

# **Trade in Health Services in South Asia: An Examination of the Need for Regional Cooperation**

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## **Executive Summary**

This study was conducted in three South Asian countries viz: India, Bangladesh and Nepal. In order to gain insights into the trade in health services in India, the study examines the opinions of patients, hospitals owners and doctors involved in this service trade. A total of 190 foreign patients from SAARC countries that came to India to receive medical services, 20 hospitals across five metros, and 65 doctors active in offering professional services were surveyed using three structured questionnaires. Two case studies were carried out on two countries (Bangladesh and Nepal) to examine the demand aspects of health service trade. This study also aims to profile the health service sector of these two countries which might affect trade in health services. It focuses on the liberalization of health services and assesses the challenges and opportunities posed by the liberalization of trade on the provisions of health services and options for national policy makers. It further makes an effort to examine the barriers in health service trade in the two relatively small countries of South Asia. An effort is made to explore possible regional cooperation in health service trade among the above three countries of the SAARC region. The evidence is actually useful in order to understand commitments and challenges regarding trade in health services in the SAARC region.

The study opines that there exists a gender bias among the foreign patients coming to India for medical treatment. An overwhelming majority (about 79.5 per cent) of the patients is male and more than half are in the age group of 40-59. Not so surprisingly, about 95.8 per cent of the patients are from Bangladesh. The largest number of patients (46 per cent) is self-employed followed by another 30 per cent in private service. About 12 per cent of the patient's sources of income are agriculture. Surprisingly, about 10 per cent of the patients are in government service in their respective country which implies a perceived lack of medical facilities even for government servants.

The largest number of patients coming to India is for cardiac (49) and cancer (45) treatment. Orthopaedic (21) and kidney-related (22) treatment also forms a significant percentage. A little bi-modality among cardiology patients – both juvenile (under 19) and middle-aged patients outnumber youth in the sample is noticed by the study. The dominance of males across all age groups and across all disease categories is also clearly visible – the only exception being patients who are between 20 and 39 years old and do not have any of the stated diseases. This may be due to gynaecological problems that are faced by the female youth patients.

Majority of the patients get their diagnosis done in their home country. Apparently, the local doctors advise them to go abroad for better treatment in view of insufficient facilities and expertise in the home country. In many cases, the issue of travelling to India for treatment comes after several months of diagnosis.

As many as 15 per cent of the patients were found to have entered India on tourist visa implying that the higher transaction cost of getting a medical visa is much more than the higher perceived value for the same. Over 85 per cent of the patients have entered India on a one-month single-entry visa. The related uncertainty and anxiety would be adding to the cost associated with the patient's treatment in India. About 11 per cent of the patients admitted to using the services of a broker or a middleman for their visa.

A vast majority (104 out of 190) patients reported that they came to India because of its inexpensive and high quality doctors– a pull factor– while 49 and 30 reported the absence of good quality doctors and medical infrastructure, respectively, in their home country – a distinctive push factor. Regarding remittance of foreign exchange, the higher income households do bring in slightly higher amounts through the informal route. There is no particular relationship between the rates at which Indian rupee is bought by the Bangladesh patients and their respective household income.

This study also studied the major obstacles to a foreign patient receiving medical services in India on a scale of 1 to 5. It turns out that visa is a major obstacle to trade in medical services (average score 3.84). Neither language nor central bank permission for remittance nor information regarding medical facilities in India is perceived to be a major obstacle. However, non-availability of Indian rail ticket in the patient's home country is given a score of 5 on a five-point scale by 172 patients.. This raises the average score to 4.77. An integrated agency to streamline trade in health services and handle all aspects of a foreign patient's availing of health services in India is felt lacking by many patients. In fact many of them have felt the lack of such an integrated agency as an obstacle.

An overwhelming majority of patients (96.8 per cent) are happy with the medical treatment but feel that the barriers in this respect are unnecessary. Surprisingly, as many as 73.2 per cent have no particular view on current account convertibility and only 24.2

per cent feel that their country should have it. Between 70 and 80 per cent patients feel that doctors should be able to move freely to another country, that there should be standardization of skill among medical personnel, that there should be dual taxation treaty to help medical professionals and that if their country removed the barriers to trade in health services, there will be more welfare gains. According to 77.9 per cent of the respondents, visa issues are complicated. About 40 per cent patients reported that they have been cheated by the informal foreign exchange traders while only 19.5 per cent reported not being cheated by them. A clear eighty percent of the patients have opined that their medical insurance policy should be valid across all SAARC countries and another 64.7 per cent patients feel that the airfare is too high.

All twenty hospitals surveyed reported receiving patients from some SAARC country or the other. South Indian hospitals from Bangalore and Chennai are more active in offering telemedicine services. Only six hospitals reported that any doctor from another SAARC country visited them over the last two years. As expected, none of the hospitals are having any Mode 3 medical service.

Doctors corroborate the information gathered from the patients that a very large number of the patients come from Bangladesh. In our sample we found that Sri Lanka sent the second highest number of patients, followed by Nepal from within the SAARC. But overall, a large number of patients also come from the gulf countries. Only 20 per cent of the doctors surveyed travel to SAARC countries to treat patients. This percentage is still fairly high considering that Mode 4 services trade is perhaps the most restrictive among all the four modes.

Security environment comes out as a strong de-motivating reason discouraging movement of doctors. The attractiveness of the Indian market is reason enough for some doctors not to move to SAARC countries. The hassles of getting an employment permit, complicated visa process or income tax policies and complications thereon also do not appear to be strong enough reasons. In summary, Mode 4 service seems to have the highest potential to offer the maximum welfare gain in South Asia.

The case study on Bangladesh reveals the fact that telemedicine services may help Bangladesh to provide better services to its people, side by side checking illegal money transfer to neighbouring countries. Telemedicine may assist more consumers to get access to faster, better and possibly cheaper diagnostic medical services, including some

therapeutic services. It should be borne in mind that there may be weak consumer protection and for this reason additional inter-country agreements are needed.

It is understood that telemedicine and teleconferencing services between the SAARC countries can help to import and export services and accordingly benefit and improve the services of both private and public hospitals of the SAARC region. Currently, Bhutan and India have already entered into the Network and are reaping the benefit of this technology, unfortunately the Bangladesh government has not taken any effective initiative in this respect and the country still remains outside the SAARC Telemedicine Network. Countries like Bangladesh, Nepal, and Afghanistan for example, can join in the regional group like SAARC telemedicine network, and provide its citizens faster, superior and cheaper diagnostic medical services, including some therapeutic services through regional telemedicine services.

It is observed that Mode 2 provides quality treatment to Bangladeshi patients and there is little doubt that a huge amount of foreign exchange of Bangladesh outflows to foreign countries, often through illegal channel as Bangladeshi patients spend huge amount of foreign exchange in India and East Asian countries like Thailand and Singapore for receiving treatments.

The study opines that commercial presence in health services (Mode 3) can create supplementary resources for investment in and upgrading of health care infrastructure and technologies of the country. The availability of private capital in the country may reduce the total burden on government resources and may help to generate employment. Inflow of foreign capital in certain parts of the health system (e. g. establishment of hospitals with modern facilities) may reduce the burden on government resources and allow the public sector to relocate its resources toward the patients with less ability to pay. The presence of foreign commercial firms (with higher levels of pay and /or better equipment and premises) may entice Bangladesh health personnel away from public facilities: an 'internal' brain drain. For this reason there is a need to formulate effective public policy to check it and there is a need to impose limitations on FDI in health services.

There are also other possible negative effects of FDI in health services in Bangladesh e. g. excessive technological dependence, capital flight and profit outflow. All these may

lead to negative effects on the Bangladesh's balance of payments. It may also make foreign medical services affordable to wealthy persons and to those with expensive medical insurance. It is generally observed that foreign private health service providers try to offer services which are not offered by the public sector. These services are usually given to attract affluent customers.

The study further observes that FDI actually enhances commercialization of the health care sector of Bangladesh. Bangladesh, therefore, should take a step back and deeply study the above issues of the risk and benefits of commercialization of its health sector and then decide whether this sector should be opened up to foreign investment or not.

It is noted that temporary movement of personnel (Mode 4) may assist Bangladesh and other SARRC countries to receive essential health-care services. It is felt that Bangladesh would be benefited substantially through increased export of service providers (e. g. doctor and nurses) through TMNP. It has been noticed that there exist severe disparities in the number of health personnel among SAARC countries. TMNP may make health services more accessible and affordable, thus increasing the welfare of the SAARC countries. In this respect some constructive knowledge spillover effects are also possible. TMNP can assist to reduce these disparities and help to reduce the shortages of health professionals. Bhutan has already shown interest to employ Bangladeshi doctors in the hospitals of country. This is a significant signal for Bangladesh indeed. Bangladesh can adopt an effective domestic health policy in this respect. For opening up market in the SAARC region and also in the developed countries, Bangladesh government should identify current capacity of supply of health professionals within the country.

Special type of visa may be introduced for the SAARC countries in this respect. Indian proposal on GATS Visa is gradually becoming popular both in developed members and developing members who successfully distinguished between temporary provision of service supply and migration (Bhattacharya et al., 2003). Some developing countries e. g. Tunisia, earns huge amount of foreign exchange through health service trading. Tunisia has probably the highest potential for health services exports in the MENA (Middle East and North Africa) region (Lautier, 2008) and a country like Bangladesh can follow the model of Tunisia in this respect.

Bangladesh government should also devise a long term plan for health service trade. Identification of market and negotiations for market access should be linked with health professional's skill development plan. The number one priority in upcoming negotiations for Bangladesh in health service trade should be TMNP under mode 4. The liberalization of health sector with limited opening of mode 4 in the SAARC region will bring positive result in reducing deficit in trade in health services, improving quality of health services, and enhancing technology transfer. The policy of exporting health service providers through TMNP requires plans for attraction of returned migrants, an essential element of which is to help them to be effectively absorbed into the domestic labor market (Raihan and Mahmood, 2004). It is also understood that in designing health service trade in future under SAFTA, it is vital to protect the interests of the smaller and weaker economies of the SAARC region for example, Bangladesh and Afghanistan, so that these countries can constructively engage themselves in benefiting from access to a free trade area.

This study makes some observations and recommendations basing on Nepal case study. Health services at most of the public institutions in Nepal are subsidized by the government and services are generally provided from public good perspective. This implies that such public institutions are less important from the trade viewpoint. Therefore greater involvement of the private sector particularly in operating teaching hospitals and tertiary care, and liberalization of the policies for exporting health services are necessary for exporting the services.

Most of the patients arrived in Nepal from India belong to low-income households. However, some patients have expressed their willingness to pay even higher fees for the services however they were referring to arrange additional and fringe benefits while consuming the health services. Therefore, provision of at least two or three levels of fee structure with differing facilities particularly at specialty and high cost treatment providers should be arranged to attract high income foreign people for service consumption. Rather than the general services, Indian patients are found to be interested in the specialty and chronic problem related services. Therefore, Indian patients-targeted departments with relevant services should be established particularly in the hospitals which are nearer to India. In doing so, priority should be given to the illness requiring high-cost treatment so that volume of the trade would be large.

Effective information channel needs to be developed to attract larger flow of the patients from the foreign land. Many patients are facing problems in identifying appropriate service provider because of the non-availability of the information regarding available services and the cost structure in different institutions.

It is noted by the study that a different stratum of patients can be attracted in Nepalese hospitals if some unique features can be incorporated in the domestic service system. For this purpose, more focus should be given on research activates for exploring the locally available natural resources that are useful in the treatment and at the same time for developing country-specific unique method of treatment and promoting traditional methods of treatment. Quality of the services is one of the most important elements to attract patients in a particular health institution. Therefore, Nepal government should make necessary provisions for assuring quality of the health services.

Some of the advanced countries such as USA, Canada have high demand for low cost health service providers, particularly from developing countries. To fulfill this gap in those countries and for the promotion of service export through the bilateral agreements, efforts should be done to attract FDI to raise the production of human resources in the domestic country. By this means export of health service can be facilitated mainly via mode 4.

Despite the increasing inflow of non-Indian tourists, health tourism is found virtually limited to Indian service consumers in Nepal. Therefore, there is need to integrate health services with the tourism for exporting services to non-Indian foreigners via second mode. For this purpose, gradually tourists can be attracted for the treatment purpose in the country by making them familiar with the domestic service system through the arrangement of health services in the tour package, etc.

Management tie up and the expansion of the network of the domestic service providers with the reputed foreign health service providers and insurance companies is important for exporting services via both second and third modes. The Nepalese Government can encourage for this primarily through policy adjustments. In the present context of increasing role played by the private sector, the purpose of regulating the health services in the country and registering medical practitioners according to their qualifications by establishing a Medical Council as provisioned in Nepal Medical Council Act seems



relevant. Initiation should be taken in this line to ensure quality services and bring homogeneity in the services which are important elements to attract foreign patients for service consumption.

This study has put forward some policy implications. The findings of the study suggest that there exists a huge arbitrage opportunity for the local professionals and other local service providers in a particular economy due to demand and supply gap. To achieve greater economic welfare, the barriers have to be removed, defined by modes 3 and 4. The organization of a regional skills council for standardization of skills would be very important to take advantage of the arbitrage opportunity. Once these are identified, then investments may be encouraged and in the process movement of natural persons without barriers such as simplified visa, favorable work permit, dual taxation, among others, may be resolved. This is a kind of win-win situation in the light of economic welfare gains in the region.

The study has four strong policy implications for services trade sector in South Asia. Firstly, due to abundance of trained and skilled professionals in health services India has advantage in cross-border supply (i.e. in modes 1 and 2) Therefore, opening up of cross-border supply of services in these sectors would strengthen services trade flows through modes 1 and 2 in the region. The member countries and their highly skilled population can also be benefited with the help of an integrated region. Secondly, with regard to trade in services under mode 3 (commercial presence), South Asian countries should further liberalize FDI and adopt transparent domestic regulations in the areas of health services. Besides, domestic reforms and liberalization would lead to generate higher FDI under mode 3 in the region. Thirdly, SAARC region is one of the most important exporters of services through the movement of natural persons (mode 4). Bangladesh, India, Pakistan and Sri Lanka have large endowments of labour at all skill levels and have a comparative advantage in exporting services through this mode of supply. South Asian countries should therefore expect liberalization of movement of natural persons for professional services from developed and other developing countries. Fourthly, many have argued that the level of education is below the performance required to integrate entrants to the labour force. The modes are important implications for understanding technology spill over in health sector across South Asian economies.

What emerges is that South Asian countries have to take cautious but forward looking steps in order to remove the trade restrictions in services trade in general and health,

sector in particular. These are the sectors which drive services trade in many of the South Asian countries and also provide employment. Therefore, adequate reforms may not only remove the barriers to services trade but also generate higher services trade in the region, through which the region may achieve higher income and employment. This will ultimately strengthen the overall services trade capacity of the region, which is remarkably skewed at present.

Trade liberalization, under multilateral broad based negotiations is important because it provides an opportunity for the countries to gain visible benefits for their exporters from opening up of markets. The WTO has proven a powerful means for countries to promote economic growth and development resulting in creation of new jobs and narrowing the development gaps. This study envisages that SAARC as a regional trading bloc can also promote growth, generate employment and strengthen overall development of the region.

As a next step, an assessment of the impact of the different reforms engaged by the sample countries would be useful. However, such an evaluation is not an easy task given the multiplicity of direct and indirect effects. Ex ante and ex post qualitative and quantitative assessments must be conducted at the sectoral level but also at the economy-wide level to capture the interaction between the various sectoral reforms and the impact on other sectors.

The world as we know today will undergo major changes by the middle of this century. The countries that are unable or slow to respond will have to make room for others that can move quicker and innovation will be the key differentiating factor. In the long term, it may even be possible for some economies to survive only on the basis of their capital or technology, but labour alone may be unable to provide this sustenance. By bringing a large part of their population to the economic marketplace, the South Asian nations may set free their innovation potential which has so far not found any route to reach the market. When this happens, the region will surely be a different place with many possibilities. .

# **Trade in Health Services in South Asia: An Examination of the Need for Regional Cooperation**

## **1.0 Introduction**

South Asian countries are having a large intra-regional trade in health services. However, a large part of health services trade in the region is informal, whereas the formal health services trade, which is rather small in size, faces a large number of barriers – implicit or otherwise. The measurement of barriers to trade in services, and the gains associated with removing such barriers, has been of keen interest in recent years, particularly in the context of inclusion of services and investment in SAFTA (South Asian Free Trade Agreement). In general, barriers to trade in health services are unlike tariffs. They are typically regulatory barriers, rather than explicit taxes. The underlying economic rationale for these policy reforms is that the removal of barriers to trade in services is likely to result in lower prices, improved quality, and higher competitiveness. As with trade in goods, restrictions on trade in services reduce welfare because they create a wedge between domestic and foreign prices, leading to a loss to consumer surplus. Health services liberalization exerts an economy-wide influence as they constitute strong inputs to all other economic activities, including trade. Some studies identified several challenges related to the implementation of General Agreement on Trade in Services (GATS) commitments<sup>1</sup>.

It seems useful to mention here that through the GATS, the member states of the World Trade Organization (WTO) have the option to commit themselves to liberalize health services. Article I of the General Agreement on Trade in Services (GATS), following Bhagwati, (1984) and Sampson and Snape (1985), discusses a four part typology of trade in health services (Bhagwati, 1984; Sampson and Snape, 1985, quoted in Findlay and

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<sup>1</sup> Interestingly, multilateral liberalization of trade in goods has taken place for the last half century,. However, liberalization of trade in services began only in 1994 with end of Uruguay Round . The General Agreements on Trade in Services (GATS) is the first and the only set of multilateral rules covering international trade in services. The agreement was concluded at the Uruguay Round (1986-1993). It came into force in January 1995. The GATS sought to gradually liberalize and expand trade in the service sector. It had a “built in agenda” mandating members to kick off progressive liberalization negotiation on services from January 2000. The Guidelines and Procedures of Negotiations were adopted by the Council for Trade in Services on March 2001 as provided in the GATS Article XIX: 3 see Kelegama, (2009).

Warren, 2000). In terms of the GATS, health services include: medical and dental services, services provided by midwives, nurses, physiotherapists and para-medical personnel, hospital services, and other human services.

The four modes of GATS delivery of health services are: (1) *cross-border supply*: where the service is provided remotely from one country to another, such as telemedicine via Internet or satellite, or international health insurance policies<sup>2</sup>; (2) *consumption abroad*: where individuals use a service in another country, such as patients traveling to take advantage of foreign health care facilities<sup>3</sup>; (3) *commercial presence*: where a foreign company sets up operations within another country in order to deliver the service, such as hospitals, health clinics or insurance offices<sup>4</sup> and (4) *presence of natural persons*<sup>5</sup>: where

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<sup>2</sup> The rising competition for foreign patient, due not only to economic but also cultural policy reasons has been accompanied by initiatives in the marketing of medical institutions. Such initiatives, sponsored by governments, universities, or private firms, consist of dissemination of information on the institutions and patients. For example, the so-called "health tourism fairs" are one of the most common mechanisms used by governments and institutions, either directly or through marketing agencies. Likewise, a telemedicine link has been established between Apollo Hospitals at Hyderabad, Delhi, and Chennai in India and Lahore Medical Imaging Center, Lahore in Pakistan. This is the first telemedicine link between India and Pakistan. Such kind of link is an excellent effort, which will go a long way in bringing together the medical community and people of the two countries. This will enable people of Pakistan to have easy access to specialists and super specialists without traveling to India. The telemedicine link has been launched in a move to facilitate exchange of medicare and health facilities at reduced cost in South Asian countries. The Apollo Telemedicine Networking Foundation has also established telemedicine centres in Nepal and Sri Lanka.

<sup>3</sup> A good number of patients come to India from Bangladesh, Nepal, Bhutan, Sri Lanka, Pakistan and Afghanistan for medical treatment every year. Like wise many patients come to Pakistan from Afghanistan for the medical treatment. Lack in domestic health infrastructure forces the Bangladeshi patients to move to India for treatment. In general, Mode 2 (consumption abroad) is the most popular mode through which trade in health services has been taking place between the two countries.

<sup>4</sup> For instance, in an effort to enhance domestic capabilities in medical services as well as reduce foreign exchange costs derived from outflows of patients, several Asia Pacific countries are allowing foreign medical institutions to establish "local branch campuses" or "subsidiaries". For example, India's Apollo Group has opened branches in Bangladesh and Sri Lanka, Escorts Heart Centre in Bangladesh, Nepal and Sri Lanka.

<sup>5</sup> International trade in health services focuses on the mobility of patients; no comprehensive information on the movement of medical professionals is adequately available. A similar lack of information exists in relation to cross-border supply of medical education services. As mentioned, ample demand for health services, triggered by the needs of the labour market, and the emergence of new technologies are rapidly expanding the market share of telemedicine. Such an expansion is likely to have a growing international component, but its potential for changing the current patterns of trade in the sector is difficult to assess at this stage.

individuals such as doctors, nurses or midwives travel to another country to supply a service there on a temporary basis.

There is a dearth of analytical research in estimating barriers to trade in health services, particularly in the context of South Asia. This study observes that an in-depth study exclusively focusing on health services trade will not only strengthen overall services trade capacity of South Asian region but will also promote global as well as regional trade.

### **1.1 Research objectives**

South Asian economies have small intra-regional trade in health services, but mostly in informal sector. The trade in health services is directly associated with language, culture, technology and also to some extent ethnicity and religion. These types of asymmetries across the countries pose a great threat to trade in health services. In view of technological change, there is an important need to measure the market size and also the barriers to health services trade in South Asia.

Therefore, the main purpose of the study is aimed at assessing the potential in health services and economic costs of barriers to trade in health services in select South Asian economies such as Bangladesh, India and Nepal. As an extension, this study will also analyze the impact of liberalization and regulatory reforms on economic welfare. For example, in order to promote telemedicine in selected South Asian economies, this study will attempt to highlight the barriers and also provide the way forward to eliminate such barriers.

Broadly, the study attempts to answer the following questions concerning trade in health services, the GATS and the SAFTA.

- (i) Why are current levels of trade in health services low?
- (ii) How will the GATS/SAFTA legally affect a country's health policy?
- (iii) What effect might liberalization have on national health system?
- (iv) What are the likely benefits from greater trade in health services?
- (v) What can be done to limit the possible risks of trade?
- (vi) What is the relationship between trade in health services and other sectors?

- (vii) What are the barriers affecting trade in health services in South Asia in general and Eastern South Asia in particular?
- (viii) What is the size of barriers to health services trade, how they change under liberalization, what are the elasticities, and the size of health service trade flows (in context of SAARC)?
- (ix) Given that the bulk of trade in health services takes place through consumption abroad (Mode 2), an attempt will be made to assess the costs of measures restricting the mobility of patients through field study among selected Indian medical institutions.
- (x) With respect to establishing commercial presence, this study will try to measure potential barriers include the inability to obtain national licences , measures limiting direct investment by foreign service providers (e.g. equity ceilings), nationality requirements, needs tests, restrictions on recruiting foreign doctors and professionals, and the existence of government monopolies and high subsidization of local institutions.

More specifically, the study also attempts to provide specific answers to the following questions:

- (i) Does the substantial role of the government in health - as health service provider, financial supporter, regulator and promoter - have implications for the treatment of the sector under the GATS/SAFTA?
- (ii) What is the impact of liberalization of international trade in health services on the quality and availability of health services in developing SAARC countries?
- (iii) Given the importance of consumption abroad for trade in health services, and the gradual opening of health markets through Modes 1 and 3 (cross border supply and commercial presence), how can problems associated with trade in Mode 1 and Mode 3 be prevented? Are these problems sufficiently addressed by GATS/SAFTA disciplines?

The literature on trade in services remains vast in general but found to be small in health services specifically in the context of South Asia. However, a few of them may be considered as notable contributions. The aforementioned studies by Rahman (2002), De (2006), De and Bhattacharya, (2007) focus on health-related infrastructure issues and then discuss dominance of informal trade in this context. For example, Rahman *ibid*

found that about 57 per cent of total Bangladeshi patients seeking treatment abroad actually went to India in 1999. This is because medical services facilities in Bangladesh are inadequate, and the services quality in India is relatively better than that of Bangladesh. More interestingly, about 20 per cent of estimated 50,000 Bangladeshi patients went to India officially for treatment without valid visa. In most of the cases, they do not seek visa on medical ground in order to avoid hassles, and take tourist visa to enter India for medical treatment. The findings are consistent with numerous examples of patients and case studies (see De and Bhattacharya, *op cit*). In another interesting study, Kelegama and Mukherjee, (2007) finds that the Indian doctors face problems in obtaining work permit in Sri Lanka for their stay in that country.

Banik, De and Bhaumik (2009) have recently studied Service Trade Restrictive Index (STRI)<sup>6</sup> in the context of five South Asian economies such as India, Pakistan, Nepal, Sri Lanka and Bangladesh. The authors focused their analysis based on sectors such as education, health, travel and tourism, telecom (fixed and mobile) and transport sectors (air and maritime). They found that trade restriction in health sector varies across South Asian countries. For example, aggregate scores for select South Asian countries range from 0.23 (Nepal, the least restrictive) to 0.41 (Pakistan, the most restrictive). Pakistan's score is primarily attributed to consumption abroad (mode 2) and movement of natural person restrictions (mode 4). On close investigation, it appears that Central Bank's lengthy formalities to allow foreign exchange for nationals' treatment in other countries beyond limit is the major impediment. Bangladesh follows with an aggregate STRI score

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<sup>6</sup> The STRI methodology which translates qualitative information on services barriers into an aggregated quantitative score by sector is based on four modes defined by the GATS. This categorization also allows one to capture the issue of complementarity and substitution between modes. The authors have gathered qualitative information through questionnaires completed by government agencies and various country reports that are available in the region as well as supplementary research. The qualitative information has been used to determine the values of the different components of the sectoral aggregate and modal indexes. The weight of each component has been determined through pair-wise comparison. The transition from qualitative to quantitative analysis involves many benefits, but is not without risks. The two main benefits of synthesizing qualitative information in a quantitative index are first, to enable the comparison of restrictions across countries at the sectoral level, and second, to determine the impact of barriers on trade in services and on different variables of economic performance. This provides a more objective basis for domestic policy debates, as well as for bilateral, regional and international negotiations through more transparent evaluations of reciprocity in concession-making. The main risk, however, of such an exercise is that a traditional researcher face when moving from qualitative information on policy to a synthetic quantitative index: some dose of subjective-ness. The methodological improvements proposed by researchers on these subjects such as the use of pairwise-comparison techniques try to minimize the subjectivity

of 0.35, comprised of restrictions across modes 2 and 4, but almost full openness in mode 2. India's aggregate score of 0.33 reflects the sector's relative openness, carrying restriction in mode 4.

The remainder of the study is laid out as follows. Section 2 provides outline of the study. Section 3 elaborates a brief overview of the dynamic properties of service trade liberalization in South Asia. In Section 4, we discuss methodology. In Section 5, we analyze data based on field work. The country cases are discussed in Sections 6 and 7 with an emphasis on issues of identification. Section 8 contains conclusions and policy recommendations.

## **2 Outline of the study**

Barring Afghanistan and Bhutan, South Asian countries are World Trade Organization (WTO) members and are committed to multilateral liberalization in services trade. They have committed to the rules and principles of the GATS where Article V of GATS permits the liberalizing of trade in services between or among the parties to an economic integration agreement. However, within trade in services sector, the liberalization of health services has seen little progress, particularly among developing countries.

Services have emerged as the engine of growth in the major South Asian economies explaining the dynamism displayed by them over the past decade. Service sector is also emerging an important source of employment. In general, the trade potential of services remains to be exploited by the region. In many sectors, a strong domestic market plays a key role as the platform for developing export capacity. This pattern is evident in telecommunications, audiovisuals, distribution, health, transport and related services and higher education services— and even, in some cases, in e-commerce related sectors. Normally, countries tend to follow a pattern: serving the domestic market first and building on that export markets. South Asian countries need to take steps to specialize in services sectors which have potential for expansion in domestic markets and build their export capacity. Regional cooperation and integration of the service markets in the South Asian Association for Regional Cooperation (SAARC) region may also assist in specialization and strengthening the competitiveness of services industries in the South Asian countries (SAARC Secretariat, 2008).



Given that the health services are traded predominantly through patient mobility across borders (consumption abroad), nonetheless, a host of problems persist in South Asian countries in opening up their health services, in raising their health services providing standards, in recognizing each others' standards, and in removing the barriers to trade in health services. It is important to bear in mind that cross-country disparities in health services may not only reflect different policy priorities, but a variety of economic, social and demographic factors.

Health services sector liberalization exerts an economy-wide influence as they constitute strong inputs to all other economic activities, including trade. Health services are the least committed sector in WTO. In India, Modes 2 and 4 in health services are unbound under market access and national treatment for hospital services whereas in the case of Nepal and Pakistan only Mode 4 is unbound. Ideally, effective health service liberalization requires quality services and cost reduction among and within countries. Health patients need to consider both barriers (inner and outer) while framing any international policy. There is also an in-built need to look into the subject in a wider context of regional trade initiatives when South Asian countries have decided to include services trade and investment in SAFTA.

South Asian countries have great potential in health services trade. They have undertaken a substantial degree of liberalization in trade in health services autonomously over the past decade, and a number of commitments under GATS to bind their reforms multilaterally. However, a number of regulations and barriers still exist that may need to be addressed in the context of SAARC for fully exploiting the synergies that may exist for mutually beneficial exploitation. Besides regulations, taxation policies with regard to services also need to be examined. However, the information based on different aspects of domestic policies and regulations that affect market access to health services in a country is scanty and needs to be addressed in the framework of cooperation.

### **3 Trade in health services – an overview**

A better health services enable countries to face the challenges of environment and global commercial integration. Evidence confirms that expanding economic opportunities for people living in developing and LDCs raises their incomes. The key to expanding their economic opportunities is to help them build up their assets. Human capabilities such as health are of intrinsic value and also have powerful effects on material well-being. Broad

access to such facilities is also important to the material prospects of the people. And the trade in health services can reduce their vulnerabilities. Therefore, challenges for the South Asian countries are to achieve gender equality health – national commitment, and to recognize each others standards – international commitment.

In case of national commitment, the prospects for achieving gender equality in health vary considerably between countries. There has been more progress in gender equality in health (World Bank, 2005). Still, more than a third of developing countries will not achieve gender parity in health, and most of them risk not meeting the Millennium Development Goal (MDG) in 2015 if they do not take immediate action to extend health services to cover poor people. The risk is greatest for Sub-Saharan Africa and South Asia, the regions reporting the slowest progress in universal health.

In case of global commitment, progress toward mutual recognition of health services differs across countries. While developed countries were successful in recognizing each others medical services, the problem get more acute in case of developing and LDCs where progress has been very limited. Specifically, a strong asymmetry persists in terms of standards and contents of the medical services across the countries and regions. In addition, changes in the domestic and international market structures have promoted the appearance of activities closely related to health services. These new activities are designed to support health processes or systems without being "instructional activities" per se. Examples of these activities are exchange programmes in health services and health services education services. In some countries, these activities are considered to constitute health services. Given the pace of change in the Sector, definitional issues have also appeared as an important issue in any in many countries.

Health services also exist as a "private consumption" item with a price determined freely by the providing institutions. Private sector expenditure on medical institutions reveals significant variations among OECD countries, ranging from 2 per cent or below of total expenditure on health in Portugal, Sweden and Turkey, to over 22 per cent in Germany, Japan, Korea and the United States (WTO, 2001). Private sector expenditure is particularly significant at the tertiary level of health amounting, for instance, to over half of total private expenditure on health in Japan, Korea and the United States.

Health services have become the single largest sector in many economies worldwide. It not only provides the bulk of employment and income in many countries, but it also serves as vital input for producing other goods and services. So an efficient health

services sector is crucial for the overall economy. And because of this, agreement on opening up health services markets is crucial to the success of the current global trade talks.

Such market opening will bring gains to all economies, including the developing world, as long as it is done in a carefully considered way. But opening up health services markets is a particularly complex challenge. For one thing, any discussion of trade in health services has to include the thorny question of in- and out- migration issues (e. g. whether a qualified medical professional can freely move from one country to another to provide services to the patients).

In South Asia, Afghanistan, Bangladesh and Sri Lanka are showing to import interests in health services. A cooperative framework may facilitate SAARC countries to tap advanced expertise available in some countries such as India through telemedicine and tele-diagnostic, tele-radiology, and tele-pathology services to hospitals in other SAARC countries (SAARC Secretariat, 2008). Trade in health services can be enhanced through Mode 2 (patients seeking treatments in other countries), Mode 3 (investment in labs and hospitals) and Mode 4 (temporary movement of health professionals like doctors and specialists). As mentioned earlier, cross-border informal trade in health sector plays a very important role in the case of services.

Another problem is that there is analytical literature which purports to show that when intermediation services are explicitly represented in their true economic form, rather than being represented in ad-valorem equivalent form, the two fundamental theorems of welfare economies need not hold. Because of this property, welfare impacts from liberalization in services trade (even in small open economies) can be negative rather than positive as generally presumed in the goods like models used in the literature. Ryan (1990) study may be considered as an early piece to point this out. Chia and Whalley (1997) provided an example of welfare worsening liberalization in the case of trade liberalization in banking services. Bhattarai and Whalley (1998) have shown how explicitly modeling telecoms liberalization in a network structure can change perceptions as to the division of the gains from liberalization between small and large countries. The implication seems to be that only limited confidence can be attached to results obtained from the ad-valorem equivalent modeling used in numerical literature because the analytical structures used rule out alternative results. This problem would arise even where the results of individual studies are not contradictory with one another. Nevertheless, due

to lack of information on cross-country trade in health services, we have not come across any concrete study with clear focus to measure barriers to trade in health services in case of South Asian countries.

#### **4 Methodology and data**

Methodological discourse towards assessing barriers to trade in health services follows a wide spectrum of studies on the services trade sector. A balanced and appropriate measure(s) has been considered in this study. In order to judge the relative strengths of the health service providers, a primary survey on selected health service providers has been carried out in the study region.

Different measures have been applied to measure barriers in services trade. For example, Deardorff (2001) has proposed an interesting methodology to theoretically measure the benefit of relaxing barriers to trade in services. Trade services by nature are such that their demand arises from trade itself or presumably from trade in other industries. Examples for trade services may be transportation, communication and financial services.

Deardorff decomposed the gain due to larger trade in trade services into (i) comparative advantage (ii) reduced distance (iii) elimination of fixed costs. Indirectly, it might be capturing (a) economies of scale and (b) economies of time. However, the whole exercise needs reasonable assumptions and measurements about costs of the services as well as some other control variables like distance, quantity of services etc. Data are needed for periods which capture regulated and de-regulated periods.

Another methodology is proposed by Mattoo, Rathindran and Subramanian (2001). They have tried to choose variables for the index which are more policy type rather than outcomes policies. They found countries with fully open telecom and financial services sectors grow up to 1.5 percentage points faster than other countries. For the telecom sector the openness index is based on competition, restriction on FDI and regulation. In case of financial services they use the index of capital controls compiled by Dailami (2000). They could not get data for competition or regulation, although one may use the concepts of concentration ratio in banking sector and the foreign ownership as used by Claessens and Klingebiel (1999).

Terecan, Panagariya and Pitigale (2006) provide details about preferential trading in South Asia, but mentions very low levels of trade in services in this region. They

mentioned good prospects for IT, Education and Health in this context. This paper also mentions the limitations of CGE models since they are susceptible of producing significantly different results for change in the underlying assumptions regarding behaviour of agents and technology. The authors mention whatever work has been done in CGE modelling for South Asia is mainly done using GTAP database.

Our study is based on a primary survey in India based on information gathered from patients, doctors and hospitals involved in trade in health services. We conducted a detailed survey of foreign (South Asian) patients who came to India to receive health services due to India's growing importance in supplying health services in the region. We surveyed a sample of 190 such patients based on convenience sampling procedure. Detailed information regarding their diseases, treatments, costs and payments was collected based on a questionnaire designed to capture all relevant data on patients including their perception on some aspects of trade in health services. Similarly, we surveyed 20 hospitals and 12 doctors. Three different questionnaires were used and these are attached as AI, AII and AIII. On demand side, we develop two country case studies such as Bangladesh and Nepal highlighting the key issues in trade in health services in order to identify some policy suggestions. Methodologies adopted in the two case studies are elaborated in the concerned sections.

## **5.0 Data analysis**

### **5.1 Profile of patients**

A survey of 190 patients who had come to India from other South Asian countries to avail of medical services was conducted to understand the trade related barriers and their effect on actual patients. This section captures the essential aspects of the survey.

Tables 1 and 2 present a socio-demographic and socio-economic profile of the patients. We can see that an overwhelming majority (about 79.5 per cent) of the patients is male and more than half are in the age group 40-59. Not so surprisingly, about 95.8 per cent of the patients are from Bangladesh and about 61.0 per cent of these foreign patients have studied up to SSC/HSC or above.

**Table 13: Socio-demographic profile of sample patients (Nos.)**

Age Categories (years)	Patients			Marital Status				Education							Countries						
	Male	Female	Total	Unmarried	Married	Widowed	Sptd / Divrcd	Can not read / write	Can read / write	Some schlg (Up to 4 yrs)	5-9 yrs of school	SS C/ HS C	Tech Trg (fml/ infml)	Others	1	2	3	4	5	6	7
Juvenile Upto 19	9	6	15	15	0	0	0	7	1	3	4	0	0	0	0	15	0	0	0	0	0
Youth 20-39	42	17	59	14	45	0	0	1	2	2	9	27	3	15	55	1	0	1	1	1	
Middle-aged 40-59	84	15	99	5	94	0	0	0	8	11	20	46	3	11	96	0	0	1	0	0	
Old 60 yrs and above	16	1	17	0	17	0	0	1	2	1	2	5	4	2	16	0	0	0	0	1	
Total	151	39	190	34	156	0	0	9	13	17	35	78	10	28	182	1	0	2	1	2	

Countries: 1=Afghanistan, 2=Bangladesh, 3=Bhutan, 4=Maldives, 5=Nepal, 6=Pakistan, 7=Sri Lanka.

