THE DETERMINANTS FOR MEDICAL TOURISM IN PRIVATE HOSPITALS: A CASE STUDY OF NAIROBI COUNTY, KENYA

Kambaga Dunstan[1], Mongare Omare[2] and Ondara R. O[3].

[1]Technical University of Kenya, School of Business and Management Studies,
Department of Business Administration and Entrepreneurship.
P.O. Box 52428-00200, Nairobi ; Tel. : +254733340411
Email: kambaga@tuk.ac.ke/ okambaga@gmail.com

[2]Kisii University, School of Business and Economics,
Department of Tourism and Hospitality,
P.O. Box 408, Kisii; Tel.: +254721556906.
Email: mongareomare@gmail.com

[3]Technical University of Kenya, School of Hospitality and Human, Ecology,
Department of Hospitality and Leisure Studies,
P.O. Box 52428-00200, Nairobi, Kenya,
Email: robertondara@yahoo.com

Corresponding Author: Email; kambaga@tuKenya.ac.ke / okambaga@gmail.com
Mobile number; +254733340411
The paper has not been published

ABSTRACT

The Kenya government is expected to lead in developing medical experts and facilities to take care of the well-being of its citizens and beyond the borders, since health is one of the pillars in the government's agenda of Vision 2030. Therefore, the study is to find out determinants for medical tourism for private hospitals in Nairobi County, with a view of improving medical tourism in Kenya. The study examined a sample of cross-section of the tourist stakeholders to establish the impact of quality medical treatment facility, service delivery offered, competent doctors and the cost for medical treatments for private hospitals in Nairobi County. A descriptive and exploratory strategy were used for the study, whereby, the population was 400 medical tourists per month visiting the 25 private hospitals (Table 4) using census method. While, Krejcie and Morgan Table (1970) was used to sample 196 respondents, by use of convenient sampling to select medical tourists in each hospital selected. The data was collected by a structured questionnaire and analyzed by Statistical Package for Social Sciences (SPSS). The presentations and conclusions of the study was done after descriptive and inferential

statistics was investigated. The findings revealed that predictors were statistically significant at α=0.05 and the p-values < 0.05 (Quality medical treatment facility, p=0.00; Service delivery, p=0.00; Competent doctors, p=0.03; Costs, p=0.00). This is an indication that Quality medical treatment facility, Service delivery and Competence of doctors all have a significant outcome on medical tourists coming to Kenya. The study recommended that the management of private hospitals ensure that they have quality medical treatment equipment/facilities and competent medical doctors who will offer quality services to motivate more tourists to visit hospitals. The government to put in place policies to protect medical tourists from being exploited by private hospitals as well as to manage public hospitals to compete favorably with private hospitals. In such a scenario, medical tourism would expand and lead to the creation of employment and generate revenues for the country. Finally, the study will assist the government and tourism stakeholders in addressing the obstacles facing local and international medical tourism in the country. The researcher suggested a comparative study between private and public hospitals on medical tourism in Nairobi, Kenya.

Keywords: Tourists; Medical tourism; Private hospitals.

1.INTRODUCTION

1.1 Background of the Study

Tourism sector is one of the sectors most countries in the world depends on its development of their economy to drive their social-economic agendas. In such a case, through socio-economic drivers, more tourist destinations are established for the development of an economy to create employments and enterprises, export revenues, and infrastructure development (United Nations World Tourism Organization: UNWTO, 2015). World Health Organization (2018), expenditure on healthcare most of the countries in the world have doubled for the last 16 years (2000 to 2016 years). According to World Bank (2014), Kenya has made great progress in medical care between 1995 and 2014, whereby, the health expenditure doubled from 6.4% to 12.8% thus, improving the life expectancy of its citizens. The passage of Kenya's 2010 constitution, healthcare was handed over to the County government, which has made rural population to access primary health care for health population in future, unlike in the past.

