The Cost-Effectiveness and Competency Untold -
An Analysis of Medical Tourism in Kerala with reference to Allopathic Medicine

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Abstract

The key benefits of medical tourism in the ‘God’s Own Country’ are relatively competitive prices, quality, timely and personal care. The article unveils the cost difference between Kerala and other cities and compares with the main competitors like US and Thailand. Primary concerns are quality care, which includes expected quality of animate and inanimate resources and procedures, Personal care, which makes them ‘feel at home’ and the cost of treatment. However, the perception-reality analysis indicates that there is a slight difference in these two variables, which calls for conscious and coordinated efforts. There is an increase in supply of medical tourism products leading to greater competition and commercialization.

Introduction

Medical tourism is a new niche, which has largely reversed an earlier pattern of wealthy patients travelling to rich world centres for treatments. Now the new world has made the curiosity of the people of the bygone era to a novel phenomenon called medical tourism which make the people across the globe to get first class treatments mostly in third world countries at a reasonable price (Bennet, 2011). Globalization and the drastic developments in information and technology have changed the healthcare field amazingly. Medical tourism is the fastest growing industry especially in Asian countries and many others are entering into the market. Medical tourism is therefore defined here as tourism (international or domestic) for the primary purpose of invasive, diagnostic, or lifestyle medical treatments (Simon Hudson & Xiang (Robert) Li, 2012). India has become a hub of this and of which the southern state of Kerala stands at the helm with extensive, functional healthcare facilities of both Allopathic medicine and Ayurveda. Caring is an important aspect of the long tradition and culture of India and the southern state of Kerala. The key benefits of medical tourism in the ‘God’s Own Country’ are relatively competitive prices, quality, timely and personal care. This article again gives the real picture of cost advantage of Kerala by comparing with the costs of other states and major competitors.

Medical tourism is an important part of the Indian tourism industry and holds immense growth potential. It has come to be called medical or health tourism in the course of 2006, it has captured the worldwide attention of governments, policy makers, academics, and the press in both destination and sending countries (Bookman & Bookman, 2007). Medical Tourism can contribute 50 - 100 billion additional revenue for up-market tertiary hospitals by 2012, and will account for 3-5% of the total healthcare delivery market, as per the CII-McKinsey study on healthcare (www.sinetinfo.org).

Kerala- Reason for a choice

Kerala is on par with U.S in longevity and standard of living aspects (Pitroda, 2012). A wide variety of medical treatments from which patients can choose is an important factor that influences an individual’s decision of the source of medical services. There has been a trend of healthcare practitioners from other countries such as Japan and South Korea visit Kerala to attend trainings in Ayurveda healthcare practices. Such practitioners set up their hospitals in their home countries after completion of their training. In addition, many entrepreneurial Indians have set-up their Ayurveda hospitals in various countries such as the US, the UK, Canada, and Sweden, Switzerland etc. The trend is expected to continue in the near future and it is estimated that the global Ayurveda healthcare industry would be about USD 5,000 billion in 2050. According to recent estimates, the market size for Ayurveda healthcare in India is about USD 1.4 billion. This includes exports of herbal raw material and medicines worth more than USD 700 million per year. Further, the Ayurveda healthcare market in India is expected to grow at about 20% per year during the next five years. There is a possibility that within five years, medical tourism earnings can overtake the general tourism revenue. The average spending of the tourist is less than Rs. 10,000, whereas the minimum
spending of a medical tourism wing will definitely attract more revenue than others. Kochi will be a major hot spot in ten years and can overtake other cities like Bombay, Delhi and Chennai. Dentistry rates in the West are 10 times higher, compared to Kerala. Quality of treatment is one driving force, but another major factor is the massive cost difference.

According to a report released by the RNCOS, an industry research firm incorporated in 2002, titled Opportunities in Medical Tourism in India (2007), “Kerala, since beginning, has been the most-preferred destination for those looking for the rejuvenating magic of Ayurveda. However, the current trends show that Kerala is emerging as a modern healthcare provider due to evolving collaborations of enterprisers in the private healthcare sector and the tourism industry, which are advertising medical tourism belligerently. Hospitals are also setting up special divisions and support systems for their foreign clients.” Kerala doctors and nurses have established themselves as highly skilled and conscientious caregivers worldwide. Out of a total of 17.5 lakhs of nurses in India, 12 lakhs are Kerala nurses (Ikbal, 2012).