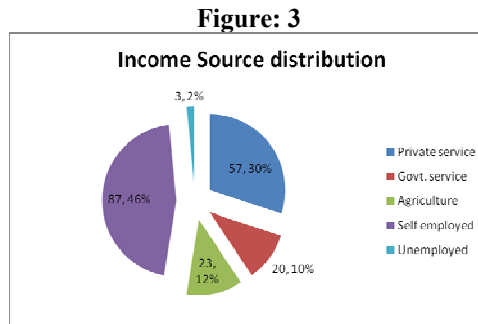
The largest number of patients is from single earning member households and for such households the average number of dependents is 4.97. It must be very difficult for such households to travel to another country for the treatment of one of its members – particularly when we also observe that the average income per household for such households is only 2,35,623.40 in local currency (which effectively means Bangladesh Taka). For double income households, the average number of dependents per earning member is 3.18 but the average income per household is about 5,00,000 units of local currency.

**Table 14: Socio-economic profile of sample patients**

Number of Earning Household Members (including respondent)	No of Patients	Adults	Children	Total Members	No of dependents	Average Income per household per annum in Taka (For Bangladesh patients only)
0	2	2	2	4	NA	375000
1	94	335	132	467	4.97	235419.56
2	61	281	107	388	3.18	502965.58
3	17	118	38	156	3.06	691875
4	8	77	26	103	3.22	495714.28
5	6	55	14	69	2.30	1060000

6	2	29	11	40	3.33	890000
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Figure 1 shows the source of household income for the sample patients. The largest number of patients (87 out of 190 or 46 per cent) is self-employed followed by another 30 per cent in private service. About 12 per cent have agriculture as their source of income. Surprisingly, about 10 per cent of the patients are in government service in their respective country which implies a perceived lack of medical facilities even for government servants.



## 5.2 Profile of diseases

Table 3 reveals that the largest number of patients is coming to India for cardiac (49) and cancer (45) treatment. Orthopaedic (21) and kidney-related (22) treatment also forms a significant percentage of the sample of foreign patients.

**Table: 15**  
**Disease types**

Type of disease	No of Patients
Cardiology	49
Orthopaedics	21
Ophthalmology	6
Cancer	45
Kidney related	22
Neurology	11
Others	36

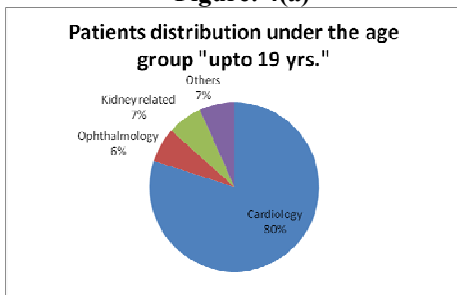
Table 4 shows the age-wise distribution of diseases among the sample patients. We notice a little bi-modality among cardiology patients – both juvenile (under 19) and middle-aged patients outnumber youth in the sample. The dominance of males across all age groups and across all disease categories is also clearly visible – the only exception being patients who are between 20 and 39 years old and do not have any of the stated diseases. This could be due to gynaecological problems faced by the female youth patients.

**Table: 16**  
**Age-wise distribution of patients**

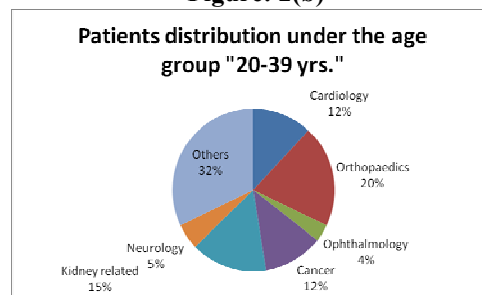
Age (Years Completed)	Type of disease	No of Patients	Male	Female
Juvenile Up to 19	Cardiology	12	7	5
	Ophthalmology	1	0	1
	Kidney related	1	1	0
	Others	1	1	0
Youth 20-39	Cardiology	7	5	2
	Orthopaedics	12	12	0
	Ophthalmology	2	1	1
	Cancer	7	4	3
	Kidney related	9	9	0
	Neurology	3	2	1
Middle-aged 40-59	Cardiology	23	18	5
	Orthopaedics	8	7	1
	Ophthalmology	2	1	1
	Cancer	34	31	3
	Kidney related	11	10	1
	Neurology	6	5	1
	Others	15	12	3
Old 60 yrs and above	Cardiology	7	7	0
	Orthopaedics	1	0	1
	Ophthalmology	1	1	0
	Cancer	4	4	0
	Kidney related	1	1	0
	Neurology	2	2	0
	Others	1	1	0

Figures 2(a) to 2(d) show the disease distribution of patients under different age groups. We find that 80 percent of the juvenile patients are cardiology patients whereas there is no such clear dominance among the youth patients – the highest percentage of patients in this age group is from the disease category “others”. Cancer is the most common disease among middle-aged patients and cardiology is the cause for treatment in India for 44 per cent of old patients.

**Figure: 4(a)**

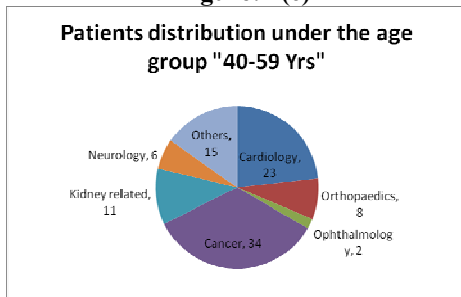


**Figure: 2(b)**

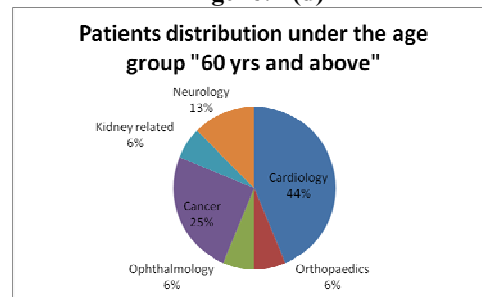




**Figure: 2(c)**

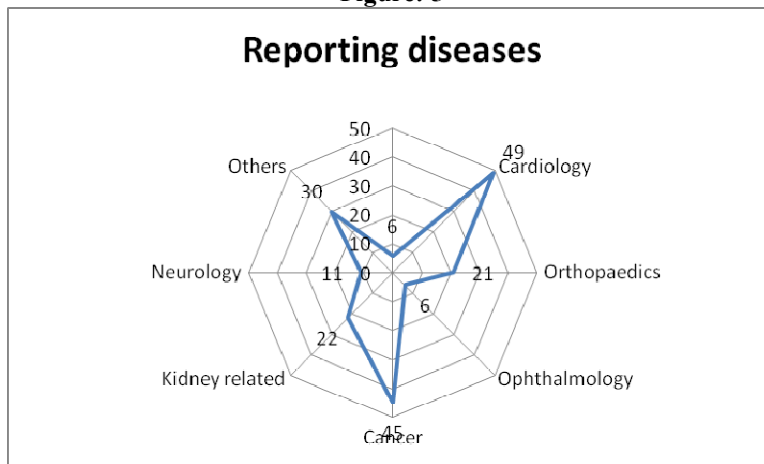


**Figure: 2(d)**

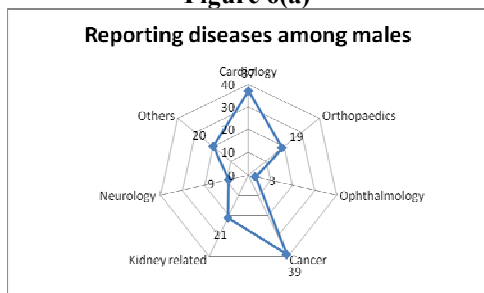


The disease distribution shown in Figure 3 suggests that cardiology and cancer seem to be the diseases for which most of the patients are coming to India. However, a gender-wise reclassification shows that while cardiology is a common disease among both male and female patients, cancer is not that common a disease among female patients. In fact Figure 4(a) and 4(b) show different disease profiles for male and female patients.

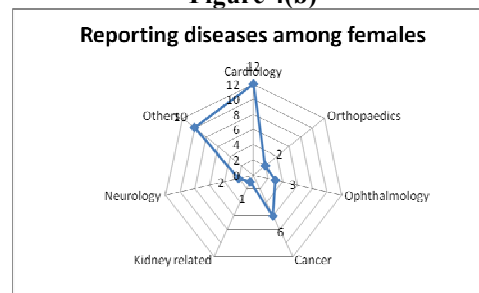
**Figure: 5**



**Figure 6(a)**



**Figure 4(b)**



In Table 5 we analyze the average household income of Bangladesh patients under different age groups and undergoing treatment for different types of diseases. We do not find any common pattern for household income either based on the age of the patient or on the disease category.

**Table 17: Disease and economic characteristics of Bangladesh Patients**

<b>Age (Years Completed)</b>	<b>Type of disease</b>	<b>No of Patients</b>	<b>Avg income (in Bangladesh Taka)</b>
Juvenile Up to 19	Cardiology	12	276833
	Ophthalmology	1	100000
	Kidney related	1	120000
	Others	1	40000
Youth 20-39	Cardiology	6	477333
	Orthopaedics	12	661250
	Ophthalmology	1	150000
	Cancer	7	180000
	Kidney related	9	456667
	Neurology	3	241333
	Others	17	785530
Middle-aged 40-59	Cardiology	22	355818
	Orthopaedics	8	351250
	Ophthalmology	1	480000
	Cancer	33	312697
	Kidney related	11	452182
	Neurology	6	263500
	Others	15	310400
Old 60 yrs and above	Cardiology	7	320514
	Orthopaedics	1	120000
	Ophthalmology	1	300000
	Cancer	3	223333
	Kidney related	1	180000
	Neurology	2	690000
	Others	1	1680000

For example, the average household income is very high (16,80,000 and 7,85,530 respectively) for “youth” and “old” patients who reported to be undergoing treatment for other diseases (“others”), whereas for the same category of disease, the average household income is only 40,000 among juvenile and 3,10,400 among middle-aged patients.

### **5.3 Disease diagnosis and treatment**

Figure 5 reveals that the vast majority of patients got their diagnosis done in their home country. Apparently, the local doctors advised them to go abroad for better treatment in view of insufficient facilities and expertise in the home country.

Not only was the diagnosis done in home country, in many cases we find that the patient knew about the disease diagnosis, but could not come earlier due to lack of resources as revealed in Figure 6. These could be both financial and non-financial. Many non-financial resources may be employed to overcome the different barriers to trade in health services.

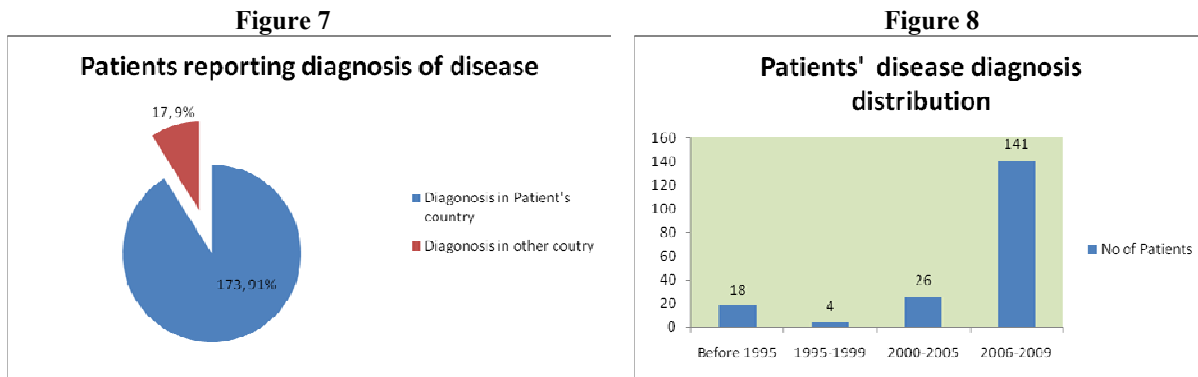
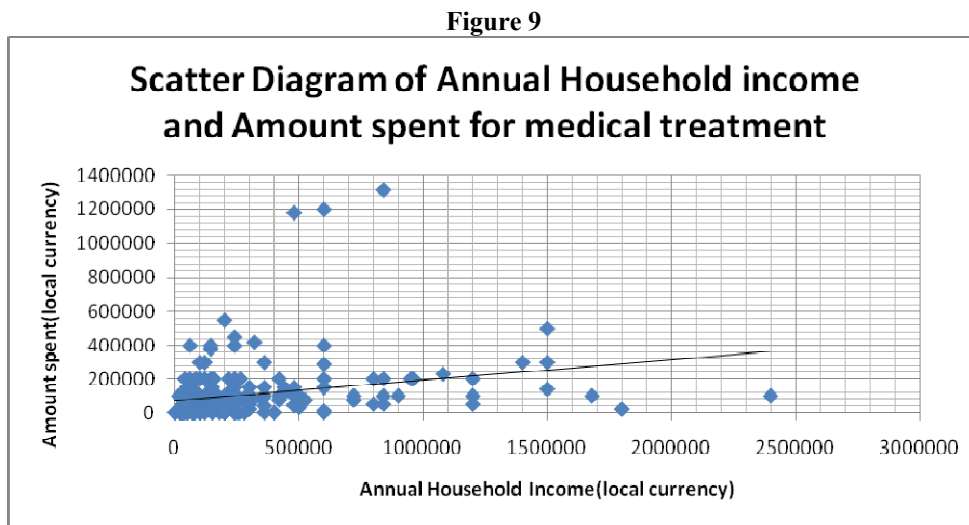


Figure 7 shows that there is positive correlation between the annual household income and the amount spent on medical treatment in India, although the slope of the line of best fit is quite low. This chart is only for Bangladesh patients as the amount spent is in local currency (Bangladesh Taka). The richer patients tend to spend a higher amount on an average.



#### 5.4 Barriers and obstacles

We now analyze the barriers to Mode 2 trade in health services in South Asia. Figure 8 shows that while a clear category of medical visa is available, not all patients come under this category. In fact, as many as 15 per cent of the patients have entered India on tourist

visa perhaps because getting a medical visa is more difficult and time-consuming in their perception i.e. the transaction cost of getting a medical visa is much higher than that of a tourist visa whereas there is no added value for the same.

**Figure 10**

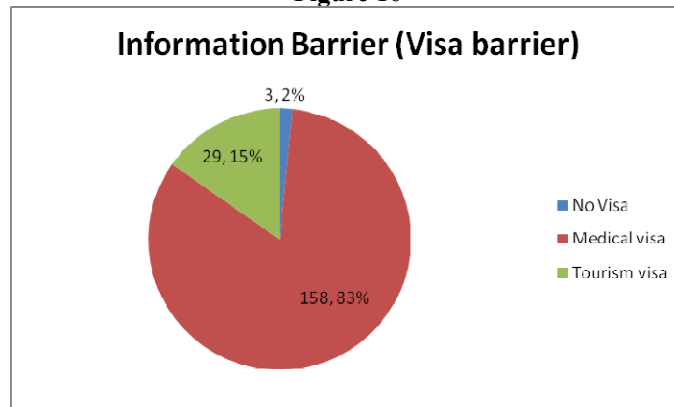
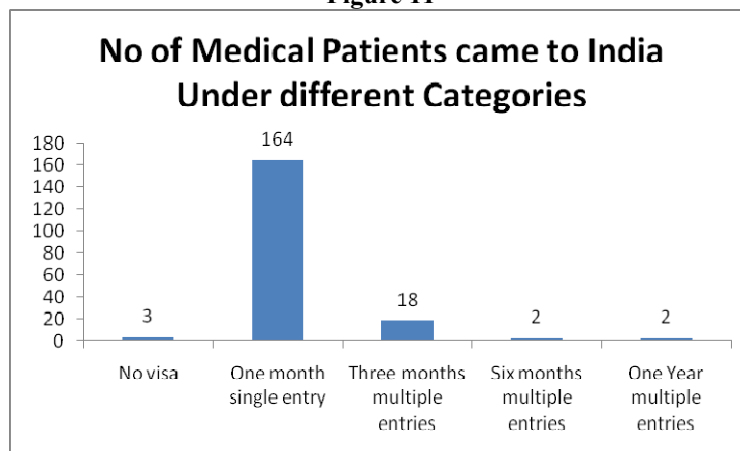


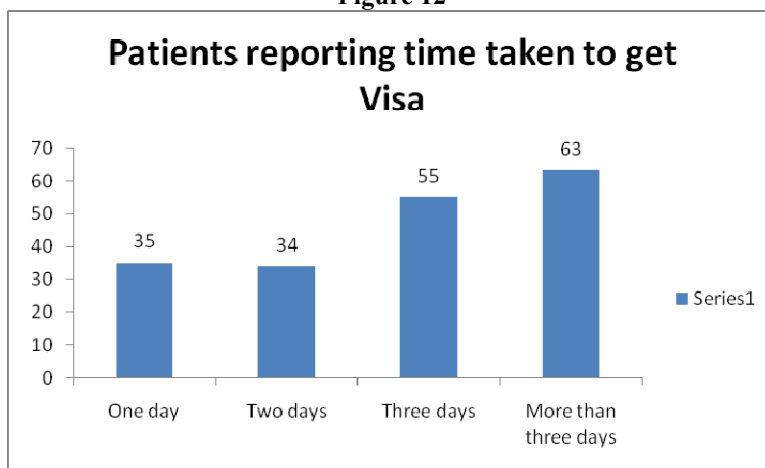
Figure 9 highlights another major barrier in terms of the duration and number of entries permitted by the patient’s visa. Over 85 per cent of the patients have entered India on one month single-entry visa. It is reasonable to assume that the related uncertainty and anxiety would be adding to the cost associated with the patient’s treatment in India.

**Figure 11**



The time and cost incurred to get the Indian visa is reported in Figure 10 and Table 6 respectively. Although some (35) patients got their visa in one day, a large number of the patients (63) reported that it took them more than three days to get the same while another 55 reported to have got their Indian visa in three days.

Figure 12



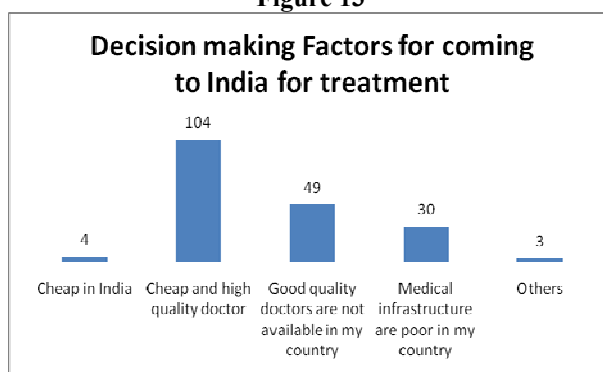
165 patients reported to have paid directly for their Indian visa – an average amount of 201.81 in their respective local currency, while another 22 preferred to use the indirect route – i.e. use the services of a broker or a middleman and spent 430.45 for the visa. This is reported in Table 6.

Table 18  
Patients reporting “Amount spent to get Visa”

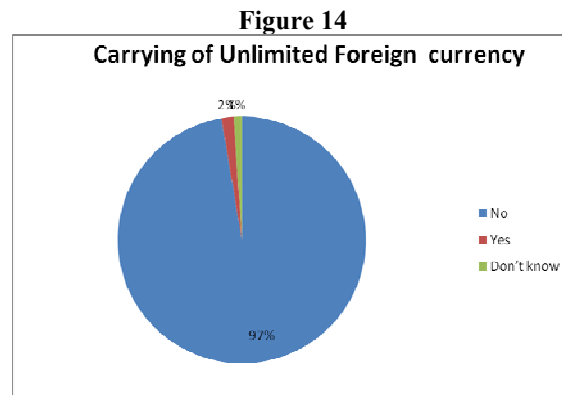
Categories	No of Patients reporting	Total Amount Spent	Average amount per patient
Direct	165	33300	201.81
Indirect	22	9470	430.45

Figure 11 reinforces the reasons for these patients to come to India for their treatment. A vast majority (104 out of 190) patients reported that they came to India because of its inexpensive and high quality doctors – a pull factor – while 49 and 30 reported the absence of good quality doctors and medical infrastructure, respectively, in their home country – a distinctive push factor. The pull factor can also be interpreted to cause welfare gain among the population of patients in the neighbouring South Asian country.

Figure 13



An overwhelming majority (97 per cent) of the patients were not able to carry unlimited amount of foreign exchange from their respective country for medical treatment as reported by the respondents themselves (Figure 12).



However, only 9 per cent of the patients reported to have used the informal route to bring foreign currency to India for their treatment as shown in Figure 13. Apparently, most patients are able to bring all the foreign exchange they need for the treatment through the formal route itself.

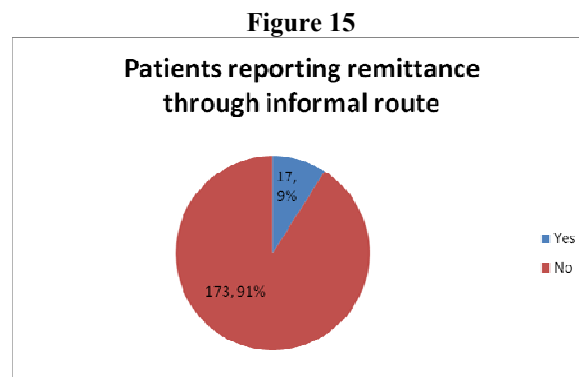


Table 7 shows that the use of informal route for remittance of foreign exchange is more-or-less equally frequent across all household income levels. The higher income households do bring in slightly higher amounts through the informal route on an average. This can also be seen from Table 7.

**Table 19: Remittance through informal route**

Yearly Household Income(in local Currency)	Total No. of patients	No. of patients taken informal route	Amount in remitted informally	Average Bangladesh Taka per Indian Rs. 100
Less than Rs. 5 lakh	141	11	1100000	145.78
Between Rs. 5 lakh and 10 lakh	26	3	485000	146.43
10 lakh and above	15	3	600000	147.71

Figure 14 suggests that there is no particular relationship between the rates at which Indian rupee is bought by the Bangladesh patients and their respective household income. The *Batta* rate might vary depending on other factors and not so much on the household income of the patients.

**Figure 16: The variation of effective *Batta* rate with household income**

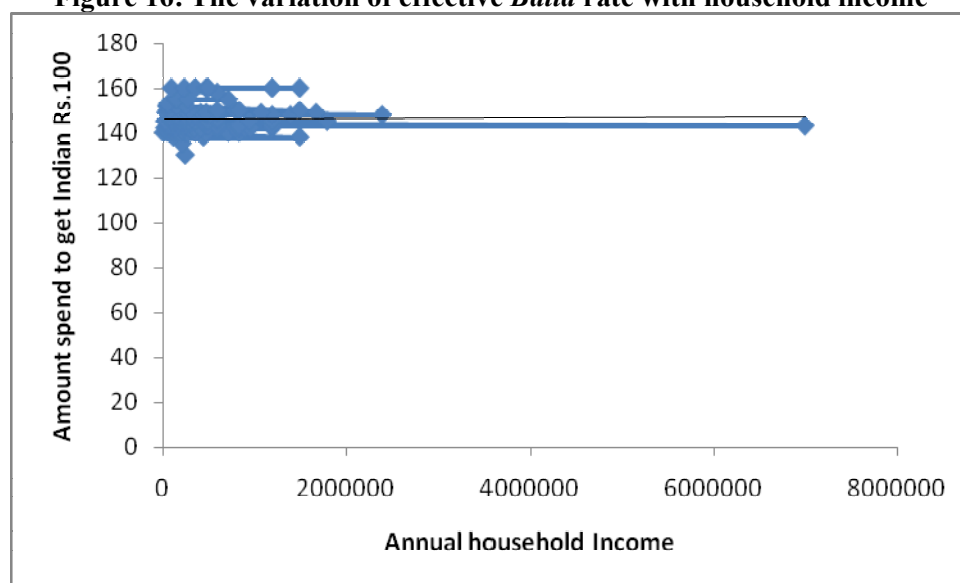


Table 8 shows the mode of travel used by the patients to reach their home country border. Most Bangladesh patients have travelled by road to reach their nearest border implying that they crossed the land border while for patients from most other countries, it has been the air border. The rail route is not much preferred by Bangladeshi patients.

**Table 20: Mode of Travel to reach home country border**

Country	Travel to nearest border	No of patients	Total Cost (in local Currency)	Avg. cost in local currency
Afghanistan	By air	2	NA	NA
Bangladesh	By air	22	55250	2630.95
	By rail	4	1710	427.50
	By road	156	133565	856.19
Bhutan	By road	1	2000	2000.00
Nepal	By air	1	3500	3500.00
	By road	1	300	300.00
Pakistan	By Air	1	NA	NA
Sri Lanka	By Air	2	NA	NA

The next few charts assess the major obstacles to a foreign patient receiving medical services in India on a scale of 1 to 5 (1 – minor obstacle and 5 – major obstacle) as reported by the patients. A vast majority of patients feel that visa is a major obstacle to trade in medical services – the average score is 3.84 on a five point scale of 1 to 5 as seen in Figure 15. The bimodality of the distribution is interesting and suggests that there are two subpopulations within the patient population. For example for patients with contacts it is easy and for patients without contacts it is very difficult to get their Indian visa and so becomes a major obstacle.

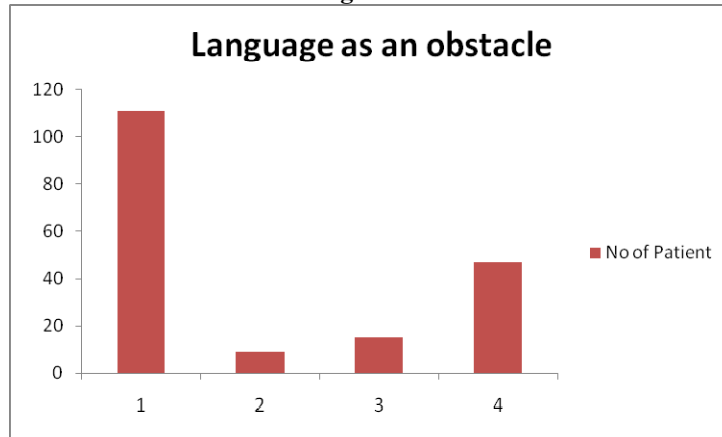
**Figure 17**



Figure 16 suggests that language is not generally viewed as a major obstacle. On the other hand about 48 patients felt that language was a somewhat major obstacle (score 4) and the average score works out to 2.15.

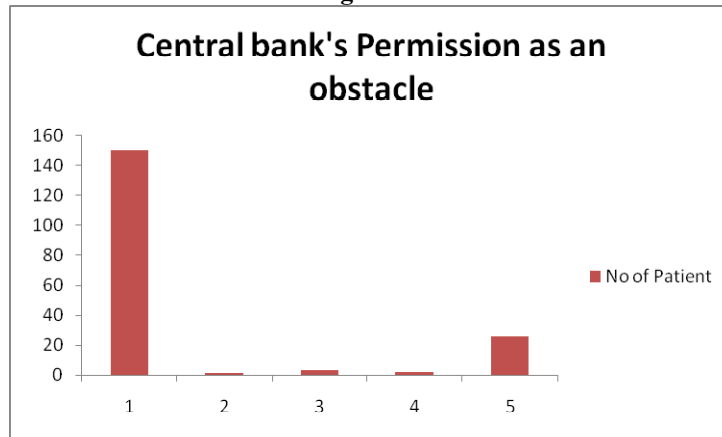


**Figure 18**



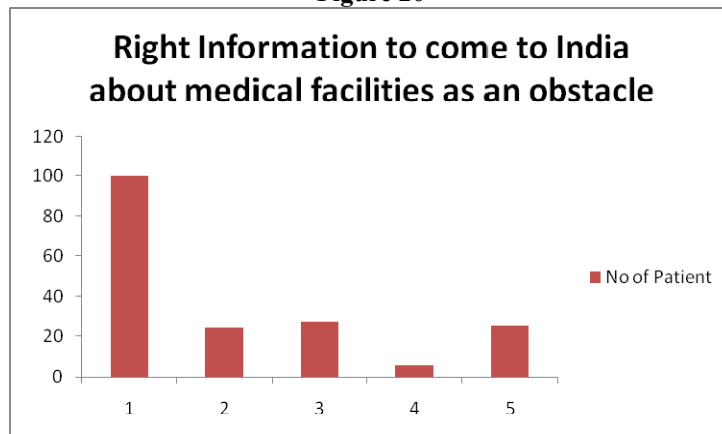
Permission of the central bank for remitting foreign exchange is not perceived to be a major obstacle and the average score for this works out to just 1.57 from Figure 17.

**Figure 19**

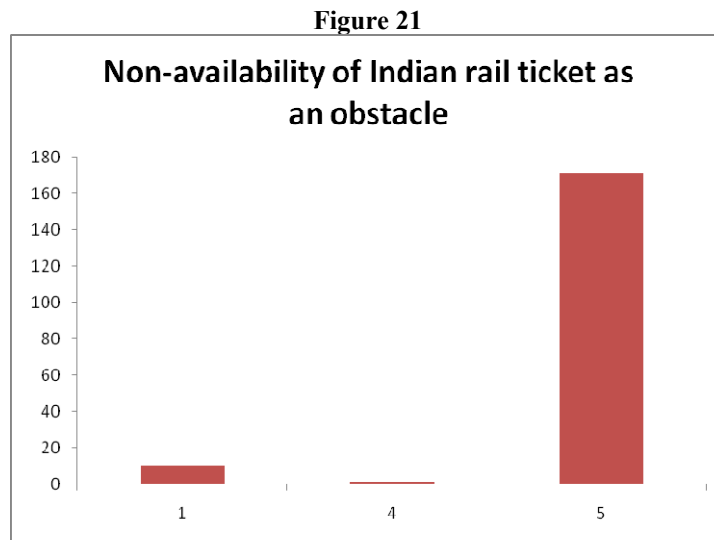


According to Figure 18, the absence of right information regarding medical facilities in India and the details regarding the processes and the treatments is seen as a serious obstacle by many patients. The average score on this count works out to 1.99.

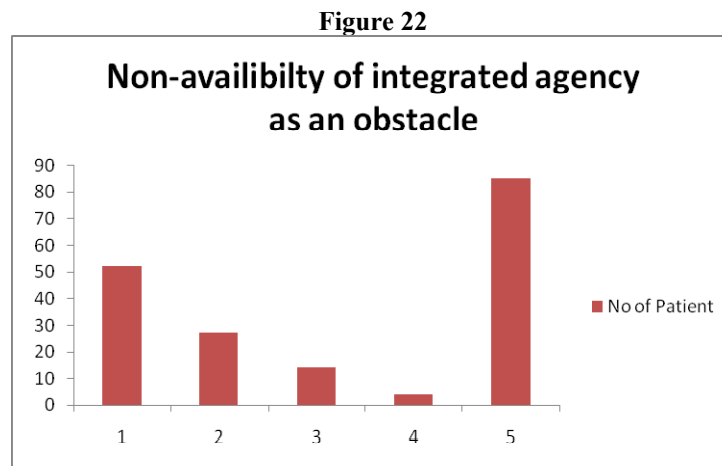
**Figure 20**



Non-availability of Indian rail ticket in the patient’s home country is given a score of 5 on a five-point scale by 172 patients as shown in Figure 19. This raises the average score to 4.77.



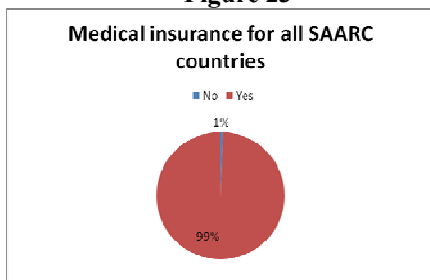
An integrated agency to streamline trade in health services and handle all aspects of a foreign patient’s availing of health services in India is felt lacking by many patients. In fact many of them have felt the lack of such an integrated agency as an obstacle and the average score is 3.10 computed from the distribution shown in Figure 20.



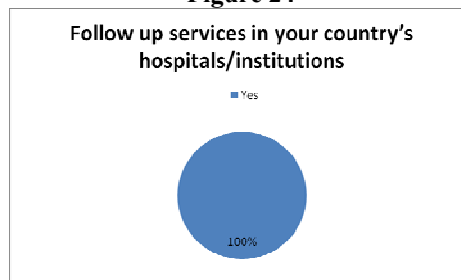
### 5.5 Suggestions and perceptions

Almost all the patients have responded very favourably to some of the suggestions made to them as shown in Figures 21 to 24. As many as 99 per cent agree that common medical insurance should be available for treatment in any SAARC country, while 100 per cent of them feel that hospitals should offer comprehensive packages.

**Figure 23**

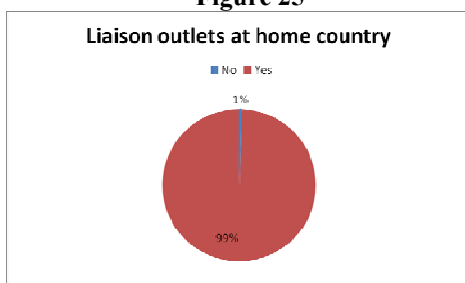


**Figure 24**



Similarly, 99 per cent of the patients feel that Indian hospitals should establish liaison outlets in their home country as well arrange to provide follow-up services in hospitals and/or institutions of the patient's home country.

**Figure 25**



**Figure 26**

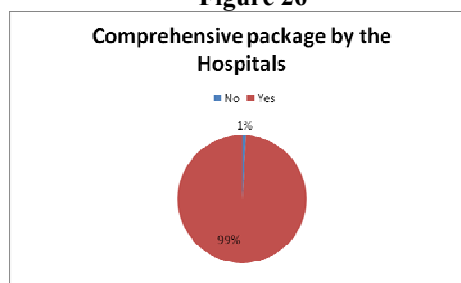


Figure 25 present the opinion of the respondent patients on different aspects of trade in health services including various barriers to such trade. An overwhelming majority of 96.8 per cent patients are happy with the medical treatment but feel the barriers are unnecessary. Surprisingly as many as 73.2 per cent have no particular view on current account convertibility and only 24.2 per cent feel that their country should have it. 77.9 per cent feel that doctors should be able to move freely to another country to offer their services while another 73.7 per cent feel that there should be standardization of skill among medical personnel to help their movement across countries. Seventy per cent patients feel that there should be dual taxation treaty to help medical professionals and another 76.8 per cent have expressed the view that if their country removed the barriers to trade in health services, there will be more welfare gains.

Figure 27



Figure 26 presents some more perceptions of the patient respondents. According to 77.9 per cent of the respondents, visa issues are complicated. About 40 per cent patients reported that they have been cheated by the informal foreign exchange traders while only 19.5 per cent reported not being cheated by them. A clear eighty per cent of the patients have opined that their medical insurance policy should be valid across all SAARC countries. 64.7 per cent patients feel that the airfare is too high and 93.7 per cent stated that access to medical services is needed for all citizens of South Asian nations.

Figure 28

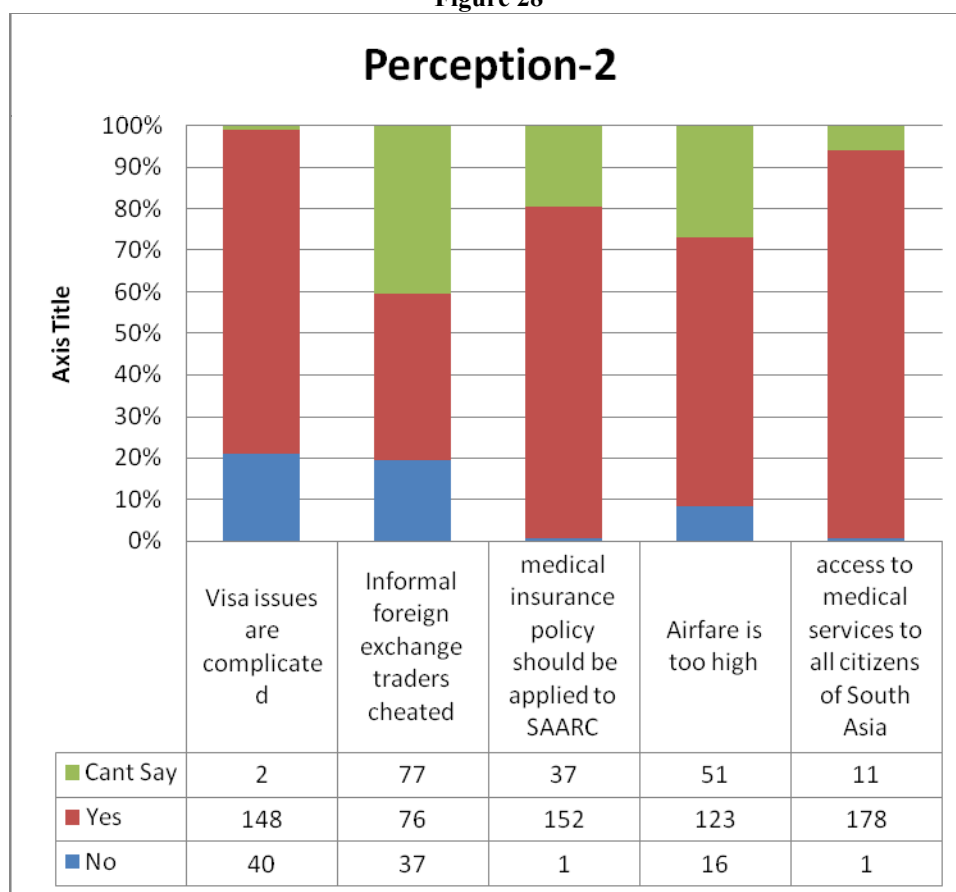


Table 9 summarises the charges of different medical services and also the average actual payments made by them, including any discount received by the patients. All the patients made the payments by cash. The unit prices vary across a wide range and by and large the actual payments are close to the unit prices.

**Table 21**  
**Charges for getting medical services**

<b>Sr. No</b>	<b>Service</b>	<b>Average Unit Price</b>	<b>Average actual payment Including test (Rs.)</b>	<b>Average Discount if any</b>	<b>Payment mode</b>
1	High risk open heart surgery	255200	255200		Cash
2	Balloon heart Surgery	79800	79800		Cash
3	Bypass Surgery(Avg.)	149478	149478	27321	Cash
4	Angiography	10000	10000		Cash
5	Double valve change	255000	255000	25000	Cash
6	Tga operation	180000	180000		Cash
7	Open heart surgery and Angiogram	180000	180000		Cash
8	Cataract Operation	15600	15600		Cash
9	Kidney stone operation	45000	45000		Cash
10	Kidney Transplant	215000	235000		Cash
11	Operation of spinal cord	35000	59250		Cash
12	Plate setting operation	80000	80750		Cash
13	Package operation for bone marrow	200000	200000		Cash
14	Ultrasound Operation	54000	54000		Cash
15	Elbow operation	35000	35000		Cash
16	Appendix Operation	30000	30000		Cash
17	Operation fees(neuro)	75000	115000		Cash
18	Plate setting operation	80000	80750		Cash
19	Other orthopaedic operation	69000	69000		Cash
20	Chemotherapy	25000	40167		Cash
21	Cancer related Tests (CT scan,MRI, X ray, Blood test, Biopsy etc. avg)	14977	14977		Cash
22	Asthma test	10000	10000		Cash
23	Bone marrow transplant	2000000	2000000		Cash
24	Skin allergy test	2000	2300		Cash
25	CT Scan	9000	9000		Cash
26	MRI	6500	6500		Cash
27	Doctor's fee(avg)	400	400		Cash

## 5.6 Hospitals

Table 10 captures different aspects of medical services offered by our sample of Indian hospitals to foreign patients. We have tabulated the information using the WTO classification of trade in services.

