globalization of healthcare and medical travel. Part three critically examines the healthcare situation in Bangladesh which pushes the Bangladeshi patients to travel to India for medical treatment and surgery. Part four discusses research method along with data analysis and findings. Finally, limitations, future research agenda and conclusions, which discuss challenges and policy implications for the healthcare system in Bangladesh and the Indian medical tourism industry.

## 1. Literature review

**1.1. Medical tourism.** India Medical Tourism (2009) defines medical tourism as provision of 'cost effective' private medical care in collaboration with the tourism industry for patients needing surgical and other forms of specialized treatment. This process is being facilitated by many private corporate hospitals such as Apollo Group, Wockhardt, Fortis, as well as the tourism industry. Carrera and Bridges (2006) conceptualize, distinguish and clearly define the two terms: health tourism and medical tourism. According to them, "health tourism is defined as an organized travel outside one's local environment for the maintenance, enhancement or restoration of the individual wellbeing in mind and body". Medical tourism, on the other hand, is defined as "the organized travel outside one's natural healthcare jurisdiction for

the enhancement or restoration of the individual's health through medical intervention" (p. 449). For this paper, we define medical tourism "as a phenomenon where a patient travels with or without a companion outside his or her country of residence, across border for medical treatment which could be risky, invasive and involves complex surgical procedures with the use of highly specialized medical equipment, technology and experienced surgeons, for the improvement of overall physical health and quality of life, and may be combined with a vacation at an exotic destination" (Medhekar, 2010, p. 4).

Medical tourists gather information from various sources such as friends, family, doctor, media, print and the internet to make informed healthcare decisions and choice to travel overseas for medical treatment (Miller & West, 2007; Medhekar & Newby, 2011). Travel abroad for medical treatment is growing fast in the twenty first century due to various pull and push factors such as: long waiting list, high healthcare cost and health insurance in developed countries; state of the art medical facilities, technology and skills in destination countries, ease of travel, medical travel facilitators and internet marketing, have all played a key role in patients travelling from developed and developing countries to the countries, which are leading destinations for medical surgery such as Thailand, India, Singapore, Malaysia, Dubai, Poland, South Africa and Mexico having a competitive advantage (Lee, 2006; Bookman & Bookman, 2007; Horowitz & Rosensweig, 2007; Hopkins, Labonte, Runnels & Packer, 2010; Lunt et al., 2010; Ghose, 2010; Stanley, 2010; Turner, 2011; Ferrer & Medhekar, 2012). Various medical treatments are in demand in the global market for healthcare, for example, orthopaedic, cancer treatment, cardiac, hip and knee replacement, neuro-surgery, spinal fusion, cosmetic, kidney transplant, dental, reproductive, and surrogacy to Ayurvedic, spa, and herbal treatment (Blyth & Farrand, 2005; Ali, 2012).

Literature identifies numerous conceptual models of medical tourism from international trade, economics, marketing, legal, ethical and quality perspective. For example Smith and Forgione (2007) have identified the key factors influencing the patient's choice of specific destination. Caballero-Danell and Mugomba (2007) have broadly described two models of medical tourism the market of medical tourism and the distribution channel model of medical tourism. Bookman and Bookman in (2007) provided an economic argument for the emerging global medical tourism industry in developing countries in their book called 'Medical Tourism in Developing Countries'. They have categorized that medical tourists travel for invasive, diagnostic and lifestyle treatment. An

analytical framework model of Hong Kong medical tourist motivations was developed by Ye, Yuen, Qiu and Zhang (2008). Further, Heung, Kucukusta and Song (2010), have proposed an integrated supply and demand model of medical tourism and identified supply side barriers to development of medical tourism in Hong Kong (Heung, Kucukusta & Song, 2011). Lunt et al., (2010), in their paper titled "Medical Tourism and Emergence of Web-Based Health Information" have discussed "understanding of the internet's role in facilitating access to treatments" (p. 3) in a globalized medical tourism industry. They argue that, "A key driver in the medical tourism phenomenon is the platform provided by the internet for gaining access to healthcare information and advertising" (p.1). Further, for example, in case of medical tourism, family and friends as well as internet is taken as the key information source for making a decision to travel abroad for medical treatment (Medhekar & Newby, 2011). Medhekar and Haq (2015) suggest how to market Indian medical tourism to Muslim patients and attract medical tourists from Islamic as well as neighboring countries in South Asia. Further, medical travel is also examined from the perspective of global quality, regulatory, legal and social anthropology (Whittakar, 2010; Widdows, 2011; Turner, 2011; Wang, 2012). Medhekar et al., (2014) conceptualize medical tourism as an innovation in global healthcare provision in the 21st century, where patients from developed countries are travelling to developing country for complex surgeries.

Globally, medical tourism is one of the fastest growing and niche global health-care service segments of the tourism industry. Historically, pilgrims from Europe have been travelling for healing to Greece and Rome (Stanley, 2010), and to Ashrams in India for Ayurveda, Yoga, Unani, Siddhi and herbal treatment (AYUSH). Thus, in the 21<sup>st</sup> century, the success of cross-border trade in medical services can be determined by the number of medical tourists travelling overseas for medical treatment and the foreign exchange revenue earned by the host country. India was ranked second only to Thailand in the global medical tourism industry in 2009 (IMT, 2009) and, since 2014, India has fallen to third position with Malaysia in the first followed by Thailand, Mexico and Singapore (Tourism Review, 2014). It is likely that, besides low cost of treatment and surgery, no waiting period, availability of treatment and medical expertise (Hutchinson, 2005; Bookman & Bookman, 2007; Horowitz & Rosensweig, 2007; Singh, 2008; Hopkins et al., 2010; Medhekar et al., 2014), various other factors such as: economics, social conditions, food, cultural affinity, language,

religious sensitivities, political and economic conditions influence the consumer's decision to travel abroad for medical treatment (Medhekar & Haq, 2015) from neighboring countries in South Asia such as Bangladesh to India.