Medical tourism is where tourists travel to a destination with a sole purpose to have medical services in that country. The medical services being sought by medical tourists includes dental care, surgery and fertility treatments among others (The Organization for Economic Co-operation and Development, OECD, 2010). Medical care in foreign

countries started in ancient times. In the 19th Century, Europeans of middle-level-income class people travelled to places assumed to get medical attention and improve their health. In 20th Century, rich individuals travel from developing to developed countries, although, of late some medical cases it is vice versa, owing to affordability and available of facilities in the hospitals (OECD, 2010).

Private hospitals in Kenya are for making profits while NGOs and faith based are for non-profit making. The government earns revenue in terms of tax from these private hospitals for development. Quality service is the variance among the customer's expectation before and after the delivery of the service provided by the hospital (Lewis and Mitchell, 2010). Competition is a key to customer's satisfaction which makes the private hospitals improve their services to patients (Gole, 2015). According to Cummings and Worley (2012), customers' expectations depend on marketing determinants like the image of the business/hospital, public relations and communication to have improved service.

According to The Netherlands Enterprise Agency report (2016), Kenya's private health sector today, 60% of healthcare facilities are managed by private or faith-based organizations and is among the most improved and vibrant private health sector in sub-Saharan Africa. Through the private health sector's International Medical connections, Kenyan have benefited such as Kijabe hospital and The Mater hospital which have highly skilled doctors from foreign countries like India and Britain who have relocated to Kenya permanently or partially to provide medical services. Therefore, Kenya needs to be a front runner in medical tourism than other countries, particularly on quality and price. In order to deliver quality health and the government has to recognize the Public Private Partnerships (PPPs) as one of the supports in medical care.

1.2 Justification of the study

Medical tourism internationally, has received a lot of attention from numerous academicians (Bookman, 2007; Balaban and Marano, 2010). According to Holloway et al. (2009), for a successful destination they envisaged: Competent doctors, attractions, amenities, travel opportunities, travel arrangements and travel information as components making a stopover for tourists. Private hospitals in Kenya controls 70% of the doctors practicing in Kenya, whereby only patients who can afford to pay can get access to the facilities in private hospitals. Majority of private hospitals are located in Nairobi (Kioi et al., 2015).

Sheikha et al. (2017) established the reasons for medical tourists preferring private hospitals than public hospitals in Kenya. In this reference, there is a correlation between

the two types of hospitals due to quality and cost of services offered, whereby they have an impact in the choice of the hospital for treatment. According to O'Meara et al. (2013), competition is a motivator for private hospitals in Kenya to enhance quality services, but patients prefer to go to cost friendly hospitals. Although, the government has facilitated the operation of running private hospitals, still quality is wanting from the patient's point of view (Muthaka et al., 2004).

Despite, different studies have been done on the determinants of medical tourism in private hospitals in Kenya, the level of satisfaction is still higher in private hospitals than public hospitals (Tumlinson et al., 2015), but still many Kenyan go abroad and many foreigners come to Kenya for medical treatment. According to Maina (2015), a study in Karen Hospital on service quality concluded that customer's perception towards the hospital depends on the service provided which affect hospital's performance.

According to various research done, it is imperative that not much has been explored on medical tourism treatment in Kenya. However, the study was to pursue the determinants of quality medical treatment facility, service delivery, competent doctors and the cost on medical tourism for private hospitals in Nairobi County.

1.3 Purposes of the Study

The objective of the study was to establish the determinants of medical tourism for private hospitals in Nairobi County, specifically to determine the impact of quality medical treatment facility, service delivery offered, competent doctors and the cost for medical treatment in private hospitals, Nairobi County.

2.0 LITERATURE REVIEW

2.1 The Conceptual/Theoretical Framework

Healthcare and medical tourism is an emerging niche product in tourism sector which needs a theoretical framework to understand the sector. Choice theory (1998), was developed by William Glasser which specified that diverse behaviors of human being is a choice when performing a task. According to Glasser's theory, all deeds in a human being are driven by internal motivations, despite, there are external forces, which means that any action we take in life is a choice whether you are aware or not and we are responsible for that action. Although, we sometimes behave that the action taken is not our action due to external influences. Also, self-interest inspires man in all his conducts.