**Table 22**  
**Mode 1, Mode 2 and Mode 4 services from hospitals**

City	Name	Mode 1		Mode 2		Mode 4	
		Countries offered tele-medicine services*	No of cases (tele-medicine) during last two years	South Asian Patient coming from	No of patients during last two years	Countries visited by your hospital doctors to offer professional services	No of doctors from SAARC countries that visited your hospital in last two yrs
Bangalore	Manipal Health System	none	0	Bd, Bh, Np, SL	300	none	0
	Narayana Hrudayalaya	Bd, Bh, Np, SL	3000	Bd, Bh, Np, SL	3000	Bd, Bh, Pk	30
	Sri.Jayadeva Institute of Cardiology	none	0	Bd, Np, SL	200	none	0
Chennai	Apollo Hospitals	Bd, MI, Np, SL	10000-12000	Bd, Bh, MI, Np, Pk, SL, Af	2500	Bd, MI, SL	25
	Chetnad Health City	none	0	Bd, SL	100	none	0
	Christian Medical College	none	0	Bd, Bh, MI, Np, Pk, SL, Af	10000	none	0
	Global Hospitals & Health City	Bd	300	Bd, MI, SL	100	none	0
	Lifeline Multispeciality Hospital	none	0	Bd, MI, Np, SL	86	MI, SL	10
	MIOT	none	0	Bd, MI, Np, SL, Af	300	none	0
	Sri Ramchandra Medical Centre	Bd, Bh, MI, Np, Pk, SL, Af	700	Bd, Bh, MI, Np, Pk, SL, Af	200	SL	15
Delhi	All India Institute For Medical Sciences	none	0	Bd, Bh, Np, Pk, Af	2000	Bd, Bh, MI, Np	50
	Apollo Hospitals Delhi	Bd, Np, Pk, Af	0	Bd, Bh, Np, Pk, Af	1000	none	0
	Escorts Heart Institute & Research Centre	none	0	Bd, Pk, Af	500	none	0
	Jaipur Golden Hospital	none	0	Bd, Pk, Af	100	none	0
	Rajiv Gandhi Cancer Institute and Research	none	0	Bd, Bh, Np, Pk, Af	800	none	0
Kolkata	Kothari Medical	none	0	Bd		Bd	50
	Peerless Hospital & B.K.Roy Research	none	0	Bd, Bh, Np	600	none	0
	Rabindranath Tagore International Institute	Bd	12000	Bd, Bh, Np	3000	none	0
	Ruby General Hospital Ltd.	none	0	Bd, Bh, Np	1500	none	0
Mumbai	Tata Memorial Hospital	none	0	Bd, MI, Np, Pk, SL, Af	1200	none	0

\* Bd – Bangladesh; Bh – Bhutan; MI – Maldives; Np – Nepal; Pk – Pakistan; SL – Sri Lanka; Af - Afghanistan

All the twenty hospitals surveyed reported receiving patients from some SAARC country or the other. South Indian hospitals from Bangalore and Chennai are more active in offering telemedicine services. Only six of the twenty hospitals reported that their doctors go to some neighbouring country to render professional services and one each has stated that their doctors have gone to only Bangladesh or only Sri Lanka. Similarly only six hospitals reported that any doctor from another SAARC country visited them over the last two years. Mode 3 services are relatively fewer and could not be captured through the questionnaires administered to the Indian hospitals.

### 5.7 Doctors

The questionnaire for doctors was administered to 65 doctors and some of the information is presented in Table 11. The information given by doctors corroborates the information gathered from the patients that a very large number of the patients come from Bangladesh. In our sample we found that Sri Lanka sent the second highest number of patients, followed by Nepal from within the SAARC. But overall, a large number of patients also come from the gulf countries.

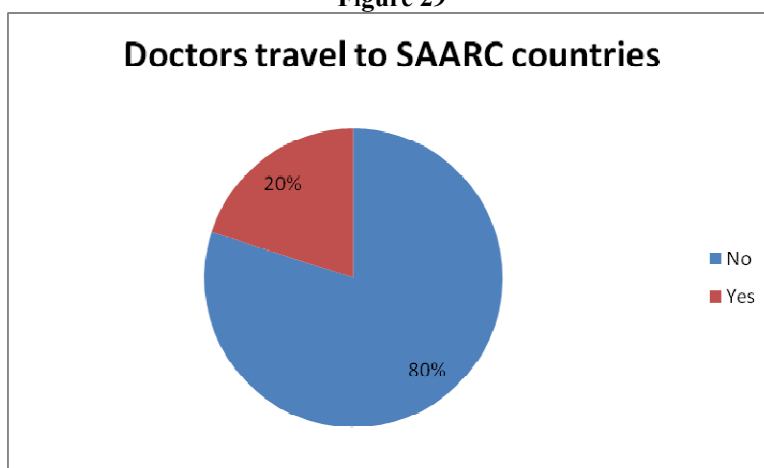
**Table 23**  
**No of patients treated in last five months (before 01-Jun-2009)**

Month	Total No of patients	Country of origin										
		Bangladesh	Pakistan	Nepal	Afghanistan	Maldives	Sri Lanka	Bhutan	US	EU	Gulf	Others
January	524	274	11	26	19	8	42	12	7	8	59	58
February	441	188	16	26	16	13	45	10	6	6	41	74
March	538	279	11	19	18	7	37	9	9	7	48	94
April	477	264	14	27	12	7	23	7	8	6	54	55
May	490	290	6	12	11	7	32	3	3	9	38	79
<b>Total</b>	<b>2470</b>	<b>1295</b>	<b>58</b>	<b>110</b>	<b>76</b>	<b>42</b>	<b>179</b>	<b>41</b>	<b>33</b>	<b>36</b>	<b>240</b>	<b>360</b>

Figure 27 reveals that only 20 per cent of the doctors surveyed travel to SAARC countries to treat patients. This percentage is still fairly high considering that Mode 4 services trade is perhaps the most restrictive among all the four modes. The break-up in terms of which neighbouring countries do these 13 (out of 65 surveyed) travel to is shown in Table 12.



Figure 29



Out of 13 doctors that reported to have travelled to a neighbouring country to offer medical services, 10 of them reported to have travelled to Bangladesh. None of the doctors reported to have travelled to Pakistan or Afghanistan.

Table 24  
Neighbouring countries visited by doctors to render medical services

Countries travelled	No of Doctors
No countries	52
Bangladesh	10
Bhutan	4
Maldives	5
Nepal	6
Pakistan	0
Sri Lanka	4
Afghanistan	0

The doctors were asked to rate on a ten-point scale how important each of the five given possible reasons was in their decision not to move to SAARC countries. Figures 28 through 32 capture the responses of the 65 doctors.

Security environment comes out as a strong demotivating reason in Figure 28. The mean score is 7.43 out of a possible 10. Figure 29 conveys that the attractiveness of the Indian market is reason enough for some doctors not to move to SAARC countries. The average score is 9.00.

Figure 30

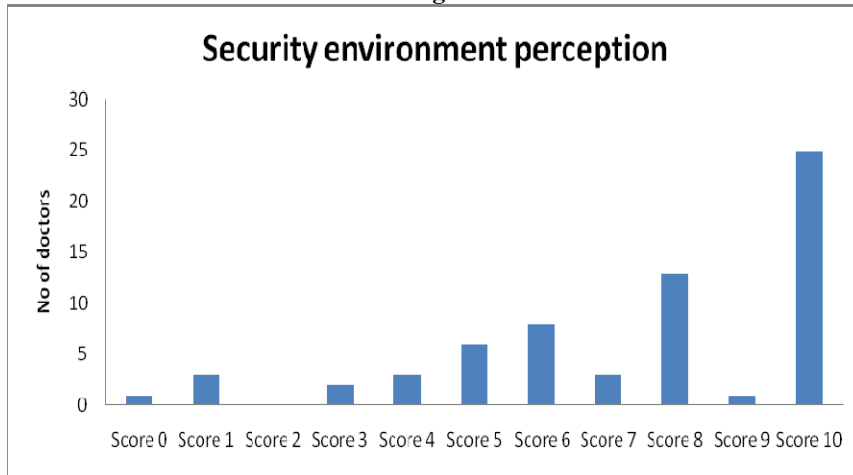
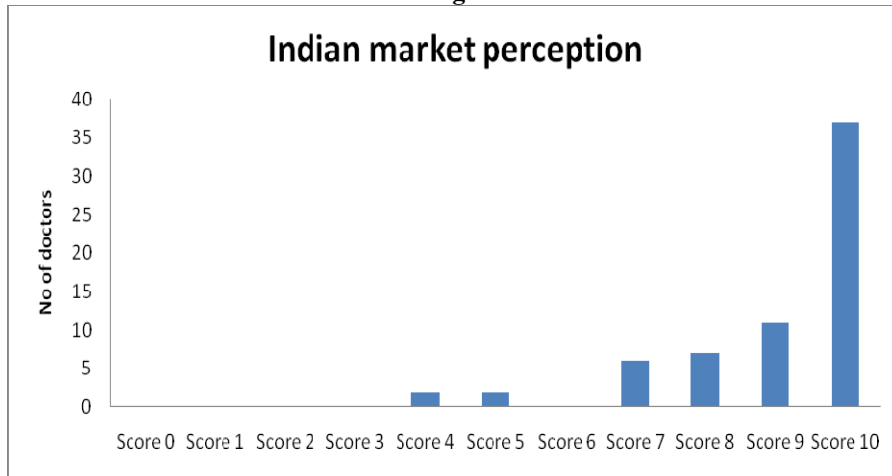


Figure 31



The hassles of getting an employment permit does not appear to be a strong enough reason as the average score is 6.98 as shown in the distribution captured in Figure 30. Similarly, complicated visa process also does not appear to be a strong reason to dissuade travel to other SAARC countries because the average score on this count is only 4.29 computed from the distribution shown in Figure 31. Finally income tax policies and complications thereon are not perceived to be a strong reason by the doctors. They have awarded an average score of only 3.86 to this reason.

Figure 32



Figure 33

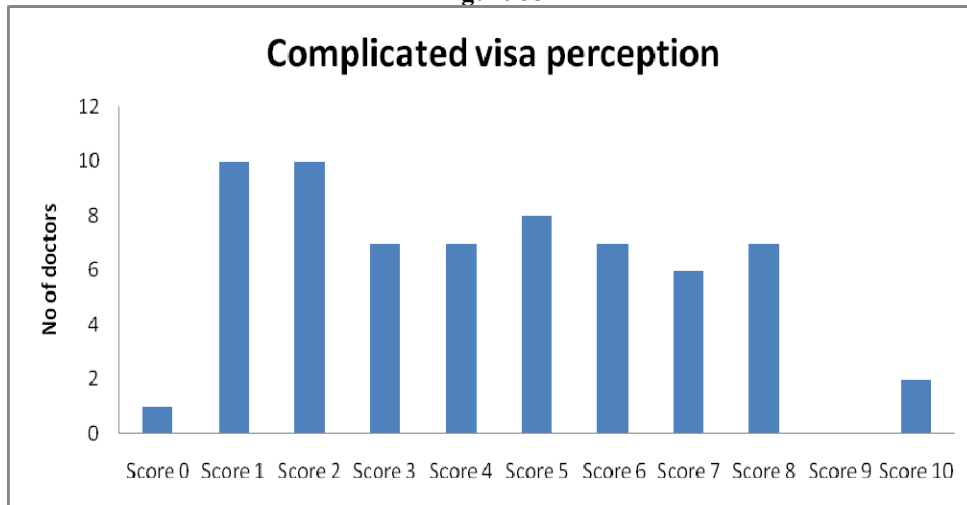
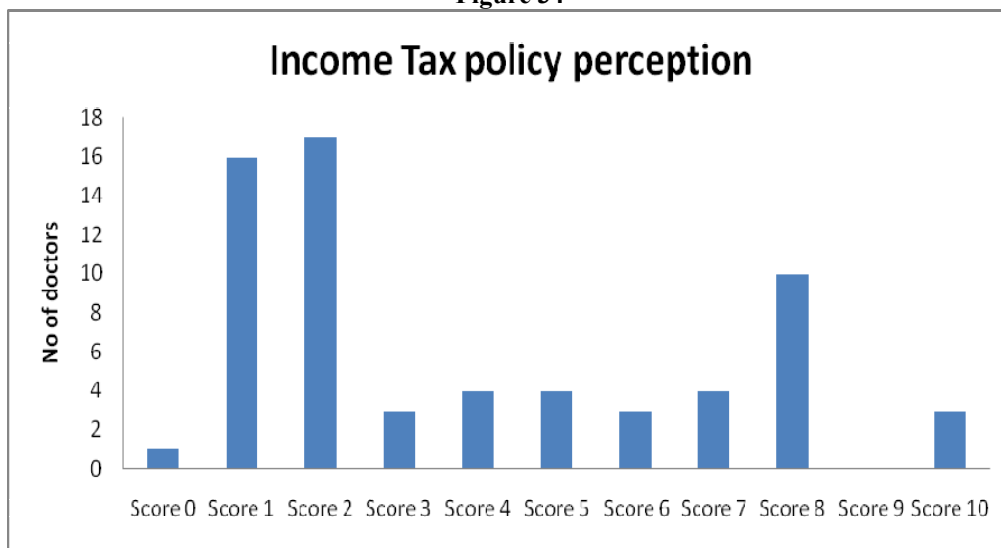


Figure 34



## **6.0 Case Study on Bangladesh**

### **6.1 Introduction**

Although, expansion of trade and investment is a common goal of the South Asian Regional Cooperation (SAARC) bloc unfortunately, it is lagging behind in regional cooperation in trade and investment in health services. Cooperation among the member countries of SAARC is stressed for strengthening and creating competitiveness and specialization among the South Asian Countries (SAARC, Secretariat, 2008). Out of eight countries of the SAARC region (Countries are: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka), six are members (excluding Bhutan and Afghanistan) of the World Trade Organization (WTO). Among the countries under SAARC region, Bangladesh is a net importer of health services.

With an overview of the health service sector of Bangladesh this case study focuses on health service trade in Bangladesh and possible regional cooperation to enhance health service trading in the SAARC region. It also examines the rules of the GATS and focuses on the pattern of trade in health services in Bangladesh. This case makes an effort to examine the barriers and opportunities in health service trade for Bangladesh under the four modes.

### **6.2 Methodology**

This study used a multi-method design (Waitzkin et al., 2005) which involved data collection from three sources: (a) Research and literature on trade, public health and health services such as, professional journals, newspapers, government documents, corporate records, international organizations and from the internet; (2) Interviews conducted with people involved in the private hospitals (e.g. hospital administrators) and telemedicine service providers, officials from trade ministry, persons from the professional organizations (e. g. Medical Association) and (3) Interview (Checklist) conducted with health service consumers who received services from local hospitals (private and government) and foreign hospitals (patients received services from Indian hospitals).

Key informant interviews were conducted in person with semi-structured protocol, designed to elicit responses concerning causes and problems of employing foreign

doctors in Bangladesh by the health service providers and prospects and barriers to trade in health service in Bangladesh under four modes of GATS. Total 4 administrators from 4 private hospitals (hospital A, B, C, D), which employ foreign doctors and nurses, were interviewed as key informants to gather information about the present situation of the foreign doctors and nurses working in these hospitals and their opinions about the causes of employing foreign doctors and nurses and problems associated with their employment.

It is understood that an analysis of the perception of the patients would provide significant information regarding causes behind the pattern of health service trade at the regional and country levels. To examine the barriers in trade in health services in Bangladesh and South Asia as a whole, patients' perceptions about health services in Bangladesh hospital and foreign countries were examined and compared. Total 81 patients were selected who received health services from various hospitals (30 patients, who received services from private hospitals; 28 patients who received services from government hospitals and 23 patients who took services from Indian Hospitals).

Patients were interviewed with a multi-response check list containing total 17 questions. Sample size of the study was derived through snowball sampling method. In this study, snowball sampling technique is considered as most appropriate method; as it was impossible to locate the respondents without getting information from any source. For this reason, an initial small group of respondents was selected first with random method, and after being interviewed, these respondents were asked to identify others who belong to the target population of interest. Subsequent respondents were selected on the basis of referrals (Malhotra, 2008). This study used Mean Score of Relative Importance (MSRI) technique, a simple statistical method to analyze data. The data were coded as BD\_Govt\_MSRI for Government hospitals, BD\_Private\_MSRI for Private Hospitals in Bangladesh, and INDIA\_MSRI for Indian Hospitals.

The respondents were asked to rank each possible answer with a score from 1-17. These answers were then tabulated and analyzed with Mean Score of Relative Importance (MSRI) statistical method to assess the variations in the importance of the factors that were mentioned by the respondents who received services from private and government hospitals in Bangladesh and also from Indian hospitals. It is understood that the variations in the relative importance score would help to assess the underlying causes of consuming health services in India by the Bangladeshi patients.

The case study further attempt to examine the nature of barriers to trade in health services, based on available qualitative evidence and administering checklist interview. It also tries to see current perception on optimal regulatory policy in health service sector and examines the links between domestic regulation and trade in Bangladesh.

### **6.3 Overview of health service in Bangladesh**

Bangladesh is administratively divided into 6 divisions, 64 districts, 507 upazilas (sub-districts), 4,484 unions and 87,319 villages. In the public sector, the largest health service provider of the country is the Ministry of Health & Family Welfare (MOH&FW). The MOH&FW has established a country wide network of physical and organizational infrastructure to plan, manage and deliver public health and family planning services. The macro level health policy and planning are prepared by this ministry. There are also two major implementation wings under the MOH&FW-the Directorate General of Health Services (DGHS) and the Directorate General of Family Planning (DGFP).The types of public health service facilities provided by these organizations are mentioned in table 4. The service providers in this respect include teaching hospitals, district hospitals, upazilla health complexes, union health and family welfare centre and community clinics serving a huge number of population of the country (Table: 13).

The DGHS registered 1005 private clinics and hospitals in 2005 (DGHS, 2009, <http://www.dghs.gov.bd/>). The number of medical colleges, dental colleges and institutes of health technologies in private sector were 34, 10 and 39 respectively in 2008 (DGHS, 2009, <http://www.dghs.gov.bd/>). A large number of people avail private health services in the country, as public health services are backward and not reliable in many respects. Table 5 depicts the list of key public and private health care providers of the country. Besides public and private health service providers, there are quite a few non-government (NGO) hospitals and clinics operating in the country (Table: 14). Table 15 depicts the pattern of health workforces available in the country.

The total per capita expenditure on health as percent of GDP is quite low in the country and private health sector spending is high in comparison to the public sector (Table: 16). It should be noted that the private hospitals represent a small portion of the hospital capacity of the country.

**Table: 13 Types of health service facilities in Bangladesh**

Level of Care	Administrative Unit	Health facility	Population Coverage
Tertiary Referral Level	Division (6) or District	Teaching Hospitals/Institutes (19) :250-1050 beds each	10-15 million Population
Second Referral Level	District (64)	District Hospitals (59): 50-150 beds each	1-2 million
First Referral Level	Upazila (507) Urban upazilas do not have UHC	Upazila Health Complexes-UHC (399): 31 beds each	200,000-450,000
First Level Health Facility	Union (4484) UH&FWCs are not established in 397 unions where UHCs exist	Union Health and Family Welfare Centre- UH&FWC (3200)	21,000
First Contact with Health services/health providers	Ward (13,209)	Community Clinics-CC (18,500) each with One Family Welfare Assistant (FWA ) and One Health Assistant (HA)	6,000
	Village ( 87,319)	Trained Birth Attendants (TBA) and Village Health Volunteers	1,000-1,500

Source: Bangladesh Health Bulletin 2001, Directorate General of Health Services of Government of Bangladesh.

**Table: 14 Key Healthcare Providers in Bangladesh**

Government of Bangladesh	Private	NGO's
University and Medical College Hospitals	Private Clinics and Hospitals	NGO Hospitals
District Hospitals	Private Practitioners	NGO Clinics
Upazila (small administrative unit) Health Complex	Traditional Providers	
Union Health and Family Welfare Center	Homeopathic Providers	
Community Clinics	Unqualified providers	
Specialized Hospitals	Drug Retail Outlets	
Other Facilities	Retail Sale of Other Medical Goods	
Health Facilities in other Ministries and Autonomous Corporations		

Source: The World Bank, 2005

**Table: 15 Workforces in the health service sector in Bangladesh**

<b>Number of Workforce</b>	<b>Total</b>
Total number of Registered Doctors	47,259
Estimated total number of doctors now available in the country	38,537
(a) Percentage of Doctors working under the MOHFW	35%
(b) Percentage of doctors working under other Ministries (Home, Police, Railway, Civil Aviation, LGED, Social Welfare and labor).	3%
Percentage of doctors working under the private sector	62%
Total number of Medical Officers (MCHFP) under the Family Planning Directorate	540
Total number of registered nurses in the country	22,803
Estimated total number of nurses currently available	15,023
Total number of Dental Surgeons	2,995
Total Number of Family Planning Officer (TFPO)	546
Total Number of Assistant Family Planning Officer (ATFPO)	339
Total number of registered medical technologists produced up to 2002	
(a) Sanitary Inspector	952
(b) Dentists	454
(c) Laboratories Technicians	2220
(d) Pharmacists	7622
(e) Radiographers	1054
(f) Physical Therapists	139
Number of Medical Assistants	5598
Total Number of Health Assistants (HA) (Sanctioned)	21016
Total Number of Assistant Health Inspector (Sanctioned)	4202
Number of Family Welfare visitors	5248
Number of Health Inspectors	1401
Number of Family Planning Inspector	4110
Total number of Family Welfare Assistants (in position)	22350

Source: Human Resources Development (HRD) Unit, Ministry of Health and Family Welfare,  
www.mohfwbdgov.org



Bangladesh's health system is dominated by public sector, in terms of health services infrastructure consisting essentially of hospitals. Various economic factors, such as the distribution of income, wealth, distribution and consumption processes, production, employment and living condition, significantly manipulate the health of the population. Many health policies and programs are doomed to fail due to the lack of resources (Perkins and Roemer, 1991). Due to scarce resources, there exist large differences in the access to health care between rich and poor of the poor countries such as Bangladesh (Hjortsberg and Mwikisa, 2002). The people of the country must resort either to the government-paid sector of the health care system that is often badly equipped and performs poorly in term of quality of care or to the private healers who provide health services at higher price and sometimes with questionable quality.

There are also other reasons for the backwardness of the public hospitals. These are for example, lack of empathy, uncaring and casual conduct, and aggressive pursuit of monetary gains, poor competence etc. of the service providers. All these failures play a dominant role in shaping patient's negative attitudes and dissatisfaction with health care service providers and health care itself (Andaleeb et al., 2007). Besides, economic and socio-cultural factors affect the health policy environment of the country. These factors also influence the socio-political behavior of the people and the flow of resources for health development of health sector (Johansson et al., 2001).

**Table: 16 Selected indicators of health financing in Bangladesh, 2003**

Indicators	Value
Total expenditure on health as percent of GDP	3.2 %
Total per capita spending in average exchange rate US \$	12.0 %
Public health spending as percent of total	44.2%
Public health spending as percent of government budget	8.7 %
External resources as percent of total public health expenditure	13.3 %
Private health spending as percent of total	55.88 %
Out of pocket expenses as percent of total private spending	9.3%

Source: World Bank, 2005

**Table: 17 Suggested norms for health personnel in Bangladesh**

Category of personnel	Norms suggested
Doctors	1 Per 3500 Population
Nurses	1 Per 5000 Population
Health (Worker (Male and female)	1 Per 5000 Population in plain area and 3000 population in tribal and hilly areas
Trained Dai (Midwives)	One for each village
Pharmacists	1 Per 10,000 Population
Laboratory Technician	1 Per 10,000 Population

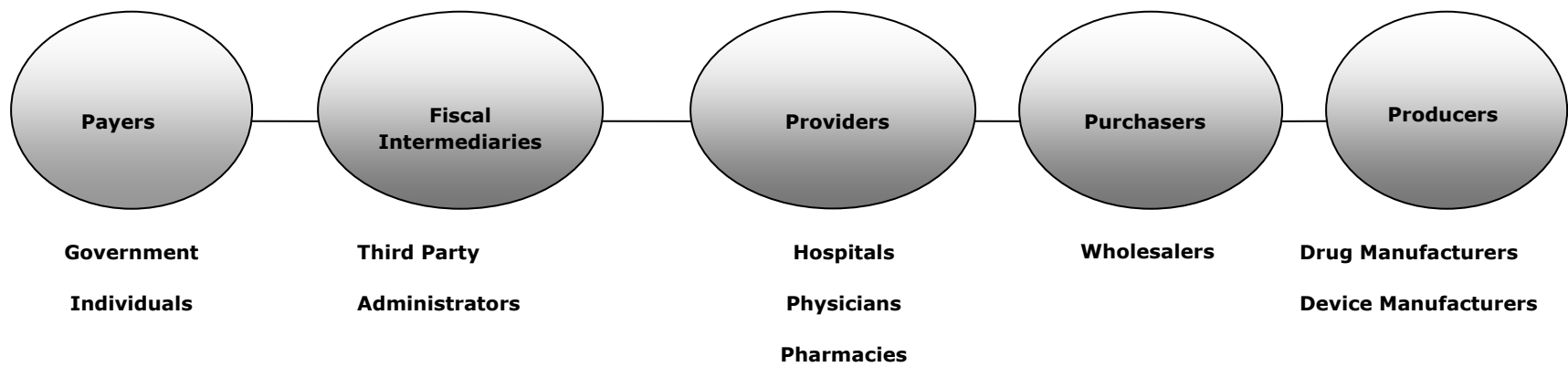
Source: Human Resources Development (HRD) Unit, Ministry of Health and Family Welfare, [www.mohfwbdgov.org](http://www.mohfwbdgov.org)

Like many other developing countries, the public health sector of Bangladesh is plagued by irregular demand and perceptions of poor quality. One study observed that the overall public health care services has been declining between 1999 and 2003, while the rate of utilization of private health care facilities for the same period has been increasing (Andaleeb et al., 2007). Another recent study demonstrates that the overall utilization rate for public health care services of the country is as low as 30 percent (Ricardo et al., 2004).

The health care system of Bangladesh is dominated by the public sector, in terms of both the health services infrastructure, consisting essentially of hospitals, and financing. About 90 percent of beds are found in public health facilities throughout the country (MoH&FW, 2005). The density of human resources for health under SARRC region in different years is also quite low in Bangladesh and it is much low for Bangladesh ( WHO 2006). Total number of hospital beds in Bangladesh was 43,293 in 1999, which has increased to 51, 684 in 2005. In 2005, 3.43 beds per 10,000 populations were available (U. N. no date).

The value chain of health care system of the country is a typical reflection of the underdeveloped country. Figure 13 also shows the health care value chain of Bangladesh which is actually a strappingly connected system among payers, fiscal intermediaries, service providers, purchasers and producers. It may be observed that governmental authorities or people play the role of the payers, producers are drug/device manufacturers, wholesalers are purchasers, hospitals are service providers and third party administrators

are considered as fiscal intermediaries. This is a typical value chain system of the underdeveloped countries for example, Bangladesh, India, and Pakistan.



**Fig: 33 Health Care Value Chain in Bangladesh (Adapted from Burns et al., 2002)**

#### 6.4 Trade in Health Services in Bangladesh

The service sector is the largest contributor to Bangladesh's real GDP growth. This sector grew by 6.47 during the year 2005-2006 compared to 6.36 per cent in 2004-2005 and contributed 49.22 per cent to GDP growth<sup>7</sup> An analysis of the real growth in GDP achieved in Fiscal Year (FY) 2008 reveals that service sector contributed 51.2 per cent of the incremental GDP, while industry and agriculture sectors contributed 31.5 per cent and 12.0 percent respectively (CPD, 2008). All sub-sectors of Bangladesh shared in the overall growth of the services sector activities, but relatively higher growth rates were registered in education (7.98 per cent), transport, storage and communication (8.25 per cent), hotels and restaurant (7.45 per cent), financial services (7.12 per cent), public administration and defense (8.21 per cent), wholesale and retail trade (7.26 per cent) and health and social work (7.17 per cent) <sup>8</sup>

Trade in health services of Bangladesh, more specifically Bangladesh's import of health services, constitutes an important segment in total bilateral trade between Bangladesh and neighboring countries (Rahman, *op cit*). The available health services data on payments and receipts collected by the Bangladesh Bank in different years show that receipts were low in most of the years and net medical services show negative figures for Fiscal Year (FY) 2003-2007 (Table: 18 and also see A-10). Strikingly, FY 2009 depicts a positive balance (net medical services) and this provides a positive indication of the growth in health trade for the year (Table: 18).

A large number of Bangladeshi patients are going to foreign hospitals, despite the financial costs and the cumbersome process involved in visas, obtaining foreign exchange, arranging transportation, accommodation, food and locating right health service providers (Rahman, *op cit*). From neighbouring countries perspectives (e. g. India) Bangladesh is a country with high service seeking potential. Bangladesh mainly

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<sup>7</sup> [www.epb.gov.bd](http://www.epb.gov.bd)

<sup>8</sup> [http://www.epb.gov.bd/bangladesh\\_country\\_profile.html](http://www.epb.gov.bd/bangladesh_country_profile.html)

imports health services from foreign countries. A large number of Bangladeshi patient seek medical services in foreign countries such as India, Thailand and Singapore.

A study has observed that about 500 million taka (71.2 million US \$) is spent by the Bangladeshi patients each year to avail treatment in foreign hospitals (IHE, 2002). Bangladesh's trade in health services actually is dominated with import of services from foreign countries.

**Table: 18 Medical Services Trade in Bangladesh (Value unit in US \$)**

	FY2003	FY 04	FY 05	FY 06	FY 07	FY 08
Invisible Receipts	0	9823	39924	10309	11219	1734875
Invisible Payments	522745	588712	603834	429881	251044	480859
Net Medical Services	-522745	-578889	-563910	-419572	-239825	1254016

Source: Database, Statistics Department, Bangladesh Bank, 2009

There is a dearth of reliable data or information on imports of health services in Bangladesh (Rahman, *op cit*). There are no reliable data on such important indicators as number of individuals seeking services in India, reasons for the import of such services, modes of payments, structure of expenditures and quantum of foreign exchange spent etc. The lack of data actually hinders adequate understanding of the state, scope and dynamics of this type of trade among countries under the SAARC region and other foreign countries.

Table 18 depicts that although a substantial number of service trade related requests have been made by several countries; to date no country has made any request to Bangladesh to liberalize its health and social service sector under the GATS mode. It reveals that a relatively large number of requests were made for telecommunication services, financial services, business services and transport services.

**Table: 19 Request to Bangladesh at Sub-sector levels**

	Service Sub-sectors	Total sub-sectors	Requests made	Number of Requesting Countries	Major requesting Countries
<b>1. Business Services</b>		46	35	5	USA, EC
	1A. Professional Services	11	10	3	USA
	1B. Computer and Related Services	5	5	2	EC
	1C. Research and Development Services	3	0	0	
	1D. Real Estate Services	2	0	0	
	1E. Rental/Leasing Services Without Operators	5	0	0	
	1F. Other Business Services	20	20	3	EC, USA
<b>2. Communication Services</b>		28	23	6	USA, EC, Japan, Norway
	2A. Postal Services	1	0		
	2B. Courier Services	1	1	1	USA
	<b>2C. Telecommunication Services</b>	20	20	6	USA, EC, Japan, Norway
	2D. Audiovisual Services	6	2		
<b>3. Construction and Related Engineering Services</b>		5	5	3	Japan, EC
<b>4. Distribution Services</b>		5	5	2	Japan, USA
<b>5. Educational Services</b>		5	0	0	
<b>6. Environmental Services</b>		4	4	3	USA, EC, Norway
<b>7. Financial Services</b>		17	17		
	7A. All Insurance and Insurance Related Services	4	4	5	USA, EC, Japan
	7B. Banking and Other Financial Services	12	12	5	USA, EC, Japan
	7C. Other	1	1	5	USA, EC, Japan
<b>8. Health Related and Social Services</b>		<b>4</b>	<b>0</b>	<b>0</b>	
<b>9. Tourism and Travel Related Services</b>		4	1	1	
	9A. Hotels and Restaurants (including catering)	1	1	1	
	9B. Travel Agencies and Tour Operator Services	1	0	0	
	9C. Tourist Guide Services	1	0	0	
	9D. Other	1	0	0	
<b>10. Recreational, Cultural and Sporting Services</b>		5	1	1	

	10A. Entertainment Services	1	1	1		
	10B. News Agency Services	1	0	0		
	10C. Libraries, Archives, Museums, and Other Cultural Services	1	0	0		
	10D. Sporting and Other Recreational services	1	0	0		
	10E. Other	1	0	0		
<b>11. Transport Services</b>		35	35	4	Japan, EC	
	11A. Maritime Transport Services	6	6	4	Japan, EC	
	11B. Internal Waterways Transport	6	6	2	Japan	
	11C. Air Transport Services	5	5	2	Japan	
	11D. Space Transport	1	1	1	Japan	
	11E. Rail Transport Services	5	5	1	Japan	
	11F. Road Transport Services	5	5	1	Japan	
	11G. Pipeline Transport	2	2	1	Japan	
	11H. Services Auxiliary to All Modes of Transport	4	4	4	Japan, EC	
	11I. Other Transport Services	1	1	3	Japan	
<b>12. Other Services Not Included</b>				1	USA	
		Development of E-commerce	1	1	1	USA
Horizontal		<b>Mode 4</b>	1	1	6	Japan, USA, EC, Norway

Source: Raihan, 2005

## 6.5 Health service trade in Bangladesh under four modes: Potentials and barriers

### 6.5.1 Cross border supply of trade (telemedicine, Mode 1)

Cross-border supply of trade does not involve the physical movement of the supplier or consumer. Trade through electronic means, as also border crossing by material substances that embody services in them would fall under this mode. Telemedicine is an example of health service trade where physical movement of the supplier and consumer is not needed. Telemedicine can be broadly defined as the use of information technology to provide patient care and share clinical information from one geographic location to another. The use of telemedicine brings about changes in health care and opens up new possibilities in service delivery for the underdeveloped countries. Telemedicine involves several possible services provided synchronously in real time or asynchronously at a later time (Rafiq et al., 2005).



Some studies opine that telemedicine divides the world into those who have access to ‘real doctors’ and face to face care, and others who remain contended with electronically mediated and sensorial anesthetized relationships (Nicolini, 2006). A question is often asked: ‘will physicians exhibit the same degree of ‘care’ for those patients who receive distant treatment?’ (Cartwright, 2000; p. 257). This type of question is raised by the researcher to question about the effectiveness of telemedicine service in medical treatment.

Although the pitfalls of this type of mode service is sometimes mentioned, several studies have noted the benefit of using telemedicine in health care, especially in the poor countries (Broens et al, 2007; Hjelm, 2005; Johnston et al., 2004; Rafiq et al., 2007). It has been observed that telemedicine reduces costs substantially (Rafiq, et al., 2007). Cross-border delivery of health services through telemedicine can enable health care providers to cater to remote and underserved segments of the population (Chanda, 2002). This can be done with the help of electronic delivery of health services, such as telediagnosics, surveillance and consultation services, telepathology and teleradiology (e. g. India to Bangladesh and Nepal), e-health (products and services available over internet) etc.

It is often noted that telemedicine helps to alleviate some human resource constraints, enable more cost-effective surveillance of diseases, improve quality of diagnosis and treatment, and upgrade skills etc (Hjelm, 2005; Johnston et al., 2004). The impact that telemedicine can have on the health care system is entirely dependent on the degree of integration. With the network of technologies and human factors, telemedicine provides cost reductions in the delivery of health care and facilitates consultations without respect to state or national borders.

A recent study has noted that health care needs of underserved poor countries in Africa can be effectively addressed, with the establishment of a telemedicine network, using community hospital in an industrialized country e. g. in France (Johnston et al., 2004). In this type of service, physicians are linked to each other through virtual network within the internet where they are readily available to collaborate in a requested role from a distant

site. The skilled health professionals of the developing countries have the potential to provide consultation from a distance. Currently medical images such as, X-rays, MRI images, and other types of medical images can be digitized and transmitted via computer and internet from one country to another.

### **6.5.2 Telemedicine service in Bangladesh**

There are several telemedicine service providers in Bangladesh and a few of them are working at the cross border level (A-IV) and these are mainly private level initiatives and they mainly import telemedicine services from foreign countries. Some of these health care providers give services both at the domestic and international levels. A study, after analyzing some telemedicine projects and their activities, opines that Bangladesh has much potential in telemedicine services (Nessa, et al., 2008). This study, after reviewing existing functions of the service providers, proposed a proto type telemedicine network for Bangladesh.

One of the largest telemedicine service providers in the country is Medinova Telemedicine. This is a project of the Medinova Health Care based in the capital city of Dhaka. Through this service, a private hospital like Medinova is connected with super-speciality hospitals in India like AIIMS in New Delhi, Apollo Hospital in Madras, Shankar Netralaya, Max cardiac hospital, Kranti Kidney hospital in Kerala, and CARE in Hyderabad (A-IV). The facility of the services allows tele-consultation and video conferencing between Bangladeshi doctors with specialists in India.

There are also several other telemedicine service providers in the country and these hospitals and private organizations import most of their services from India, East Asian Countries and North America. In the private sector, telemedicine is expected to make up for the shortfall in specialized human resources in certain hospital facilities.

