

# Role of Emergengening Neuromarketing Techniques in Advertising with Particular Reference to Indian Medical Tourism Industry: A Discussion and Agenda for Future Research

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## ABSTRACT

*Mass Media and travel agencies have coined a term Medical tourism; it is becoming a popular choice for tourist across the world. In current scenario developing countries like India, Thailand, Malaysia, etc are making focused effort to promote medical tourism. India is enjoying competitive advantage in healthcare segment by its low cost advantage. The key concerns facing the Indian medical tourism industry include: limited government initiative, lack of integrated effort to promote the industry, lack of promotion and the lack of uniform pricing policies and standards across hospitals. Recent years have seen an “explosion” in the abilities of neuromarketing in developing effective advertisement campaign. Unfortunately, it is little known and reported on how advertising companies make more effective healthcare tourism commercials. The purpose of this paper is to analyze how neuromarketing techniques may impact the consumer response to Indian Medical Tourism advertising campaigns. The result shows that using neuromarketing methods an Indian healthcare company can better understand the conscious and unconscious consumer’s thoughts and tailor specific marketing messages. . Finally, this paper analyses and concludes the main factors, affecting the consumer behavior and why the developing country like India should focus these factors to attract foreign tourists for the medical treatment.*

**Keywords:** Medical Tourism, Neuromarketing, Neuroscience, Old Brain, Advertising, Consumer behavior

## I INTRODUCTION OF MEDICAL TOURISM

Medical tourism is an emerging form of a niche tourism market which has been rapidly on the rise in the recent years. The term medical tourism is the act of roaming to other countries to attain medical, dental and surgical care. According to Goodrich & Goodrich (1987), medical tourism is the attempt to create a center of attention tourists by deliberately promoting its health-care services and facilities, in addition to its regular tourist amenities.

A law (1996) has defined medical tourism as a travel from home country or home city to other country or other city to improve one’s health condition as one type of relaxation. It comprises of getting indigenous and alternative medical services, and any other form of tourism undertaken with the purpose of focusing a health concern.

Connell (2006) observes medical tourism as a popular mass culture where natives travel to out of the countries to find healthcare services and facilities such as medical, dental and surgical care even as having the opportunity to stay the tourist spots of that country.

Carrera and Bridges (2006) have given a new definition to medical tourism, as travel which is methodically designed to maintain one’s physical and mental fitness.

According to GATS (General Agreement on Trade and Services), medical tourism is the subsequent mode of trade in health services. In this mode, Patients (customers) leave their home country to get health care services with expert at reasonable prices. Blouin et al., (2006).

Bookman & Bookman (2007) have defined medical tourism as travel with the endeavor of improving one’s health, and also an economic activity that entails trade in services and represents two sectors: medicine and tourism. Medical tourism according to Dhaene (2009) is looking for available quality combined with cost effective and low price health services while offering a similar level of safety to the patient.

Generally, mainstream of medical tourists come from developed countries of the world especially Europe, the UK, Middle East, Japan, U.S. and Canada where the expenditure of medical handling is very exclusive and there are frequently lengthy waiting times for treatments. Other than India, countries that are currently promoting medical tourism are Thailand, Malaysia, Singapore, South Korea Bolivia, Brazil, Belgium, Cuba, Costa Rica, Hungary, and Jordan. Private sector expansion in rising economies— such as India, Thailand, Singapore, and certain Latin American nations— attracts foreign patients for moderately cheaper care: the uninsured, the underinsured, or those who prefer not to wait for treatment under a national health insurance system.

From various previous research it has been observed that following factors are driving the growth of medical tourism in India are: (i) the lengthy waiting lists in the developed countries, (ii) the low cost of medical treatments In India, complicated surgical procedures are being done at one-tenth of the cost as compared to the procedures in the developed countries, (iii) The inexpensive international air fares and favorable exchange rates, (iv) the Internet; with the development of communications, new companies have emerged who acts as middlemen between international patients and hospital networks (v) the latest technology, expert doctors, nurses and paramedical staffs that has been adopted by the big hospitals and diagnostics centers in India.