2.2 The Concept of Medical Tourism in a Destination

Goodrich and Goodrich (1987), medical tourism is an effort to have quality medical facilities and amenities in a destination to attract and promote medical tourism.

Destination is not only a tourism product but a perceptual concept, which dependents on various types of determinants (Buhalis, 2000) like social, cultural, personal and psychological and among others in decision-making. However, decision-making rest on the impact of external forces based on the attractiveness of a destination and tourist's perceptions and expectations (Hsu et al., 2009); while, internal determinants includes relaxation, health care and adventure (Djeri et al., 2007). Employees in hospitals are supposed to be courteous to patients to develop mutual understanding with the patient while being treated in treatments. for better service delivery.

2.3 Medical Tourism

Globally, medical tourism industry is growing at an annual growth rate of rate of 17.9% in 2013-2019, with a revenue of USD32.5 billion by 2019 (Global Access to Healthcare Index, 2017). The medical tourism sector comprises of two segments namely luxury segment and economic segment. The global demand is dictated by demographic factors of a country births, life expectancy and death rates. According to Organization for Economic Co-operation and Development (2010), those above 80 years will double from 4% (2010) to 10% (2050) and these will make more people to seek medical care. Global Access to Healthcare Index (2017), some developing countries have performed better in medical care than developed countries. In 2017, the top-five-performing country in medical is Netherlands followed by France, Germany, Australia and United Kingdom among others (KPMG,2018)

2.3.1 Global medical tourist destinations and services offered

The top ten destinations for medical tourism plus their products (www. Medicaltourismmag.com of 29/12/2019) and specialty includes: Brazil- body beautiful; India – low cost treatment including packages from airport to hospitals pick-ups; Thailand- dental, dermatology and cosmetic surgery; Turkey-low cost, transplantation, genetic testing and neurosurgery, Turkey airline gives discount for those travelling on medical ground; Costa Rica- surgery, dentistry, cancer and eye treatments; Mexico- dentistry, cosmetic surgery and low cost treatment; Taiwan – cardiology, orthopedics and health screening; and South Korea – spinal surgeries.

In Kenya, there are roughly 7,000 to 10,000 seeking medical services abroad, spending approximately KES 7-10 billion (Netherlands report, 2016), however, the most medical services sought include Cancer (37%); Renal (21%); Cardiac (19%) and General surgery (23%). The Popular destinations for Kenyans in search of medical care abroad go to India, South Africa, USA, UK and Thailand among others (Netherlands report, 2016).

Kenyan patients go abroad due to affordability, whereby they spend an average of KES 1 million than what they would have spent in Kenya, a short stay in hospital, less waiting time and quality services (GoK,2013). Also, inbound medical tourism in Kenya averaging 3,000-5,000 foreigners, spending approximated KES. 3billion annually. Medical tourist comes from Uganda (28%), Tanzania (18%), Sudan (12%), South Sudan (14%), Somalia (4%), Rwanda (7%), Ethiopia (4%), Eritrea (1%), DRC Congo (5%) and Burundi (7%), others from USA and Europe. The most sought from Kenyan private hospitals: General Surgery, Orthopedics and Dental; Renal treatments; Cardiology and heart procedures and Oncology. Medical tourists in Kenya spend roughly KES 500,000 per visit (Vision 2030 Delivery Secretariat), this has necessitated Kenya to have a medical tourism strategy, which is envisaged in the Kenyan Government's Vision 2030. In this regard, the study is to explore the dynamics in health tourism in private hospitals in Kenya (GOK, 2018).

2.3.2 Local medical tourism

Mogaka et al (2016), study revealed that some patients travel out of the country and others come into the country for medical care as medical tourists. Some people argue that medical tourism promote healthcare, inequity and generates revenue for the hospital and Kenyan economy. The wealthy and middle - class people in Africa, regularly seek advanced medical care abroad.