### **6.5.3 Cross Border Supply of Trade (Telemedicine) in Bangladesh: Opportunities and Barriers**

It has been gathered through field study that Bangladesh has potential for health service imports and exports through Mode 1. Telemedicine has the potential to deliver health services to countries under the SAARC region using the state-of-the-art technology. It may also be considered as an opportunity for economic development of the country. Bangladeshi hospitals can provide best possible treatment to their patients through telemedicine. Telemedicine discourages movement of the Bangladeshi patients to foreign land as they can receive the medical services from foreign doctors without moving to a foreign land, and check illegal (unreported) money transactions which are mostly carried through informal channels with India and other foreign countries (Rahman, *op cit* ). The implementation and use of this technology may be a tool to stop huge amount of illegal foreign exchange outflow from the country each year.

A recent study estimates that there are 1.1 million PCs in the country (7.3 PCs per 1000 population) (UNDP, 2008, quoted in DGHS, 2008). With the Bangladesh's accession to the WTO service sector like telecommunications, insurance, banking etc. are being liberalized and progressively opened up (A-V). The liberalization steps in telecommunication sector may have a significant and positive affect on telemedicine services at the cross border level which actually depends heavily on the liberalization of telecommunications, Information and Communication Technology (ICT).

Some service providers opined that several factors hinder the implementation process of telemedicine services in Bangladesh (A-IV). Resistance from doctors who feel threatened by alternative approaches, high initial expense of setting up some telemedicine systems, difficulty in justifying high costs, reimbursing insurance, legal liability issue etc. hinder the process of the development and implementation of telemedicine services in the country. Another barrier is the lack of privacy and security regulations. Telemedicine is capital intensive, and there exist possible diversion of resources from basic preventive and curative services. This service may also impair equity if it caters to a small section of the population for example only urban affluent of the country. Besides, most patients still prefer to see their physicians so the trust on the accuracy of findings generated through

telemedicine needs to be built up (Dacanay and Rodolfo, 2005). Partnering between a local healthcare provider and a reputable institution in the target market may help overcome this barrier.

Telemedicine may have also some detrimental effect if its basic aspects are not considered while implementing this service mode. Incompatible information infrastructure, poor diagnostic and imaging studies, weak hospital infrastructure, may hinder the development of telemedicine services in Bangladesh. Telemedicine may create obstacle in resolving the cases about malpractice liability and coverage (Rafiq et al., 2005).

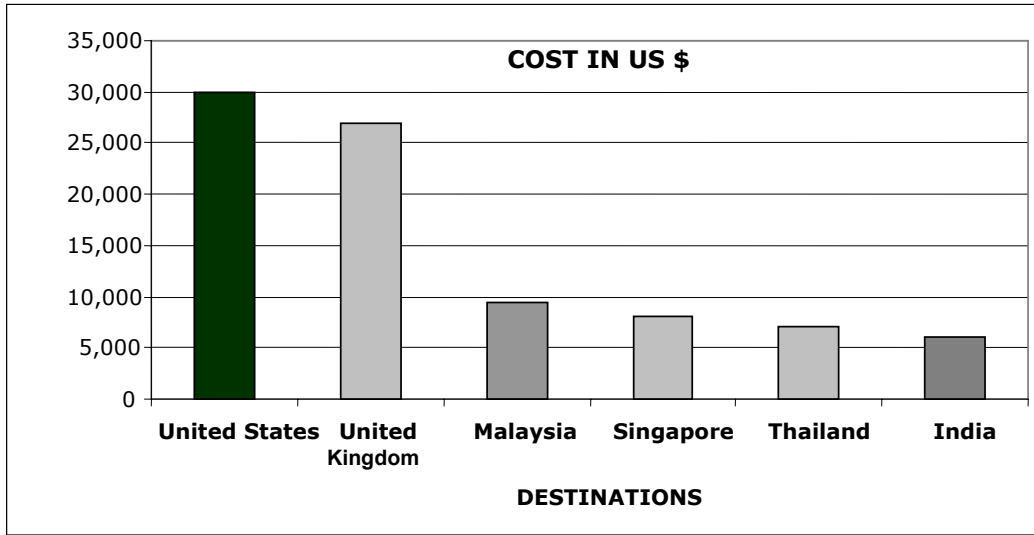
Although health service trade through Mode 1 has much potential for Bangladesh, it is observed from field study that poor computer literacy among physicians, low technical expertise, lack of motivation and interest, technology phobia, and lack of initiatives from the government hinder the development and expansion of telemedicine services in Bangladesh (A-IV).

## **6.6 Consumption abroad (Mode 2)**

It can be here mentioned that healthcare service providers and planners in Bangladesh are often more concerned about the cost of health care rather than its quality. There exists a general feeling among Bangladeshi health care provider that people do not want to pay more for higher service quality. This is not correct in reality. A large number of patients avail private health care services within the country and also from foreign hospitals.

To identify reasons for the import of health services by Bangladeshi patients, costs in treatment among domestic private and public hospitals and foreign hospitals are compared. The cost of treatment of five diseases (coronary bypass graft surgery, breast lump removal, knee joint replacement, cataract surgery, in vitro fertilization (IVF) cycle and hernia correction are compared among United States, United Kingdom, Singapore, India and Bangladesh (Table 19 and Figure 34). The data for cost of treatment from both private and public hospitals in Bangladesh have been collected through field survey and compared with published data of the four other countries.

**Fig: 34 Global Cost Differences for Cardiac Surgery**



Source: <http://www.sitacare.com/>

**Table: 20 Comparative costs of treatment (USA, UK, Singapore, India and Bangladesh, in US \$)**

	USA	UK (Private Hospital)	Singapore	India	Bangladesh (Government Hospital)	Bangladesh (Private Hospital)
Coronary Bypass Graft Surgery	35,000	25,000	-----	6,000	1324 (Full Package)	3,221
Breast Lump Removal	-----	3,200	1,000	700	41 (Medicine should be bought by the patient)	441
Knee Joint Replacement	-----	15,000	7,000	5,000	1912 (Only instrument, no operation cost)	3,088
Lasik Surgery	4,000	2,800	1,600	700	-----	-----
No Stitch Cataract Surgery	4,500	2,600	-----	700	59 (Medicine and lenses should be	588

					bought by the patient )	
In-vitro fertilization (IVF) cycle	15,000	-----	-----	1,800	-----	1,647
Hernia Correction	2,800	2,700	2,500	1,000	41 (Medicine should be bought by the patient )	500

Source: <http://www.indianhealthguru.com/price-cost-surgery-india.htm> and Field Survey, 2009.

The findings of the comparison (Table 19 and 21) indicate that although the cost of treatment is low in Bangladesh (in both public and private hospitals), patients of the country are ready to pay higher price for treatment in the foreign hospitals and due to this a large number of patients receive health services from India and other foreign countries. The Confederation of Indian Industry and McKinsey reported that 150,000 foreigners visited India for treatment in 2004 and a large number of them were from Bangladesh (WTO, 2007).

A study also noted that Bangladeshi patients found physicians in the foreign hospitals more available, competent, and empathetic compared to those in the private hospitals in Bangladesh (ICDDR, 2007). The unavailability of doctors and nurses in the public health care facilities, as well as their negative attitudes and behaviors, are key impediments to the utilization of public hospitals in Bangladesh. This situation is compounded by lack of drugs, long travel and waiting time (HEU, 2003 quoted in Andaleeb et al., 2007). A study done by World Bank (2005) observed that Bangladeshi patients perceived private hospital having best quality at all levels. On the other hand, public hospital was considered having low quality and NGO hospital at the Upazilla<sup>9</sup> level was considered having best quality.

Although cost of treatment in the public hospitals was lowest, these hospitals provide poor quality services (World Bank, 2005). On the other hand, private hospitals were more costly but their services were considered more improved. The government of Bangladesh

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<sup>9</sup> Administrative unit like Police Station

and Non Government Organizations (NGO) have also acknowledged their concern about the overall health care services of the country (World Bank, 2003).

**Table: 21 Export of health tourism services by three Countries in the ASEAN region**

Country	Export revenues	Number of patients	Origin of patients
Malaysia (2003)	US \$ 40 million	More than 100 000	60% from Indonesia, 10% from other ASEAN countries
Singapore (2002)	US \$ 420 million	210 000	45% from Indonesia, 20% from Malaysia, 3% from other ASEAN countries
Thailand	US \$ 482 million	470 000 (2001) 630 000 (2002)	42% from the Far East (mostly Japan), 7% from ASEAN countries

Sources: Arunanondchai and Carsten, 2006

**Table: 22 Cost of Treatment in Bangladesh, Cardiac Intervention**

Types of Intervention	Government Hospitals	Private Hospitals
(a1) Cost of Ring operation/ stunting (including accommodation for 3-5 days)	(a1) US \$ 217 -- 289	(a1) US \$ 580 -- 797
(a2) Price of Ring	(a2) US \$ 434 -- 1449 (Ordinary)	(a2) Drug eluting special type of ring (long lasting) US \$ 2898 – 3333
(b) Balloon valve plasty (including 3 days accommodation costs)	(b) US \$ 217 -- 261	(b) US \$ 289– 725
(c) Pace maker fixing (permanent) including cost of pace maker (1 piece) and accommodation and other costs	(c) US \$ 217– 362	(c) US \$ 435– 724

Source: Shaptahik, 2006 (www.shaptahik2000.com)

It is observed that an increasing number of foreign patients are going to India for treatment from developing and also to some developed countries. Bangladeshi patients perceive foreign healthcare services to be more reasonably priced (ICDDR, 2007). Relatively better and low-cost treatment in India and proximity, are principal reasons for patients going to India from neighboring countries such as, Sri Lanka, Bangladesh and

Nepal . A large part of transactions for trade in health services for Bangladesh for example, goes unreported (especially in case of India) since such transactions are carried mostly through informal channels and therefore, not reflected in the balance of payments accounts. It can be observed that countries like Thailand, Singapore and Malaysia which belong to the ASEAN region earn huge amount of foreign exchange from their neighboring countries (Table: 12) through health service trading and this may be an good example for Bangladesh and other South Asian countries e. g. India, Nepal, Bhutan and Pakistan. Bangladesh also can earn huge amount of foreign exchange if it can develop its health infrastructure. An effective and sound health policy is needed in this respect.

### 6.6.1 Health care seeking behavior of the Bangladeshi patients: An application of Mean Score of Relative Importance (MSRI) Method

To analyze the relative importance of the factors which motivated Bangladeshi patients to seek services from various types of hospitals mentioned before, Mean Score of Relative Importance (MSRI) analysis was carried out (A-IV). MSRI technique, which is a descriptive statistical technique, was administered to analyze data. The formula of MSRI is given below (Huque, 2001).

$$MSRI = \frac{\sum W_i + (n - f)N}{n}$$

Where,

$\sum W_i$	= Total sum of cardinal weights assigned to different degrees of importance for the factor in question pointed out by the respondents
n	= Total size of sample
f	= Total number of respondents pointed out the factor in question (i.e., the frequency of the factor)
N	= Total number of factors contributing to satisfaction (or dissatisfaction)



**Table:23 Ordinal Degrees and Cardinal Weights**

<b>Ordinal Degree</b>	<b>Cardinal Weight</b>
I (1st)	1
II (2nd)	2
III (3rd)	3
IV (4th)	4
V (5th)	5
VI (6th)	6
VII (7th)	7
.	.
.	.
XVII (17th)	17

Firstly, ordinal weights were assigned to different degrees of importance indicated by the respondents. Afterwards, the cardinal weights were assigned to different degrees of importance to calculate mean score of relative importance (Table: 22). The formula used in the present study is more robust than a simple weighted average method (Alam, 1986; Huque, 2001).

The study sees the health related service factors from service quality (Service Quality or SERVQUAL) point of view. Parasuraman et al. (1988), Zeithaml & Bitner (2006) note that there are five dimensions of consumer's service quality judgment when marketing perspectives are taken into consideration. These dimensions are (a) reliability, (b) responsiveness, (c) assurance, (d) empathy and (e) tangibles. These dimensions are discussed below.

#### .6.1.1 Reliability

Reliability is defined as the ability to perform the promised service dependably and accurately. In the broadest sense, reliability emphasizes on promises about delivery of services, problem resolution ability and pricing and other core service attributes of the company.

### 6.1.2 Responsiveness

Responsiveness is the willingness to help customers and to provide prompt service. This dimension emphasizes attentiveness and promptness in dealing with customer requests, questions, complaints, and problems.

### 6.1.3 Assurance

Assurance is defined as employees' knowledge and courtesy and the ability of the firm and its employees to inspire trust and confidence.

### 6.1.4 Empathy

Empathy is defined as the caring, individualized attention the firm provides its customers. The essence of empathy is conveying, through personalized or customized service, that customers are unique and special.

### 6.1.5 Tangibles

Tangibles are defined as the appearance of physical facilities, equipment, personnel, and communication materials. All of these provide physical representations or images of the service that customers, particularly new customers, will use to evaluate quality.

Total 26 health service factors were classified according to SERVQUAL dimensions. The classification of these factors is given in Table 24. Table 25 depicts the consolidated MSRI results of the three types of hospitals. These are government hospitals, private hospitals in Bangladesh and hospitals located in India (Coded as BD\_Govt\_MSRI, BD\_Private\_MSRI, and INDIA\_MSRI).

**Table 24: Hospital Related Service Factors and Dimension of SERVQUAL**

Hospital Related Service Factors	SERVQUAL Dimension
F1. Competency of the doctors	Reliability
F2. Competency of the nurses	Reliability
F3. Pathological laboratory equipped with all kinds of testing facilities	Tangible
F4. Waiting time to get appointment is short	Responsiveness
F5. Low treatment cost of the hospital	Reliability/cost
F6. Hospital is visually appealing	Tangibles
F7. Ambulance facility	Tangibles
F8. Hospitals has modern medical equipments	Tangibles
F9. Good quality food	Tangibles
F10. Accommodation cost low	Reliability/cost
F11. Specialist doctors are available	Reliability
F12. Hospital staffs respond promptly when needed	Responsiveness
F13. Follow up treatment good	Empathy
F14. Doctor listens to one's problem attentively	Assurance
F15. Nurses are very caring and willing to respond when needed	Assurance
F16. Easy to get bed/cabin in the hospital	Assurance
F17. Non-repetitive pathological test	Assurance

### 6.2 Analysis of the MSRI result: patients from government hospitals in Bangladesh

It can be seen from the Tables that patients ranked competency of the doctor and availability of specialist doctors as their prime reasons (Rank, 1) for visiting government hospitals. Patients who visited government hospitals ranked low cost treatment with 2 and short waiting time with 3. Government hospitals are always the last resort for the poor patients for low cost treatment. These attitudes of the patients can be examined from service quality perspectives. It seems that reliability, responsiveness and cost of treatment were the prime motivating factors behind selecting government hospitals. Patients of the government hospitals did not judge quality of food (F9) as an important factor in

choosing these hospitals. They, in fact, did not consider repetitive pathological test (F17) as an important factor for selecting the hospitals.

**Table 25: Comparative Analysis of MSRI**

Name	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17
BD_Govt_MSRI	2.67	7.75	7.50	4.67	4.50	8.83	9.67	4.92	12.75	4.83	2.00	5.42	6.58	5.92	7.33	6.58	13.50
BD_Private_MSRI	1.43	4.79	4.71	3.14	7.43	10.14	14.29	4.29	14.79	10.71	2.57	5.93	4.79	2.71	5.36	7.07	11.07
INDIA_MSRI	1.75	4.44	5.00	15.44	13.63	10.25	16.63	5.38	16.31	16.31	1.81	3.44	1.81	2.63	3.19	16.56	5.31

### 2.6.3 Analysis of MSRI result: patients from private hospitals in Bangladesh

Competency of specialist doctors (F1) was the most important criterion for the patients to select private hospitals in Bangladesh. The patient identified those specialist doctors (F11) who used to listen to the problems of the patients (F14) with care. It was the second most important decisive factor to select private hospitals. Reliability and assurance dimensions were also important service quality aspects that motivated patients to receive services from private hospitals. Short waiting time to receive appointment was the third most important criterion to decide on the private hospitals.

It can be observed from Table 24 that ‘relative waiting time to see the doctor’ is high in case of private hospitals when compared with government hospitals. It seems that there were some tangible elements (modern equipment or F8, and good pathological facilities or F3) which actually attracted patients to choose private hospitals. Like government hospitals, quality of food (F9) did have any important bearing on selecting private hospitals.

### 6.4 Analysis MSRI result: patients from hospitals in India

The cost factor (F5) had low level of significance for the patients, who visited India to receive treatment (Table 24). Bangladeshi patients had to wait long for getting doctors appointment (F4), but finally received reliable treatment with high levels of assurance and empathy. Most of the patients’ selected Indian hospitals, as specialist doctors were available there (F11) and they had high level of competency (F1). In addition to this, most of the patients visited India, as these hospitals provided good follow up treatment (F13). Indian doctors listened to the patients’ problems with care

**Table 26: Service Quality Factors, MSRI Ranking and SERVQUAL Dimensions**

Type of Hospitals	Factors		Weight	SERVQUAL	Rank
Government Hospitals, Bangladesh	Specialist doctors available	F11	2.00	Reliability	Rank 1
	Competency of doctors	F1	2.67	Reliability	
	Low treatment cost of the hospital	F5	4.50	Reliability/Cost	Rank 2
	Waiting time to get appointment is short	F4	4.67	Responsiveness	
	Accommodation cost is low	F10	4.83	Reliability/Cost	Rank 3
	Hospital has modern medical equipments	F8	4.92	Tangibles	
	Hospital staff respond promptly when needed	F12	5.42	Responsiveness	Rank 4
Private Hospitals, Bangladesh	Competency of the doctors	F1	1.43	Reliability	Rank 1
	Specialist doctors are available	F11	2.57	Reliability	Rank 2
	Doctors listen to one's problem attentively	F14	2.71	Assurance	
	Waiting time to get appointment is short	F4	3.14	Responsiveness	Rank 3
	Hospital has modern medical equipments	F8	4.29	Tangibles	Rank 4
	Pathological facilities equipped with all types of testing facilities	F3	4.71	Tangibles	Rank 5
	Competency of nurses	F2	4.79	Reliability	
	Follow up treatment is good	F13	4.79	Empathy	
Hospitals in India	Competency of the doctors	F1	1.75	Reliability	Rank 1
	Specialist doctors are available	F11	1.81	Reliability	
	Follow up treatment good	F13	1.81	Empathy	
	Doctors listens to one's problem attentively	F14	2.63	Assurance	Rank 2
	Nurses are very caring and willing to respond when needed	F15	3.19	Assurance	Rank 3
	Hospital staffs respond promptly when needed	F12	3.44	Responsiveness	
	Competency of nurses	F2	4.44	Reliability	Rank 4

(F14) and this was the second most important decisive factor for selecting treatment in India (Table 25). Prompt and good nursing services were also important determinants

which allured the patients to choose Indian hospitals. Patients, who selected India as their destination for treatment, did not bother much about the accommodation cost (F10) and quality of food (F9).

**Table: 27 Identified Strength and weaknesses of the public, Private and NGO health service providers in Bangladesh**

Type of Services	Cost	Perceived Quality	Technical quality	Subjective Performance	Accessibility	Price
<b>Public</b>	Lowest costs found at the national level. Highest costs found at the district level	Lowest perceived quality scores	Slightly lower technical quality than private facilities, increasing with level			Lowest prices at all levels
<b>Private</b>	Lowest costs found at the district level. Highest costs found at the national level	Best perceived quality scores at all levels	Technical quality Increasing with level		High levels have higher accessibility scores from the facility's standpoint, but lower scores from the patient's standpoint	Highest prices at all levels, increasing with the level of attention
<b>NGO</b>	Shows a similar cost than private and public facilities at the Upazila (small administrative unit) level	Best perceived quality scores at the Upazila (administrative unit) level	Best technical quality scores	Best subjective performance scores	Have the highest accessibility score from the patient's standpoint	Low prices

Source: The World Bank, 2005

### 6.5 Consumption abroad: opportunities and risks

The specific nature of health consumption generates barriers to patients' mobility. The psychological cost of going abroad can be high for the patient. It is not the consumer's choice that always defines the nature, scope etc. of the health service consumption but also the physician's instructions. The problem of follow up and after care when the patient is back home increases considerably the cost (and the risk) of this type of international transaction.

The opportunities involved with consumption abroad may be listed below:

- For exporting countries like India, consumption abroad generates foreign exchange earnings and increase resources for health service.
- It helps the exporting countries to upgrade its health infrastructure and knowledge about health service.
- Bangladeshi patients receive quality treatment.
- This type of service helps Bangladesh to overcome the shortages of physical and human resources in the specialty areas.
- It provides incentives to the local entrepreneurs to establish joint venture hospitals with modern and world-class equipments and facilities in the importing countries like Bangladesh. These may attract local patients to receive services in these hospitals. A tendency of establishing modern hospitals can already be seen in the country (e. g. Apollo Hospitals, United Hospitals, Square Hospitals etc).
- Bangladesh can promote Mode 2 to export health services by adopting some strategies. The strategies may be: (a) establishing excellence in specialist areas; (b) giving health tourism package; (c) invest more resources in modern medical equipments and (d) encourage referrals etc. These strategies may attract patients living specially, in Eastern part of India and Myanmar to receive services from modern private hospitals in Bangladesh.

There are also some risks associated with this mode of health service for importing countries like Bangladesh. These are:

- It will crowd out poor domestic population. This is particularly true for Bangladesh, where a large number of people remains outside periphery of the modern and relatively costly treatment provided by the hospitals of the foreign countries.
- There is no doubt that a huge amount of foreign exchange of Bangladesh will outflow to foreign countries, often through illegal way as Bangladeshi patients will spend huge amount of foreign exchange in India and East Asian countries like Thailand and Singapore for receiving treatments by the Bangladeshi patients.

## 6.7 Commercial Presence (Mode 3)

Commercial presence (Mode 3) involves the establishment of health care providers or firms in the health care sector outside their home nation through Foreign Direct Investment (FDI) in equity or non-equity forms. The common pattern of foreign participation (mainly hospitals and specialized clinics) is to invest in existing facilities or enter a joint venture with local partners (Outreville, 2007). Inflow of foreign capital provides additional resources to invest in the health care infrastructures and services of the country.

The most direct beneficiaries in this respect are people who can afford the services offered by foreign suppliers. The benefits go beyond the direct impact for patients receiving the services from the foreign providers, and can have system-wide impacts. They can take the form of access to new technologies and services, information, management techniques (Blouin, 2006). It has been observed that FDI in services exceeds manufacturing and this tendency concerns both developed and developing countries (OECD, 2005).

A study has shown that doing Business in Bangladesh today is easier than many developing economies (Table 27). A report entitled “*Doing Business in 2007: Creating Jobs*” published jointly by the World Bank and IFC ranked Bangladesh in the 68th position in terms of Starting a business Ease of Doing Business among 175 economies.



**Table 28: Ease of Doing Business Ranking (Selected)**

Rank	Country
1	Canada
11	Singapore
30	Mauritius
40	Kazakhstan
68	Bangladesh
79	Bhutan
88	India
97	Vietnam
128	China
159	Cambodia

Source: World Bank, 2007

In the above ranking based on 10 categories, Bangladesh appears as one of the easiest location for doing business in South Asia. Government of Bangladesh has undertaken a long term Private Sector Development Support Project (PSDSP) to improve the investment climate of the country. The main components of the project are reforming the business related regulatory framework and focusing on the establishment of Special Economic Zone and capacity building of the related agencies.<sup>10</sup>

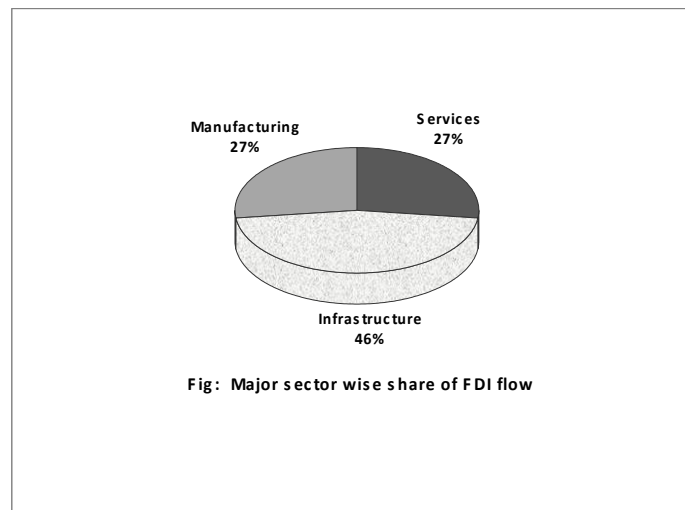
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<sup>10</sup> [http://www.boi.gov.bd/boi\\_services.php](http://www.boi.gov.bd/boi_services.php)

### 6.7.1 Foreign Direct Investment (FDI) in Service Sector of Bangladesh

It can be observed that a recent shift in FDI has been towards services. Table 28 depicts the FDI inflow (including that in export processing Zones, EPZ's) over the last 11 years. With the country's accession to the World Trade Organization (WTO), service sector like power and energy, banking, insurance and telecommunications are being liberalized and progressively opened up. The sector-wise inflow of FDI during 1998 to 2007 is presented in Table 28. There are three broad sectors of FDI inflows: infrastructure, manufacturing, and services. The shares of the three sectors are 46 per cent, 27 per cent and 27 per cent respectively (Figure 36).

FDI has significant impact on the economy of Bangladesh. Bhattacharaya and Dev (2004) estimated that a 10 per cent investment in Bangladesh might increase GDP up to 3.71 per cent and it was estimated that about 13 per cent increase in the foreign investment was necessary to reduce about 1 per cent level of poverty.



**Figure 36: Major sector wise share of FDI flow**

The rate of foreign investment in Bangladesh from the South Asian countries is very meager. The total investment made by the countries under the South Asian region was less than 2-3 per cent of the total investment made in the country (Bhattacharya, 2002). If we look at Table 29, it can be observed that only India plays a somewhat significant role among the SAARC countries. In the year 2006 India invested US\$6.09 million in

Bangladesh. The amount comprises about 0.77 per cent of the total investment in Bangladesh. Pakistan, on the other hand, invested US\$5.14 Million in Bangladesh in 2006. Sri Lanka invested about US\$2.63 million. Other countries within the SAARC region had not worth mentioning investment into Bangladesh.

**Table: 29 Aggregate and Sector-Wise FDI inflow, 1995-2005 (Million US \$)**

Sectors	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Agriculture and Fishing (Total)	0.0	0.3	1.4	1.4	2.9	15.2	1.1	1.6	4.1	1.7	2.3
Power, gas and Petroleum	3.2	47.0	242.1	235.2	83.5	301.0	192.4	57.9	88.1	124.1	208.3
Manufacturing	45.5	89.2	162.4	139.8	191.8	193.5	132.2	142.9	165.2	139.4	219.3
Industry (Total)	48.7	136.2	404.5	375	275.3	494.5	324.6	200.8	253.3	263.5	427.6
Trade Commerce	41.3	92.3	158.9	164.3	27.5	53.2	27.6	63.7	44.0	66.6	130.5
Transport & Telecom	1.7	1.5	5.9	25.3	0.5	5.4	0.9	48.5	45.9	127.5	281.9
Other services	0.6	1.3	4.6	10.5	2.9	10.3	0.3	13.7	2.9	1.1	3.0
Services (Total)	43.6	95.1	169.4	200.0	30.9	68.9	28.8	125.9	92.8	195.2	415.4
Total FDI to Bangladesh	92.3	231.6	575.3	576.5	309.1	578.6	354.5	328.3	350.2	460.4	845.0

Source: Bangladesh Bank Enterprise Survey.

**Table: 30 FDI Inflow in Bangladesh from selected countries (in Million \$US)**

FDI Source	2005 (Total)	2005 (Rank)	2006 (Total)	2006 (Share)	2006 (Rank)
India	2.7	18	6.09	0.77 %	14
Nepal	0.1	30	--	--	--
Pakistan	25.5	12	5.14	0.65 %	16
Sri Lanka	4.1	17	2.63	0.33 %	18
Egypt	48.4	7	105.36	13.03 %	2
Norway	53.5	5	82.95	10.47%	4
UAE	55.4	4	88.02	11.11 %	3
UK	152.8	1	70.47	8.89 %	5
USA	141.8	2	175.72	22.17 %	1

Source: Bangladesh Bank Enterprise Survey, 2007 (www.boi.gov.bd).

Major investments in the country from India were from companies like Asian Paints, Apollo Hospital (a health service investment), Reckitt Benkissar, VIP-Nitol, Mann Pharma, Cello-GQ industries, Berger paints and Data Soft Ltd (Bhattacharya, 2002).

Although doing business is easy in Bangladesh , many foreign investors involved in health service trading find it risky to invest in the developing countries like Bangladesh, where only a few can afford private treatment (Smith, 2004). There are a small number of hospitals which have been established under joint ventures in Bangladesh (e. g. Apollo Hospitals in Dhaka, a joint project of Apollo Hospitals Enterprise Limited and STS Holdings Limited)<sup>11</sup>.

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<sup>11</sup> Some of these hospitals are facing problems in recent months. Apollo hospitals, which started its operations in Dhaka with an investment of US \$ 45 million is to reorganize management after it fails to make substantial profit . Employees of the Apollo Hospital on March 8, 2008 staged demonstrations after 150 members of the staff, including doctors and nurses, were sacked. Apollo Hospital of Dhaka is running at only 50 percent of its capacity as competition heats up at the top end of the private healthcare market in the capital. Apollo was built to provide space for 450 patient beds, but less than 300 are installed. Of these the hospital is not able to fill more than 155 Square Hospital and United Hospital are among the top end private healthcare facilities in Bangladesh. These hospitals and some other private hospitals are also

### **6.7.2 Commercial presence: opportunities and barriers**

It is anticipated that FDI in health sector, will bring additional resources and expertise to improve the range, quality and efficiency of services offered. It is understandable that this depends on regulation that exists. The presence of increased health technology through FDI may encourage the Bangladesh Government to invest in such technology and the government may feel to improve the health service condition of the public sector.

The commercial presence in health care services in Bangladesh can generate additional resources for investment in and upgrading of health care infrastructure and technologies. Nevertheless, concerns remain about the possible negative effects of FDI, including the question of market power, technological dependence, capital flight and profit outflow. It is also observed that in respect of mode 3 the services usually non-tradable and an influx of foreign enterprises such as companies from India and East Asian countries (e. g. Thailand and Malaysia) can cause significant outflow of investment income from Bangladesh. This may lead to negative effects on the Bangladesh's balance of payments (Khor, 2006).

### **6.8 Temporary Movement of Natural Persons (TMNP, Mode 4)**

Temporary movement of natural persons (TMNP, Mode 4) is defined in Article 1:2 of the GATS as 'Supply of a service... by a service supplier of a member through presence of natural persons of a member in the territory of any other member'. It includes both service providers who are working overseas in an individual capacity and service providers who are part of a home, host, or third country commercial establishment (Chanda, 2001). GATS also contain a separate annex on the movement of natural persons. The annex defines the scope of mode 4 to cover "persons who are temporarily working in another member country. It is not applicable to individuals who are seeking access to the employment market of another member on a permanent basis or for

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providing world class services and are involved in intense competition with foreign hospitals like Apollo, Dhaka. (The Daily Star, 13-3-2008).

citizenship or residency purposes.” (Chanda, 2001). Developing countries always stress that political will from the developed countries is needed for a meaningful liberalization of Mode 4, and this mode should be treated as a trade and development issue of the poor countries (Khor, *ibid*).

It is understood that temporary movement of natural persons can play an important role on the economy of Bangladesh in terms of maintaining macroeconomic stability of the country, reduces pressure on the national unemployment, helps poverty alleviation and investment in agriculture etc. In fiscal year 2007-2008, remittance earnings of the wage earners have increased to US\$7914.78 million and in 2008-2009 it was US\$8770.16 (up to the month of May) (Table: 30). Table 29 depicts percentage changes over corresponding period of the previous years and it may be observed that the changes were quite significant. The number of workers going abroad to provide services is around 23 per cent of the total population entering the labor force (Raihan and Mahmood, 2004). It may be mentioned that here that Special Modalities of Negotiations on Service Trade Liberalization for Least Developed Countries (LDCs) which had been adopted on September 3, 2003 on the eve of Cancun Ministerial meeting and this has opened up

**Table: 31 Annual trends in remittances**

Year	Million US \$
2005-2006	4801.88 (+ 243.47)
2006-2007	5978.47 ((+24.50))
2007-2008	7914.78 ((+32.39))

Source: Foreign Exchange Policy Department, Bangladesh Bank.

(Note: Figures in brackets indicate percentage changes over the corresponding period of the previous year).

**Table: 32 Wage Earners Remittance Inflows (Yearly)**

Year	Million US \$
2008-2009*	8770.16
2007-2008	7914.78
2006-2007	5998.47
2005-2006	4802.41
2004-2005	3848.29
2003-2004	3371.97
2002-2003	3061.97
2001-2002	2501.13
2000-2001	1882.10
1999-2000	1949.32
1998-1999	1705.74
1997-1998	1525.43
1996-1997	1475.42
1995-1996	1217.06
1994-1995	1197.63
1993-1994	1088.72
1992-1993	944.57
1991-1992	849.66
1990-1991	763.91

Source: Bangladesh Bank, (<http://www.bangladesh-bank.org/>)

\* Data up to month of May of financial year 2008-2009.

new opportunities for LDCs to deal with this issues. Article 8 of the Special Modalities mentioned: `It is recognized that the temporary movement of natural persons supplying services (Mode 4) provides potential benefits to the sending and recipient members. LDCs have indicated that this is one of the most important means of supplying services internationally. Members shall, to the extent possible, and consistently with Article XIX

of the GATS consider undertaking commitments to provide access in Mode 4, taking into account all categories of natural persons identified by LDCs in their requests”.

A recent economic analysis pointed out that if entry quotas were increased by an amount equal to 3 per cent of developed countries labor forces, there would be an increase in world welfare 156 billion US \$ per year (Winters et al., 2002). Bangladesh has no existing or proposed GATS commitments on Mode 4 in health services.

A study observed that Bangladesh would be benefited substantially through increased export of service providers through TMNP (Raihan and Mahmood, 2004). This study designed three scenarios and observed that an increase in export of professionals involved in services (e.g. doctors) would bring more benefit and the potential benefit from exporting about 0.2 million professionals would be around 11.57 billion US dollar (Raihan and Mahmood, 2004). On the other hand exporting unskilled and semi-skilled workers, the study observed, had lower levels of return.

To examine the causes behind employing foreign doctors in the private hospitals (TMNP from foreign land) a survey was conducted on four large private hospitals with the help of checklists. It was observed that having good qualifications, good caring attitude towards patients, having well training and professional attitude and competency of the doctors were major reasons for employing foreign doctors in the country by the hospitals. Persons affiliated with the hospitals mentioned that problems associated with income tax and work permit issues, hiring right doctors and restrictions from the government etc. actually create barriers in employing doctors in the private hospitals of the country.

These above problems should be solved for the shake of smooth health service trading among the SAARC countries. Like the foreign doctors and nurses who are currently employed in the private hospitals in Bangladesh, Bangladeshi doctors can work in the SAARC countries. This will enhance human resource trading among SAARC countries.



**Table: 33 Reasons for employing foreign doctors in the hospital  
(One dot represents one hospital)**

Causes	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
Have higher degrees/qualifications				•	•••
Less costly than locals	•••	•			
Well mannered				•	•••
Very caring to patients					••••
Well trained					••••
They attract more local patients				••	••
Patients likes them				•	•••
Doctors add fame and name to hospital				•	•••
Have professional attitude					••••
Doctors are more competent					••••

Source: Field survey, 2009

**Table: 34 Problems faced in employing foreign doctors in the hospital (One dot represents one hospital)**

Problems	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
Cultural barrier/language barrier		••		••	
Problems in hiring right doctors			•	••	•
Problems associated in government work permit issue			•	••	•
Problems associated with income tax				•••	•
Licensing problem		••	••		
Foreign exchange restrictions			•	••	
Problems involved in document requirements by the government			•	•	••

Restrictions on employing foreign doctors by the government				••	••
Restrictions from Medical and Dental Association (BMDC)			•••	•	

Source: Field survey, 2009

### 6.8.1 Temporary Movement of Natural Persons (TMNP): opportunities and barriers for Bangladesh

To address the interest of the developing countries and promote service trade, the ongoing round of GATS negotiations must aim at liberalizing movement of natural persons. Mode 4 liberalization could be a win-win situation for both developed and developing countries.

There are several barriers to health service trade through mode 4 of GATS. Several restrictions are imposed on health service providers who intend to move to a host country. These can be broadly grouped into the following categories (Chanda, 2001).

- Immigration related regulations which blockage entry and stay of service providers;
- Regulations concerning recognition of qualifications, certification, licensing, work experience and training;
- Differential treatment of domestic and foreign service personnel.

A number of recent decisions have been made by the government of Bangladesh with a new foreign doctor/nurse employment policy, which creates barrier for foreign doctors and nurses to work in the country (MOH&FW, Advertisement, Date: 28/6/2009). The policy states that if there is any dearth of Bangladeshi specialist doctor within the country, only then a hospital can take initiative to employ foreign specialist doctors. Besides, a hospital must employ at least two Bangladeshi doctors, against the employment of one foreign specialist doctor and the number of foreign doctors should not exceed more than one-fifth of the total number of recommended doctors working in a hospital (this rule will remain valid for first 7 years). There is also limit on visa for the foreign doctors and nurses. Although the whole procedure of getting employment is complex, foreign doctors and nurses can practice in the country after taking permission

from the government and Medical and Dental Association of Bangladesh (BMDC) with making formal applications (A-IV).

A large number of Bangladeshi doctors mostly non-specialist doctors are working in the Middle-Eastern countries and it seems that there exist good opportunities for Bangladeshi doctors to work abroad<sup>12</sup>. This is a significant positive sign for Bangladesh indeed. Bangladesh can adopt some domestic policies in this respect. For opening up market in the SAARC region and also in the developed countries, government should identify current capacity of supply of health professionals within the country. Bangladeshi nurses, though in a very limited number, are already serving with good reputation abroad. If some manpower exporting firms take an interest in establishing training institutes for nurses of international standard, then the initiative can fetch handsome returns in the long run. Any type of investor in the private sector can set up such institutes with a vision for their prospects in the foreign employment markets. Government of Bangladesh may take the lead in providing training facilities for nurses with the objective of creating a surplus number to feed the needs of foreign countries.

### **6.8.2 Liberalization of trade in health services in Bangladesh: challenges and opportunities**

It is generally observed that services trade is considerably heavily restricted than goods trade. As international health service transactions include foreign direct investment (FDI) and the movement of labor, as well as long-established cross-border transactions, any policy that impedes service producers and consumers act together through any of these channels (or modes of supply) is considered an hindrance to trade (Findlay and Warren, 2000).