Medical tourism is an example of not only outbound travel to another country for medical treatment, but also international trade in healthcare services across border (Chanda, 2002; Wagner & Linder, 2010; Ferrer & Medhekar, 2012) between neighboring developing countries. According to Rahman (1999), medical tourism is an example of bilateral trade in healthcare services between India and Bangladesh. Ali (2012) argues that there is an increasing evidence of outbound medical tourism where Bangladeshi patients travel to neighboring countries for treatment due to "inefficient human resources in healthcare management industry" (p. 2). According to Patnaik (2010), collaboration among the appropriate academic groups, professional associations, and health care institutions, with leadership from the state bodies, is essential to create best learning environment for dissemination of knowledge for professional development of physicians. Dasgupta (2011) notes that, in some of the less developed countries, such as Bangladesh, specialized treatment is not available and there is overcrowding in the hospital, high cost, demographic pattern, inadequate infrastructure and medical technology, lack of qualified professionals and lack of quality of health care services, which motivates the patients to travel across border to various cities in India for medical treatment.

This paper addresses a research gap by critically examining the healthcare management situation and exploring and identifying the reasons to travel abroad for medical treatment by Bangladeshi citizens. To achieve this objective, structured questionnaire was distributed in 2010-2011, and 1282 number of participants who had travelled across border from Bangladesh to capital cities in India such as: Calcutta, Chennai, Bangalore, Delhi, Hyderabad and Mumbai for medical treatment, returned the questionnaire. This paper focuses on medical tourists who have travelled from Bangladesh, across border, to major capital cities in India and other minor cities of West Bengal and Bihar which is mostly visited by middle income and lower middle income group patients (see Figure 3) for complex invasive medical surgeries such as: heart surgery, eye-cataract surgery, kidney related problems, different types of cancer, bone fracture, stomach, diabetes, gynaecology, spleen, brain, liver, dental, mental, dental, tuberculosis, and others (see Figure 4).

Health is a state of complete physical, mental and social wellbeing, and an important indicator of Human Development Index (HDI). Healthcare system in Bangladesh is in dire straits due to many recent incidents where the Bangladeshi patients have lost confidence in their country's health system, to deliver quality of health and medical care with a human touch. For the last two decades, many Bangladeshis are travelling to India or other countries for medical treatment (Paul, 1999; Rahman, 2000; Mamun & Andaleeb, 2013) and "more than 75% travel to India, stay one month on average, and collectively spend about US\$100 million every year" (Paul, 1999, p. 680). Medical patients from Bangladesh feel at ease to visit India due to similarities in culture, language, food, familiarity with the society and country besides, low cost, quality of medical services and healthcare professionals and technological superiority. This exploratory research draws together the medical tourism literature with the findings of the exploratory study of cross-border medical tourism. In this exploratory study, data from interviews are designed to reveal why medical tourists from Bangladesh travel across border to India for medical treatment. The empirical findings support theory development specific to medical travel, as there is little previous empirical work found on medical tourism from Bangladesh to India, except by Paul (1999); Rahman (1999); Ali (2012); Medhekar & Ali (2012); Pramanik, Law & Roy (2012); Mumam & Andaleeb (2013).

## **2. Health care management situation in Bangladesh**

Bangladesh is a densely populated developing country, bordering with West Bengal in India. Large numbers of people are living below poverty line and they are faced with natural disasters like floods every year during the monsoon season. There is some improvement in primary healthcare provision but still large numbers of people have problem of availability, accessibility, and affordable quality of medical facilities and treatment due to overcrowding, non-availability of treatment and medical facility, lack of qualified and experienced medical specialists and growing corruption (The Financial Express, 2012). Further, Bangladeshi nationals are travelling to neighboring countries for diagnostic, pathology and complex surgeries, as they are seeking lower cost, high quality of care, better access for treatment, then, they would receive at home (Ali, 2012). The public hospitals suffer from full capacity problems, shortage of essential medical equipment, facilities, essential life saving medication, diagnostic services, experienced specialist doctors and trained nurses. Every year Central Government of Bangladesh allocates large

sums of money in the budget for health care, but it is inadequate to meet domestic demand for healthcare. There is also evidence of wide spread corruption in the provision of public health, as exposed by media.

There has been a rise in number of private clinics in Bangladesh since 1990's. Provision of healthcare has been taken over by private hospitals and private medical college hospitals. Since 2004-2005, there has also been presence of state-of-art private hospitals in Dhaka, such as Apollo Hospital Dhaka, Square Hospital and United Hospital (Ali, 2012). This growth is in Dhaka and patients have to travel from regional, rural and remote area to capital Dhaka to see the specialist in the private medical hospitals with increasing domestic medical travel.

Major concern for the private sector is lack of highly qualified and experienced health-care professionals and high medical, diagnostic and surgical costs. There is also widespread public perception about the low quality of healthcare service delivery provided by the public and private sector hospitals in Bangladesh. A report titled Bangladesh-India Bilateral Trade: An investigation into trade in services of health and the education sector by Rahman (2000, p. 38) concluded, after an empirical study, that quality of healthcare has declined in Bangladesh with increasing cost and non-availability of certain treatments, which has resulted in an increase in cross-border medical travel to India. Further, Bangladeshi patients overall have had a good experience in India in terms of quality of health care, less waiting time, less costly, cordial and caring doctors and nursing staff, reliable pathological and diagnostic tests and convenience of travel, close to home, cultural, food, tourism and no language problem in India compared to Bangladesh (Rahman, 2000; Ali, 2012).