Medical tourism in Africa is an emerging market whereby most countries namely; Egypt, Kenya, Morocco, South Africa, and Tunisia are trying to expand the market. According to Tourism for transformative and inclusive growth report (2017), Kenya was named among the top six medical tourism destinations in African in search of high-end specialized medical services. In this regards, Kenya is tactically positioned in accessibility to the outside world in terms of infrastructure linking the patients to medical services in the country. However, countries with good balancing strategy between pricing and quality will sustain medical tourism for long term. The Ministry of Health (2019), nearly 10,000 Kenyans are seeking medical services abroad annually, spending not less than KES 10 billion, therefore, this is a market private and government hospitals needs to enhance in order to tap more medical tourists to the country.

2.3.3 Public Hospitals in Kenya

According to the government of Kenya Vision 2030, health sector is one of the pillars to be achieved in its economic plan which focuses on the provision and delivery of health services (Makhamara and Waiganjo, 2016). The medical services provider in Kenya is branded into three namely; Public hospitals, Private hospitals and NGO's and

Philanthropists hospitals offering services at low cost pricing and targeting low income individuals (Omondi, 2016). However, earlier studies have shown poor state of medical care and in insufficiencies and disorganized health services (Owino and Korir, 2000) in public hospitals. In such, a case patients seek other medical providers in foreign countries resulting poor publicity, thus, affecting the growth and development of medical tourism in the country. Kenyatta and Eldoret referral hospitals are among the main public hospitals in Kenya (Economic Review, 2018).

2.3.4 Private hospitals in Nairobi County

According to GoK (2016), the hospitals facilities in the country are equipped as follows; 52% public, 11% faith based and 37% private, whereby, private hospitals facilities are mainly found in Nairobi 31% and Mombasa 6%. The Ministry of health (2019), indicates that a total of 27 private hospitals are registered in the country (Table 4) out of which 25 are located in Nairobi. In the last five years, health spending in Kenya has been on the rise due to population increase and high demand of better medical services by middle level class people. Although, private hospitals provide good diagnostic analysis and other facilities, the pricing are higher for most people, in lieu of that, 47% Kenyan pursue medical services from private hospitals (Burger et al., 2012).

2.3.5 Services offered by private hospitals in Kenya

The services offered by private hospitals to medical tourists include; Excelled medical expertise and services provision, advanced diagnostic, treatment and referral center, postgraduate education in surgery and surgical training, access to quality healthcare, state-of-the-art technologies for medical treatments and cancer and heart centers, Neuro interventional and finally teaching hospital in the region (GoK, 2016)

2.4 Determinants influencing choice of private hospital

Medical tourism is becoming complex due to demand for specialized procedures in medical field which has brought concerns in medical costs, lifestyle diseases and aging population. However, medical tourism if taken serious will reduce peoples severing and improve the living standard. Promoting medical tourism some determinants have to be taken into account namely; Affordability and cost effectiveness, high-quality healthcare, immediate service and affluent patients among others (KPMG 2016).

According to Kim (2017), the model for medical tourism, suggests that medical facility and country location plays a comparable role, whereby, tourists initially select the country location and then look for a medical facility, infrastructure and service accessibility (Kim, 2017). Caballero-Danell and Mugomba (2007), identified customer benefit, branding, communication channel, legal framework and infrastructure as

dominant determinants for attracting healthcare tourists. while, Ye et al. (2008), acknowledged marketing promotion programs, Competent doctors, communication, employee expertise and certification as motivators to medical tourists to visit the destination for healthcare services. Heung et al. (2010), developed an integrated model to determine the determinant which affects decision-making to medical tourist. The model took two aspects; demand, which came up with economic Competent doctors, distance/location, political stability, hospital reputation while, supply determinants included infrastructure, promotion and quality of healthcare facility.