The major opportunities and risks for health service trade in developing countries like Bangladesh are mentioned in Table 36. Impediments to trade in health services come

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<sup>12</sup> Recently, the High Commissioner of Bhutan in Bangladesh has expressed his interest to employ Bangladeshi physicians in Bhutan. He conveyed the message of his government to employ Bangladeshi physicians in Bhutan in a meeting held in Dhaka. It may be mentioned here that a significant number of students from Bhutan are receiving medical education in Bangladesh (*Prothom Alo*, July 6, 2009).

**Table: 35 Four Large Private Hospitals in Dhaka**

Name of the Hospitals	Investment & Partners	Number of Foreign Doctors	Number of Foreign Nurses	Number of doctors	Number of Nurses	Administration and Employees
Square Hospitals, Private Hospital, Dhaka, Bangladesh.  18 storied 300 bed hospital	42 million US \$; The Square hospital is an affiliate partner of Methodist Healthcare, Memphis, Tennessee, USA; Christian Medical College-Vellore, India; and Care IVF (In-vitro fertility centre) Centre, Singapore.	Total 25 (India, Pakistan, Singapore, Thailand, England)	Philippines, Australia, Sri Lanka and India (30)	350 (Approx)	300 (Approx)	Over 1000
United Hospitals	Management partnership with KPJ Healthcare Berhad of Malaysia.	10	India (30)	120	75	150
Apollo Hospitals, Dhaka. 450 bed super specialty hospital built in a total area of 400000 sq. ft.	45 million US \$, STS Holdings Ltd, the promoter of Apollo Hospitals	India (20)	India, Sri Lanka (45)	Not known	550	1400
Z H Sikdar Cardiac Care and Research Centre	100 % Own	10	---	---	---	---

Source: <http://www.skyscrapercity.com/showthread.php?t=196333&page=4>; New Age, 2006; News Today, 2005; Field Survey, 2009

mostly in the form of non-tariff barriers (NTB's), reflecting the difficulties inherent in imposing tariffs directly upon either the service consumer or the service supplier as they interact across borders. NTBs are always difficult to measure. The lack of information on impediments to trade and investment in services, and the consequent impact on the economy of these impediments, reduces the set of tools that policy reformers can use when pushing for liberalization (Belsky et al., 2004).

**Table: 36 Brief Outline of Trade in Health Services in Bangladesh**

<p><b>Macroeconomic and trade environment</b></p> <ul style="list-style-type: none"> <li>• Bangladesh is a Least Developed Country (LDC) with GDP per capita US \$ 1500 (2008).</li> <li>• Liberal market access and national treatment policies allowing up to 100 % foreign equity participation in most sectors and does not require a Economic Needs Test.</li> </ul>	<p><b>State of the domestic health care system</b></p> <ul style="list-style-type: none"> <li>• Health status indicators: population growth rate 1.292 %; Birth Rate 28.86 births/1000 population; Death Rate 8 deaths/1000 population; Infant Mortality Rate 59.02/100 live births; Total Fertility Rate 2.74 percent.</li> </ul>
<p><b>Mode 1: Cross-border supply of health services</b></p> <ul style="list-style-type: none"> <li>• Telemedicine services across borders are currently practiced by some hospitals and private organizations.</li> <li>• No restrictions exist on services and products available on the Internet for personal use.</li> <li>• There does not exist any Government Policy on telemedicine services. As a result, no controls/obstacles to use this service.</li> <li>• IT Infrastructure is good, the rate of internet subscribers is around 7.3 persons/1000 population.</li> <li>• Bangladesh has no existing GATS commitments in mode 1 in health services</li> <li>•</li> </ul>	<p><b>Mode 2: Consumption of health services abroad</b></p> <ul style="list-style-type: none"> <li>• Bangladesh is a net importer of health service. Countries receiving Bangladeshi patients are mainly from India, Thailand, Singapore, and Malaysia.</li> <li>• No restrictions on private citizens going abroad for consumption of health services</li> <li>• No existing or proposed GATS commitments in any health related sub-sectors under Mode 2</li> </ul>
<p><b>Mode 3: Foreign commercial presence</b></p> <ul style="list-style-type: none"> <li>• Commercial presence requires that Foreign Service providers incorporate or establish the business locally in accordance with the relevant provisions of Bangladesh laws, rules and regulations. There is no fixed ratio of equity between local and foreign investors. Foreign equity to the extent of 100 per cent is allowed.</li> <li>• Difficult to identify FDI in health sector as all private hospitals.</li> <li>• Ministry of commerce and industry is responsible for regulating FDI in health. Licensing of premises and its compliance with standards is the responsibility of MOH</li> <li>• Bangladesh has no existing or proposed GATS commitments on Mode 3 in health services.</li> </ul>	<p><b>Mode 4: Movement of health professionals</b></p> <ul style="list-style-type: none"> <li>• In Bangladesh, the entry and residence of foreign natural persons (service providers) are subject to Bangladesh's immigration and labour laws, regulations, guidelines and procedures. There is no restriction is issuing work permits to foreign nationals in Bangladesh. The employment of foreign natural persons for the implementation of the foreign investment shall be agreed upon by the contracting parties and approved by the Government and such personnel shall be employed in higher management and specialized jobs only.</li> <li>• There is no restriction on professionals to move abroad for temporary job.</li> <li>• Bangladesh has no existing or proposed GATS commitments on Mode 4 in health services</li> </ul>

While addressing the issue related to GATS and its influence on health policy of Bangladesh, it is observed that GATS may have some adverse affect on the health service policy of the country. The GATS actually works in the following manner: GATS commit WTO members to successive rounds of negotiations with a view to achieving a progressively higher level of liberalization in their service sectors. To achieve this, WTO

members make liberalization requests of other member countries in secret, bilateral meetings in Geneva so as to open up to competition those sectors which are of most interest to their own service providers (Khor, 2006).

When a country fully commits a given sector e. g. health service sector under the GATS, it accepts two types of legal obligations. It actually grants ‘market access’ to foreign competitors and refrain itself from establishing barriers to trade, such as quotas that limit the number of providers of a given service (physicians, hospitals etc). It also abstains from establishing barriers to the volume of service supplied by each provider (e. g. number of bed). If Bangladesh commits fully, it agrees to treat foreign competitors no less favorably than the suppliers from its own country (Belsky et al., 2004).

Although, developing countries officially have the right to decide whether to commit a sector to GATS, in practice they come under intense pressure in these negotiations to meet the demands of more powerful WTO members—pressure which the smaller and poorer countries are often powerless to resist.

From a health policy perspective, measures that restrict market access may be more important than measures that restrict national treatment (Blouin, 2006). Restricting market access may serve legitimate health policy objectives, such as limitations on the number of service suppliers in a geographical area based on an economic needs test (Blouin, 2006). If Bangladesh would like to open its health sector to foreign providers it should consider ‘experimenting with liberalization outside of GATS before making GATS commitments as policy reversal remains easier if the experiment produces unsatisfactory results (Khor, 2006).

Liberalization of trade in health services can create opportunities for Bangladesh, but may also aggravate pre-existing problems. Moreover, once liberalization is locked in under international trade agreements, reversing policies becomes difficult. This may be true for a poor country like Bangladesh. It is understood that making inappropriate commitments to liberalize health services under GATS may result in the loss of policy space for Bangladesh.

The barriers to trade in services are opaque, given the nature of transactions involved. Trade in health services, far more than trade in goods, is affected by a variety of domestic regulations, ranging from qualification and licensing requirements and procedures in professional services regulations in telecommunications, and other network services, to universal access requirements in health services (Mattoo and Sauvé, 2003). There are several barriers between India and Bangladesh which are responsible for rise in informal trade in health services between the two countries.

**Table: 37 Opportunities and risk of liberalizing international trade in Health services in developing countries**

Mode of Supply	Importing country		Exporting country	
	Opportunities	Risks	Opportunities	Risks
Cross-border supply	<ul style="list-style-type: none"> <li>▪ Improved access to high quality diagnostic and therapeutic services</li> <li>▪ Service extendable to remote and underserved areas</li> <li>▪ Upgraded skills, dissemination of knowledge through interactive electronic means</li> </ul>	<ul style="list-style-type: none"> <li>• Capital intensive, possible diversion of resources from basic preventive and curative services</li> <li>• May hurt equity if it caters to only the affluent segment of the population</li> <li>• Difficulties in regulating e-prescriptions</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased revenue generation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Problems of electronic transfer of revenue from developing countries</li> </ul>
Consumption abroad	<ul style="list-style-type: none"> <li>▪ Overcome shortages of physical and human resources in specialized fields</li> <li>▪ Contractual arrangement with exporting country to rationalize costs</li> </ul>	<ul style="list-style-type: none"> <li>▪ High foreign exchange consumption by poor governments</li> <li>▪ Mainly the well to do benefit</li> </ul>	<ul style="list-style-type: none"> <li>▪ Promote ‘medical tourism’</li> <li>▪ Increased revenue generation</li> </ul>	<ul style="list-style-type: none"> <li>▪ ‘Crowding out’ of nationals, especially the less well to do</li> <li>▪ Create dual market structure</li> </ul>
Foreign Commercial presence	<ul style="list-style-type: none"> <li>▪ Foreign direct investment in health infrastructure</li> <li>▪ Employment opportunities for local workforce</li> <li>▪ Possible freeing up of local resources</li> <li>▪ Access to higher quality health services</li> </ul>	<ul style="list-style-type: none"> <li>▪ ‘Internal’ brain drain of health professionals</li> <li>▪ Establishment of a two tiered system: ‘crowding out’ of poor, ‘skimming’ of lucrative patients</li> <li>▪ Challenge of regulating foreign investors</li> <li>▪ If subsidies used, potential diversion of resources from the public sector</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increased revenue generation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Similar for an investor in any other sector</li> </ul>
Movement of natural persons	<ul style="list-style-type: none"> <li>▪ In the short run, achieves a balanced health workforce, which could be deployed in remote areas</li> </ul>	<ul style="list-style-type: none"> <li>▪ In the long run, mitigates against nationalization of health workforce</li> </ul>	<ul style="list-style-type: none"> <li>▪ Upgraded skills of providers on return to home country</li> <li>▪ Workforce in labor</li> </ul>	<ul style="list-style-type: none"> <li>▪ External brain drain of skilled workforce</li> <li>▪ Loss of investment in financial capital and subsidized training</li> </ul>



			surplus countries to cater for others ▪ Increased revenue generation	▪ Temporary migration of workforce may result in permanent loss.
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Source: World Health Organization (WTO)

## **6.9 Regional Cooperation in Trade in Health Services: SAARC Region**

The South Asian Association for Regional Cooperation (SAARC) was established when its Charter was formally adopted on December 8, 1985 by the Heads of State or Government of Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. Countries belong to South Asian Region have already liberalized their services sectors to a certain extent through unilateral, multilateral, and regional initiatives. Under the GATS, most South Asian countries (other than Bhutan) have made commitments. Further commitments are forthcoming under regional and bilateral arrangements such as Bay of Bengal Initiative (BIMSTEC) - including Bangladesh, India, Bhutan, Nepal, and Sri Lanka- and the Comprehensive Economic Partnership Agreement (CEPA) between India and Sri Lanka (Kelegama, 2009).

Trade in services is also expected to find its way into the South Asian Free Trade Area (SAFTA) framework (Kalegama, 2009). The idea seems to broaden SAFTA so that liberalization in goods gets a stimulus from services. There also seems to be an observation that the services in South Asia have more complementarities than the trade in goods. The SAARC Summit of the Heads of States (Dhaka 12-13, 2005) recognized the potential for trade in services which has rapidly expanded at the informal level. At the 14<sup>th</sup> Summit (New Delhi, April 3-4, 2007), the leaders stressed that to realize the full potential, SAFTA should integrate trade in services.

Bangladesh also joined the Bay of Bengal Initiative for Multi Sectoral Technical and Economic Cooperation (BIMSTEC). There is another regional agreement in the process of forming an FTA that would include Nepal, Bhutan, Thailand, Myanmar and India. Bangladesh is discussing bilateral Free Trade Agreements (FTAs) with India, Pakistan and Sri Lanka. It has recently finalized a Trade and Investment Framework Agreement (TIFA) with the USA (Bhattacharya, 2005). In the context of the present multilateral trading system, every country is trying to transform the challenges of globalization into opportunities for economic prosperity.

SAFTA will provide a mechanism for enhancing intra SAARC trade and Bangladesh can reap the benefit of regional cooperation. Both India and Bangladesh have long shared common objectives for closer economic integration within the South Asian region. These have recently been reemphasized by signing on to SAFTA4, which takes effect from January 2006.

Some initiatives have been taken under SAFTA in this respect. These include the eventual removal of tariffs and non-tariff barriers on trade between the members, the harmonization of customs procedures and documentation, and the facilitation of banking relationships, and cooperation and improvements in the infrastructure for regional trade (The World Bank, 2006). All these may have favorable effect on health service trade among SAARC countries.

A number of studies have observed that there is a high potential of gains from mode 4. The gain is huge in term of financial aspect. Winters et al. (2002) indicate that large potential gains may come from a small increase in the movement of people between low- and high-income countries. They suggest that increasing developed country quota for incoming temporary movement of natural persons by three percent of the existing labor will generate global income gains of US \$510 billion US \$ per year (Winters et al., 2002). A modest liberalization of this scale may provide large benefits for the developed countries.

To achieve success in regional health service trade, countries under SAARC region should take positive steps such as, remove visa requirements, remove limitations on the movement of natural persons, establish common curricula in medical education, mutual recognition of diploma and other professional qualifications, ease requirements of obtaining necessary permits and authorizations etc. These policies, if implemented, would enhance health service trade substantially among the countries under the SAARC region.

## 7.0 Case Study Nepal

This case study analyzes the trade in health service in South Asian through Nepal's perspective. Nepal is a landlocked least-developed country (LDC) in South Asia. The Government of Nepal is cognizant about the benefit of global economic integration. In this regard, the country in 2004 acceded to the World Trade Organization (WTO) through the normal process of accession. In the same year, it also joined the regional trading agreements such as the South Asian Free Trade Agreement (SAFTA) and the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC). Further, the country has bilateral preferential trade agreement with three countries (Indian, Tibet and Pakistan).

Against this background, the case study will focus on the status of health services trade of Nepal with other South Asian countries and analyze the barriers of smooth flow in the health service trade. The study will primarily focus Mode 2 and Mode 3 since Mode 2 is most used one in health trade in the global context (Chanda, op cit.) and FDI inflow through Mode 3 is important in the health sector of developing countries due to the investment and technology transfer in the country (Maskay et al., 2006). Nevertheless, the study will also touch on the health trade potential through other two modes.

Nepal is net importer of health service by itself but there are several health service sectors in which country has comparative advantage. However, these health services are properly exploited for economic benefits of the country. Further, there is a need to identify the constraints to supply the health service via each mode. So, the study will analyze on i) Policy Framework of Nepal in Health Service; ii) The status of Nepal in term of Health Export and Import and iii) Address the constraints on supply of health service via each mode.

This country case study will use both secondary and primary information. In the context of health export status, the study will use SAWTEE database of 50 foreign patients having been treated in Nepal during the period of 2007. The other information regarding

health trade service has been collected via key informant interview using checklist provided in A X-A XV.

There is no authentic recording of health service trade in Nepal so data in all four modes are not available. Nepal Rastra Bank (Central Bank of Nepal) maintains the record of foreign exchange transaction by purpose which again is underestimated due to substantial informal health trade of Nepal. So, this country study has tried to present a glance of health trade in reference to information collected via own information and some secondary source.

The study has the following limitations.

- The study identifies the potential of Nepal's health service trade with South Asia. But it does not analyze the other overlapping trade potential which would be benefited by the enhancement of the health trade.
- The study conducts the field survey to identify the constraints and barrier to health service import in Nepal. Nevertheless, the study focuses on secondary sources, such as the SAWTEE, 2008 database.
- The field survey is limited to about 15 key informants that include doctors, other medical personals, regulators, private sector, banks and NGOs.
- The analysis has been constraint by the level of information available. The study has not substantially explored Modes 1 and 4 of health service trade because of limited information.

## **7.1 Health services in Nepal - characteristics and policy**

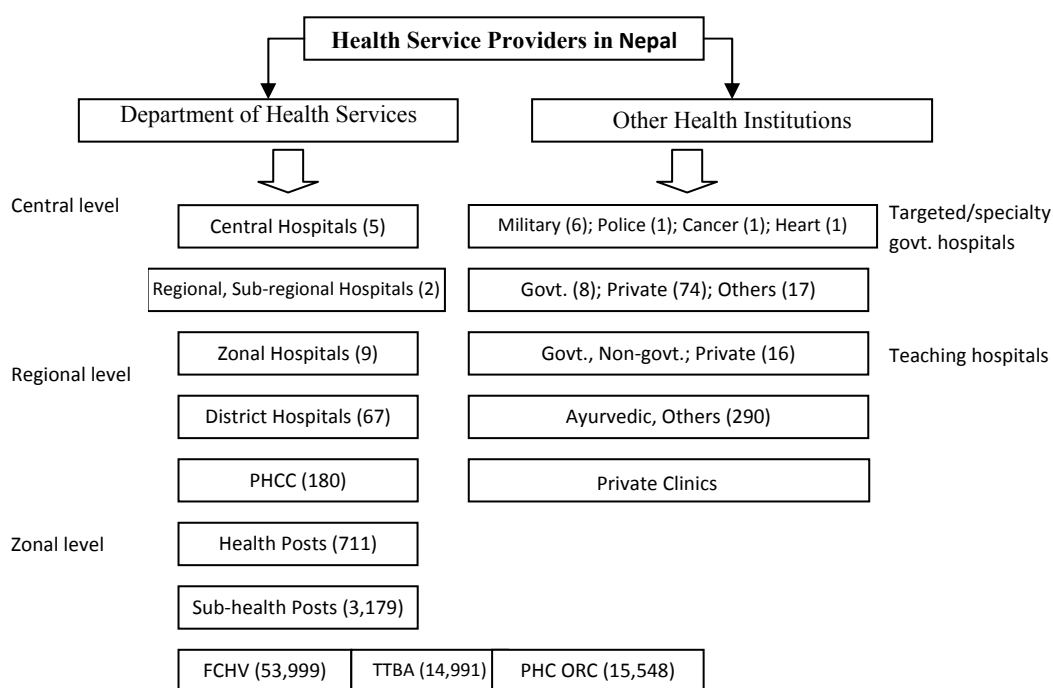
### **7.1.1 Policy framework of health services**

The health sector in Nepal is guided by the National Health Policy, 1991, the Second Long Term Health Plan (SLTHP, 1997 – 2017), various Development Plans such as the present Three Year Interim Plan (TYIP). In consideration to all these policies and planning documents, the strategies have been translated into “Health Sector Strategy: An agenda for Reform” in 2003 and “Nepal Health Sector Program- Implementation Plan” (NHSP-IP) in 2004. Moreover, Local Self Governance Act, 1999 (LSGA, 1999)

increases the responsibility of the local bodies in health service related decisions and extension of health services in the local level.

The public health system focuses to provide the health services emphatically to the rural as well as urban areas. It is organized as a system of public and private health institute which is interlinked through a network of : i) public hospitals at district, zone, regional and central level, ii) health posts at VDC and ward level iii) Private Health Institution iv) National Disease Specific Health Institution and v) Ayurvedic and other health institution [ Figure 1]. NHP 1991 has organized the public health system of Nepal from the lower tier to the upper tier [Figure 37]. Further, it is important to note how the existing organizational structure of GON's Department of Health Services (DoHS) relates to the different administrative levels as a public health care network.

**Figure 36: Flow Chart of Health Service Provider in Nepal**



Source: <http://www.moh.gov.np/Home/FACT.ASP>

The basic health services are largely provided by the public sector and the specialized services are open to both the public and private sector. The non-government sector incorporating “for profit” institutions, non-governmental organizations (NGOs) and mission hospitals provided 41 per cent of the total beds in 2003 (MOH, 2003) which are however mostly concentrated in the urban areas. Together with the liberal policy shift, GON is taking a very proactive approach for the development of the private sector with a view of promoting public private partnership with particular emphasis for the private sector on tertiary care.<sup>13</sup> Nepal Health Service Act, 2053 BS and Nepal Health Service Rule, 2055 BS are the legal document to govern the health service in Nepal Presently, six councils related to Health sector are instituted in Nepal under special law and regulation of respective council in order to govern and supervise the health service<sup>14</sup>.

### **7.1.2 Establishment of health institutions**

Nepal Health Service Act, 1997 and Nepal Health Service Regulation, 1997 govern the establishment of health institution in Nepal [Dixit, 2004]. The concerned act and regulation has provision of establishment of health service institution, recruitment of health staff and supervision of health institutions. The act and regulation also incorporate allopathic, ayurved and homeopathy along with health staff of all level (doctors health workers, assistant health worker and other). Specifically, along with these legal provisions, Industrial Enterprises Act (IEA) 1992 governs the setting up of private profit making health institutions and the Trust Act or Social Welfare Act governs in term of setting up other non profit and non governmental health institution. In terms of registration, the government hospital are registered in Department of Health (DoH) under the Government of Nepal’s Ministry of Health and Population, private profit making hospitals are register in Department of Industry (DoI) under the Government of Nepal’s Ministry of Industry, Commerce and Trade (MoICT) after the consent of DoH the non profit and non governmental hospital are registered with Social Welfare Council (SWC) under Ministry of Women, Children and Social Welfare (MoWCSW) after the consent of DoH. Some Diseases specific hospitals owned by government are also established under

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<sup>13</sup> TYIP also includes the strategy of managing and coordinating human, financial and physical resources for the quality improvement of the services provided under the partnership of private, government and non-government sector.

<sup>14</sup> Please refer Annexure 1 for the detail of these councils.

its own act. For instance, B. P. Koirala Memorial Cancer Hospital has been established under B.P. Koirala Memorial Cancer Hospital Act, 1997 and Saheed Ganga Lal National Heart Center has been Saheed Ganga Lal National Heart Centre Act, 1997. After registration in concerned Department, the health institution needs to be registered at Inland Revenue Office to obtain a Permanent Account Number and obtain permission for trademarks, patents, and designs if necessary.

### **7.1.3 FDI Provision in health**

Foreign Investment and Technology Transfer Act (FITTA), 1992 govern the FDI in health sector under which FDI inflow needs to be registered and approved from Department of Investment after the consent of DoI, DoH and Company Registrar's Office (CRO). Foreign investors are required to undertake following steps (i) incorporating at CRO; (ii) registering and approval from DoI and DoH and (iii) registering and approval from the Department of Investment. In the FITTA and any other FI related government document there is no clear documentation on the approval procedure so FI approval is granted case by case. To facilitate the above-mentioned procedures, the One Window Committee (OWC) was constituted at the MoICT of Government of Nepal but it is less functional because government has not clearly mentioned the authority and responsibility of the committee. Foreign investors can own up to 100% equity in private health firms and are entitled to repatriate the investment amount and other earnings. Further, to facilitate business transactions, foreign exchange restrictions have been relaxed. Foreigners and companies are now allowed to open and operate foreign exchange accounts in any of the domestic commercial banks. Likewise, there is the provision for business visas for foreign investors for up to 5 years. Provisions also exist for providing non-tourist visas to carry out studies for investment along with residential visas for foreign investors.

### **7.1.4 Qualification and licensing criteria of medical practitioner**

Nepal Medical Council (NMC) established under Nepal Medical Council Act (NMCA), is the responsible body to regulate and maintain the standard of the medical and dental doctors in Nepal. Likewise, Nepal Nursing Council established under Nepal Nursing



Council Act is responsible body to regulate and maintain the standard of the nurses and assistant health worker of Nepal. These councils are responsible to recognize the medical certificate of concerned health personal and supervise the concerned medical teaching institutions. In terms of South Asia, NMC has recognised the medical degree (MBBS and Post Graduate) from 6 Bangladesh's Universities, over 100 Indian Universities, 9 Pakistani Universities and 1 Sri Lankan University. NMCA also allows foreign medical professional to practice in Nepal for one year after permission of NMC.

#### **7.1.5 Provision of visa for people's movement**

Visa provision is one of the most important factors to influence services trade via mode 2. Nepal has visa free provision for India, with its border being porous and open. The residents of countries other than India, can apply for three months tourist visa in the Nepali embassy of the country of residence and extent such visa for further three months. If there is no Nepali embassy in the country of residence then the applicant can apply for free visa for three day in the border point entry and receive the tourist visa from Department of Immigration within these three days.

#### **7.1.6 Nepal's commitment in GATS**

In term of general commitment in service sector, the market access limitation of Nepal includes: i) convertible currency limit of USD 2,000 which is applied to Nepalese citizens on personal travel under Mode 2 ii) none would be made more restrictive than that of date accession under mode three and iii) For mode four "Unbound", except for temporary entry and stay of natural persons of another Member as Service sales persons, Persons responsible for setting up a commercial presence and Intra-corporate transferees. Nepal is silent in term of Mode 1 under the market access limitation. The limitation on National Treatment includes: i) None, except with respect to foreign exchange provided to foreigners (excluding those categories of persons covered by commitments in this agreement) to pay for any cross-border services for Mode one ii) None for Mode 2 iii) None except approval from concern department for mode three and iv) Unbound except for measures concerning the categories of natural persons referred to in the market access column for mode four. Nepal has also made additional general commitment in term of

environmental impact and repatriate. Nepal has made specific commitment only in hospital services. The specific commitments in Hospital services are revealed Table 37.

**Table 38: Nepal’s Health Sector Commitment in GATS**

Sector or Sub-sector	Limitation in Market Access	Limitations on National Treatment
<p>Health related and social services</p> <p>A. Hospital services (CPC 9311) and direct ownership and management by contract of such facilities on a ‘for fee’ basis.</p>	<p>1) None</p> <p>2) None</p> <p>3) None, except only through incorporation in Nepal and with maximum foreign equity capital of 51 percent.</p> <p>4) Unbound, except as indicated in the horizontal section.</p> <p>Medical experts can work with the permission of Nepal Medical Council maximum of one year.</p>	<p>1) None</p> <p>2) None</p> <p>3) None</p> <p>4) Unbound, except as indicated in the horizontal section.</p>

(Source: WTO website)

Specifically, FDI cap of 51 per cent in GATS commitment remain void as the FDI policy of the country has unilaterally fixed the cap of 100 per cent in FDI in hospital.

### 7.1.7 International trade in health service

NRB study reveals that the health service accounts marginal share in the service trade of Nepal. The share of health in service trade in 2004 is relatively low<sup>15</sup> (only 0.8 percent) which however is expanding in terms of FDI flow, attracting 28.2 percent of total FDI flow in service sector in 2004 (NRB, 2005). Nepal Rastra Bank data suggest that Nepal is a net importer of the health treatment services in terms of mode one and two on aggregate, and there is also an increasing trend in FDI approval.

In the key informant interview, the major health export and import diseases of Nepal are provided in Table 38. The Nepalese patient of Cancer, Neuro, Kidney, Liver and Heart generally travel to foreign country particularly India for treatment. On the other side, the Indian residing near border come to hospitals located in Terai region of Nepal for treatment. Basically they come to Nepal for the treatment of Pathology, General Medicine and Gastroenterology. Further, Nepal also export health service in eye related disease and Ayurvedic.

**Table 39: Major Disease with Health Import and Export of Nepal**

Major Disease and Related Health Services that Nepali Treat in Foreign Land	Major Diseases and Related Health Services that Foreign Peoples Treat in Nepal
<ul style="list-style-type: none"> <li>• Cancer</li> <li>• Neuro Related Diseases</li> <li>• Kidney Related Diseases</li> <li>• Liver Related Disease</li> <li>• Heart Related</li> </ul>	<ul style="list-style-type: none"> <li>• Pathology (In Terai Belt)</li> <li>• General Medicine (In Terai Belt)</li> <li>• Gastroenterology (In Terai Belt)</li> <li>• Eye</li> <li>• Ayurvedic</li> </ul>

(Source: Key Informant Interview)

**Mode 1:** The recent rapid development in telecommunication technologies and health informatics has been dramatically changing the picture. Telemedicine, the practice of medical care using interactive audio, visual and data communications, includes medical care delivery, consultations, diagnosis and treatment, as well as the transfer of medical

<sup>15</sup> Tourism is the dominant sector contributing one third of the total trade in services and one half of the total FDI flow in service sector in Nepal.

data. In the key informant interview with an official from the Nick Simon Institution, it was revealed that there are all together around 25 hospitals in Nepal that are providing telemedicine facilities and all of them are either government funded or charity hospital. Om Hospital, was the only private hospital that had once initiated this service but hospital later terminated this service. Further, there are not any health service institutions in Nepal that is providing telemedicine facilities to foreign country.

**Mode 2:** Nepal has substantial outflow of patient to foreign country especially India as Nepal has limited capacity in providing services in many diseases. In the key informant interview with senior doctors and medical professionals, it came out that the major disease prevalent in Nepal which lags in overall resources are: Cancer, Neuro related Diseases, Kidney Diseases and Liver Diseases. So the patient of these diseases travel to foreign country especially India for treatment. The information collected from the field survey and other related secondary source postulates a glance of patient outflow from Nepal for treatment [Table 39].

**Table 40 : Patient Flow from Nepal to Foreign Country.**

Source of Information	Flow of Patient	Remarks
Bajracharya and Bajracharya, 2008	Average of 2 to 3 Patient per day to Indian Cities	Migrant Movement Survey conducted in Nepalgunj and Danghadi (Two Bordering Cities with India in Mid and Far Western Region of Nepal) using Purposive Sampling of 25 respondent collected in 2 days
Handicap International, 2008	Average of 9 to 11 Patient per day to Indian Cities	Migrant Movement Survey conducted in Bairahawa (Bordering Cities of with India in Central Region of Nepal) using Purposive Sampling of 100 respondents collected in 4 days
Hospital Agents (Apollo Hospital, Delhi; Bangkok	Average 4 to 5 patient go to Bangkok and Apollo Hospital for	Collected by Study Team During

Hospital, Bangkok)*	treatment	Key Informant Interview
Cancer Patient Association of Nepal*	In last three years, Average of 8 to 10 Patients per year consult the Association regarding procedure to treat in Different Indian Cities	Collected by Study Team During Key Informant Interview
Nepal Kidney Association*	In last year, average of 4 patient went to India for treatment	

(\* Collected during Key Informant Interview)

In the context of patient inflow from foreign countries, there is significant inflow of Indian patient to Nepal for seeking the health care. Information relating to foreign patients in five health institutions of SAWTEE survey on health export of Nepal is discussed in AX-XV. The patients are generally from economically less well off as the SAWTEE database suggests that their mean income is around IRs. 7000. Low and middle level income group consumers from foreign country limits the expansion of services and provision choices of services to them. Wealthy patients in particular might wish to take advantage of advanced, specialized treatments unavailable in the home country or perceived as better quality, or to avoid long waiting lists in the home country.

**Table 41: General Characteristics of Foreign Health Service Consumers**

Statistics	Age	Years of schooling	Monthly income (IRS)	Persons Accompanied with the Consumer
Mean	41	5	7390.74	3
Median	45	4	5550.00	3
Mode	60	1	3000.00	2
Std. Deviation	20	4	8938.43	1
Minimum	1	1	1500	0
Maximum	80	16	30000	8

(Source: SAWTEE, 2008)

Eye care providers have some strategies to export the services through different levels of income of the consumers. Eye hospital at Biratnagar has choices for the consumer ranging from NRs. 900, 1700, 2500, 3500, 5000 and to 8000 for cataract services at the same provider. However Koshi, and BPKIHS are able to provide only very limited choices. Limited service choices not only in the same provider but also limited choices for selection of providers in Nepal are major obstacles to expand the services for high income groups. Due to this they divert to the Patna and Darbhanga for consumption of health services and Nepalese institutions provide services for the low and middle income groups.

**Mode 3:** There has been flows of health related FDI into Nepal, the first (a Nursing home with Chinese FDI) was granted permission for operation in 1991. In this regard and even after about one and a half decade, the operating FDI of the seven firms total about Rs. 1.6 billion (approximately US\$ 231 million) and the four firms have been approved by the government of Nepal and are in course of operation. The situation of health related FDI for 2005 is provided in Table 41.

**Table 42: Foreign Direct Investment in Health Services**

Category	Number of Firms	Foreign Investment	Local Employment	Foreign Employment
Operating	7	1617	877	138
Approved	4	1445	1524	1531
Total	11	3062	2401	1669

(Maskay et. al., 2006 )

**Mode 4:** There are regular flow of Indian specialists visiting Nepal to provide services to Nepalese patients through private hospitals and nursing homes in Nepal. Further there are substantial number foreign medical professional coming to Nepal as visiting professor. SAWTEE, 2008 presents a case study of private medical college where there have 4 to 5 foreign visiting professors in each academic year. Further, Table 41 also resent substantial number of foreign medical professional working in Nepal

### 7.1.8 Barriers to health services exports

During the field survey, some service consumers mentioned absence of ward facility at some service providers, lack of the adequate information about the service providers and limited choices of service providers as the existing disincentives related to the health services and providers. Similarly, a few respondents mentioned security problems/unpredictable situation in the country and cheating in the transportation (particularly in Kathmandu taxis) as the major disincentives from which they suffered. Moreover, though the study could not capture non-Indian foreigners, service provider informed that they are facing additional disincentive of limited choices in food items. Besides these, no any other specific disincentives have been noticed from the field survey while examining it from the consumers' perspective.

In fact, with regards to movement of the patients, one of the most important barriers is emotional insecurity of patients who do not wish to be far from their families and are particularly sensitive of possible cultural and linguistic differences. However, the patients from India did not face any such problems including language, discrimination in providing consultation services and cultural both within and beyond the service providers while receiving health services in Nepal. Disincentives for the export of health services from the service providers' perspective have been identified as elaborated follows.

**Mode 1:** The recent rapid development in telecommunication technologies and health informatics has been dramatically changing the picture. Telemedicine, the practice of medical care using interactive audio, visual and data communications, includes medical care delivery, consultations, diagnosis and treatment, as well as the transfer of medical data. Patan hospital and Om hospital are occasionally involved for receiving such benefits from this mode of supply of service however development of professionalism in this sector is still in far distance Nepal. The existence of the enabling technology constitutes a critical element in providing some of these services: the substantial investment needed would make trade in telemedicine services prohibitively expensive in some cases. Information technology infrastructures such as internet access, electricity, computer networking and technical expertise are basic requirement for exploring the

possibilities of the market in this area however most of the health care providers in Nepal are facing such problems.

**Mode 2:** Patients from foreign countries, particularly from India seeking health care includes (i) those who travel to Nepal looking for specialized and surgical treatments, specially eye care that employ advanced technology which may not be available at home; (ii) those who travel for medical and diagnostic services, looking for a service of similar quality that they can receive at home country, but less expensive (in terms of time and money) or for specific services not available in the home country. Lack of or incomplete information may discourage consumers from looking for receiving same or better services at affordable cost in Nepal. Findings of the field study suggests that prices of services in Nepal compared to border side of Indian market are cheaper at least for two reasons: relatively lower exchange value of Nepalese currency and time cost (travel, waiting and treatment time) of receiving health care. However information channels for foreign consumers are very limited for example, they received information for health services available in Nepal from their family members and previous visits only. Lack of appropriate information channels for attracting non-Nepali service consumers is also the barrier to expand the services.

The health policy is to open markets to domestic and foreign competition with the aim of reducing costs and improving quality for the people. A new challenge for the private and the public sectors is how to coexist in the same market benefiting from each other's presence. Lack of coordination between public and private institutions is one of disincentive to export the services. For example, there is good relation between BPKIHS and Birat nursing home to provide diagnosis services. BPKIHS suggests the consumer to consult Birat nursing home when they have no such services however there is no such relationship between Koshi hospital and Birat nursing home. The major problem for making coordination between the service providers is lack of professionalism to expand the services. Health services can be possible to produce with combination of “man and machine”. Shortage of specialized manpower on the out side of Kathmandu valley and high cost of technology are main barriers to expand the services for the foreign consumers in border area with India.



Low and middle level income group consumers from foreign country limits the expansion of services and providing choices of services to them. Wealthy patients in particular might wish to take advantage of advanced, specialized treatments unavailable in the home country or perceived as better quality, or to avoid long waiting lists in the home country. Eye care providers have some strategies to export the services through different levels of income of the consumers. Eye hospital at Biratnagar has choices for the consumer ranging from Nrs. 900, 1700, 2500, 3500, 5000 and to 8000 for cataract services at the same provider. However Koshi, and BPKIHS are able to provide only very limited choices. Limited service choices not only in the same provider but also limited choices for selection of providers in Nepal are major obstacles to expand the services for high income groups. Due to this they divert to the Patna and Darbhanga for consumption of health services and Nepalese institutions provide services for the low and middle income groups.

Mode 3: The country has started opening their markets including health to foreign presence in various forms and favoring competition as a means to achieve better health services, reduce price escalation, and take pressure off the public sector. In addition, new business techniques have facilitated foreign participation with a minimum of actual investment. Hospital management companies usually try to establish themselves in country which have liberal investment laws, are open to joint ventures, and have either high per capita income or a sufficiently large share of the population which can afford private health treatment. However, highly government intervened sector compared to other consumption goods produced industries and continued political instability in Nepal are major factors to reduce the incentives to the foreigners to invest in health sector. Services are income elastic (De, 2006) and low level of income of Nepali people is a disincentive factor for foreign direct investment in health sector in Nepal.

Mode 4: There is debate on how to get benefit from the outflow of health personnel. The out flow of health has a clear impact on equity if it produces shortages in the home country, thus reducing access to the services that would have been provided by the migrants. The loss of specific categories of health professionals will also reduce the range of services available. On the other hand, if the categories of health personnel involved are

those in which the home country has an oversupply, in this case the country can get benefit from exporting skilled manpower to developed country because we are exporting unskilled labor to some Asian countries. Lack of clear cut vision with cost benefit analysis is limiting the access of market in mode.

Finally, lack of awareness of our own potential areas for exporting health services and lack of policy priority for promoting trade in the health sector are also responsible elements working as disincentive in this sector. Lack of clear cut policies on export of health services and conflicting in objectives among the policies such as free health services to the citizen and trade in health services are the problems working on background for exporting health services in Nepal.