In case of Bangladesh, access to basic primary and secondary healthcare is a problem for the poor, resulting in inequities in healthcare provision across socio-economic groups and geographical regions. The marginalized people of rural areas, as well as slum dwellers of the urban areas are treated in a highly discriminatory manner, as regards to access to public health care services. Even the lower middle class and the middle class do not get proper medical treatment. On the other hand, the affluent sections of the society only in case of emergency take treatment in Bangladesh modern hospitals, otherwise, travel abroad for medical treatment. According to one patient's statement, "unethical or inhumane professional practices are not uncommon in India, but the number of cases is relatively much less compared to Bangladesh. A common complaint against the doctors in this country is that they often send their

patients for unnecessary diagnostic tests to labs, thus, pocketing 50-60% of the charge. Taking hostage of dead bodies for not clearing the hospitalization costs by some of the hospitals is becoming quite common" (The Daily Sun, 3-9-2011).

There is also an increase in child mortality rate. On average, 83,000 new born babies die each year due to inadequate paediatric facilities, training for the doctors, poor weight of the babies, illiteracy and ignorance among the expectant mothers regarding pre- and postnatal care (The Daily Star, 8-7-2012). Besides, unethical malpractice and lack of human touch in pre and post-surgery care, lack of quality of healthcare service, high cost, non availability of treatment and latest medical technology, and shortage of specialist medical staff are some of the main reasons why Bangladeshis travel across the border, to India or other countries for medical treatment (The Financial Express, 2012). All this has damaged the reputation of the healthcare professionals and image of the private and public hospitals in Bangladesh.

Current logistics of the health sector in Bangladesh is characterized by centralized procurement of the medical supplies with some decentralized provision. Delay in health sector's procurement has always been questioned and identified as one of the prime causes of low absorption of budgetary allocations each year by the Government of Bangladesh. Irregular supply chain management in healthcare and inappropriate supplied items were experienced in procurement. In many cases, supplied goods did not match with the requirements of the hospital. In addition, repair and maintenance of medical equipment and facilities remain inadequate and of sub-standard quality. Further, accident and trauma patients, as well as those needing emergency attention, are least served by the private clinics and hospitals, compared to the public hospitals which provide these services. Andaleeb (2000) notes that at all stages of healthcare delivery when appropriate combination of incentives are designed and applied, it encourages a variety of activities in health care service improvement such as "training, continuous quality improvement (CQI) and total quality management (TQM), organizational restructuring, six sigma programs and other innovations that have served proactive organizations in other countries. It is also important to monitor the extent and direction of change in the overall quality of services in the hospitals. Such oversight measures should provoke the pride and professionalism of the country's health care providers to deliver what patients have long expected from them; when this happens, the neglected health care recipient is likely to get a better deal" (Andaleeb, 2000, p. 101).

Complaints about the weak governance in the public sector relate to unavailability of designated health personnel, pilferage of drugs and other essential supplies, mistreatment and negligence of the clients, unauthorized and illegal payments at public health premises. Thus weak governance in health-care sector has caused the very vulnerable members of the society to suffer the most in terms of high costs, deficient service delivery and negative healthcare outcomes. Bangladesh has a shortage of doctors, nurses and medical technologists; besides lack of trust, corruption, accountability in use of public money, poor quality of health care service provision, lack of availability of treatment and timely and reliable medical intervention creates dissatisfaction due to which many Bangladeshi's are seeking medical treatment in other countries.

Everyone in Bangladesh is aware that medical doctors in public hospitals either own or have a contractual relationship with private clinics. For doctors, public service is a false front-up identity. Their main purpose is making money through their private practice or business. They appoint public hospital staff members as brokers to bring clients to private clinics instead of properly treating them in public hospitals. Even if people are treated in a public hospital, they are forced by the doctor to visit private clinics for diagnosis purposes and, in return, doctors earn 'commissions'. The greed of doctors in Bangladesh is also reflected in their relationship with other allied healthcare professionals. They rarely delegate responsibilities to other medical specialists, such as physiotherapists, psychologists, counsellors, nurses, speech therapists and so on, who are often looked down upon as lower class members of the health care profession in Bangladesh.

In public hospitals, from the time patients arrive for treatment, the staff encourages them and their relatives to move to a private clinic to seek better treatment. Doctors neither seriously listen to the patients nor explain their health problems and discuss possible treatments, including the diagnosis and medication. As a result, patients and their relatives always remain confused about the role of the doctors, as well the possibilities for treatment for alleviating their suffering. Furthermore, medical equipment in public hospitals is intentionally kept out of order by the doctors and technicians for years, in anticipation of increasing the business of private clinics and earning commissions. Patient cannot expect a simple pathological or radiological examination in a public hospital. Ultimately, patients are forced to go to private clinics and spend far beyond their financial affordability.

This culture of greed has created a class of neo-rich medical professionals in Bangladesh as the owners of up-market private clinics. In addition, hundreds of

people who can afford (rich and upper middle-class patients) travel abroad, to avoid the inefficient, inequitable and ineffective health care service in Bangladesh; while a lack and absence of corporate governance, accountability and government monitoring helps to survive and sustain such a corrupt healthcare system. Patients with serious illnesses or injuries painfully learn about the country's corrupt and inadequate healthcare system through their experiences, often paying the price with their life. While the government authorities have no conscience, and the medical staff never reflect on their irresponsible and unethical practises, at the cost of patient's health and wellbeing.