A World Health Organization supported study on Inter-sectoral Linkages and Health Development says, “Kerala state provides an illuminating example of the complex way in which modernity can interact in the case of health.” Today private institutions dominate the healthcare sector of Kerala with hi-tech methods of diagnosis and therapy such as computerised Tomography(CT)scans, endoscopy units, Magnetic Resonance Imaging (MRI), coronary units, neonatal care etc.

The value chain

The value chain of medical tourism in Kerala includes the various stakeholders like doctors and other medical- paramedical staff, hospitals, government agencies, tourist resorts, travel agents, insurance companies etc. First, foreigners seeking medical treatment use channels such as mouth recommendation, electronic and print media to decide on the medical tourism package that meets their needs. Once the decision is being made, the patient flies to Kerala and undergoes treatment at the hospitals of their choice. After their medical procedure, the patients can rest and recuperate at tourist resorts before heading back to their home countries.

The Confederation of Indian Industry (CII) has declared 2006-2007 as Medical Tourism Year in Kerala, one of India’s most attractive states. India is being promoted for its cheap health care, and Indian medical tourism packages in Kerala are especially desirable because of the scenic surroundings, including the famous backwaters. The Department of Tourism in Kerala in partnership with CII is organizing a show and international conference on medical tourism, which will be attended by prominent medical tourism hospitals, medical insurance companies, and travel operators. According to the CII-McKinsky report, medical tourism industry in Kerala is expected to be worth $4 billion by 2017. This sector will bring in as much as $2 billion by 2012 as compared to an estimated $333 million in 2006-07. “Kerala has an immense potential to develop the scope of health tourism in the country. It can become the hub and one of the most preferred destinations in the world for potential health tourists.” Sri Lankan minister for minor export crop promotion Reginald Cooray opined on an international conference and exhibition on health tourism, Kerala Health Tourism 2011. Low cost is the norm today without compromising on the quality and it is this ‘cost-effectiveness and competency’ bundled and packaged well with amazing tourism products of Kerala.

Allopathy

The term “allopathy” was coined in 1842 by C. F. S. Hahnemann to designate the usual practice of medicine as opposed to homeopathy, the system of therapy that he founded based on the concept that disease can be treated with drugs (in minute doses). This system or Western medicine was originated in the technologically advanced European countries. Allopathic medicines often give rapid cure and the treatment is based on symptoms. It is an experimental science and analytical in approach. Patients from the Gulf countries, Pakistan, Sri Lanka and from many other countries are coming to India to experience the excellence of cardiac care in Kerala. Hospitals equipped with the latest equipment including Color Doppler Echocardiography and Nuclear Scanning hospitals in Kerala offer advanced cardiac care procedures such as minimally invasive surgery, angioplasty, bypass surgery and interventional cardiac catheterisation. With well-trained teams of Cardiologists, cardio-thoracic surgeons and anaesthesiologists, specialty hospitals, Kerala is the preferred choice of cardiac patients, worldwide. Cardiac surgery is also very reasonable in Kerala compared to international rates. The complete cost of airfare to India, hospitalization, pre and post-operative care, doctors’ fees and recuperation put together is between 1/3 to ½.
the cost of similar surgery in most western nations, where a long waiting list of cases also has a negative impact on the health of the patient.