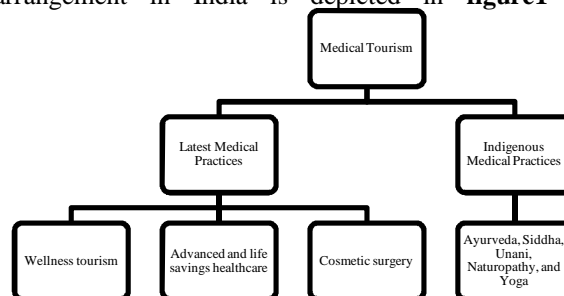
## II MEDICAL TOURISM IN INDIA – THE CURRENT SCENARIO

According to a Mckinsey-CII study the industry’s earning potential estimated at Rs.5000-10000 Crores by 2012 (CII-Mckinsey, 2002). Medical tourism can contribute Rs 5,000-10,000 crore additional revenue for up-market tertiary hospitals by 2012 and will account for 3-5% of the total healthcare delivery market, says the Confederation of Indian Industry (CII)-McKinsey study on healthcare (2002: pp.1-2).

The key service providers in Indian medical tourism are: In Private sector hospitals like Apollo Hospitals, Escorts Hospital, Fortis Hospitals, Breach Candy, Hinduja, Mumbai’s Asian Heart Institute, Arvind Eye Hospitals, Manipal Hospitals, Mallya Hospital, Shankara Nethralaya etc. a In public -sector hospital, AIIMs is also in the fray. In terms of locations – Delhi, Chennai, Bangalore and Mumbai accommodate to the maximum number of wellbeing tourists and are developing as famous medical tourism hubs of India. India visualizes high-end healthcare services through BPO firms like Hinduja TMT, Apollo Heart Street, Comat Technologies, Datamatics and Lapid that work in the areas of claim settlement, billing and coding, transcriptions and form processing. Therefore, it is clear that the opportunities and challenges for growth in the health sector are seen primarily within the private/corporate sector, not in the public sector.

Now days India is renowned for latest medical practices as well as indigenous medical practices. All these traditional healthcare systems are attracting national and international patients, and generate tourism flows. The medical tourism

arrangement in India is depicted in **figure1**



**Table 1:**  
**Categorization of the services range of medical tourism**

	Wellness tourism	Alternative systems of medicine	Cosmetic surgery	Advanced and life savings healthcare
Services offered	Spas, Stress relief, rejuvenation centres	Ayurvedics, Siddha treatment for diseases e.g. Arthritis, Rheumatism	Dental Care, Plastic Surgery, Breast enhancement, Tummy reduction, Skin Treatment	Open transplants, cardio vascular surgery, Eye replacement, In vitro fertilization
Profit Margin	Low	Low	Medium	High
Key Competitors	Thailand, South Africa	--	South Africa, Cuba, Thailand	Singapore, Jordan, Thailand

## III OBJECTIVES OF THE STUDY

This research works explores concepts and the role of emerging neuromarketing techniques in promotion of Indian medical tourism, and designing the suitable promotional strategies for developing medical tourism in India.

## IV RESEARCH METHODOLOGY

It is based on a review of the literature, including published research, web sites, newspapers, and the travel and tourism magazines that carry medical tourism related information. This helps to design the strategies being used for promoting medical tourism in India.

## V INTRODUCTION OF NEUROMARKETING

Neuromarketing is a emerging marketing concept that uses medical techniques to know how central nervous system reacts to marketing stimuli. The term of neuromarketing was initially coined by the Nobel Prize winner, Ale Smidts, in 2002 and defines “the study of the cerebral mechanism to understand the consumer’s behavior in order to improve the marketing strategies”

In particular, new economic sciences developed neuromarketing, neurofinance, neuroaccounting or neuromanagement. These new disciplines have more important academic aims, but also practical aspects are applied. Dr. Eric Kandel, neuroscientist and winner of the Nobel Price for Psychology and

Medicine said that “Understanding the human mind in biological terms has emerged as the central challenge of science in the twenty-first century”.

Neuromarketing usually studies the action of FMRI, EEG, galvanic skin response and eye tracking. They are selected for the potential results and cost of use. Among all the areas of research, the brain is the most captivating. The human brain is the most complex structure of our body. The synapses change with experience and learning, which gives a different picture for marketing specialist when studying subjects with different age or level of education.

Dr. A. K. Pradeep, founder & CEO at Neurofocus, a Nielsen company, suggests that about 11 million bits of information is collected by our brain every second, but only 40 bits from that is processed by our conscious mind. Unconscious mind can reveal important details about the purchase process and consumer behavior, and become one of the top priorities in the neuromarketing studies.