According to the patients, the healthcare services are of poor standard and they are ill-treated by the doctors and the hospital staff in public hospitals compared to the private medical colleges, specialized hospitals. They charge exorbitant amount of money without ensuring good treatment and quality of services. In case of quality of medicine in Bangladesh, patients often complain that although medicines manufactured by some companies are of international standard, however, due to lack of proper monitoring and supervision, some companies sell low quality of medicines and doctors are bribed by the companies to prescribe these medicines. Patients also commented that the charges at good diagnostic clinics in Bangladesh are higher relative to India. In defence, the diagnostic clinics in Dhaka and Chittagong informed the researcher that they have to pay 25-45 per cent commission to the doctors who send them patients for diagnostic tests. Moreover, specialized doctors usually see 80-100 patients on an average per day, resulting in poor diagnosis. According to the Daily Star (18-9-2012), due to wrong diagnosis of bone cancer at Anwara Diagnostic Centre on January 20, 2010 followed by the cancer treatment based on the findings has resulted in a 35-year-old former radiographer of Labaid Cardiac Hospital invalid for life. The patient said that "he was shocked when he later went to Apollo Hospital in capital Dhaka for biopsy and came to know that he had no symptom of cancer. He then, upon his doctor's advice, went to Delta Hospital for a second opinion. They also confirmed that he did not have cancer at all" (The Daily Star, 18-9-2012). This situation reflects a pitiable condition of the health sector in Bangladesh as regards to doctor-patient ratio, or nurse-patient ratio, or physician per nurse ratio, or population per bed. Thus, very poor and ineffective healthcare service provision with negative healthcare outcomes has largely given rise to outbound medical travel/tourism from Bangladesh.

In case of medical education, there are large numbers of private medical colleges, which charge exorbitant capitation, admission and tuition fees. A student needs 3 to 6 million taka to complete MBBS degree in a

country where per capita GDP in the fiscal year 2010-11 was US\$ 715 and, in 2014, it increased to US\$750. When a student qualifies as a doctor, the attitude is to recover the cost of education by charging high price to the patient. Medical Degree colleges for doctors and nurses have low quality of education. There is also shortage of medical professionals and nursing staff. The current nurse-doctor ratio is 0.4, (that is 2.5 times more doctors than nurses), compared to the international standard of around three nursing staff per doctor. To meet this skill shortage in nursing care, the first Grameen Caledonian Nursing College was inaugurated in Dhaka on 1<sup>st</sup> of March, 2010. However, there is speculation that these nurses after completion of courses may travel overseas for jobs. An estimate of shortage based on the doctor-population ratio currently prevalent in low-income countries revealed a shortage of over 60,000 doctors, 280,000 nurses and 483,000 health technologists in Bangladesh (Ahmed et al., 2012).

A recent study by Nurunnabi and Islam (2012), confirms the accountability gap in the privatized healthcare hospitals in Bangladesh and they have concluded that patients do not have trust and faith in the healthcare professionals and managers. Thus healthcare professionals such as doctors' nurses, pathologists, administrators, managers, legal and the government medical and health officers should be accountable for their corrupt malpractices and culture of greed. They are "not liable for any medical malpractice and medical services are not delivered, as promised or advertised. Laws are too lenient to hold parties liable" (Nurunnabi & Islam, 2012, p. 3). Further, healthcare practitioners and managers are driven by the profit motive. Nurses are not well trained and qualified and with an unreliable pathology-diagnostic service drives many Bangladeshi's to travel cross-border to India and other neighboring countries for medical treatment.

This study has highlighted that India is not only the preferred choice of medical travel for Bangladeshi patients from middle and lower income families due to relatively low cost and better quality of care, but also it has identified shortcomings of the Bangladesh healthcare system, due to which an increasing number of Bangladeshi patients are crossing the border for medical treatment every year. The main destinations for Bangladeshi include India and Thailand. Singapore and Malaysia are destinations preferred by the affluent section of Bangladeshi. From qualitative interviews of medical tourists from Bangladesh, a kidney-transplant patient from Sylhet informed that she went to India mainly for three reasons: firstly, kidney transplant treatment was not available in Bangladesh, secondly, it was relatively cheaper than Singapore and Thailand, and finally, she received positive feedback about the

medical services of India from friends and family. Another patient from Chittagong said that, he went to India due to dissatisfaction over Bangladeshi doctors, incorrect diagnosis and corruption. Whereas in India, he received excellent healthcare service, qualified medical doctors and excellent nursing care at low cost and no waiting period. Both asserted that geographical proximity, cultural, religious affinity and familiarity with the Hindi and Bengali language were also beneficial.

From the qualitative data it can be observed that Bangladeshi patients are travelling to India for medical treatment as in most of the cases they did not receive basic diagnostic and primary medical treatment. Due to corruption, some doctors are engaged in different types of business and active politics which greatly harms provision of health care services in an equitable, efficient, effective, ethical and transparent manner. The ongoing corruption in the public health care sector, the irresistible greed, ignorance of behavioural science, lack of ethical and professional commitment by doctors, and the preoccupied brokers of such business along with the health care professionals and senior government healthcare officials, are responsible for poor health care service delivery, thus resulting in outbound medical travel from Bangladesh to India. The results of our study thus confirms that, Bangladeshi patients travel to India for quality of health care, state of the art medical treatment, skilled doctor and pre and post-nursing care which they don't get in their own country, besides geographical proximity, familiarity with culture, food, language, meeting relatives along with a short vacation.

### 3. Methodology

Besides the qualitative part of the study, a structured self-administered questionnaire was distributed to a total of N = 1450 respondents in six divisional cities of Bangladesh: Dhaka, Chittagong, Sylhet, Rajshahi, Barisal, and Khulna and two districts Comilla and Bogras. Out of these 1282 surveys were completed by the respondents, and 168 were incomplete responses which were discarded from the study. From a total of 1282 cases, 579 were females and remaining 703 were male respondents.

The questionnaire was administered to the respondents in Bangladesh during the period from 30-April-2010 to 2-January-2012. The respondents were selected on the basis of the information that they had undergone treatment in India. A random sampling design technique was adopted since the researcher recognized the difficulties involved with sampling the population (Sudman & Blair, 1999). Thus, there was a bias in the sample favoring those who, primarily, went to India for medical treatment. Descriptive statistical analysis was applied to the study. The questionnaire consisted



of questions on (a) demographic information about the patients such as age, education, family income, occupation; (b) type of diseases, (c) destination of treatment in India (d) duration of stay and (e) type of disease/treatment. Reliability test was conducted using dummy in the regression equation for Yes = 1 and No = 0 in the survey questions answer given by the respondents. The quantitative study took into consideration 3 equations for regression analysis.