Transplant surgery is a specialized branch of surgery offered at select hospitals in Kerala. Each transplant operation requires a team of surgeons and doctors with different skills, including immunology, anaesthesiology and surgery to come together and work in unison to provide the patient with the complete surgical procedure. The well-equipped hospitals, highly skilled doctors and trained teams of support staff at hospitals in Kerala have led to a positive success rate in transplant surgery in Kerala. Dental care in Kerala is a cost-effective alternative for residents of western countries and nations in the Middle East. The extremely high cost of dental care in these nations has prompted many Indians and residents of these countries to travel to Kerala in search of a better solution. Tourists can avail of excellent treatments including specialized periodontal treatment, orthodontic and prostodontics treatments at dental care centres, dental clinics and hospitals in Kerala. From routine dental procedures such as root canal treatment and surgical extraction of impacted wisdom teeth to cosmetic dentistry procedures, such as tooth realignment and smile designing, dental care in India offers a complete range of medical solutions to medical tourists from around the world. Eager to receive personalized treatment of an international standard at an affordable price medical tourists have been increasingly exploring the options offered by dental care in Kerala India. Fertility Treatment in Kerala is a specialized treatment offered at a large number of hospitals and clinics in Kerala. Assisted reproduction programs offer parents who are unable to conceive, the hope of having biological children with the assistance of modern technology. Advanced techniques such as GIFT (Gamete Intra Fallopian Transfer) and ZIFT (Zygote Intra Fallopian Transfer) are offered at well-equipped Fertility centres in Kerala. With fully equipped laboratories, ultrasound equipment and experienced doctors and support staff, fertility treatment in Kerala is economically priced and has been a sought-after treatment option by many Indian residents of the Middle East Countries.

Cost Comparison-Allopathy

Table 1 reveals that the cost structure of Kerala is the cheapest when compared to other states and countries, which have not brought out to the business world so far. Kerala can be positioned as the cheapest hub of medical tourism in modern medicine as well though Ayurveda has been the existing cheapest quality known alternative for the outer world. Cost effective treatments in Kerala are less expensive when compared to other states and rest of the world. Today it has become a reality as the total cost, including airfare, hospital expenses, hotel accommodation and the added tourism experience, works out very economic in comparison just the surgery cost in the developed nations (Figure 1). The package includes the required services like the following.

Value Added Services - Kerala Package
- Airport Pick –up
- Critical – care ambulance with doctor and paramedics on board
- Reception at VIP lounge
- Dedicated medical tourism counter
- 24 – hour guest relations
- Personal attention
- Co-ordination of all appointments
- Accommodation for patients’ attendants
- Customized cuisine
- Temple, Church, Mosque at the hospital
- Round – the - clock internet and library
- Locker facility
- Special services including Bath towel, Soap, Shampoo, Newspaper, Flower, Fruit basket and sanitary paper

For a liver transplantation it is just $ 33,000 in Kerala while in US, IT IS 3, 00,000. The transplantation surgeries of hip, bone marrow, kidney etc are highly charged in US and Thailand. For an MRI scan when we charge $700, in Kerala it is just $ 60. The same trend is applicable to cosmetic surgeries as well.

The medical tourism industry offers high potential for Kerala because of its inherent advantages in terms of cost and quality. Medical tourists require concrete and quantifiable signals of quality (Hudson & Li, 2012). Kerala medical tourism” provides a combination of healthcare with tourism potential and offering the ‘Best of the East and the West under one roof.’ However, if it has to sustain and develop an active industry, collective and conscious efforts have to be envisaged and implemented by the competent authorities. The learning that emerges out of this study can be built into a strategic framework that may be usefully adapted by the key players linked to this industry.

For the purpose of this study, the researcher has used a variant of this technique- Perception-Reality Matrix (‘A study of problems and challenges of medical tourists in India,” 2011) in PRM, medical tourists’ perception and the reality have been plotted on a grid that is divided into 4 quadrants. Each quadrant is created based on the mean scores of the
expectations—experience ratings. The variables are then assessed according to its position in the quadrant on the grid. Each quadrant suggests different response from a strategy point of view (Figure 2). Quality care, cost-benefit aspect of treatment, connectivity to the home country, empathy of the medical staff that is acclaimed globally, the professionalism of the hospitals, satisfaction of cross-cultural needs is the attributes perceived to be very important to respondents, and at the same time, the organization seems to have high levels of performance on these activities (Figure 3). It suggests that service providers keep up the good work vis-a-vis variables in this quadrant and increase resources directed towards these. These variables are the current differentiators for the service providers.

Conclusion

Kerala’s Healthcare sector has made impressive strides in recent years and is surging ahead with new facilities and technology of Allapathy and the global brand Ayurveda. The state has the State-of-the-art technology and the skilled super specialists and has an enormous potential for future growth and development. The state carries an image in the international markets with comparable success rates and services levels directly in proportion to the high value system and personal and quality caring that comes with its unique and varied natural beauty. The current segment of tourists does not consider accreditation as a main concern as they are more concerned about the quality, personal care and cost factor.