#### **7.1.9 Reforms and potential benefits**

Various reforms help in enhancing trade of health services that result into the expansion of the potential benefits for the domestic country. For examples, if patients move to the country where the treatment is offered, they bring with them foreign exchange, new market opportunities and, in doing so, may even diminish the incentive for the migration of qualified personnel. On the other hand, due to the special characteristics of health market, establishment of additional health providers do not reduce the market share, however they increase the scope of the market. Due to the increase in access of services, information and choices additional consumers attract from the communities. Converting Health service from luxurious goods into normal goods encourages the home providers to exporting the health services. We have good example of eye care services. The eye care providers are competing to export the services. This is a leading sector exporting health services. Other health providers can explore their services through this channel.

Various international driving forces are exerting a significant influence on health services and are creating opportunities in the health sector. Health is an essential good that can be linked with other sectors such as tourism, education. Studies have identified different channels of potential benefit depending on the country context. In the Chilean context, Leon (2000) has identified prioritizing elder care, establishing the links between tourism and health, exporting health service in border areas, enhancing international agreements

on health insurances and facilitating specialized professional and technical training. Similarly, Chacko (2001) has identified 1) upgradation of basic amenities and hospital infrastructure, 2) co-ordination between the healthcare and tourism sectors, 3) creating a resource pool of highly skilled and cordial manpower, 4) standardization of services and accreditation of hospitals, 5) increasing visibility of India on the world map, and 6) the impact on domestic healthcare services as the issues requiring attention with reference to medical tourism in India. The channels which are practiced presently or are appropriate for future in order to exploit the potential export opportunities for Nepal are discussed below.

### **7.2.1 Channels for First Mode**

Advancement in telemedicine and the Internet have led to new opportunities for exporting health services worldwide. The practice of telemedicine address a number of issues, including cost containment, optimizing the use of expensive technology and specialized medical services, upgrading of health treatment, improving access of patients in remote areas to primary and specialized health services, and regional sharing of knowledge and cooperation. This facilitates international flow of the service usually from more advanced location to less advanced areas. However, in Nepal, with lack of communicational infrastructure and absence of proper coordination and integration with the foreign health service providers, problems remain with quality assurance, reliability, and competitive cost structure. Hence, in brief, there remains less feasibility to export significant services in the present context via first mode in Nepal.

### **7.2.2 Channels for Second Mode**

To expand the exports via second mode, areas of both competitive and comparative should be considered. Currently, following elements have been working as the important elements for exporting the services.

- Quality service at cheaper cost: Quality of health services available at lower (affordable) cost in Nepal compared to Bihar and Uttar Pradesh (relatively weak health system).

- Regular campaigns: Particularly eye hospitals of Nepal are regularly conducting campaign in rural communities in India.
- Establishment of referral chain: Trainings about the symptoms of eye diseases are provided to the representative persons in the communities and are identified as the referral person for eye care in Nepal. Referral chains in the Indian communities have been developed though not formally but are well established.
- Components of comparative/competitive advantages: Different components such as quality, lower travel time, lower cost of treatment, relatives living in Nepal (time, quality and price) are jointly contributing to the comparative/competitive advantage for attracting patients in Nepal.
- Presence of doctors from India: Some health service providers have Indian doctors that is motivating Indian consumers to that particular service provider.

Potential channels that could be promoted in the future to enhance service exports by attracting foreign patients in the domestic territory are as follows.

- Developing the new and unique methods of services delivery that are feasible in the country,
- Integrating health services and tourism,
- Encouraging for the establishment of foreign patients targeted service providers,
- Enhancing capacity of the existing service providers where there is greater flow of the foreigners and encouraging for the establishment of other service providers in the nearby locations.

### **7.2.3 Channels for Third Mode**

UNCTAD (1997) has identified a role for developing countries to work with least developed countries (LDCs) to strengthen their capacity to provide specialized health services to their populations by procuring required modern medical and surgical equipment and training physicians and surgeons in delivering these specialized services. Affiliation or partnership with reputed service providers in advanced countries would enhance service facilities in developing countries by improving quality of services and promoting research and development. Maskay et al (2006) have examined the practices of service sector investment liberalization and incentives from selected developing

countries. They have found that there did not appear a clear relationship between the incentives (e.g. liberalization strategy) and FDI flows; the exception is the regulatory incentive which perhaps gives an indication of the investment climate – this has a strong relation with FDI flows. For Nepal, exporting service through outflow of the FDI seems a bit difficult until now which however should not be overlooked for the future. Important channels for exporting services through the third mode are mentioned below.

- Encouraging recognized specialty service providers to take initiation for extending their services in the foreign market by FDI outflow after assuring their quality and reviewing comparative cost structure.
- Provisioning regular visit of the medical personnel through management contract or tie up with foreign hospitals at greater number of domestic hospitals.
- Liberalizing the policies of licensing provisions and the establishment of joint venture hospitals,
- Attracting inflow of FDI that has capacity to enhance the export of services through other channels. For example, liberal provisions can be made for attracting reputed foreign hospitals, retirement homes, old age care centers to made investment in the domestic country that targets to attract service consumers from the foreign land.

#### **7.2.4 Channels for Fourth Mode**

Discussed in earlier section , there is trend of outflow of health personnel usually from developing to developed countries which is the apparent potentiality for the country like Nepal to export service via fourth mode. However, the problem associated with this is that there is also inadequacy of skilled personnel in the domestic country. Together with solving the domestic problem we can promote the export through the channels as pointed out below.

- Prioritizing the production of medical personnel in the domestic country,
- Promoting bilateral and multilateral agreements for mutual benefits by creating the environment for the movement of natural persons,

- Enhancing international network by coordinating reputed foreign health institutions so as to expand and manage the outflow of health personnel to provide health services in the foreign land.

Nevertheless, Maskay (2004) has highlighted some of the challenges with unbridled liberalization in general, and for Nepal in particular. Likewise, there are a number of barriers which impede the movement of service suppliers, including: visa and entry provisions, and licensing and recognition of qualifications which to some extent have been addressed under the GATS. Similarly, at the multilateral level there is a need for the promotion of transparency in standards and qualifications requirements.

## **8.0 Conclusions and policy recommendations**

In order to gain insights into the trade in health services, we designed and carried out a study to collect data, information and opinions of patients, hospitals and doctors involved in this trade. A total of 190 foreign patients from SAARC countries that came to India to receive medical services, 20 hospitals across five metros, and 65 doctors active in offering professional services were surveyed using three detailed questionnaires designed specifically for this study.

We find a gender bias among the foreign patients. An overwhelming majority (about 79.5 per cent) of the patients is male and more than half are in the age group 40-59. Not so surprisingly, about 95.8 per cent of the patients are from Bangladesh. The largest number of patients (46 per cent) is self-employed followed by another 30 per cent in private service. About 12 per cent have agriculture as their source of income. Surprisingly, about 10 per cent of the patients are in government service in their respective country which implies a perceived lack of medical facilities even for government servants.

The largest number of patients coming to India is for cardiac (49) and cancer (45) treatment. Orthopaedic (21) and kidney-related (22) treatment also forms a significant percentage. We notice a little bi-modality among cardiology patients – both juvenile (under 19) and middle-aged patients outnumber youth in the sample. The dominance of males across all age groups and across all disease categories is also clearly visible – the only exception being patients who are between 20 and 39 years old and do not have any

of the stated diseases. This could be due to gynaecological problems faced by the female youth patients.

Majority of the patients got their diagnosis done in their home country. Apparently, the local doctors advised them to go abroad for better treatment in view of insufficient facilities and expertise in the home country. In many cases, travel to India for treatment came after many months of diagnosis.

As many as 15 per cent of the patients were found to have entered India on tourist visa implying that the higher transaction cost of getting a medical visa is much more than the higher perceived value for the same. Over 85 per cent of the patients have entered India on a one-month single-entry visa. The related uncertainty and anxiety would be adding to the cost associated with the patient's treatment in India. About 11 per cent of the patients admitted to using the services of a broker or a middleman for their visa.

A vast majority (104 out of 190) patients reported that they came to India because of its inexpensive and high quality doctors – a pull factor – while 49 and 30 reported the absence of good quality doctors and medical infrastructure, respectively, in their home country – a distinctive push factor. Regarding remittance of foreign exchange, the higher income households do bring in slightly higher amounts through the informal route. There is no particular relationship between the rate at which Indian rupee is bought by the Bangladesh patients and their respective household income.

We also studied the major obstacles to a foreign patient receiving medical services in India on a scale of 1 to 5. It turns out that visa is a major obstacle to trade in medical services (average score 3.84). Neither language nor central bank permission for remittance nor information regarding medical facilities in India is perceived to be a major obstacle, but non-availability of Indian rail ticket in the patient's home country is.

An overwhelming majority of 96.8 per cent patients are happy with the medical treatment but feel the barriers are unnecessary. Surprisingly as many as 73.2 per cent have no particular view on current account convertibility and only 24.2 per cent feel that their country should have it. Between 70 and 80 per cent patients feel that doctors should be able to move freely to another country, that there should be standardization of skill

among medical personnel, that there should be dual taxation treaty to help medical professionals and that if their country removed the barriers to trade in health services, there will be more welfare gains. According to 77.9 per cent of the respondents, visa issues are complicated. About 40 per cent patients reported that they have been cheated by the informal foreign exchange traders while only 19.5 per cent reported not being cheated by them. A clear eighty percent of the patients have opined that their medical insurance policy should be valid across all SAARC countries and another 64.7% patients feel that the airfare is too high.

All twenty hospitals surveyed reported receiving patients from some SAARC country or the other. South Indian hospitals from Bangalore and Chennai are more active in offering telemedicine services. Only six hospitals reported that any doctor from another SAARC country visited them over the last two years. As expected, none of the hospitals are having any Mode 3 medical service.

Doctors corroborate the information gathered from the patients that a very large number of the patients come from Bangladesh. In our sample we found that Sri Lanka sent the second highest number of patients, followed by Nepal from within the SAARC. But overall, a large number of patients also come from the gulf countries. Only 20 per cent of the doctors surveyed travel to SAARC countries to treat patients. This percentage is still fairly high considering that Mode 4 services trade is perhaps the most restrictive among all the four modes.

Security environment comes out as a strong demotivating reason discouraging movement of doctors. The attractiveness of the Indian market is reason enough for some doctors not to move to SAARC countries. The hassles of getting an employment permit, complicated visa process or income tax policies and complications thereon also do not appear to be strong enough reasons. In summary, Mode 4 service seems to have the highest potential to offer the maximum welfare gain in South Asia.

Finally, in Table 42 we have summarized Mode-wise the various barriers to international trade in health services that exist in the SAARC region.



**Table 43**  
**Health Sector Barriers to Trade**

Barrier Code	Barrier Name	Barrier Description
<b>MODE 1</b>		
<b>Cross-border transaction</b>		
1-1	Telemedicine	Tele-medicine in collaboration with foreign hospitals either not allowed or allowed with permission
1-2	Payment system for honorarium	Payment for fees and honorarium of foreign doctors not allowed without permission of central bank
1-3	ICT to support telemedicine	ICT support needed to support telemedicine either not allowed or allowed with permission
1-4	Regulatory environment for telemedicine	The regulatory environment for telemedicine does not allow establishment/operation/both of telemedicine facilities without any approval
1-5	Incidence of income-tax	Not having double taxation treaties with SAARC member countries
<b>MODE 2</b>		
<b>Consumption abroad</b>		
2-1	Visa requirements	No open visa policy for patients coming from other countries
2-2	Registration requirements	Free and unregistered movement of foreign patients not allowed
2-3	Amount that can be carried in foreign currency by patients	Patients cannot carry unlimited foreign exchange for their treatment abroad without approval of central bank
2-4	Common health insurance policy	Health insurance policy from home country of patient not valid in country of consumption of health services
<b>Mode 3</b>		
<b>Commercial presence</b>		
3-1	Establishment of hospitals	Regulatory impediments in establishing foreign hospital in country
3-2	Operation of foreign hospitals	Permission and approvals needed periodically to operate foreign hospitals
3-3	Hiring issue	Restrictions on hiring foreigners in foreign hospitals
3-4	Composition of the Board	Composition of the board has restrictions in terms of foreigners and locals
3-5	Repatriation	Repatriation of profits or dividends require permission of central bank
3-6	Taxation policy	Foreign hospitals are under the country's taxation policy
<b>Mode 4</b>		
<b>Movement of natural persons</b>		
4-1	Work permit	Approval and/or pre-employment criteria + limits on the lengths of work permits
4-2	Compensation	Payment to foreign doctors not allowed without permission of central bank
4-3	Double taxation	Not having double taxation treaties with SAARC member countries
4-4	Standardization of qualification	Qualifications of doctors and other medical staff acquired in another SAARC country not automatically recognized to allow practice

Our case study based Bangladesh reveals that telemedicine services may help Bangladesh to provide better services to its people, side by side checking illegal money transfer to neighboring countries. Telemedicine may assist more consumers to get access to faster, better and possibly cheaper diagnostic medical services, including some therapeutic services. It should be borne in mind that there may be weak consumer protection and for this reason additional inter-country agreements are needed.

It is understood that telemedicine and teleconferencing services between the SAARC countries can help to import and export services and accordingly benefit and improve the services of both private and public hospitals of the SAARC region. At the regional level SAARC countries have initiated a project called SAARC Telemedicine Network<sup>16</sup> Although Bhutan and India have already entered into the Network and are reaping the benefit of this technology, unfortunately the Bangladesh government has not taken any effective initiative in this respect and the country still remains outside the SAARC Telemedicine Network. Countries like Bangladesh, Nepal, and Afghanistan for example, can join in the regional group like SAARC telemedicine network, and provide its citizens faster, superior and cheaper diagnostic medical services, including some therapeutic services through regional telemedicine services.

We find that Mode 2 provides quality treatment to Bangladeshi patients, there is no doubt that a huge amount of foreign exchange of Bangladesh outflows to foreign countries, often through illegal channel as Bangladeshi patients spend huge amount of foreign exchange in India and East Asian countries like Thailand and Singapore for receiving treatments.

Our analysis suggests that commercial presence in health services (Mode 3) can create supplementary resources for investment in and upgrading of health care infrastructure and technologies of the country. The availability of private capital in the country may reduce the total burden on government resources and may help to generate employment. Inflow of foreign capital in certain parts of the health system (e. g. establishment of hospitals with modern facilities) may reduce the burden on government resources and allow the public sector to relocate its resources toward the patients with less ability to pay. The presence of foreign commercial firms (with higher levels of pay and /or better equipment and premises) may entice Bangladesh health personnel away from public facilities: an ‘internal’ brain drain. For this reason there is a need to formulate effective public policy to check it and there is a need to impose limitations on FDI in health services.

There are also other possible negative effects of FDI in health services in Bangladesh e. g. excessive technological dependence, capital flight and profit outflow. All these may lead to

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<sup>16</sup> <http://www.kuenselonline.com> In case of Bhutan, the project takes the existing Bhutanese health telemedicine a step further (<http://www.kuenselonline.com>) and it helps to develop mutual effort involving a regional telemedicine network. The project, which was proposed by the Indian Prime Minister, Dr. Manmohan Singh during the 13th SAARC summit in Dhaka, is being implemented with financial help from the Indian government (<http://www.kuenselonline.com>).

negative effects on the Bangladesh's balance of payments. It may also make foreign medical services affordable to wealthy persons and to those with expensive medical insurance. In China, majority of hospitals involving foreign capital are established in urban coastal areas and not in the rural areas, as wealthy people live in the urban areas (Blouin, 2006). It is generally observed that foreign private health service providers try to offer services which are not offered by the public sector. These services are usually given to attract affluent customers. FDI actually enhances commercialization of the health care sector. Bangladesh, therefore, should take a step back and first think through the above issues of the risk and benefits of commercialization of its health sector and then decide whether this sector should be opened up to foreign investment or not.

We find that temporary movement of personnel (Mode 4) may assist Bangladesh and other SAARC countries to receive essential health-care services. It is felt that Bangladesh would be benefited substantially through increased export of service providers (e. g. doctor and nurses) through TMNP. It has been observed that there exist severe disparities in the number of health personnel among SAARC countries. TMNP may make health services more accessible and affordable, thus increasing the welfare of the SAARC countries. In this respect some constructive knowledge spillover effects are also possible. TMNP can assist to reduce these disparities and help to reduce the shortages of health professionals. Bhutan has already shown interest to employ Bangladeshi doctors in the hospitals of country. This is a significant signal for Bangladesh indeed. Bangladesh can adopt an effective domestic health policy in this respect. For opening up market in the SAARC region and also in the developed countries, government should identify current capacity of supply of health professionals within the country. Special type of visa can be introduced for the SAARC countries in this respect. Indian proposal on GATS Visa is gradually becoming popular both in developed members and developing members who successfully distinguished between temporary provision of service supply and migration (Bhattacharya et al., 2003). Some developing countries e. g. Tunisia, earns huge amount of foreign exchange through health service trading. Tunisia has probably the highest potential for health services exports in the MENA (Middle East and North Africa) region (Lautier, 2008) and a country like Bangladesh can follow the model of Tunisia in this respect.

Bangladesh government should also devise a long term plan for health service trade. Identification of market and negotiations for market access should be linked with health professional's skill development plan. The number one priority in upcoming negotiations for

Bangladesh in health service trade should be TMNP under mode 4. The liberalization of health sector with limited opening of mode 4 in the SAARC region will bring positive result in reducing deficit in trade in health services, improving quality of health services, and enhancing technology transfer. The policy of exporting health service providers through TMNP requires plans for attraction of returned migrants, an essential element of which is to help them to be effectively absorbed into the domestic labor market (Raihan and Mahmood, 2004).

It is also understood that in designing health service trade in future under SAFTA, it is vital to protect the interests of the smaller and weaker economies of the SAARC region for example, Bangladesh and Afghanistan, so that these countries can constructively engage themselves in benefiting from access to a free trade area.

We advocate following recommendations based on our Nepal case study,

- **Encouraging Greater Involvement of Private Sector:** Health services at most of the public institutions in Nepal are subsidized by the government and services are generally provided from public good perspective. This implies that such public institutions are less important from the trade viewpoint. Therefore greater involvement of the private sector particularly in operating teaching hospitals and tertiary care, and liberalization of the policies for exporting health services are necessary for exporting the services.
- **Facility Differentiating at Cost Differentiation:** Most of the patients arrived from India belong to low-income households. However, some patients have expressed their willingness to pay even higher fees for the services however they were referring to arrange additional and fringe benefits while consuming the health services. Therefore, provision of at least two or three levels of fee structure with differing facilities particularly at specialty and high cost treatment providers should be arranged to attract high income foreign people for service consumption.
- **Promoting Specialty Services:** Rather than the general services, Indian patients are found to be interested in the specialty and chronic problem related services. Therefore, Indian patients-targeted departments with relevant services should be established particularly in the hospitals which are nearer to India. In doing so, priority should be given to the illness requiring high-cost treatment so that volume of the trade would be large.
- **Building Effective Information Channel:** Effective information channel needs to be developed to attract larger flow of the patients from the foreign land. Many patients are

- facing problems in identifying appropriate service provider because of the non-availability of the information regarding available services and the cost structure in different institutions.
- **Promoting Unique Treatment System:** A different strata of patients can be attracted if the unique features can be incorporated in the domestic service system. For this purpose, more focus should be given on research activates for exploring the locally available natural resources that are useful in the treatment and at the same time for developing country-specific unique method of treatment and promoting traditional methods of treatment.
  - **Assuring of the Service Quality:** Quality of the services is one of the most important elements to attract patients in a particular health institution. Therefore, government should make necessary provisions for assuring quality of the health services.
  - **Attracting Foreign Investment for Human Resource Development:** Some of the advanced countries like USA, Canada have high demand for low cost health service providers, particularly from developing countries. To fulfill this gap in those countries and for the promotion of service export through the bilateral agreements, efforts should be done to attract FDI to raise the production of human resources in the domestic country. By this means export of health service can be facilitated mainly via fourth mode.
  - **Integrating Health Services with Tourism Industry:** Despite the increasing inflow of non-Indian tourists, health tourism is found virtually limited to Indian service consumers in Nepal. Therefore, there is need to integrate health services with the tourism for exporting services to non-Indian foreigners via second mode. For this purpose, gradually tourists can be attracted for the treatment purpose in the country by making them familiar with the domestic service system through the arrangement of health services in the tour package, etc.
  - **Management Tie Up and Network Expansion:** Management tie up and the expansion of the network of the domestic service providers with the reputed foreign health service providers and insurance companies is important for exporting services via both second and third modes. Government can encourage for this primarily through policy adjustments.
  - **Effective Policy and Regulatory Provisions:** In the present context of increasing role played by the private sector, the purpose of regulating the health services in the country and registering medical practitioners according to their qualifications by establishing a Medical Council as provisioned in Nepal Medial Council Act seems relevant. Initiation

should be taken in this line to ensure quality services and bring homogeneity in the services which are important elements to attract foreign patients for service consumption.

## References

ADB and UNCTAD (2008), *Quantification of Benefits from Economic Cooperation in South Asia*, Macmillan India Limited, New Delhi.

Alam, S. M. I. (1986), “ Job Satisfaction: A Case Study of Working women in Different Garment Factories in Dhaka City”, *Journal of Management Business & Economics*, Vol. 12(1), pp. 72-88.

Andaleeb, S. S., Siddiqui, N. and Khandakar S. (2007), “Patient satisfaction with health services in Bangladesh”, *Health Policy and Planning*, 22, pp. 263-273.

Andaleeb, S. S. (2006 ), “ Choice and evaluation of hospitals in Bangladesh: insights from patients and poly implications”, *Journal of Health & Population in Developing Countries*, 1(2), pp. 19-28.

Arnold, P. J. (2005), “ Disciplining domestic regulation: the World Trade Organization and the market for professional services”, *Accounting, Organizations and Society*, 30, pp.299-330.

Adlung, Rudolf and Carzaniga, Antonia.(2001), “ Health services under the General Agreement on Trade in Services”, *Bulletin of the World Health Organization*, World Health Organization.

AHIDF and DFAT., (1996), *The Australian Health Care Industry*. Australia: Australian Health Industry Development Forum and Department of Foreign Affairs and Trade.

Ahmed, Sadiq ( 2006), *Explaining South Asia’s Development Success: The Role of Good Policies*. Washington DC: World Bank

Baysan, T., A. Panagariya and N. Pitigale (2006), *Preferential Trading in South Asia*, Policy Research Working Paper 3814, World Bank, Washington D.C.

Bangladesh Bank, *Bangladesh Bank Enterprise Survey*, various issues.

Banik, Arindam, Prabir De and Pradip K Bhaumik ( 2009), *Measuring the Barriers to Trade in Services in South Asia: An Empirical Exercise*, International Management Institute, November, *mimeo*.

Bhattacharya, D. (2005) *Least Developed Countries in Trade Negotiations: Planning Process and Information Needs*, Paper 52, Centre for Policy Dialogue, Dhaka, Bangladesh.

Bhattacharya, D. (2002) *Foreign Direct Investment in South Asia: Promises and Pitfalls*, presented the paper for the roundtable on “Government-Industry Partnership: Sourcing Foreign Direct Investment for Poverty Alleviation in SAARC Countries” held in Paradise Island, Maldives, 29 September– 1 October 2002.

Bhattacharya, D., Rahman, M., Raihan, A., Tipu, M. A., Khatun, F. A. (2003), Ongoing WTO negotiations and Bangladesh’s interests: Insights from CPD’s October 2002 tracking mission to Geneva, CPD Occasional Paper 34., Centre for Policy Dialogue, Dhaka.

Belsky, L., Lie, R., Mattoo, L., Emanuel, E. J., and Sreenivasan, G.( 2004), “The general agreement in trade in services: implications for health policymakers”, *Health Affairs*, 23, no. 3, pp. 137-145.

Blouin, C. (2006), International trade in health services and the GATS, Presentation at the CEEC, La Havana, July 13-14.

Brouwer, W., Exel, J. V. Hermans, B. and Stoop, A. (2003), “Should I stay or should I go? Waiting lists and cross-border care in the Netherlands”, *Health Policy*, 63, pp. 289-298.

Broens, T. H. F., Veld, R. M. H. A. H., Vollenbroek-Hutten, M. M. R., Hermens, H. J., Halteren, A. T., Nieuwenhuis, L. J. M.( 2007),“Determinants of successful telemedicine implementations: a literature study”, *Journal of Telemedicine and Telecare*, 13, pp. 303-309).

Bhattarai, Keshab and John Whalley (1998), *The Division and Size of Gains from Liberalization of Service Networks*, National Bureau of Economic Research Working Paper: 6712.

Bajracharya, Bhuban B and Rojan Bajracharya.(2008), *Endline Evaluation of the Community Based Trafficking Prevention Initiatives Project*. Submitted to Save the Children. Kathmandu: Technical Review Group Pvt. Ltd.

Brown, D., A. Deardorff and R. Stern (2002), *Computational analysis of goods and services liberalization in the Uruguay Round and the Doha Development Round*, Discussion Paper No. 489. Research Seminar in International Economics, School of Public Policy, The University of Michigan.

Chanda, Rupa, (2002), *Trade in Health Services*. New Delhi: Indian Council for Research on International Economic Relations, *mimeo*.

Chanda, R. (2001), *Movement of natural persons and the GATS*, Report written for the Indian Council for Research on International Economic Relations, New Delhi, India (Excerpt published by Blackwell Publishers, Oxford, UK).

Chanda, R. (2003), “ Social services and the GATS: key issues and concerns”, *World Development* Vol. 31, No. 12, pp. 1997–2011.

Chia, Ngee Choon and John Whalley (1997) “A Numerical Example Showing Globally Welfare-Worsening Liberalization of International Trade in Banking Services”, *Journal of Policy Modelling*, Vol. 19, No. 2, pp. 119-27.

Claessens, S. and D. Klingebiel (1999), *Alternative Framework for the Provision of Financial Services*, Policy Research Working Paper 2189, World Bank, Washington D.C

Centre for Policy Dialogue ( 2008), *State of Bangladesh economy and an analysis of the National Budget for FY 2008-2009*, Dhaka, Bangladesh.

Cartwright, L. (2000), “ Reach out and heal someone: Rural telemedicine and the globalization of US health care”, In P. Brodwin (ed), *Biotechnology and culture, bodies, anxieties, ethic*, Bloomington: Indiana University Press.

Dailami, M (2000), *Financial Openness, Democracy and Redistributive Policy*, Policy Research Working Paper 2372, World Bank, Washington D.C

Deardroff, A (2001), “International Provision of Trade Services, Trade and Fragmentation”, *Review of International Economics*, Vol. 9, No. 2, pp. 233-248

De, P. (2006), “The Growth of International Trade in Services: Some Implications”, *Journal of International Logistics and Trade*, Vol. 4, No. 2.

De, P. and B. Bhattacharyay (2007), *Deepening India – Bangladesh Economic Cooperation: Challenges and Opportunities*, Discussion Paper # 130, Research and Information System for Developing Countries (RIS), New Delhi

Dee, P. and K. Hanslow (2000), *Multilateral Liberalization of Services Trade*, Productivity Commission Staff Research Paper, Ausinfo, Canberra.

Dixit, Hemang. (2004), *Health in Quest: Nepal*. Kathmandu

Dacanay, J. C. and Rodolfo, M. C. L (2005), *Challenges in Health Services Trade: Philippines Case*, Discussion paper Series No. 2005-30, Philippines Institute for Development Studies, Philippines.

Drager, N. D (undated), *Trade in Health Services and GATS*, Department of Ethics, Trade Human rights and Health Law, World Health Organization (WHO).



Findlay, C. and T. Warren, (eds.) (2000), *Impediments to Trade in Services: Measurement and Policy Implications*, Routledge, New York.

Findlay, C. and Warren, T. (2000), 'Introduction', in Findlay, C. and Warren, T. (eds) *Impediments to Trade in Services: Measurement and Policy Implications*, London: Routledge, pp. 1: 20.

Francoise, J., and B. Hoekman (1999), *Market Access in the Service Sectors*, Tinbergen Institute, *mimeo*

Government of Bangladesh, (2001), *Bangladesh Health Bulletin, various issues*. Directorate General of Health Services (DGHS), Dhaka.

Handicap. International. (2008), *Situation of Physically Disable in Central Terai of Nepal*. Kathmandu

Hoekman, B. (1995) "Assessing the General Agreement on Trade in Services," in W. Martin and L.A. Winters (eds), *The Uruguay Round and the Developing Economies*, Discussion Paper No. 307, World Bank, Washington DC, pp. 327-64.

Hoekman, B. and C.A. Primo Braga (2001), *Protection and Trade in Services: A Survey*, Volume 1, Policy Research Working Paper 1747, World Bank, Washington D.C.

Hjelm, N. M. (2005), "Benefits and drawbacks of telemedicine", *Journal of Telemedicine and Telecare*, 11, pp.60-70.

Huque, S. M. R. (2000) Consumers' Perception on Health Service Marketing of Private Hospitals in Dhaka Metropolitan Area. Unpublished Masters' Thesis. Department of Business Administration, Jahangirnagar University, Savar, Dhaka, Bangladesh.

Hjortsberg, C.A., and Mwikisa, C.N. (2002) Cost of Access to Health Services in Zambia. *Health Policy and Planning*. 17(1):71-77.

Kelegama, S. and I.N. Mukherjee (2007). *India-Sri Lanka Bilateral Free Trade Agreement: Six Years Performance and Beyond*, RIS Discussion Paper #119, New Delhi.

IHE, 2002. *Cross border health care: A study of determinants for patients in Kolkata from Bangladesh*, Dhaka: Institute of Health Economics, University of Dhaka.

Johnston, K., Kennedy, C., Murdoch, I., Taylor, P., Cook, C. (2004), "The cost effectiveness of technology transfer using telemedicine", *Health Policy Planning*, 19 (5), pp. 302-309.

Johansson, S.E., Konlaan, B.B., and Bygren, L.O. (2001), "Sustaining Habits of attending Cultural Events and Maintenance of Health: a Longitudinal Study", *Health Promotion International*. 16(3),pp.229-234.

Jennett, P., Yeo, M., Pauls, M., Graham, J. (2003),” Organizational readiness for telemedicine: implications for success and failure”, *Journal of Telemedicine and Telecare*, 9, pp. 27-30.

Jain, C. S. (1999), “Prospects for a South Asian free trade agreement: problems and challenges”, *International Business Review*, 8, pp. 399-419.

Kelegama, S. (2009). *Trade in Services in South Asia*, SAGE: India

Khor, M. (2006) UNCTAD panel debates state of WTO services negotiations, Geneva, 10 February, 2006.

Lautier, M. (2008) “Export of health services from developing countries: The case of Tunisia”, *Social Science & Medicine*, 67, pp. 101-110.

Mattoo, A, Rathindran, R. and Subramanian, A. (2006). “Measuring Services Trade Liberalization and its Impact on Economic Growth”, *Journal of Economic Integration*, Vol. 21, No. 1, pp. 64 – 97

Matto, A and Robert M. Stern. (2008). *A Handbook on International Trade in Services*, Oxford University Press, New Delhi

Mattoo, A., R. Rathindran and A. Subramanian (2001), *Measuring Service Trade Liberalisation and its Impact on Economic Growth: An Illustration*, Policy Research Working Paper 2655, World Bank, Washington D.C.

Ministry of Health. (1991). *National Health Policy, 1991*. Kathmandu: World Health Organization

\_\_\_\_\_. (1999), *Second Long Term Health Plan 1997 – 2017*. Kathmandu.

\_\_\_\_\_. (2003) *Strategic Plan for Human Resources for Health 2003 to 2017*, Kathmandu: Government of Nepal.

\_\_\_\_\_. (2005), *Annual Report 2005*, Kathmandu: Department of Health Services

Maskay, Nephil Matangi. (2004) “The Interaction of Increased Trade and the Decentralization of Health Care Delivery in Nepal: A Suggestion for Reform”, in *Yale Journal of Policy, Law, and Ethics*, Volume IV, Issue 2.

Maskay, Nephil Matangi, Rajan Krishna Panta and Bishnu Prasad Sharma.( 2006) *Foreign Investment Liberalization and Incentives in Selected Asia-Pacific Developing Countries: Implications for the Health Service Sector in Nepal*. Working Paper Series,

No. 22, Asia-Pacific Research and Training Network on Trade.  
<http://www.unescap.org/tid/artnet>

Mattoo, A. and Sauv , P. (2003 ), “Domestic regulations and trade in services: Key issues”, in Mattoo, A. and Sauv , P. (eds) *Domestic Regulation & Service Trade Liberalization*, Washington D. C.: The World Bank.

Mikic, M. (2007), Health related services in multilateral and preferential trade arrangements in Asia and the Pacific, Asia-Pacific Research and Training Network on Trade, Working Paper Series, No., 30, January, 2007.

Nessa, A., Ameen, M. A., Ullah, S., Kwak, K. S. (2008), “Applicability of telemedicine in Bangladesh: Current status and future prospects”. *Conference proceedings, Third International Conference on Convergence and Hybrid Information Technology*, pp. 948-953.

New Age. (2006), New Age, Daily Newspaper, Dhaka, Sunday, October 8, 2006

News Today.( 2005), Daily Newspaper, Thursday August 11, 2005.

Nicolini, D. (2006), “The work to make telemedicine work: A social and articulative view”, *Social Science & Medicine*, 62, pp. 2754-2767.

Nepal Rastra Bank (2005), *Nepal’s WTO Service Sector Commitments and Its Impact on Balance of Payment Situation*. Kathmandu: Nepal

OECD (2005), *International Development Perspectives*, 60, OECD publications.

Outreville, J. F.(2007), “ Foreign direct investment in the health care sector and most-favored locations in developing countries”, *European Journal of Health Economics*, 8: 305-312.

Perkins, D., and Roemer, M. (1991), *Reforming Economic Systems in Developing countries*. Boston. Harvard University Press.

Prothom Alo, (2009), Daily Newspaper, Monday, July 6, 2009.

Parasuraman, A., Zeithamal, V. A., and Berry, L. L. 1988. SERVQUAL: A Multiple Item Scale for Measuring Consumer Perception of Service Quality, *Journal of Retailing*, 64: 12-40.

Rahman, Mustafizur (2000), "Bangladesh-India Bilateral Trade: An Investigation into Trade in Services", Paper prepared for SANEI, Dhaka: Centre for Policy Dialogue.

Rahman, Mustafizur (2002). "Bangladesh-India Bilateral Trade: An Investigation into Trade in Services" in T. N. Srinivasan (ed.), *Trade, Finance and Investment in South Asia*, SANEI and Social Science Press, New Delhi.

Raychaudhuri, A., R. Acharyya, S. Marjit, M. Rahman, M.A. Tipu and D. Bhattacharya (2002), *Trade Potentials of South Asian Economies Under the New Global Trade Regime: The Role of Some Non-price Factors - A Case Study of India, Bangladesh and Sri Lanka*. Project Report for South Asia Network for Economic Research Institutes (SANEI), India.

Raychaudhuri, A. and P. De (2007). "Barriers to Trade in Higher Education Services: Empirical Evidence from Asia-Pacific Countries", *Asia-Pacific Trade and Investment Review*, Vol. 3, No. 2.

Raychaudhuri, A. and P. De. (2008), "Barriers to Trade in Higher Education Services in India in the Era of Globalisation: An Empirical Exercise", *Economic and Political Weekly*, Vol. 43, Forthcoming.

Robinson, S., Z. Wang and W. Martin (1999) *Capturing the Implications of Services Trade Liberalization*, Paper Presented at the Second Annual Conference on Global Economic Analysis, Ebberuk, Denmark, June 20-22.

Raihan, A. and Mahmood, M. (2004), *Trade negotiations on temporary movement of natural persons: A strategy paper for Bangladesh*, Paper: 36, CPD occasional paper series, Dhaka: CPD.

Raihan, A. (2005), *Liberalizing Trade in Services: Negotiating Strategy for Bangladesh*, Centre for Policy Dialogue (CPD), Dhaka, Bangladesh

Rahman, M.( 2001), *Bangladesh-India bilateral trade: an investigation into trade in services*. Dhaka: Centre for Policy Dialogue.

Rahman, M. (2002), "Bangladesh-India Bilateral Trade: An Investigation into Trade in Services", in Srinivasan, T. N. (ed) *Trade, Finance and Investment in South Asia*, SANEI and Social Science Press, New Delhi.

Rahman, M. M., Shahidullah, M., Shahiduzzaman, M., Rashid, H. A. (2002), Quality of health care from patient perspectives, *Bangladesh, Medical Research Council Bulletin*, 28, pp. 87-96.

Rafiq, A., Merrell, C. R. (2007), Telemedicine for access to quality care on medical practice and continuing medical education in a global arena, *The Journal of Continuing Education in the Health Professions*, vol. 25, pp. 34-42.

Ricardo B, Hussmann K, Munoz R, Zaman S. (2004), *Comparative advantages of public and private providers in health care service in terms of cost, pricing, quality, and*

*accessibility*. Dhaka: Health Economics Unit, Ministry of Health and Family Welfare, Government of Bangladesh.

Rodrik, D.( 2002), *Feasible Globalizations*, NBER Working Paper W9129, National Bureau of Economic Research, Cambridge, MA, August.

SAARC Secretariat. (2008). Report of the Regional Consultation Meeting on the Draft Study on Potential for Trade in Services under SAFTA Agreement', New Delhi, 6-7 February

SAWTEE.( 2008), *Nepal's Export Potential in Services: Health, Education and High-end Retail Services*. Kathmandu.

Srinivasan, T.N. (2002), *Developing Countries and the Multilateral Trading System After Doha*. Online Available at Yale University Web Site: <http://www.econ.yale.edu/~egcenter/research.htm>

Sebastian, M. S., Hurtig, A. K., Rasanathan, K. (2006), "Is trade liberalization of services the best strategy to achieve health-related millennium development goals in Latin America? A call for caution," *Pan American Journal of Public Health*, 20 (5), pp. 341-346.

Smith, R.( 2006), Measuring the globalization of health services: a possible index of openness of country health sector to trade, *Health Economics, Policy and Law*, 1, pp. 323–342.

The Lancet. (2002), vol.359., April 20, 2002, pp. 1363-1364.

The Daily Star, 13-3-2008, Dhaka, Bangladesh

UNCTAD. (2005). International Investment Agreements in Services, UNCTAD/ITE/IIT/2005/2, Geneva.UNCTAD. (2007). Trade in Services and Development Implications, TD/B/COM.1/85, Geneva.

UNCTAD (1997), *Report of the Expert Meeting on Strengthening the Capacity and Expanding Exports of Developing Countries in the Services Sector: Health Services*. UNCTAD

\_\_\_\_\_. (1997), *Health Care Exports under Consumption Abroad Mode*. Geneva. Presentation on 16-18 June.