1. Inefficient Healthcare Management System (IHMS) = f (occupation, disease, total family income, treatment place, staying period).
2. Occupation = f (disease, total family income, treatment place, staying period).
3. Staying Period = f (occupation, disease, total family income, treatment place)

#### 4. Data analysis and findings

Interview data for this exploratory research were gathered from a set of medical tourists that had travelled from Bangladesh to India for medical treatment which informed the questionnaire development and also provided with the details of the Bangladesh healthcare situation and their own personal experiences, as discussed in the section after literature review. The demographic from descriptive statistics was also analyzed from the data. Among all the individual participants, there was a convergence of 'theory, research, pedagogy and politics' providing 'unique and important formations of collective inquiry' (Kamberelis & Dimitriadis, 2005, p. 888). Reliability statistics estimated from the study gave a Cronbach's Alpha value of .712 with six (6) items, indicating internal consistency between the items (Green & Salkind, 2014).

Table 1. Regression equation 1, dependent variable: IHMS

R square	Adjusted R square	F	Sig.	Durbin-Watson
.933	.849	11.142	.018	2.283
		Coefficient	T stat	Sig
	Constant	67.193	1.755	.154
	Disease	-.104	-.203	.849
	Treatment place	.380	1.278	.270
	Staying period	.579	3.049	.038
	TT family income	.000	.034	.975
	Occupation	-.633	-2.202	.092

Source: developed for this research.

From Table 1, it is observed that R square and adjusted R square is good. F statistics is also significant at 5% level of significance. However, autocorrelation prevails. Here, staying period has 5% level of significance and indicates expected sign. Occupation is significant at 10% level of

significance and indicates expected sign. A priori relationship assumes that, as IHMS is inefficient in Bangladesh, so, it will have negative impact on occupation, positive with type of disease and negative relationship between total family incomes. Moreover, positive relationship is expected between treatment place and staying period outside the country, such as India.

Table 2. Regression equation 2, dependent variable: occupation

R square	Adjusted R square	F	Sig.	Durbin-Watson
.795	.630	4.993	.05	2.043
		Coefficient	T stat	Sig
	Constant	25.844	.442	.677
	Disease	-1.260	-2.252	.074
	Treatment place	.344	.789	.466
	Staying period	.507	2.677	.044
	TT family income	.001	1.315	.246

Source: developed for this research.

From Table 2, regression equation 2, it is observed that disease is negatively related to occupation and significant at 10% level of significance. Here, staying period is positively related and significant at 5% level of significance. Difference between R square and adjusted R square is relatively high. F statistics is significant at 5% level of significance. Autocorrelation prevails as evident from the Durbin-Watson statistics. In the second regression equation, we assume that positive relationship between dependent variable and independent variables exists, except disease, as the person is mentally and physically stressed due to the disease (see Table 2).

Table 3. Regression equation 3, dependent variable: staying period

R square	Adjusted R square	F	Sig.	Durbin-Watson
.904	.828	11.89	.009	2.007
		Coefficient	T stat	Sig
	Occupation	1.161	2.677	.044
	Disease	1.649	1.740	.142
	Treatment place	.118	.169	.873
	TT family income	-.002	-3.862	.012

Source: developed for this research.

From Table 3, regression equation 3, we observe that total family income is negatively related to staying period as per our expectation and is significant. Occupation is positively related to staying period and significant at 1% level of significance. The difference between R square and adjusted R square is relatively high. F statistics is significant at 1% level of significance. Durbin-Watson statistics indicates that autocorrelation prevails. In the third equation, a priori relationship between dependent and independent variables are positive except for total family income.

Total family income decreases, when the patient travels to India for treatment.

1. The *age distribution* of the participants ranged from as young as 15+ to 75 years old. Both males and females were included in the sample. Of these 1282 Bangladeshi participants, there were 48.05 percent females and 51.95 percent males. Of these total participants, 149 were 15 years of age, 150 each accounted for age 32 and 38, 149 participants were 55 years old, 95 were 60 years old and 48 each accounted for 71 and 75 years old.
2. *Educational background* of the participants ranged from 48 participants (3.70 %) with no education, and similar percentage with primary education, 146 (11.40%) were with secondary education, 149 (11.605) were with secondary school certificate (SSC), 322 (25.10%) with higher secondary school certificate (HSC), 321 (25%) participants were with an undergraduate degree, and 248(19.30%) with graduate university degree.
3. Total family *income distribution* shows that 55.90% percent of the medical tourists belonged to the group whose total family income was 100,000 Lakhs BDT, while 29.10% of participants earned 50,000 BDT and 15.10% earned 150,000 BDT. Data on distribution of respondents according to occupation also showed that the majority of them had financial security and good jobs, that is, they were government service holder, students, medical doctors, or self-employed businessmen. This finding is also consistent with the literature that the higher the family income, the greater is the propensity to travel for medical treatment across border.

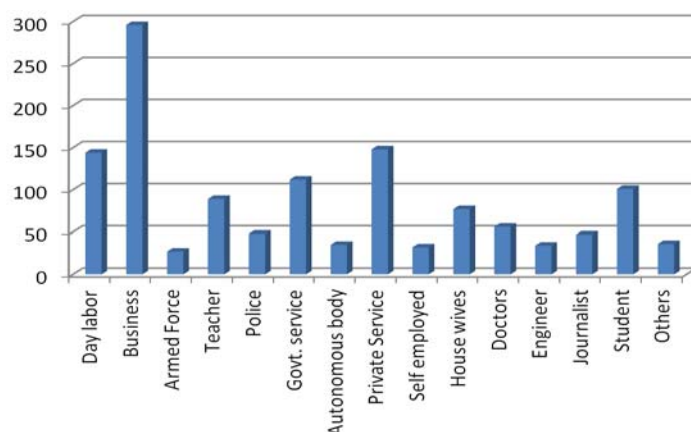


Fig. 1. Occupation of medical tourists from Bangladesh

Source: developed for this research.