References

## Illustrations

### Illustration 1

Table 1: Cost Comparison - Allopathy

<table>
<thead>
<tr>
<th>Treatments</th>
<th>Average rate in India as a whole ($)</th>
<th>Average rate in Kerala ($)</th>
<th>Cost in US ($)</th>
<th>Thailand ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angioplasty</td>
<td>11,000</td>
<td>4000-7000</td>
<td>57,000</td>
<td>13,000</td>
</tr>
<tr>
<td>Liver transplantation</td>
<td>40,000</td>
<td>33,000</td>
<td>3,00,000</td>
<td>75,000</td>
</tr>
<tr>
<td>Breast Augmentation (Primary &amp; Secondary)</td>
<td>2800</td>
<td>1320</td>
<td>8000</td>
<td>2200</td>
</tr>
<tr>
<td>Procedure</td>
<td>Cost 1</td>
<td>Cost 2</td>
<td>Cost 3</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>Kidney Transplantation</td>
<td>5000</td>
<td>1,75,000</td>
<td>27,000</td>
<td></td>
</tr>
<tr>
<td>Open Heart Surgery (CABG)</td>
<td>7000</td>
<td>1,50,000</td>
<td>14250</td>
<td></td>
</tr>
<tr>
<td>Bone Marrow Transplantation</td>
<td>$69000</td>
<td>4500</td>
<td>2,50,000</td>
<td>62,500</td>
</tr>
<tr>
<td>Heart Surgery</td>
<td>8000</td>
<td></td>
<td>30,000</td>
<td></td>
</tr>
<tr>
<td>Breast Reduction</td>
<td>3000</td>
<td>880</td>
<td>9000</td>
<td></td>
</tr>
<tr>
<td>Face and Neck Lift</td>
<td>2500</td>
<td>1650</td>
<td>15,000</td>
<td></td>
</tr>
<tr>
<td>Hip Replacement (Single and Double)</td>
<td>9,500</td>
<td>3200-7000</td>
<td>43,000</td>
<td>12,000</td>
</tr>
<tr>
<td>Procedure</td>
<td>Cost 1</td>
<td>Cost 2</td>
<td>Cost 3</td>
<td>Cost 4</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Magnetic Resonance Imaging (MRI) scan</td>
<td>60</td>
<td>60</td>
<td>700</td>
<td></td>
</tr>
<tr>
<td>Cataract surgery</td>
<td>1250</td>
<td></td>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td>Knee Replacement</td>
<td>8,500</td>
<td>5600</td>
<td>24000</td>
<td>10,000</td>
</tr>
<tr>
<td>Hysterectomy</td>
<td>3,000</td>
<td></td>
<td>20,000</td>
<td>4,500</td>
</tr>
<tr>
<td>Spinal Fusion</td>
<td>5,500</td>
<td></td>
<td>62,000</td>
<td>7000</td>
</tr>
<tr>
<td>Service</td>
<td>Min</td>
<td>Max</td>
<td>Avg</td>
<td></td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td></td>
</tr>
<tr>
<td>Root Canal Treatment</td>
<td>100</td>
<td>60</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>Rhinoplasty</td>
<td>2000</td>
<td>600</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Tooth Whitening</td>
<td>110</td>
<td>110</td>
<td>350</td>
<td></td>
</tr>
<tr>
<td>Blade-free LASIK surgery</td>
<td>1700</td>
<td>1200</td>
<td>2200</td>
<td></td>
</tr>
<tr>
<td>Liposuction</td>
<td>1100-1800</td>
<td></td>
<td>3500-8500</td>
<td></td>
</tr>
<tr>
<td>Dental filling</td>
<td>20-40,</td>
<td>25</td>
<td>300-400</td>
<td></td>
</tr>
</tbody>
</table>

Source: field study, IBEF, Deloitte study report - 2008
Illustration 2

Figure 1: Cost Comparison between other competitors

![Cost Comparison Diagram]

Source: Field Study
Illustration 3

Figure 2: (Martilla & James, 1977) and Ministry of Tourism Report, 2011
Illustration 4

Figure 3: (Martilla & James, 1977) and Ministry of Tourism Report, 2011
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