\_\_\_\_\_.(1998), *International Trade in Health Services: Difficulties and Opportunities for Developing Countries, International Trade in Health Services: A Development Perspective*. Geneva: UNCTAD-WHO Joint Publication.

U.N. (1997), *International trade in health services: Difficulties and opportunities for developing countries*, Trade and Development Board, Geneva, pp. 1-22.

Verikios, G. and X. Zhang (2000) *Sectoral Impact of Liberalising Trade in Services*, Paper Presented at the Third Conference on Global Economic Analysis, Melbourne, June 27-30.

WHO( 2002.) *Trade in Health Service: Global, Regional and Country Perspective*. Geneva: WHO.

World Bank.( 2007), *South Asia Growth and Regional Integration*. Washington DC: The World Bank.

World Economic Forum (1999), “Trade Policy in South Asia: Recent Liberalization and Future Agenda”. In *World Economy*. Volume 22, Number 3. PP 353 – 78

Whalley, J. (1985) *Trade Liberalization among Major World Trading Areas*. Cambridge Mass: MIT Press.

Whalley, J. (2000) *What can the Developing Countries Infer from the Uruguay Round Models for Future Negotiations*, Policy Issues in International Trade and Commodities, Study Series No.4, UNCTAD, New York and Geneva.

World Trade Organisation (WTO) (2001) *Guide to the GATS: An Overview of Issues for Further Liberalisation of Trade in Services*, Kluwer Law International, The Hague

Wibulpolprasert S, Jindawatthana A, Hempisut P, (2000), *General agreements on trade in services and its possible implications on the development of human resources for health*. Paper presented in the Annual Meeting of the American Public Health Association (APHA), Boston.

Winters, A., Walmsley, T. L., Wang, Z. H., and Gruenberg, R. (2002), *Negotiating the liberalization of the temporary movement of natural persons*, Discussion paper No. 87 (University of Sussex).

Winters, A., Walmsley, T. L., Wang, Z. H., and Gruenberg, R. (2003), “Liberalizing Temporary Movement of Natural Persons: An Agenda for the Development Round”, *World Economy*, 26(8), pp. 1137–1161.

World Bank, 2003. *Private sector assessment for health, nutrition and population (HNP) in Bangladesh*, Report No: 27005-BD, Washington, DC: World Bank, pp. 6-7.

World Bank, (2005), “ Comparative Advantages of Public and Private Health Care Providers in Bangladesh”, *Bangladesh Development Series–paper no. 4*, ([www.worldbank.org.bd/bds](http://www.worldbank.org.bd/bds)).

World Bank.(2006), *India-Bangladesh Bilateral Trade and Potential Free Trade Agreement*, Bangladesh Development Series Paper No: 13, ([www.worldbank.org.bd/bds](http://www.worldbank.org.bd/bds)).

WHO,( 2006), *The World Health Report*, World Health Organization.

WHO (undated ). A methodological approach to assessing international trade in health services from a public health perspective, Division of Health System and Services Development Mediterranean Regional Office, World Health Organization, Cairo

WTO, (2007.), *Challenges and opportunities in global services trade*, International Trade Statistics.

Waitzkin, H., Jasso-Aguilar, R., Landwehr, A., Mountain, C.( 2005), “Global trade, public health and health services: Stakeholders’ constructions of key issues”, *Social Science & Medicine*, 61, pp. 893-906.

Whitehead, M., Dahlgren, G., and Evans, T. (2001), “ Equity and health sector reforms: can low-income countries escape the medical poverty trap?” *The Lancet*, vol. 358, pp. 833-836.

Zeithamal, V. A. and Bitner, M. J. (2006), *Marketing*, 4th Ed. Singapore: McGraw-Hill/Irwin.

Websites sources,

[http://www.epb.gov.bd/bangladesh\\_country\\_profile.html#services](http://www.epb.gov.bd/bangladesh_country_profile.html#services).

<http://www.kuenselonline.com>

<http://info.worldbank.org/etools/wti2008/doc/indicators.htm>

[http://www.boi.gov.bd/boi\\_services.php](http://www.boi.gov.bd/boi_services.php).

[www.mohfwbdgov.org](http://www.mohfwbdgov.org)

[www.epb.gov.bd](http://www.epb.gov.bd)

World Trade Organization: <http://www.wto.org>

ICDDR, B. 2007.

<http://www.icddrb.org/pub/publication.jsp?classificationID=30&pubID=8848>

U. N. (undated) [http://www.searo.who.int/en/Section313/Section1515\\_6124.htm](http://www.searo.who.int/en/Section313/Section1515_6124.htm)

Ministry of Health, Nepal: <http://www.moh.gov.np>

Shaptahik, (2006), ([www.shaptahik2000.com](http://www.shaptahik2000.com))

## **Appendices**



# A-I

IMI-SANEI  
HEALTH  
STUDY

Country code(P)		City code		Hospital	Patients

**A STUDY ON  
TRADE IN HEALTH SERVICES IN SOUTH ASIA: AN EXAMINATION OF THE  
NEED FOR REGIONAL CO-OPERATION**

SOUTH ASIA NETWORK OF ECONOMIC RESEARCH INSTITUTES (SANEI)

IN COLLABORATION WITH

INTERNATIONAL MANAGEMENT INSTITUTE (IMI), NEW DELHI, 2009

QUESTIONNAIRE FOR SOUTH-ASIAN PATIENTS  
(INFORMATION FOR THIS FORM TO BE COLLECTED FROM SA-PATIENTS ONLY)

## General Information

IDENTIFICATION												
Name		112	Country									
		114	Thana/Block									
		116	Name of Respondent									
		Male		1	Female		2					
Age (in years)	Upto 19 yrs		1	20-39 yrs		2	40-59 yrs		3	60 yrs or above	4	
	Unmarried		1	Married		2	Widowed		3	Separated/ Divorced		4
Education Completed (by respondent)												
	0	Can read/write		1	Some schooling (Up to 4 years)				2			
	3	SSC/HSC		4	Technical Training (formal/informal)				5			
Please specify at 133a)		9	133a									

134	<b>Size of Household</b> (Number of persons including respondent)	134a	Adults		134b	Children		
135	<b>Number of Earning Household Members (including respondent)</b>							
136	<b>Income of Household per annum (in local currency)</b>							
137	<b>Main source of income</b>		Private service		1	Govt. service		2
	Agriculture	3	Self employed	4	Unemployed		5	

210	NATURE OF MEDICAL TREATMENT IN PATIENT'S COUNTRY										
211	Disease diagnosis in your own country					No	0	Yes	1		
212	If yes, when ( year)				213	Amount spent in your own country ( in local currency)					
214	To come to India, amount owned ( in local currency)				215	To come to India, amount borrowed ( in local currency)					
216	Type of disease ( tick mark only)										
217	Cardiology	1	220	Cancer	4	222b	Dental			7	
218	Orthopaedics	2	221	Kidney related	5	222c	Others(please specify at 222d)			9	
219	Ophthalmology	3	222a	Neurology	6	222d					
223	INDIAN VISA ISSUE ( IN YOUR OWN COUNTRY)										
224	Type of Visa		Medical		1	Tourism		2			
225	If Medical		One month single entry	1	Three months multiple entries	2	Six months multiple entries	3	One Year multiple entries	4	
225a	Time taken to get the Visa		One day	1	Two days	2	Three days	3	More than three days	4	
226	Amount Spent to Get Visa( in local currency)		Direct		1	Indirect(Brokers etc)		2			
227	Your Decision to Come to India		Cheap in India		1	Cheap and high quality doctor		2			
	Good quality doctors are not available in my country		3	Medical infrastructure are poor in my country		4	Others(please specify at 227a)		9		
227a											
227b	Your source of information about medical facilities in India			Local Doctor	1	Outgoing patients	2	Relatives	3	Internet	4
	Others(please specify at 227c)		9	227c							
228	Are you able to carry unlimited amount of foreign exchange for medical treatment from your country?						Yes	1	No	0	
229	State the maximum amount allowed by your Central Bank? (in US\$)						Do not know			8	
230	Did you take the informal route?					Yes	1	No	0		
231	If yes(230) amount(In local currency)										
232	EQUATION (BATTA)										
	TO GET INDIAN RS. 100 HOW MUCH YOU HAVE PAID(In local currency)										
	TRAVEL										
233	Travel to nearest border		By Air	1	By Rail	2	By Road	3	By Ship	4	
234	Cost to come to nearest Indian Border(In local currency)										
235	In India (if by land route /Rail)										
	Your decision to go to city		Kolkata	1	Mumbai	2	Bangalore	3			
	Chennai	4	Delhi	5	Hyderabad	6	Other cities		9		
236	If City is other than Kolkata :										
	Waiting time in Kolkata to get RailTicket		24 hours	1	48 hours	2	72 hours	3	120 hours	4	
237	Amount paid to get Rail Ticket to the Broker(In India										

	Rs)				
238	<b>Hospital Environment( Non Kolkata/ Non Chennai)</b>				
239	<b>Did You hire a person from Kolkata to help in Communication?</b>	Yes	1	No	0
240	<b>If Yes Amount Paid to Hire(In India Rs)</b>				
241	<b>Are you aware of packages offered by hospitals</b>	Yes	1	No	0

**242. Charges for getting medical services**

Sr. No	Service	Unit Price	Payment( US \$ or RS.)	Discount if any	Payment mode(Cash/credit card)

**Accommodation:**

243	Accommodation availability for your companions	Difficult to get	1	Easy to get	2		
244	Amount paid ( in India Rs)						
245	Time Spent in India (no of days)						
246	According to you which are the major obstacles of a patient like you(a scale of 1 to 5)	Visa		Language	Central bank's permission		
	Right information to come to India about medical facilities	Non-availability of Indian rail ticket in my country		Non-availability of integrated agency			
247	If you could not come to India where would you have gone	Singapore	1	Thailand	2	Malaysia	3
	Western countries	4	Stay in my country		5		
248	<b>SUGGESTIONS</b>						

<b>248 a</b>	<b>Medical insurance for all SAARC countries</b>	<b>Yes</b>	<b>1</b>	<b>No</b>	<b>0</b>
<b>248 b</b>	<b>Comprehensive package by the Hospitals</b>	<b>Yes</b>	<b>1</b>	<b>No</b>	<b>0</b>
<b>248 c</b>	<b>Liaison outlets at home country</b>	<b>Yes</b>	<b>1</b>	<b>No</b>	<b>0</b>
<b>248 d</b>	<b>Follow up services in your country's hospitals/institutions</b>	<b>Yes</b>	<b>1</b>	<b>No</b>	<b>0</b>

### 300 Perceptions

	Please record the perceptions of the respondent on the statements below. (The intention is to capture the perceptions of the respondent in terms of free trade in services)	No	Yes	Can't Say
311	Happy with the medical treatment but the barriers are unnecessary	0	1	9
312	We should have Current Account Convertibility	0	1	9
313	Doctors(skilled) should move freely without barriers	0	1	9
314	Standardization of skill ( Regional Council)will help skilled professional to move freely.	0	1	9
315	There should be dual taxation treaty for medical professionals in South Asia.	0	1	9
316	If my country is removing the barriers, more FDI in health sector is expected from India/other foreign countries to my country.	0	1	9
317	If the above ( 316) is true , there will be more welfare gains.	0	1	9
318	Visa issues are complicated.	0	1	9
319	Informal foreign exchange traders cheated us.	0	1	9
320	Our medical insurance policy should be applied to SAARC countries	0	1	9
321	Airfare is too high.	0	1	9
322	We need access to medical services to all citizens of South Asian nations.	0	1	9

333	General comments	
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334	How to improve the system	
-----	---------------------------	--

Please thank the respondent for his/her cooperation.

For Office Use Only					
Interview Conducted		Schedule Checked/ ID Coded		Data Entered	
By (name)		By (name)		By (name)	
On (date)		On (date)		On (date)	
At (Place)		At (Place)		At (Place)	
Signature		Signature		Signature	
Field Agency Collecting the information					

Interviewers please ensure that all the data fields have been recorded. In case of doubts, please refer to your field supervisors.

Please return all wasted, spoilt or unused blank schedules to your supervisors or to the Project Director, IMI, Delhi.

Sr No	Country	Code
1	Afghanitan	1000
2	Bangladesh	2000
3	Bhutan	3000
4	Maldives	4000
5	Nepal	5000
6	Pakistan	6000
7	Sri Lanka	7000

Sr No	City	Code
1	Bangalore	100



2	Chennai	200
3	Delhi	300
4	Kolkata	400
5	Mumbai	500

City	Hospital code	Doctor's code	Patient code
Bangalore	101-110	111-125	126-199
Chennai	201-210	211-225	226-299
Delhi	301-310	311-325	326-399
Kolkata	401-410	411-425	426-499
Mumbai	501-510	511-525	526-599

**Code of Hospitals, doctors and patients will be selected by field level agencies.**

## A- II

<b>City code</b>	<b>Hospital</b>

IMI-SANEI  
HEALTH STUDY

### A STUDY ON TRADE IN HEALTH SERVICES IN SOUTH ASIA: AN EXAMINATION OF THE NEED FOR REGIONAL CO-OPERATION

SOUTH ASIA NETWORK OF ECONOMIC RESEARCH INSTITUTES  
(SANEI)

IN COLLABORATION WITH  
INTERNATIONAL MANAGEMENT INSTITUTE (IMI), NEW DELHI, 2009

#### General Information

IDENTIFICATION OF THE SERVICE PROVIDER				
611	<b>Name</b>			
612	<b>Address of the Organisation</b>			
		<b>Telephone</b>	<b>Fax</b>	
		<b>Mobile</b>	<b>Email</b>	
		<b>Website</b>		
613	<b>NAME OF THE RESPONDNT</b>			
614	<b>Designation of the respondent</b>			
615	<b>NAME OF THE ENUMERATOR</b>			
616	<b>Date of Survey</b>			

**QUESTIONNAIRE FOR SOUTH-ASIAN HOSPITALS**  
(INFORMATION FOR THIS FORM TO BE COLLECTED FROM SA-HOSPITALS ONLY)

710	NAME OF THE HOSPITAL /MEDICAL CENTRE						
711	Year of establishment						
712	Type of hospital/ medical centre	Public	1	Private	2	Joint venture	3
	Trust/ Charity	4	NRI	5	NRI/Indian Company	6	
	Others(specify)						
713	Amount of investment (other than land ) in Indian Rs.						

**Principal service mix(Offered by the hospital):**

**714. Model1**

714a	Category	Example					
	Cross-border supply of health services	Tele-medicine	Yes	1	No	0	
<b>If 714a Yes, ask 714b, 714c, 714d and 714e</b>							
714b	Countries offered tele-medicine services		Bangladesh	1	Bhutan	2	
	Maldives	3	Nepal	4	Pakistan	5	Sri Lanka 6 Afghanistan 7
714c	When did you start tele-medicine services						
714d	No of cases(tele-medicine ) during last two years						
714e	Revenue earned in tele-medicine services/Year						

**715. Mode2**

715a	Category	Example					
	Consumption aboard	South Asian Patient coming to India for treatment	Yes	1	No	0	
<b>If 715a Yes, ask 715b, 715c, 715d and 715e</b>							

715b	<b>Countries from</b>			Bangladesh		1	Bhutan		2	
	Maldives	3	Nepal	4	Pakistan	5	Sri Lanka	6	Afghanistan	7
715c	<b>No of patients during last two years</b>									
715d	<b>Revenue earned(in Indian Rs.)/Year</b>									
715e	<b>Role of insurance sector in integrating medical services in SAARc economies(in a scale of 10)</b>									

**716. Mode3**

716a	<b>Category</b>	<b>Example</b>							
	<b>Commercial presence</b>	<b>Branch of foreign hospital</b>		Yes	1	No	0		
<b>If 716a Yes, ask 716b, 716c, 716d, 716e and 716f</b>									
716b	<b>Countries in</b>			Bangladesh		1	Bhutan		2
	Maldives	3	Nepal	4	Pakistan	5	Sri Lanka	6	Afghanistan
716c	<b>Started year</b>								
716d	<b>Investment size ( US\$)</b>								
716e	<b>No of local doctors</b>								
716f	<b>No of Indian doctors</b>								

**717. Mode4**

717a	<b>Category</b>	<b>Example</b>					
	<b>Movement of natural person</b>	<b>Doctor going South Asian economies to offer professional services.</b>		Yes	1	No	0
<b>If 717a Yes, ask 717b, 717c, 717d and 717e</b>							

717b	<b>Doctors visited from your hospital to</b>			Bangladesh			1	Bhutan		2
	Maldives	3	Nepal	4	Pakistan	5	Sri Lanka	6	Afghanistan	7
717c	<b>No of doctors visited SAARC countries to your hospital in last two years</b>									
717d	<b>Frequency ( no. of doctors/year)</b>									
717e	<b>Role of insurance sector in integrating medical services in SAARc economies(in a scale of 10)</b>									

**718.Facilities it offers:**

S r. N o	Name of the Dept	Function	No of Doctors working	No. Of paramedica l staff	No of house keeping staff working	No of admin staff working	No of Patie nts /week

**719. Medical degree it offers:**

Sr. No.	Degree/Certificate	Name of the Degree/Certificate	Certifying Authority

**720. Cost of Medical Services( In Rs.)**

Sr. No.	Service	No of Patients	Gross revenue(Indian Rs.)			Payment Mode(Us \$/Indian Rs.)	Discount If any
			Medicine	Surgery	Others(test, etc.)		

721.Foreign Patients treated at this hospital/health centre

Year	No of patients		Country of origin															
	No	Rs	Bangladesh		Nepal		Sri Lanka		Other South Asians		Gulf	Europe		Southeast Asians		Rest of the world		
			No	Rs	No	Rs	No	Rs	No	Rs	No	Rs	No	Rs	No	Rs		
1995																		
2001																		
2002																		
2003																		
2004																		
2005																		
2006																		
2007																		
2008																		
2009																		

722. Documents required for foreign patients to be treated in India? Use additional sheets, if required.

Sr. No	Documents	No of copies
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

723	Have a Future Plan to invest in South Asian Countries	Yes	1	No	0
-----	---	-----	---	----	---

724	Have a Future Plan to invest in South Asian Countries(If 723 is yes)				Bangladesh	1	Pakistan	2	Sri Lanka	3
	Afghanistan	4	Maldives	5	Nepal	6	Bhutan	7	No Plan	10
725	What is the amount of investment (US\$)									
726	In which year you are planning to invest									



**Current Impediments**

**Mode 1 (tele-medicine)**

**(Rate a scale of 5):**

727a	<b>Indian Visa issue</b>								
727b	<b>Is the network infrastructure good to support tele- medicine in the SAARC region</b>			Bangladesh			Bhutan		
	Maldives		Nepal		Pakistan		Sri Lanka		Afghanistan
728	<b>Do you think that people are aware of tele- medicine</b>			Bangladesh			Bhutan		
	Maldives		Nepal		Pakistan		Sri Lanka		Afghanistan
729	<b>Govt. Regulatory environment (tele- medicine)</b>			Bangladesh			Bhutan		
	Maldives		Nepal		Pakistan		Sri Lanka		Afghanistan

**Mode 2 (South Asian Patient coming to India for treatment):**

**Rate a scale of 5**

730	<b>Security Environment</b>								
731	<b>Restricted foreign exchange regime</b>			Bangladesh			Bhutan		
	Maldives		Nepal		Pakistan		Sri Lanka		Afghanistan
732	<b>Language barrier</b>			Bangladesh			Bhutan		
	Maldives		Nepal		Pakistan		Sri Lanka		Afghanistan
733	<b>Infrastructure barrier</b>			Bangladesh			Bhutan		
	Maldives		Nepal		Pakistan		Sri Lanka		Afghanistan

734	<b>Patients can not afford cost of companions</b>			Bangladesh				Bhutan		
	Maldives		Nepal		Pakistan		Sri Lanka		Afghanistan	

**Mode 3(Branch of foreign hospital)  
Rate a scale of 5**

735	<b>Security</b>			Bangladesh			Bhutan		
	Maldives		Nepal		Pakistan		Sri Lanka	Afghanistan	
736	<b>Regulatory issue</b>			Bangladesh			Bhutan		
	Maldives		Nepal		Pakistan		Sri Lanka	Afghanistan	
737	<b>Repatriation issue</b>			Bangladesh			Bhutan		
	Maldives		Nepal		Pakistan		Sri Lanka	Afghanistan	
738	<b>Hiring labour issue</b>			Bangladesh			Bhutan		
	Maldives		Nepal		Pakistan		Sri Lanka	Afghanistan	
739	<b>Language barrier among the local labours</b>			Bangladesh			Bhutan		
	Maldives		Nepal		Pakistan		Sri Lanka	Afghanistan	
740	<b>Work permit issue</b>			Bangladesh			Bhutan		
	Maldives		Nepal		Pakistan		Sri Lanka	Afghanistan	

**ode 4(Doctor going South Asian economies to offer professional services.)  
Rate a scale of 5**

741	<b>Security</b>			Bangladesh			Bhutan		
	Maldives		Nepal		Pakistan		Sri Lanka	Afghanistan	
742	<b>Regulatory issue in recruiting people</b>			Bangladesh			Bhutan		
	Maldives		Nepal		Pakistan		Sri Lanka	Afghanistan	
743	<b>Work permit issue</b>			Bangladesh			Bhutan		
	Maldives		Nepal		Pakistan		Sri Lanka	Afghanistan	
744	<b>Compensation issue</b>			Bangladesh			Bhutan		
	Maldives		Nepal		Pakistan		Sri Lanka	Afghanistan	
745	<b>Dual taxation policy</b>			Bangladesh			Bhutan		

	Maldives		Nepal		Pakistan		Sri Lanka		Afghanistan	
746	<b>Non availability of skilled persons in the country</b>			Bangladesh			Bhutan			
	Maldives		Nepal		Pakistan		Sri Lanka		Afghanistan	

747	General comments	
-----	------------------	--

748	How to improve the system	
-----	---------------------------	--

Please thank the respondent for his/her cooperation.

For Office Use Only					
Interview Conducted		Schedule Checked/ ID Coded		Data Entered	
By (name)		By (name)		By (name)	
On (date)		On (date)		On (date)	
At (Place)		At (Place)		At (Place)	
Signature		Signature		Signature	
Field Agency Collecting the information					

Interviewers please ensure that all the data fields have been recorded. In case of doubts, please refer to your field supervisors.

Please return all wasted, spoilt or unused blank schedules to your supervisors or to the Project Director, IMI, Delhi

A-III

City code	Hospital	Doctor code

IMI-SANEI  
HEALTH STUDY

A STUDY ON  
TRADE IN HEALTH SERVICES IN SOUTH ASIA: AN EXAMINATION OF  
THE NEED FOR REGIONAL CO-OPERATION

SOUTH ASIA NETWORK OF ECONOMIC RESEARCH INSTITUTES  
(SANEI)

IN COLLABORATION WITH

INTERNATIONAL MANAGEMENT INSTITUTE (IMI), NEW DELHI, 2009

General Information

IDENTIFICATION OF THE SERVICE PROVIDER											
411	Name										
412	Address		Telephone			Fax					
			Mobile			Email					
			Website								
413	Hospital										
414	Profile		MBBS	1	MD(medicine-UK)	2	MD(surgery-UK)	3	MD(medicine-US)	4	
			MD(surgery-US)	5	MD(medicine-India)	6	MD(surgery-India)	7	Others	9	
415	Average Earning per Month (In Indian Rs.)										

QUESTIONNAIRE FOR SOUTH-ASIAN DOCTORS  
(INFORMATION FOR THIS FORM TO BE COLLECTED FROM SA-DOCTORS ONLY)

**510 .NO OF PATIENTS TREATED IN LAST FIVE MONTHS( BEFORE 01-JUN-2009):**

Month	Total No of patients	Country of origin (% distribution)										
		Bangladesh	Pakistan	Nepal	Afghanistan	Maldives	Sri Lanka	Bhutan	US	EU	Gulf	Others
January												
February												
March												
April												
May												

511	Do you travel to any SAARC country to treat patients				Yes	1	No	0	
512	Which Countries do you travel?				Bangladesh	1	Bhutan	2	
	Maldives	3	Nepal	4	Pakistan	5	Sri Lanka	6	Afghanistan
513	HOW FREQUENTLY DO YOU TRAVEL								

	YOUR DECISION NOT TO MOVE TO SAARC COUNTRIES(IN A SCALE OF 10)	Score
514	Security Environment	
515	Complicated Visa Process	
516	Employment Permit	
517	Income Tax Policies	
518	In general Indian Market is better than neighbours	

519	General comments	
-----	------------------	--

520	How to improve the	
-----	--------------------	--

	system	
--	--------	--

Please thank the respondent for his/her cooperation.

For Office Use Only					
Interview Conducted		Schedule Checked/ ID Coded		Data Entered	
By (name)		By (name)		By (name)	
On (date)		On (date)		On (date)	
At (Place)		At (Place)		At (Place)	
Signature		Signature		Signature	
Field Agency Collecting the information					

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Interviewers please ensure that all the data fields have been recorded. In case of doubts, please refer to your field supervisors.

Please return all wasted, spoilt or unused blank schedules to your supervisors or to the Project Director, IMI, Delhi.



A-IV

List of major telemedicine service providers in Bangladesh

Name of the service providers	Types of Services	Organization from where services are taken	Number of patients	Equipments and year of establishment	Barriers felt by the organizations
Medinova Telemedicine, Medinova Health Care Service, Dhaka.	Mainly follow up service is provided. All most all types of health problems and treatment are covered. Started providing services from 2005. Medinova Telemedicine is one of the largest and most organized telemedicine service providers of the country.	It has its own system. Service is Taken from hospitals located in India, Singapore, U. K. and U. S. A. About 90 percent of the service is received from India. Major Indian hospitals are: Apollo, Madras; Shankar Netralaya; Kranti Kidney Hospital Kerala; Max Cardiac Hospital, Amrita Institute of Medical Science etc.	Yearly about 350 patients receive telemedicine service from this Medinova. Average cost of service is 30-40 US \$ (each service).	Service is provided through video conferencing. Polycon inbuilt camera is used. Data are transferred through VSAT telecommunication system.	Poor computer literacy, technology phobia; low level of technological knowledge; poor level of motivation etc. are the main barriers. Government has no initiative either.
Telemedicine Information Exchange, Dhaka.	Providing teleradiology and second opinion teleconsultation. Three most active clinical applications are: Oncology, Radiology, Cardiology	Nebraska Health System (UNMC/NHS), NE, USA.	<i>Teleconsultation:</i> 312 patients in 2002 and 405 patients in 2003. <i>Radiology Consultation:</i> 167 in 2002 and 180 in 2003.	Primary communication service: cable: Primary transmission; speed: 384 KBPS; Primary transmission medium: Broad band cable; Telecommunication provider: Local ISP.  Systems and equipments: Interactive video, Store and forward method, telemetry.	Barriers are: High Telecommunication charge; high general Cost.
Sustainable Development Networking Program (SDNP)	Provides telemedicine services to remote areas of the country (at		---	The company has started telemedicine services in 2005.	---

	domestic level)				
Anova Tec Limited and Bangladesh Society for Telemedicine and e-health	Provides telemedicine services to remote areas of the country (at domestic level)	---	Tel dermatology, teleconsultation etc.  Uses video conference, store and forward method (real time).  Average Cost: Around 7-8 US \$ per service	Started its operation in 2006. Software used: DSMHMSS; Instruments/methods used: Video conferencing, e-ECG, pulse oximeter, X-Ray digitizer, High resolution digital camera, online microscope etc.	Barriers are: Mindset of the people; legislative problem; acceptability among people and organizations.
DNS Telemedicine Limited (DTL) a subsidiary of DNS Group, Dhaka.	Second opinion/ medical consultation	<b>USA:</b> Partners Health care System, Massachusetts General Hospital, <b>Australia:</b> Global Doctors; Hollywood Private Hospital, St. John of G care Subiaco; SKG Radiology, The Lions Eye Institute; Western Orthopa; <b>UK:</b> E-med Private Medical Services; The St John Hospital, St Eliza, London; Dr. B. Pal's Clinic; Withington Hospital, Manchester. <b>India:</b> Manipal Hospital, Bangalore; TATA Memorial hospital, New Delhi; Madras Medical Hospital, Chennai; Sanjay Ghandhi Post Graduate Institute of Medical Sciences, Lucknow; Kerala Institute of Medical Sciences, Trevandrum.	Not known	The service provider claims that it is well equipped with full fledged telemedicine center with latest telemedicine equipment procured from AMD Telemedicine Inc. USA	---
Apollo Hospital,	---	---	---	---	---

Dhaka.					
Square Hospital, Dhaka	Medical consultation/ second opinion	At Square hospital a team is working hard to take in Bangladesh to new heights by creating partnerships with a number of different hospitals abroad, such as Methodist le Bonheur Health Care, Memphis Tennessee, USA; Christian Medical College Hospital (CMCH, Valor, India, SingHealth a conglomerate of seven different health care facilities in Singapore) and Bangkok Hospital Medical Centre, Thailand to provide telemedicine services.	The service has not started yet. It will start soon.	---	---
Bangladesh Institute of Research and Rehabilitation in Diabetes, Endocrine and Metabolic Disorders (BIRDEM)	Have Telemedicine project.	Provides only domestic service.			
Bangabandhu Sheikh Mujib Medical University (BSMMU)	Have plan to implement Telemedicine				

Source: Field survey, 2009; <http://www.sdnbd.org/sdnp/>;  
[http://tie.telemed.org.programs\\_t2/showprogram\\_t2.asp?item=2665](http://tie.telemed.org.programs_t2/showprogram_t2.asp?item=2665);  
<http://www.dnsgroup.com.bd/DTL/default.php>

A- V

Sector Specific Commitments Made by Bangladesh (Source: WTO)

Mode of Supply :	1) Cross-border supply 2) Consumption Abroad 3) Commercial presence 4) Presence of natural persons					
Sector / Sub-sector	Limitations on Market Access		Limitations on National Treatment		Additional Commitments	Notes
09. Tourism and Travel Related Services						
A. Five Star Hotel and Lodging Services (CPC 641)	1)	Unbound *1	1)	Unbound*		*1) Mode of supply is technically not feasible.
	2)	Unbound	2)	Unbound		
	3)	Commercial presence requires that foreign service providers incorporate or establish the business locally in accordance with the relevant provisions of Bangladesh laws, rules and regulations. There is no fixed ratio of equity between local and foreign investors.	3)	None		

			Foreign equity to the extent of 100 per cent is allowed.				
	4)		In Bangladesh, the entry and residence of foreign natural persons (service providers) are subject to Bangladesh's immigration and labour laws, regulations, guidelines and procedures. There is no restriction is issuing work permits to foreign nationals in Bangladesh. The employment of foreign natural persons for the implementation of the foreign investment shall be agreed upon by the contracting parties and approved by the Government and such personnel shall be employed in higher management and specialized	4)	None		

		jobs only.					
02. C.o. Other Telecommunication Services							
	4)	<p>In Bangladesh, the entry and residence of foreign natural persons (service providers) are subject to Bangladesh's immigration and labour laws, regulations, guidelines and procedures. There is no restriction is issuing work permits to foreign nationals in Bangladesh. The employment of foreign natural persons for the implementation of the foreign investment shall be agreed upon by the contracting parties and approved by the Government and such personnel shall be employed in higher</p>	1) 3)		<p>Certain subsidies and tax benefits may only be extended to national operators.</p>	<p>The creation of regulatory disciplines is under review. If the outcome of this review permits then additional commitments on regulatory disciplines will be attached before 1 January 1998.</p>	

			management and specialized jobs only.				
All Sub sectors	4)		The employment of foreign natural persons for the implementation of foreign investment shall be agreed upon by the contracting parties and approved by the Government and such personnel shall be employed in higher management and specialized jobs only.	4)			
02.C. Telecommunication Services							
For public use International service: a. Voice telephone services b. Packet-switched data transmission services c. Circuit-switched data transmission services d. Telex services e. Telegraph services g. Private leased circuit services	1)		No bypass of network facilities of Government operator. No call-back or refill allowed.	1)	None		

	2)	None	2)	None		
	3)	Reserved to exclusive supply by the Government operator	3)	None		
	4)	Unbound except as indicated under All Subsectors	4)	None		
For public use Fixed network infrastructure, Domestic long distance and local service: a. Voice telephone services g. Private leased circuit services	1)	No bypass of network facilities of Government operator	1)	None		
	2)	None	2)	None		
	3)	Two licenses are issued to private operators, each to serve designated administrative (rural) areas in competition with the Government operator	3)	None		
	4)	Unbound except as indicated under All Subsectors	4)	None		



For non-public use*1 (i.e., services supplied to closed user groups): a. Voice telephone services b. Packet-switched data transmission services c. Circuit-switched data transmission services	1)	No bypass of network facilities of Government operator	1)	None		*1) Means exclusive use of services by users within a corporate body. This use includes communication between corporate branches and affiliates but cannot be accessed for PSTN subscribers for commercial use.
	2)	None	2)	None		
	3)	Only on network facilities supplied by the Government operator and other licensed public-service operators. Two-ended breakout and resale of excess capacity are not permitted	3)	None		
	4)	Unbound except as indicated under All Subsectors	4)	None		
f. Facsimile services	1)	No bypass of network facilities of Government	1)	None		

			operator				
	2)		None	2)	None		
	3)		Only on network facilities supplied by the Government operator and other licensed public-service operators	3)	None		
	4)		Unbound except as indicated under All Subsectors	4)	None		
02.C.o. Other Telecommunication Services							
o. Other Internet access services	1)		No bypass of network facilities of Government operator	1)	None		
	2)		None	2)	None		
	3)		Only on network facilities supplied by the Government operator and other licensed public-service operators.	3)	None		
	4)		Unbound except as	4)	None		

		indicated under All Subsectors					
Mobile services (terrestrial) - Cellular/mobile voice telephone services	1)	No bypass of network facilities of Government operator	1)	None			
	2)	None	2)	None			
	3)	Four licenses issued to private operators, in addition to the Government operator	3)	None			
	4)	Unbound except as indicated under All Subsectors	4)	None			
VSAT services	1)	No bypass of network facilities of Government operator	1)	None			
	2)	None	2)	None			
	3)	Reserved to supply by the Government operator, who has entered into build-operate transfer arrangements with three foreign suppliers	3)	None			

	4)	Unbound except as indicated under All Subsectors	4)	None		
Gateway earth station services	1)	No bypass of facilities of Government operator	1)	None		
	2)	None	2)	None		
	3)	Reserved to exclusive supply by the Government operator	3)	None		
	4)	Unbound except as indicated under All Subsectors	4)	None		
Teleconferencing services (75292)	1)	No bypass of network facilities of Government operator	1)	None		
	2)	None	2)	None		
	3)	Reserved to exclusive supply by the Government operator	3)	None		
	4)	Unbound except as indicated under All Subsectors	4)	None		

Telecommunications terminal equipment (telephone sets, fax machines, PABX, cellular handsets) sales, rental, maintenance, connection, repair and consulting services	1)	None	1)	None		
	2)	None	2)	None		
	3)	None	3)	None		
	4)	Unbound except as indicated under All Subsectors	4)	None		

A-VI

**Application for temporary registration (foreign doctors)**  
**BANGLADESH MEDICAL AND DENTAL COUNCIL**  
**APPLICATION FOR TEMPORARY REGISTRATION ON THE**  
**REGISTER OF MEDICAL/ DENTAL PRACTITIONERS**

To  
The Registrar  
Bangladesh Medical & Dental Council  
203, Shaheed Syed Nazrul Islam Sarani  
(Old 86, Bijoy Nagar), Dhaka-1000

Dear Sir,  
I request that my name address and qualifications as stated below, may be registered on the Register of Medical/ Dental Practitioners under the Medical and Dental Council and that I may be furnished with a certificate of Registration:-

Name in Full:

.....

Nationality:

.....

Permanent Address (in block letters)

.....

.....

<b>Descriptions of qualifications</b>	<b>Name of the university</b>	<b>Date of obtaining qualification</b>	<b>Name of the Medical/ Dental College or institutions from which the applicant have appeared for the and qualifying examination</b>

Yours faithfully,

Date:

Full Signature:

Specimen Signature of Medical/ Dental Practitioners As Used On the Certificate:

.....

**The following documents will have to be produced:**

- (a) Original Medical degrees Certificate/ Photostat copy duly endorsed/ Attested by High Commission Embassy or Mission of the Country of the Candidate in Bangladesh.
- (b) Two copies of passport size photograph of the candidate, attested as in (a)
- (c) Registration certificate of practice of his own country, original or attested as in (a)
- (d) Fee for temporary registration for every 6months Taka 1500/=
- (e) Clearance from Government for Working in Bangladesh.
- (f) Up to date Bio-Data

A-VII

**Trade in Health Services in South Asia: An examination  
of the need for regional cooperation**

*Name of the patient:*

.....  
.....

*Age:*

.....  
.....

*Disease type:*

.....  
.....

*Educational attainment:*

.....  
.....

*Name and address of the hospital service provider:*

.....  
.....  
.....  
.....

.....*Year when service was taken:* -----

Please rank the following variables in cardinal order (e. g. 1, 2, 3, 4, 5, 6, 7... 17) according to their relative importance to you. It should be remembered that a single digit (e. g. 1) may come more than one time. For example digit 1 may come 3 times if you feel that three variables have similar importance to you. If you consider any variable unimportant, please put Zero (0) against the variable (s).