4. Figure 1 illustrates that the medical tourists from Bangladesh came from wide range of occupations such as: business (296), private service (148), day laborer (144), government service (112), teacher (89), housewives (77), doctors (56), journalist (47), police (48), student (36), autonomous body (35), engineer (34), self employed (32) and defence forces (27).
5. The *duration of stay* in India ranged from one week to more than 6 months. Figure 2 illustrates the number of patients that stayed between one week to more than 6 months were 1 week (486), 2 weeks (450), 3 weeks (47), 1 month (106), 2 months (71), 3 months (42), 4 months (29), 5 months (27), 6 months (18) and more than 6 months (6).

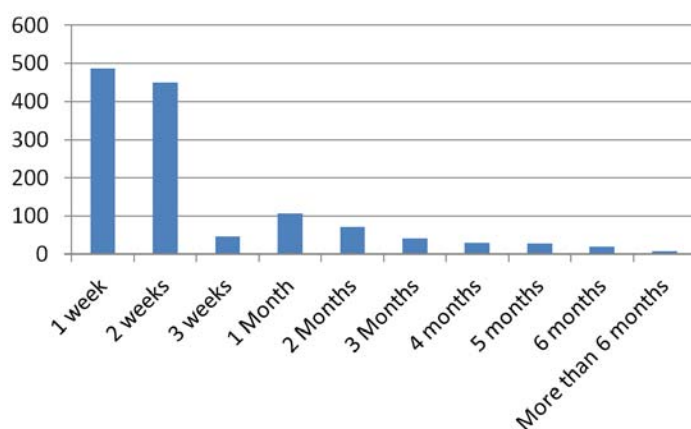


Fig. 2. Bangladeshi medical tourists staying period

Source: developed for this research.

6. Figure 3 illustrates the major cities in India that the Bangladeshi medical tourists travelled for medical treatment depending on the availability of treatment, speciality of the medical facility and surgeons; for example, Calcutta (163), other minor cities of West Bengal (89), Ranchi (24) Assam (77), Chennai (105), Mumbai (151), Hyderabad (172), Bangalore (97), New Delhi (148), other parts of Delhi (89), Gujarat (45), Lucknow (45), and other areas (54). Medical tourists from Bangladesh chose the cities of India for medical treatment such as Calcutta,

Ranchi, Assam and other cities of West Bengal not only due to geographical proximity to Bangladesh, thus, saving travel time in terms of distance and cost of travel and accommodation, but also due to language, food and cultural affinity (Medhekar & Haq, 2010). Hyderabad, Calcutta, Delhi, Lucknow, Mumbai being the most popular destination of choice within India given the super-speciality of treatment, shared Mughal heritage architecture, history, familiarity with the language, religious affinity, food, social, and cultural sensitivities.

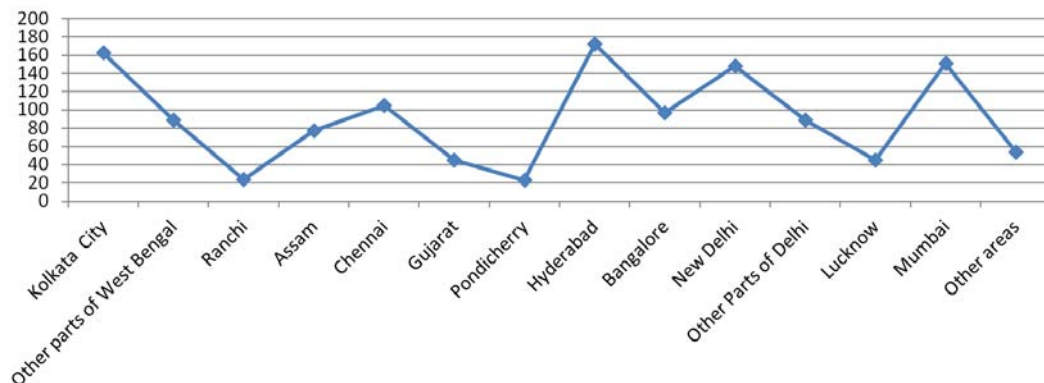


Fig. 3. Popular destinations in India for Bangladesh medical tourists

Source: developed for this research.

7. Figure 4 and table illustrate distribution of patients according to their sickness or affected parts of the body in terms of disease. It is clear that most of the participants who travelled from Bangladesh to India for medical treatment suffered from various complex health issues which required not only diagnostic, but also invasive surgeries such as: orthopaedic, eye, dental, brain, heart, stomach, kidney, liver and

spleen. For example, nearly (146) patients travelled for heart surgery, followed by eye-cataract surgery (126), kidney-related problems (96), different types of cancer (90), fracture (87), bone (83), stomach (77), diabetes (72), gynaecology (63), spleen (61), brain (57), psychology (56), liver (49), oral cavity (45), head (45), mental (43), dental (32), tuberculosis (28), HIV virus (2) and others (10).