In the book “Neuro Marketing. Le nerf de la vente”, Patrick Renvoisé and Christophe Morin talk about three brains and how consumers take decisions:

The thinking brain (neocortex) is the rational brain in charge with the logical thinking, and represents the conscious mind.

The emotional brain (limbic system) mediates and controls the emotions and feelings. It is our intuitive brain and represents the subconscious mind.

The old brain (reptilian brain) controls the basic functions like heart beating, breathings, control of adrenaline when it needs. It is the most primitive brain, but with a crucial role in taking decisions.

## VI NEUROMARKETING TECHNIQUES IN MEDICAL TOURISM ADVERTISING

Healthcare sector faces new challenges in selling and advertising their products. Innovative surgeries and medical advancement are released on the market. Due to the profitable business, the competition is strong. Each hospital tries to differentiate and attract the final consumers with their product’s benefits. In this context, advertising plays a key role. In the last few years, a new science, called neuromarketing, has been helping companies get more consumer insights.

Customer’s reaction towards advertising is inclined by many factors like culture, role and practice of advertising in different countries, gender, age, level of education and many others. While customer’s also have diversity on these all basis, but “the language of the brain is universal”

Traditional marketing research has limitation and do not answer to all the questions about consumer behavior. Integrating the neuromarketing techniques with the traditional ones may create effective advertising practices and help to attain deeper consumer and market insights.

Direct to medical tourism advertising can fall into two categories: “**Product-Assert**”, “**Help-Seeking**”, but depending on laws and regulations these can vary from country to country. Due to the high amounts of money involved in medical tourism advertising, many companies may benefit from neuromarketing research. Each year, a trillion dollars is spent to persuade the human brain and “over 400 billion dollars is invested in advertising campaigns”.

Medical service providing companies can use neuromarketing techniques to make preliminary tests and select the most effective TV commercials. This is possible by following neuromarketing techniques:

**fMRI (Functional Magnetic Resonance Imaging)** is measuring the brain’s activity by detecting the oxygen level in blood flow.

**EEG (Electroencephalography)** measures and records the electrical activity of the brain.

**SST (Steady State Topography)** measures and records the brain’s activity during TV ads.

**MEG (Magneto Encephalography)** offer information about the brain activity by using a magnetic field. It has high temporal and spatial resolution.

**Respiratory Rate** means the number of breaths usually taken during one minute.

**Heart Rate** means the number of heartbeats usually taken during one minute.

**Galvanic Skin Response or Skin Conductance** measures the changes in the electrical properties of the skin, depending on the level of moisture.

**Eye Tracking Method**, which tracks where the eyes are looking at.

The above neuromarketing tools reveal that it is possible to measure both Central Nervous System (CNS) reaction responsible for long-term communication results and also identifying short-term Peripheral Nervous System (PNS) reactions caused by a TV commercial.

## VII FINDINGS

In order to persuade the prospective customers when watching a healthcare commercial, neuromarketer’s may try to influence our reptilian brain (old brain) by using six primary factors:

- (a) **The 'Old Brain' is self-centered** – Healthcare commercials should be focused on the consumer's wellbeing, and nothing else.
- (b) **The 'Old Brain' is survival driven** – to feel better and to extend their life.
- (c) **The 'Old Brain' seeks contrasts** - before/after, with/without, slow/fast all these contrasts may snatch the concentration of the healthcare viewers.
- (d) **The 'Old Brain' is tangible** - it likes what is familiar and motivates the consumers to take decision.
- (e) **The 'Old Brain' remembers beginning and end** – a healthcare commercial should concentrate on the first and last messages.
- (f) **The 'Old Brain' is visual** – "Use a picture. It's worth a thousand words."

### VIII FUTURE SCOPE OF RESEARCH

Neuromarketing techniques may be used to respond questions that are “invulnerable” for the traditional research methods. I hope that this paper would motivate future research into new trends in behavioral aspects of medical tourism consumers. A limitation of this paper is that a complete image on the consumer behavior in this industry wishes quantitative and qualitative researches. Therefore, researcher would like to continue with a qualitative research on medical tourism advertising.

### IX CONCLUSION

India is in a strong position to tap the universal opportunities in the medical tourism sector. This paper has suggested some of the neuromarketing driven medical tourism advertising strategies for further promoting medical tourism in India. These include constructing and promoting the image of India as expert medical tourism destination, designing and promoting new amalgamation of medical tourism products, keeping up the high standard of quality treatments at a rational price, providing informative online and offline materials and make them available to the potential customers.

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