Hospital Related Service Variables	Rank
F1. Competency of the doctors	
F2. Competency of the nurses	
F3. Pathological laboratory equipped with all types of testing facilities	
F4. Waiting time to get appointment is short	
F5. Low treatment cost of the hospital	
F6. Hospital is visually appealing	
F7. Ambulance facility	
F8. Hospitals has modern medical equipments	
F9. Good quality food	
F10. Accommodation cost low	
F11. Specialist doctors are available	
F12. Hospital staffs respond promptly when needed	
F13. Follow up treatment good	

F14. Doctor listens to one's problem attentively	
F15. Nurses are very caring and willing to respond when needed	
F16. Easy to get bed/cabin in the hospital	
F17. Non-repetitive pathological test	

**Thank you for your cooperation.**

Signature of the interviewer: -----

Date: -----



**A-VIII**

<b>Method</b>	<b>Respondents</b>	<b>Place</b>
Key Informant Interview  (Causes and Problems associated with employing doctors)	4 Mid-level administrators of the hospitals (Hospitals are A, B, C, D, respondents requested anonymity).	Large Private Hospitals located in Dhaka
Key informant (Telemedicine Service providers)	<ul style="list-style-type: none"> <li>• Mr. Md. Asaduzzaman Khan, Anova Tech Ltd. and Bangladesh Society for Telemedicine, Dhaka.</li> <li>• Dr. Kazi Saifuddin Bennoor, Medinova Telemedicine, Dhanmondi, Dhaka.</li> <li>• Prof. Dr. Afzal Bachchu, Director, Japan Bangladesh Friendship Hospital, Satmasjid Road, Dhaka.</li> <li>• Dr. Md. Arman Hussain, Deputy Registrar, Bangladesh Medical and Dental Council (BMDC), Bijay Nagar, Dhaka.</li> <li>• Mr. Sanjoy Mojumder, United Hospital Ltd., Gulshan, Bangladesh.</li> <li>• One Executive, Apollo Hospital, Dhaka.</li> <li>• One Executive, Square Hospital, Panthapath, Dhaka.</li> <li>• One Executive, BIRDEM hospitals.</li> <li>• One person from the Ministry of Commerce and Trade, Dhaka.</li> <li>• Two persons from the Ministry of Health and Family Planning and Welfare (MOH&amp;WF), Dhaka.</li> </ul>	Location, Dhaka, Bangladesh
Checklist administered on 81 patients (MSRI method used)	<ul style="list-style-type: none"> <li>• Patients have received services from Government hospitals, private hospitals and hospitals from India</li> </ul>	Location Dhaka

A-IX

**Balance of Trade of Various Sub sectors**

WTO Classification of Service Sectors and Bangladesh's Service trade	FY 1999		FY 2000		FY 2001		FY 2002	
	Receipts	Payments	Receipts	Payments	Receipts	Payments	Receipts	Payments
<b>Sub-Sectors</b>								
<b>Business Services</b>								
Computer & Related Services	0.9094	0.5218	2.7998	0.3472	2.2132	0.3365	2.7929	0.3003
Rental/Leasing Services without Operators	0.0952	2.2948	0.0000	3.3289	0.0177	5.3316	0.0000	1.4096
<b>Communication Services</b>								
Telecommunication Services	33.7462	10.7039	41.5316	7.0712	13.7910	7.5726	22.8709	4.8359
Audiovisual Services	0.2498	0.0000	0.0081	0.0000	0.0045	0.0000	0.4160	0.4780
Construction and Related Engineering Services	0.2004	8.9350	0.1321	0.2193	0.0000	0.0000	0.2529	6.6500
Distribution Services (merchanting and other trade services)	2.6684	0.2958	14.8426	3.5418	5.91.4	2.7300	5.0912	3.9348
Educational Services	2.6639	20.2341	2.5089	25.3552	3.1143	29.0316	2.5822	29.0094
<b>Financial Services</b>								
All insurance and insurance-related services	2.2316	4.3612	3.4159	4.4489	2.1716	3.9017	3.0729	8.1435
Life, accident and health insurance services	0.3354	0.1983	0.6147	0.1537	0.6659	0.1504	0.7641	0.1394
Non-life	1.0948	4.1497	2.6604	4.2944	1.1627	2.8833	2.1411	3.2904

insurance services									
Reinsurance and retrocession	0.8014	0.0132	0.1408	0.0008	0.3430	0.8680	0.1677	4.7137	
Banking service	16.2719	18.5734	15.7975	29.0570	9.0747	18.9772	9.8596	12.7948	
Health Related and Social Services	0.0000	0.7595	0.0000	0.8356	0.0000	0.6984	0.0000	0.4523	
Tourism & Travel-Related Services	46.6566	120.6847	48.8287	269.2938	45.7808	236.0301	51.1742	58.1262	
Recreational, Cultural and Sporting Services (other than audiovisual services)	0.1497	0.0000	0.3122	0.0000	0.5169	0.0113	0.0624	0.0556	
News agency services	0.0749	0.9343	0.1329	1.1162	0.2001	0.9091	0.0776	0.6843	
Research and Development Services	0.0513	6.8640	0.0747	3.5993	0.0227	5.9578	0.0975	3.6869	
Transportation	95.3301	202.4059	105.7349	214.6673	84.9575	251.7638	84.1365	225.4032	
Maritime Transport Services	78.3756	20.2561	80.6180	21.7479	65.1983	23.4542	68.8420	23.2726	
Air Transport Services	15.8817	182.1273	25.1077	192.9194	19.4393	228.3096	15.2945	202.1307	
Rail Transport Services	1.0727	0.0225	0.0092	0.0000	0.3199	0.0000	0.0000	0.0000	
Business Services other than Computer and Rental and Other business Services	44.3730	45.3756	60.2301	48.8284	93.7649	103.9616	97.1291	57.7187	
<b>Exchange Rate</b>	<b>48.06</b>	<b>48.06</b>	<b>50.31</b>	<b>50.31</b>	<b>53.96</b>	<b>53.96</b>	<b>57.43</b>	<b>57.43</b>	

Source: Raihan, 2005

## A-X

## Services sub-sectors with Negative Balance of Payments

Sub-sectors		Rental/leasing services without operators	Construction and engineering services	Educational services	Health related social services	Tourism & Travel-related services	News agency services	Research and Development Services	Air Transport services
FY 1999	Receipts	0.10	0.20	2.66	<b>0.00</b>	46.66	0.07	0.05	15.88
	Payments	2.29	8.93	20.23	<b>0.76</b>	120.68	0.93	6.86	182.13
	Balance	-2.20	-8.73	-17.57	<b>-0.76</b>	-74.03	-0.86	-6.81	-166.25
FY 2000	Receipts	0.00	0.13	2.51	<b>0.00</b>	48.83	0.13	0.07	25.11
	Payments	3.33	0.22	25.36	<b>0.84</b>	269.29	1.12	3.60	192.92
	Balance	-3.33	-0.09	-22.85	<b>-0.84</b>	-220.47	-0.98	-3.52	-167.81
FY 2001	Receipts	0.02	0.00	3.11	<b>0.00</b>	45.78	0.20	0.02	19.44
	Payments	5.33	0.00	29.03	<b>0.70</b>	236.03	0.91	5.96	228.31
	Balance	-5.31	0.00	-25.92	<b>-0.70</b>	-190.25	-0.71	-5.94	-208.87
FY 2002	Receipts	0.00	0.25	2.58	<b>0.00</b>	51.17	0.08	0.10	15.29
	Payments	1.41	6.65	29.01	<b>0.45</b>	58.13	0.68	3.69	202.13
	Balance	-1.41	-6.40	-26.43	<b>-0.45</b>	-6.95	-0.61	-3.59	-186.84
FY 2003	Receipts	0.00	2.36	3.01	<b>0.00</b>	52.39	0.12	0.25	30.10
	Payments	1.18	8.49	28.84	<b>0.52</b>	84.72	0.60	3.15	249.84
	Balance	-1.18	-6.12	-25.83	<b>-0.52</b>	-32.33	-0.49	-2.90	-219.75

Source: Raihan, 2005 and Bangladesh Bank

## A-XI

## Trade in services/Export (Credit), (Source: Bangladesh Bank, June, 2009)

Code	Service Category	2000	2001	2002	2003	2004	2005	2006	2007	2008
200	1. Transportation	91.6	42.1	91.9	78.9	88.1	198.5	110.4	78.8	111.1
206	1.1 Sea transport				64.4	76.6	181.5	104.9	74.9	105.5
207	1.1.1 Passenger				0.0	0.0	0.0	0.0	0.0	0.0
208	1.1.2 Freight				2.2	16.6	41.80	25.2	15.5	16.9
209	1.1.3 Other				56.7	65.3	145.0	79.7	59.4	88.5
210	1.2 Air Transport				14.5	11.5	16.9	5.4	3.8	5.3
211	1.2.1 Passenger				5.3	3.1	6.2	3.1	0.0	0.0
212	1.2.2 Freight				1.3	4.0	4.0	0.0	0.0	1.1
213	1.2.3 Other				7.4	4.5	6.6	2.1	2.8	5.4
214	1.3 Other Transport									
215	1.3.1 Passenger									
216	1.3.2 Freight									
217	1.3.3 Other									
218	1.4 Other transport of which: space transport									
219	1.5 Other transport of which: rail transport							4.0		
220	1.5.1 Passenger							0.0		
221	1.5.2 Freight							0.0		
222	1.5.3 Other							0.0		
223	1.6 Other transport of which: Road transport									
224	1.6.1 Passenger									
225	1.6.2 Freight									
226	1.6.3 Other									
227	1.7 Other transport of which: inland waterway									

	transport									
228	1.7.1 Passenger									
229	1.7.2 Freight									
230	1.7.3 Other									
231	1.8 Other transport of which: pipeline transport and electricity transmission									
232	1.9 Other supporting and auxiliary transport services									
236	2. Travel	50.5	59.3	45.9	59.6	65.8	140.00	74.2	77.9	85.3
237	2.1 Business travel	2.6	1.5	1.5	1.2	11.6	2.7	2.5	0.7	0.9
238	2.1.1. Expenditure by seasonal and border workers									
239	2.1.2 Other									
240	2.2 Personal Travel	47.9	46.2	55.8	28.8	63.1	134.7	71.6	76.2	90.3
<b>241</b>	<b>2.2.1 Health related expenditure</b>				<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.7</b>
242	2.2.2 Education related expenditure				4.0	3.3	9.6	6.3	6.7	11.0
243	2.2.3 Other				54.5	60.7	125.8	65.1	69.4	77.7
245	3. Communication services	21.7	6.1	26.9	13.9	13.9	24.8	10.9	10.5	14.1
246	3.1 Postal and courier services				2.7	2.0	4.60	2.6	3.4	2.8
247	3.2 Telecommunications services				11.1	11.8	20.0	8.2	7.0	11.3
249	4. Construction services	0.2	0.0	0.3	3.5	1.7	17.7	16.0	36.2	7.9
250	4.1 Construction abroad									3.2
251	4.2 Construction in the compiling economy									
253	5. Insurance services	3.5	1.1	1.4	4.4	4.0	14.40	10.4	7.5	11.5
254	5.1 Life insurance and pension funding				0.6	0.8	2.80	2.0	1.2	6.4
255	5.2 Freight insurance				0.9	0.1	0.80	0.7	1.0	0.0
256	5.3 Other direct insurance				1.4	3.0	8.5	5.5	4.1	1.8
257	5.4 Reinsurance				1.3	0.5	2.6	2.1	1.7	3.2

258	5.5 Auxiliary services									
260	6. Financial services	13.1	4.2	17.1	12.3	33.0	54.7	21.7	22.9	29.7
262	7. Computer and Information services	0.0	0.0	1.6	8.0	13.1	34.6	21.5	26.3	30.1
263	7.1 Computer services				7.8	13.0	34.3	21.3	26.0	30.0
264	7.2 Information services				0.1	0.0	0.10	0.1	0.3	0.1
889	7.2.1 News agency services									
890	7.2.2 Other information provision services									
266	8. Royalties and license fees	0.1	0.0	0.1	0.2	0.1	0.50	0.4		
891	8.1 Franchises and similar rights									
892	8.2 Other royalties and license fees									
268	9. Other business services	99.3	45.9	154.1	179.5	172.3	465.5	293.2	322.6	519.8
269	9.1 Merchant and other trade related services				2.6	3.2	5.8	2.6	2.7	2.8
270	9.1.1 Merchanting				0.0	0.0	0.0		1.2	0.5
271	9.1.2 Other trade-related services				2.0	3.3	3.3		1.4	2.3
272	9.2 Operational leasing services				0.0	0.0	0.0		0.0	
273	9.3 Miscellaneous business, professional, and technical services				177.0	168.9	606.1	437.2	3.6	509.9
274	9.3.1 Legal, accounting, management, consulting and public relations				7.4	6.9	16.4	9.5	10.0	12.6
275	9.3.1.1 Legal services				3.3	2.8	5.7	2.9	0.1	0.1
276	9.3.1.2 Accounting, auditing, book keeping and tax consulting services				0.6	0.7	1.6	0.9	1.0	0.8
277	9.3.1.3 Business and management consulting and public relations services				3.5	6.4	11.9	5.5	6.1	8.5
278	9.3.2 Advertising, market research and public opinion polling				10.1	8.1	12.4	4.3	9.6	12.5
279	9.3.3 Research and development				5.6	6.1	15.00	8.9	8.9	12.3
280	9.3.4 Architectural, engineering and other technical services				3.1	3.9	31.3	27.4	29.1	34.3



281	9.3.5 Agricultural, mining, and on-site processing services				0.1	0.0	0.4	0.4	0.0	
282	9.3.5.1 Waste treatment and de-pollution								0.0	
283	9.3.5.2 Agricultural, mining and other on-site processing services								0.0	
284	9.3.6 Other business services							371.7		246.3
285	9.3.7 Services between related enterprises									
287	10. Personal, cultural and recreational services	0.0	0.5	0.0	4.0	1.3	3.8	2.5	1.5	1.0
288	10.1 Audiovisual and related services				3.9	1.2	3.2	2.0	1.3	0.8
289	10.2 Other personal, cultural, and recreational services				0.0	0.1	0.5	0.4	0.2	0.2
895	10.2.1 Education services									
896	10.2.2 Health services									
897	10.2.3 Other									
291	11 Government services, n.i.e	592.5	237.9	800	516.2	553.4	1077.70	524.3	603.2	707.9
292	11.1 Embassies and consulates				70.8	50.3	122.7	72.4	47.7	100.4
293	11.2 Military units and agencies				0.5	1.1	2.20	1.1	0.9	0.6
294	11.3 Other government services				439.7	501.7	932.30	430.6	574.6	606.7
983	Service not allocated									
	Supplementary Items									
310	Compensation and employees	9.4	10.4	11	11.6	11.5	21.51	10.0	9.2	14.8
391	Worker's remittance									
431	Migrant's transfer									
500	Direct investment	280.5	79.5	49.0	263.7	513.8	1218.89	705.1	653.4	1070.9

## A-XII

## Trade in services/Import (Debit), (Source: Bangladesh Bank, June, 2009)

Code	Service Category	2000	2001	2002	2003	2004	2005	2006	2007	2008
00	1. Transportation	996	1034	947	1125	1250	1388	1951	2088	2951
06	1.1 Sea transport				837	961	1131	1619	1700	2181
07	1.1.1 Passenger									
08	1.1.2 Freight				871	960	1128	1619	1700	2181
09	1.1.3 Other				3	1	3	0		0
10	1.2 Air Transport				252	290	257	332	388	770
11	1.2.1 Passenger				224	281	240	304	358	738
12	1.2.2 Freight				0	0	18	28	30	29
13	1.2.3 Other				28	6	2		0	4
14	1.3 Other Transport									
15	1.3.1 Passenger									
16	1.3.2 Freight									
17	1.3.3 Other									
18	1.4 Other transport of which: space transport									
19	1.5 Other transport of which: rail transport									
20	1.5.1 Passenger									
21	1.5.2 Freight									
22	1.5.3 Other									
23	1.6 Other transport of which: Road transport									
24	1.6.1 Passenger									
25	1.6.2 Freight									
26	1.6.3 Other									
27	1.7 Other transport of which: inland waterway									

	transport									
228	1.7.1 Passenger									
229	1.7.2 Freight									
230	1.7.3 Other									
231	1.8 Other transport of which: pipeline transport and electricity transmission									
232	1.9 Other supporting and auxiliary transport services									
236	2. Travel	302	116	113	165	170	136	140	156	184
237	2.1 Business travel	33	30	25	26	29	24	26	25	24
238	2.1.1. Expenditure by seasonal and border workers									
239	2.1.2 Other									
240	2.2 Personal Travel	269	136	88	139	141	112	114	131	160
241	<b>2.2.1 Health related expenditure</b>				<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>1</b>
242	2.2.2 Education related expenditure				54	62	51	56	58	66
243	2.2.3 Other				84	79	61	58	73	93
245	3. Communication services	9	4	7	10	10	21	12	24	16
246	3.1 Postal and courier services				0	1	2	1	1	1
247	3.2 Telecommunications services				9	10	18	11	23	15
249	4. Construction services	0	3	8	7	1	1	1		0
250	4.1 Construction abroad									3.2
251	4.2 Construction in the compiling economy				7	1	1	1		0
253	5. Insurance services	91	98	86	106	116	133	190	201	252
254	5.1 Life insurance and pension funding				0	0	0		0	0
255	5.2 Freight insurance				95	103	119	172	182	234
256	5.3 Other direct insurance					0	4	0	1	
257	5.4 Reinsurance				11	14	10		18	18
258	5.5 Auxiliary services					0				

260	6. Financial services	31	16	10	8	9	13	20	22	25
262	7. Computer and Information services	2	1	1	1	2	4	3	4	5
263	7.1 Computer services				1	1	4	2	3	4
264	7.2 Information services				1	1	0	1	1	1
289	7.2.1 News agency services									
290	7.2.2 Other information provision services									
266	8. Royalties and license fees	4	6	3	4	5	3	5	8	22
291	8.1 Franchises and similar rights									
292	8.2 Other royalties and license fees									
268	9. Other business services	85	97	76	83	93	138	163	164	206
269	9.1 Merchant and other trade related services				1	2	19	24	27	31
270	9.1.1 Merchanting				0.0				1	3
271	9.1.2 Other trade-related services				1	2	3	5	6	1
272	9.2 Operational leasing services				1	3	10	-7	7	5
273	9.3 Miscellaneous business, professional, and technical services				508	-341	115	56	210	169
274	9.3.1 Legal, accounting, management, consulting and public relations				3	7	5	5	6	16
275	9.3.1.1 Legal services				1	1	0	1	1	9
276	9.3.1.2 Accounting, auditing, book keeping and tax consulting services				0	0	1	0		1
277	9.3.1.3 Business and management consulting and public relations services				2	6	4	4	4	6
278	9.3.2 Advertising, market research and public opinion polling				3	1	4	4	4	3
279	9.3.3 Research and development				0	0	0	0	1	5
280	9.3.4 Architectural, engineering and other technical services				34	38	64	84	74	69
281	9.3.5 Agricultural, mining, and on-site processing services							4	0	

82	9.3.5.1 Waste treatment and de-pollution									
83	9.3.5.2 Agricultural, mining and other on-site processing services								0	
84	9.3.6 Other business services				40	20	61	40	45	75
85	9.3.7 Services between related enterprises									
87	10. Personal, cultural and recreational services	0	0	1	0		0	0	0	0
88	10.1 Audiovisual and related services				0		0	0	0	0
89	10.2 Other personal, cultural, and recreational services				0					0
95	10.2.1 Education services									
96	10.2.2 Health services									
97	10.2.3 Other									
91	11 Government services, n.i.e	96	100	72	39	43	60	87	57	77
92	11.1 Embassies and consulates				27	32	48	79	46	59
93	11.2 Military units and agencies									
94	11.3 Other government services				12	11	12	8	11	18
83	Service not allocated									
	<b>Supplementary Items</b>									
10	Compensation and employees	2	2	3	3	3	3	2	1	9
91	Worker's remittance	1957	2069	2856	3179	3571	4250	5484. 15	6557. 81	8979
31	Migrant's transfer									
00	Direct investment									

Source: Bangladesh Bank, 2009

## A-XIII

### Checklist for Key Informant Interview

#### Checklist for Health Trade's Key Informant Interview

##### Doctors

- Health services are mostly imported and exported by Nepal.
- Reason for health service import by Nepal
- Barrier to import and export the health service trade in Nepal
- Measure to Remove the Barriers
- Obstacles of FDI inflow in Health Sector and its impact on health service delivery
- Government provisions that have substantially enhanced the health trade in Nepal
- Nepal's comparative advantage in terms of Health Trade. [ All Modes]

#### Checklist for Health Trade's Key Informant Interview

##### Private Sector

- Health services are mostly imported and exported by Nepal.
- Barrier to import and export the health service trade in Nepal
- Measure to Remove the Barriers
- Obstacles of FDI inflow in Health Sector and its impact on health service delivery
- Impact on Nepal's Health Sector if the Trade provisions only favour the South Asian or ASEAN countries
- The government provision that has substantially helped to enhance the health trade in Nepal.
- Please provide us Nepal's comparative advantage in terms of Health Trade. [ All Modes]

## **Checklist for Health Trade's Key Informant Interview**

### **Regulators**

- Government's regulatory provision to supervise and control the hospital.
- Government's Mechanism to control informal health trade and its improvement
- Barrier of the health service trade
- Measure to Remove the Barriers
- Obstacles of FDI inflow in Health Sector and its contribution on health service delivery
- The government provision that has substantially helped to enhance the health trade in Nepal.
- Please provide us Nepal's comparative advantage in term of Health Trade. [ All Modes]

## **Checklist for Health Trade's Key Informant Interview**

### **Patient**

- Reasons of Patient's flow to foreign land for treatment.
- Destination for treatment of Health
- Problem associates on movement of Patient to Foreign Land
- Problem associates on treatment in Foreign Land
- Measure to address the associated problem

**A XIV**

**Persons to Meet For Key Informant Interview**

<b>Agents</b>	
Dinesh Bajracharya/ Saraswoti Shrestha	2 Promotion Nepal Pvt. Ltd., Tripureshwor, (Telephone: 4264440/ 016916523, Cell: 9841- 220211) Agent of Bangkok Hospital
K M Malla	Investor, Norvic International Hospital, 4258554
<b>Doctors</b>	
Dr. Shekhar Babu Rizal	Principal, Nepal Medical College, Telephone: 4486008
<b>NGO/ Private Sector Organization</b>	
Ishwor Shrestha	Official, Social Service, FNCCI, Teku (4266889)
Hemanta Dewadi	Official, NRN Forum, FNCCI, Teku (4266889)
Anita Lama	Nepal Medical Council, Bansbari, Telephone: 4371566
Mana Kumari Rai (After 1 Pm Only)	Nepal Nursing Council, Bansbari, Telephone: 4372521
<b>Health Service Provider</b>	
Dinesh Shrestha	Owner, Nepalgunj Medical College (Tel: 4430609, 4430525)
Bir Ban SJB Rana	Investor, Kathmandu Medical College
K M Malla	Investor, Norvic International Hospital, 4258554
<b>Regulatory Body</b>	
Kedar Raj Parajuli	Senior Public Health Officer, Management Division, Health Service Department, Teku (Tel



	4262063, Cell: 9841- 270452)
Shambhu Sharan Tiwari	Director, Health Service Department, Teku (Tel: 4262063)
Gyanendra Shrestha	National Planning Commission
<b>Telemedicine</b>	
Macha Dai Shakya	Telemedicine Official, Patan Hospital (for Time ask Kripa Tel: 9841-702732
Nav Raj Shrestha	Nick and Simon Institute, 5013552
<b>Patient Association</b>	
Anada Raj Sharma	Nepal Diabetes Association, Tripureshowar
Dila Ram Bastola, Sambhu Kadaria	Cancer Society Nepal, New Baneshwor, Kathmandu, Tel: 1-6225663, Mobile: 9851054748, 9841337150/718224
Bijaya Udaya Palpali	Executive Member, Heart Club Nepal, Lalitpur
Rabi Rauniyar, Arun Maskay	Neuro- Foundation Nepal, Pradashani Marg, Tel: 4227 886
Bimal Baral	Health Care Foundation- Nepal, Banasthali Chock, 4429866/4426016
S M Shrestha	Liver Foundation Nepal, Sitapaila

### Information Relating to Foreign Patients in Five Health Institutions of SAWTEE Survey on Health Export of Nepal

**BP Koirala Institute of Health Sciences (BPKIHS):** BPKIHS is teaching hospital type of health service provider that has diversified health services. Almost five percent of total visitors to this institution are from India. The following table suggested that the provider is exporting almost five percent of total produced services in a year. About fifty percent of Ophthalmology services are leading services to export to India. The head of the hospital informs that the services are provided at affordable cost to the consumer. There is no price discrimination for the same services to Nepalese and Indian citizens. The registration fee for out patient services for per visit is 40 Nepali rupees (NRs). The admission charge for inpatient is 200 NRs. Costs of the pathology test, operation and other are determined by level of services consumed. Food for admitted patient is provided by the hospital. The patient who is admitted to consume health services for upto five days in this provider spends in an average 5000 NRs. Almost 30 thousand consumers are admitted to this provider to consume all types of health services. The available data demonstrates that the volume, value and direction of trade in services with respect to the mode of supply 2 are almost constant in this provider.

**Table 3.1: Outpatient Service Consumers at BPKISH**

Year	Indian Consumers	Nepali Consumers	Total Consumers	% of Indian consumers
2005	9019	169954	179012	5.0
2006	9775	182916	192695	5.1
2007	6644	184721	191371	3.5

Source: BPKIHS

The provider has no any specific strategies to increase export of the services however quality of services and affordable price are the motivation to the foreigners for consuming health services in this institution. The manager of the hospital claims, “our quality of health services, devotion of qualified staff and affordable price ( ...cheaper price compared to Indian provider) are major factors to attract the foreigners in this provider”. “There is no disincentive and barrier to export health services however too expensive health technologies limit the possible expansion of services”, he adds.

**Table 3.2 : Inpatient Service Consumers at BPKISH**

SN	Diversification of Services	% consumers of health services from India		
		2005	2006	2007
1	Antenatal	0.4	1.2	0.7

2	Gynaecology	1.7	1.6	0.6
3	Postnatal	1.0	0.8	0.9
4	General Medicine	3.5	2.8	2.7
5	Ophthalmology	52.5	52.9	44.5
6	Orthopedics	3.7	2.8	1.6
7	Otolaryngology	6.9	6.6	4.3
8	Paediatrics	2.2	3.0	2.5
9	Psychiatry	4.8	5.6	3.0
10	Surgery	2.6	3.2	2.2
11	Tropical Disease	0.7	2.2	2.6
	<b>Total</b>	<b>5.5</b>	<b>5.3</b>	<b>3.6</b>

Source: BPKIHS.

**Birat Nursing Home:** Birat nursing home is one of the leading private health care providers in Biratnagar. The manager of this provider informed that the nursing home provide outpatient, inpatient and diagnostic services however data of diagnostic service users are not recorded. Almost 40 percent consumers are coming from India to receive pathology test from this nursing home. The following table shows trend of exporting health service of the nursing home. The different scenario is found in OPD and IP services however percentage of total service user almost equal.

**Table 3.3: Percentage of Indian Health Service Consumers at Birat Nursing Home**

SN	Diversification of Services	Outpatient services	Inpatient services 20064				
		FY 2062-2063	Bhadra	Kartik	Mansir	Paush	Total
1	Gynecology	3.8	8.0	9.5	5.3	7.6	7.8
2	Orthopedic	6.0	0.0	0.0	0.0	0.0	0.0
3	General Surgery	7.1	1.1	2.0	1.2	2.7	1.8
4	General Medicine	8.7	3.6	2.8	3.6	4.1	3.5
5	Pediatrics	7.0	11.2	11.1	10.2	9.6	10.5
6	Cardiology	2.1	0.0	2.5	0.0	0.0	1.6

7	Dentistry	5.0	na	na	na	na	na
8	Urology	6.3	0.0	5.3	0.0	4.2	1.9
9	Neurology	8.1	na	na	na	na	na
	<b>Total</b>	<b>6.5</b>	<b>5.3</b>	<b>6.5</b>	<b>4.6</b>	<b>6.0</b>	<b>5.6</b>

Source: Birat Nursing Home.

The manager points out that the consumers with low and middle income levels are coming to consume the services in this nursing home however they have targets to attract high income consumers in this provider by expanding the choices of services, particularly pathology and diagnostic tests for them. He adds, “we are competing with health care providers in Kathmandu, and Garbhanga and Patna as well. People think not only in prices and quality but also choices of services.” Quality of services, relatively lower price (including transportation cost) and timely treatment are major motivation factors for Indian consumers to visit Nepali health care providers”. They adopted some strategies to attract the Indian consumer to this provider such as adverting in the Indian culture programmes, health camps and mass media. Similarly, almost 200 health networking centers are established in the Indian communities for developing referral network. The problems of expanding services are: complicated and time consuming administrative procedures and blanket policy for all types of nursing home are responsible to discourage for expanding the health services. Lack of specialized human resources in local area is one of major obstacles for proving choices in services for the people. (Public private partnership and coordination may solve this problem)

**Koshi Zonal Hospital:** Koshi zonal hospital is one of oldest public hospital in Nepal. This provider has supplied more than 10 diversified services to consumers with affordable prices. In an average 150 thousand individuals consult to this provider as out patient services consumers in a year. Out of them at least 10 percent are consulting from India as informed by the head of the hospital. Although there is not any type of discrimination between Nepali and non Nepali consumers in this provider, particularly Indian patients come with their relatives who live in Nepal and put address of Nepal in their prescription notes. Consequently, recorded data show gross under estimation of exporting health services from this institution. The recorded data in inpatient services reveals that almost 2 percent out of total services are exported by this provider. The provider supplies services at subsidized price which is cheaper than market price.

**Table 3.4: In Patient Services in Koshi Zonal Hospital**

SN	Services	% of Health Service Consumers from India		
		FY 2062-63	FY 2063-64	FY 2064-65 up to Paush
1	ENT	0.92	1.97	3.77
2	Eye	1.08	0.00	0.00
3	Gynaecology	1.76	1.61	2.88

4	Intensive Care Unit	1.49	0.00	0.63
5	Medical	0.45	0.57	0.52
6	Observation	1.52	1.91	1.64
7	Obstetric	1.40	1.20	1.38
8	Orthopedic	0.90	1.01	0.33
9	Paediatrics	2.95	3.38	3.31
10	Psychiatry	0.00	0.00	0.00
11	Surgical	0.61	0.76	0.52
	<b>Total</b>	<b>1.43</b>	<b>1.47</b>	<b>1.62</b>

Source: Koshi Zonal Hospital

**Ramlal Golchha Eye Hospital (RGEH):** RGEH is a non government hospital that provides specialized services in eye care. In fact, eye hospitals in Nepal are major health service exporter. More than fifty percent of their services are exported in some cases. The major motivating factors to consume eye care services in Nepal are quality of services at lower prices compared to Indian market. In an average ten thousand people from India demand out patient services from this provider. Similarly, almost 1500 consumers demand in patient services. An individual pays almost 2000 NRs for inpatient care in this provider.

**Table 3.5: Indian Inpatient Eye Care Service Consumers in RGEH (in %)**

Months	2005	2006	2007
January	48.89	52.87	68.09
February	55.49	64.26	61.36
March	65.22	64.79	53.28
April	63.82	59.43	65.19
May	53.29	54.22	57.69
June	64.86	59.60	69.29
July	66.94	66.88	69.95
August	59.87	71.24	78.95
September	64.78	76.2	89.63

October	71.30	57.58	86.81
November	62.44	73.76	75.19
December	63.27	61.75	76.66
<b>Total</b>	<b>61.40</b>	<b>63.78</b>	<b>73.47</b>

**Tilganga Eye Centre (TEC):** TEC is not only a well-established and esteemed institution within the country, it has gained recognition and popularity even in the international arena with its quality services. A responsible administrative staff in the organization claims that services of the Centre are recognized as good even in the competitive international market. This unique eye centre of Nepal (Lak, 2003) has gained public popularity since it extended eye care facility in 1994 and consequently there is increasing flow of patients in the recent years. Hygiene is crucial because export of lenses to Australia, Europe, Latin America and other countries provide much of Tilganga's income (Lak, 2003). In addition to the six divisions (clinical facility, education & training department, outreach unit, eye bank, manufacturing facility and research unit) incorporated in the TEC, it is also the implementing body of the Nepal Eye Program. The organization claims that focus is always on affordability and uncompromised quality to the consumers. Himalayan Cataract Project (HCP), USA and The Fred Hollows Foundation (FHF), International are the integral international partners of the non-profit community organization, TEC which provides subsidized and even free services to the consumers. Unlike some eye hospitals in the Terai belt, TEC has no price discrimination policy for Nepali and non-Nepali (TEC administrator).

Following table presents the flow of Nepali and non-Nepali patients at TEC. Recorded data show the declining trend of non-Nepali service consumers but the reality is not so, record keeping person at the organization informs. This happened as the increasing numbers of non-Nepali patients, who visit the institution, are mentioning their address within Nepal where their relatives or known-person live or they have stationed temporarily. TEC administration accepts that presently supply of the services at the institution is much limited as compared to the demand within the country and hence no specific additional initiatives have been taken for the export of the services. Nevertheless, doctors of the institutions frequently visit other countries mainly East Asian and South Asian Countries to provide the services and hence eye care services are exported via fourth mode as well.

**Table 3.6: Consumers' Flow at Tilganga Eye Centre**

<b>Year</b>	<b>Non-Nepali Consumers</b>	<b>Nepali Consumers</b>	<b>Total Consumers</b>	<b>% of Non-Nepali Consumers</b>
<b>2005</b>	735	114470	115205	0.64
<b>2006</b>	612	121983	122595	0.50
<b>2007</b>	590	137054	137644	0.43

Source: TEC.

TEC is also playing a leading role in extending services through outreach programs as it conducts 51 percent of the total cataract surgery in **Outreach Microsurgical Eye Clinics (OMECS)** in Nepal (National Society for Comprehensive Eye Care Monitoring & Evaluation unit, cited in TEC Webpage). Further, the Centre assists and supports other institutions inside Nepal and outside the country to conduct their own outreach programs through the supply of intraocular lenses and provides professional expertise. The number of OMECS conducted in Nepal and other different countries are presented in the following table. As per the need, TEC also provides trainings to the surgeons and assistants from other countries and also directly involve in performing operations as an effort to extend services in the neighboring countries.

**Table 3.7: Summary of Outreach Microsurgical Eye Clinics (OMECS) (1994-2006)**

Countries	Number of OMECS	Screened patients	Major surgery	Minor surgery	Total surgery
Mainland China	10	7,964	2,871	31	2,902
Tibet	18	6,483	2,979	23	3,002
Sikkim/Kalimpong, India	10	13,673	2,987	43	3,030
DPR (North) Korea	5	3,693	1,754	1	1,755
Bangladesh	3	3,965	1,398	1	1,399
Bhutan	4	3,667	350	2	352
Nepal	159	277,544	43,978	656	44,634
<b>TOTAL</b>	<b>181</b>	<b>316,989</b>	<b>56,317</b>	<b>757</b>	<b>57,074</b>

Source: TEC.

Large percentage of surgeries has been done in the adjacent countries with high concentration in nearby locations namely Tibet and Sikkim/Kalimpong (See the chart below). Following them, number of surgeries is also significantly high in North Korea which is even less integrated with Nepal in economic sense. Similarly, Bangladesh and Bhutan are also benefiting from the initiatives of TEC to extend the services in other countries through OMECS. Financial support for operating these outreach clinics, however, are provided by different donors ranging from individuals to international institutions.

**Annex 4: Summary Table of in Key Informant Interview**

	<b>Mode (1)</b>	<b>Mode (2)</b>	<b>Mode (3)</b>	<b>(Mode 4)</b>
Hospital Owner	<ul style="list-style-type: none"> <li>The concept of telemedicine is completely new in Nepal so hospital owner hesitate to set up this service.</li> </ul>	<ul style="list-style-type: none"> <li>There is substantial inflow of Indian Patient via informal route to Nepal's hospital in Southern Terai belt. [ Treatment: Pathology, Eye, Gastroenterology and General Medicine]</li> <li>No foreign patient treatments in hospital of other region except in Eye treatment and Aurvedic t.</li> <li>There is substantial outflow of Nepali Patient from Nepal to India, Thailand and Singapore.</li> </ul>	<ul style="list-style-type: none"> <li>FDI policy is good in words but not implementation. (Problem of Repatriate, Corruption and Open provision in FDI approval)</li> <li>FDI inflow will also assist on foreign doctor flow to Nepal under mode 4</li> <li>The supervision of Government is irregular and weak. Supervision Visit is not even once a year in</li> </ul>	<ul style="list-style-type: none"> <li>Foreign Doctor can work in Nepal for one year with Permission of Nepal Medical Council.</li> <li>The hospital owner says that the provision of one year restriction limit the free flow of foreign doctors despite severe resource gap in the doctors of Cancer and Kidney</li> </ul>
Tele Medicine	<ul style="list-style-type: none"> <li>Around 7 telemedicine provider (Patan Hospital, Leprosy, Tuberculosis, Ananda Bhumi Hospital)</li> <li>Om Hospital was the only private hospital that had set- up telemedicine service in Nepal. Nevertheless, the service closed down after two years because the officials say that patient doesn't know product by itself.</li> </ul>		<ul style="list-style-type: none"> <li>Almost all telemedicine services are supported by INGO or Humanitarian organization so their services are highly subsidized and limited in number.</li> </ul>	
Regulator	<ul style="list-style-type: none"> <li>No specific law to regulate telemedicine</li> </ul>	<ul style="list-style-type: none"> <li>Government has limited control over the informal patient flow from Nepal not only from border side but also via. plane.</li> <li>Nepal is in course of amending Nepal</li> </ul>	<ul style="list-style-type: none"> <li>DOH and it's district branches are responsible for supervision of Hospital</li> <li>Medical Council is responsible for control of doctors and certificate</li> </ul>	



		Health Service Act and Regulation which will legalize many health treatment provision (especially transplant) and make health treatment easy	accreditation	
Medical Agents (Thailand and Singapore)	•	<ul style="list-style-type: none"> <li>• The foreign currency convertibility slab of US\$ 2000 is hardly enough for the major health check.</li> <li>• Legal provision won't permit treatment of certain health treatment even in foreign land especially transplant so informal route</li> </ul>		<ul style="list-style-type: none"> <li>• Medical agent can also assist to bring the foreign doctors to Nepal</li> </ul>
NGOs (FNCCI and NRN)	•	<ul style="list-style-type: none"> <li>• Comparative Advantage for Medical Tourism: Natural Environment, Cheap Lodging Cost and easy visa procedure</li> <li>• Quality need to be enhanced in order to gain benefit of comparative advantage.</li> </ul>	<ul style="list-style-type: none"> <li>• IEA, Company Law and FDI policy is good in words but not implementation. (Problem of Repatriate, Corruption and Open provision in FDI approval)</li> </ul>	•
Patient Association (Cancer, Kidney, Liver, Heart and Diabetes)	•	<ul style="list-style-type: none"> <li>• Doctor refers to that hospital where are trained (Especially in India)**</li> <li>• Charge per bed is higher for Nepali and other foreigner generally in India</li> <li>• Re – medical check and pathology test for medical treatment, Doctor from foreign land rarely</li> </ul>		•