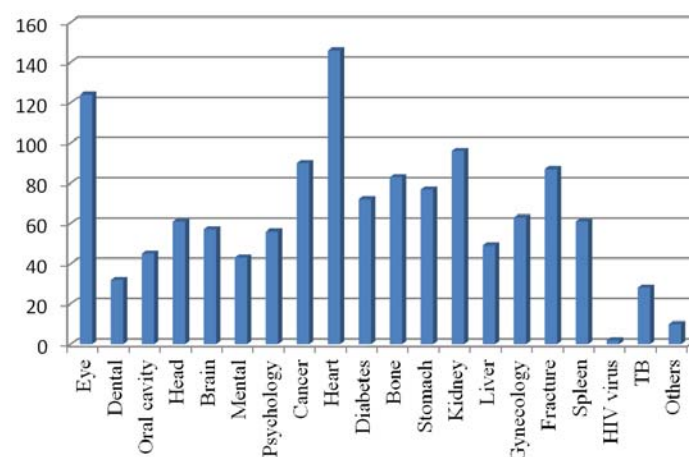


Fig. 4. Types of medical treatment/surgery demanded by Bangladeshi medical tourist

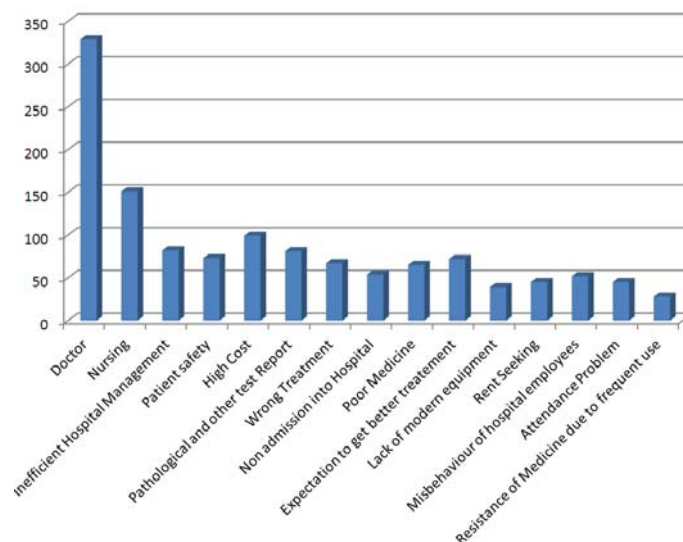
Source: developed for this research.

8. Figure 5 illustrates reasons for *inefficient health care management in Bangladesh*, as believed by the 1282 respondents: lack or inefficient doctors (329) and nurses (151),

inefficient hospital management (82), lack of patient safety (73), high cost (99), incorrect pathological and diagnostic test results (81), wrong treatment (67), no hospital admission

(54), poor medicine (65), expectations to get better treatment (72), lack of modern medical equipment (39), rent seeking behavior (45),

misbehavior by hospital employees (52), lack of attendance problem (45) and resistance of medicine due to frequent use (28).



**Fig. 5. Reasons for inefficiencies in Bangladesh healthcare management**

Source: developed for this research.

Patients travel for domestic medical tourism from different corners of the country to capital Dhaka for medical treatment. From the data, it is evident that they suffer from many illnesses (Figure 4) and many other issues when they travel to the capital city, such as residing problem, attendance of the patient, security and safety problem, as illustrated in Figure 5. There are brokers in the government hospitals who take financial advantage from the vulnerable sick patients. Rent seeking is an accepted behavior of the government officials, as well as hospital staff. Given all these problems, Bangladeshi patients do not even receive basic medical care in their own country, and so, they are travelling to India for medical tourism. Table 4 and Figure 6 identify the key factors which hamper the growth of the Indian medical tourism industry. Hence, there is further scope for India to develop and strengthen its medical tourism industry by overcoming its shortcoming and make it globally competitive, as suggested by the participants. It is also important that the Indian medical tourism service providers need to identify what areas need to be improved, future challenges in this industry, accreditations and national cross-border partnerships for India at the public and private sector level to become globally competitive in providing affordable, effective, efficient, equitable and world standard quality of healthcare not only to overseas foreign health and medical tourists from developed and developing countries, but also to local Indian population.

**Table 4. Potentialities for India to develop further in the field of medical tourism**

Key factors	Little	Average	Above average	Great	Greatest
Lack of facilities and attractions	103	211	341	354	273
Inadequate government support	83	152	459	367	221
Lack of trained personnel for tourism	45	265	445	389	138
Poor investment potentials	154	278	357	401	92
Lack of promotion	87	301	452	291	151
Foreign language barriers	441	212	279	254	96
No facilities and policies	552	396	141	109	84
Lack of coordination among key players	112	245	478	331	116
Others	79	212	346	467	178

Source: developed for this research.

- According to the survey, the N=1282 participants indicated five (5) key reasons for travel to India from Bangladesh for medical treatment such as: (i) good quality of medical care, and (ii) experienced doctors and physicians, quality of nursing care (pre- and post-surgery), (iii) affordable low cost of surgery, (iv) non-availability of treatment in Bangladesh and (iv) modern/state of the art medical treatment and medical facilities in India.

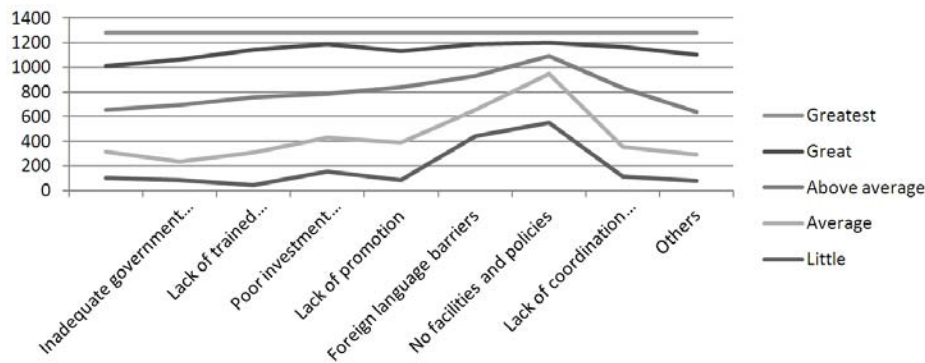


Fig. 6. Challenges for Indian medical tourism industry

Source: developed for this research.

These key 5 pull factors mentioned are consistent with the literature as to why patients travel overseas for medical treatment from developing poor countries or from developed countries to India. Improved technologies and expert services in India have also played a pivotal role in the expansion of medical tourism from Bangladesh.

### 5. Limitations and future research agenda

This study was undertaken to understand the 'Healthcare Management' system of Bangladesh, by collecting data from the Bangladeshi patients traveling to India for healthcare. It took more than a year to collect field data from the medical tourists. Moreover, the questionnaire was based on binary answer, but, in a larger context, five point Likert scale questionnaire will be considered, and structural equation modeling will be applied which may give better results to develop a model in context of South-Asian healthcare needs and cross-border medical travel. Currently, attractive medical travel packages are given by Malaysia, Thailand, and Saudi Arabia, to attract Muslim patients from Bangladesh. As such, in future, motivations behind as to why Bangladeshis are travelling to these countries for medical treatment will be considered, in context of the domestic quality of healthcare. Further, questionnaire should be addressed from healthcare service provider, that is, supply side, exploring healthcare service quality in Bangladesh, whose greed, profit motive, unethical practices, lack of transparency, lack of social prestige of nurses, and triangular mafia type nexus among medical practitioners, pharmacists, medical technologist, logistic support, and regulatory capture, is the main cause of poor healthcare outcomes and outbound medical travel.

### Conclusion and policy implications

The findings of this research make several contributions to the literature on cross-border medical travel from Bangladesh to India for medical treatment. Our study provides a theoretical and

empirical basis for medical tourism products and services provision as a specialized treatment, hospital and destination to be positioned and branded as a niche for medical treatment for patients from neighboring countries of India. This is especially important, given that the global medical tourism industry is very competitive, and many new competitive destinations are emerging in developing countries, which are providing cost-effective surgical procedures, with no waiting period, just in time services and lean operations along with tourism opportunities. The Indian medical tourism service providers, promoters and medical tourism facilitators should understand the healthcare and medical needs which attract the medical patients from neighboring country, such as Bangladesh, for medical surgery.

The informed consumer who travels abroad for medical treatment requires more customised and highly developed healthcare services, greater choice, international quality of care, specialized medical treatment and good value for money. Thus, medical tourism service providers (hospitals and hospitality, travel and tourism industry) should make sure that a comprehensive system is in place to educate, tourism facilitators, healthcare providers about cultural beliefs, dissimilarities and needs of the patients from different cultural and religious beliefs and customs, to be competitive in this global healthcare industry. Table 4 and Figure 6 highlight the shortcoming and potential for improvement for the Indian medical tourism providers to be globally competitive and attract medical travellers from South Asia, as suggested by the educated participants in the qualitative part of the study.

This research provides insights into poor quality of Bangladeshi healthcare management system due to which patients from Bangladesh travel to India for medical treatment. Further, appropriate medical tourism destinations, hospital and super-specialities promotional strategy should be developed for the neighboring countries bordering with India to

promote peace and understanding, given its shared history, language, social, food and cultural affinity. From the survey, it is concluded that India does not only have many potentials and challenges ahead to grow and develop this lucrative medical tourism industry (see Table 4), but also has many advantages for Bangladeshi patients, in terms of modern healthcare and medical facilities, qualified doctors and nurses, quality control by JCI, low cost of medical treatment, no waiting period, quality of care with human touch, besides geographical proximity to Bangladesh, low transport cost, no language barrier, similar food, culture and presence of relatives and friends which makes India an attractive destination for medical treatment not only for patients from Bangladesh, but also from other countries in South Asia. Indian medical industry should further improve and maintain its first world quality of medical experience and provide healthcare in ethical, regulatory and first world accredited facilities, by taking note and acting on patient feedback.

In case of Bangladesh, there is deteriorating quality of health care service management and provision, along with lack of affordable quality of healthcare. There is lack of corporate social responsibility with the private sector health service provision, poor communication, long waiting period, shortage of nurses and doctors, poor medical technology and infrastructure, wrong diagnosis, lack of hygienic and cleanliness to prevent infection, poor maintenance of medical equipment and outdated medical technology (Ali, 2012; Mamum & Andaleeb, 2013). Doctors, nurses and other healthcare staff and professionals are not necessarily well experienced and reliable in providing quality of care in a timely manner. There is also lack of accountability and responsibility for their corrupt practices. To sum up, the health sector of Bangladesh is characterized by lack of facilities, skilled manpower and physical

infrastructure (see Figure 5). Measures for emergency response are absent along with obsolete organizational behavior and managerial capability to improve healthcare service delivery.

Even though public expenditure on healthcare in Bangladesh has made some improvement in the quality of medical and healthcare service provision to its citizens, it has a long way to meet the international standards and eradicate corruption at all levels in the primary and secondary health care provision. Result suggests that due to various reasons such as: poor quality of health-care pre and post surgery in Bangladesh along with high cost, non-availability of treatment and shortage and poor quality of medical professionals, and a loss of human touch as a result of which, now, middle income Bangladeshis are also pushed towards India for medical treatment. Further, the results also show that, besides previous experience, family, friends, doctor and the internet were the main information search strategies employed by Bangladeshi medical patients (Medhekar & Newby, 2011; Mamum & Andaleeb, 2013). Finally, choice of destinations within India and hospital was based not only on the various sources of information search, but also the five (5) key pull factors such as the good quality and experienced doctors and physicians, quality of nursing care (pre- and postsurgery), affordable low cost of treatment, availability of treatment and state of the art medical treatment and medical facilities in India confirmed by the study findings and supported by literature in the field of medical tourism. Unethical and unscrupulous behavior of the medical related service providers is the most important factor that pushes patients to travel outbound to India from Bangladesh for medical treatment, which not only results in the brain drain of highly skilled Bangladeshi doctors, but also prevents Bangladesh from harnessing its medical expertise in niche areas of surgery, as a medical tourism destination.

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