According to Alsharif et al. (2010), medical tourists prefer traveling to China, India, United Arab Emirates (UAE) and Jordan because of the following determinants availability of doctors, economically viable, hospitals accreditation and certification. Potential medical tourists are motivated by various determinant to travel overseas viz. affordable healthcare, doctors and physician availability and less waiting time for medical care (Eissler and Casken, 2013). According to GOI (2019), Accredited hospitals offer; frontier technology, medical experts, cost saving, zero waiting strategy and friendliness and hospitality as the determinants benefiting medical tourist travelling to India.

Further study by FICCI (2016) identified major drivers for medical tourism in India such as; health (quality healthcare, dependability and credibility, acceptable infrastructure), cost-effective (insurance protection, lower fees for Competent doctors) and societal and technological (internet, privacy, cultural etc.). However, with the exploration of the existing scholarly literature in Kenya, most of the studies examined the factors which encouraged the patient's perspective to seek for international medical treatment abroad.

2.4.1 Quality medical treatment facility and medical tourist destination

The primary factor infrastructure and amenities are determined on the basis of how advanced the infrastructure is and how safety and security of the tourist is ensured. Secondly, certification and affiliation of the medical institute from the well- recognized agencies also boost the confidence of the medical tourist for traveling to the selected destination. Finally, the accessibility to the hospital location and communication in the preferred language which eases the medical tourist both mentally and physically to move to another nation (WHO,2017)

2.4.2 Service delivery and medical tourist destination

The quality services and performance delivered by medical care in a country, makes more medical tourists to visit the destination for its growth and expansion of medical facilities (Parasuraman et al. 1994). Service quality is an important factor of attractiveness in

service industry (Lewis, 1989). A number of considerations are used to measure the quality of medical care in a destination, namely; time to wait for medication, confidentiality of medical examination, hygiene of the health facility and infrastructures and professionalism in handling a patient.

Quality is a totality of quality management of service in the hospital (Wilkinson and Witcher, 1991). In this regard, quality is a major determinant in competition for any hospital to succeed since it involves different people with different culture who travel to different destinations looking for medical care (Hjalager, 1997). However, hospitals can enhance service quality by having competent doctors and improving the service provided and competitive costs. According to Saiprasert, (2011), satisfaction in the hospitals has been motivated by various features like perceptions and values.

2.4.3 Competent doctors and medical tourist destination

The availability of doctors or physicians possessing special expertise in the field of medicine the medical tourist needs makes one of the determinants of medical tourism. Consumer behavior, is the way tourists purchase and consume the services available at a particular need or time by making different decisions (Cohen et al., 2014). Tourism behavior is concerned of how the tourist interact with people and settings in a destination on an uninterrupted basis (Van Vuuren and Slabbert, 2011). Therefore, the attitudes of medical tourists depend on age, politics, income, culture, doctor's professionalism among other determinant which affect tourists to like or dislike a certain hospital. These attributes have similar drives, but a slightly different, making a destination appropriate and accessible for tourists. Satisfied medical tourists may recommend a certain hospital to a friends and relatives due to quality services experienced as opposed to dissatisfied a tourist with a destination or hospital (Chen and Chen, 2010).

2.4.4 Cost and medical tourist destination

Consumers are very sensitive regarding the cost of any product or service provided by a hospital. Infrastructure in a hospital may hike the cost for medication to be expensive for the tourist (Crooks et al. 2011; Table 1). The rates for a patient travelling to India and medical procedures (Table 2), indicates that different medical procedures and competent doctors motivates medical tourists to a destination. However, countries like Britain and Canada have nationalized health care system such that treatment in private hospitals are expensive or unavailable which forces the citizens to look for medication in foreign countries (Horowitz and Rosensweig, 2017)

In Kenya (Table 2) private hospitals charge differently in reference to hospitals and diseases. According to Daily Nation (2016), Private charges KES 1million and KNH charge 175, 000. treating a heart patient, it requires between KES 5million to 10 million considering the equipment and personnel required. While it now costs KES 200,000 to deliver in private hospital (www.businessdailyafrica.com, 2/1/2020). Heart diseases are projected to overtake aids, tuberculosis and malaria by year 2025, they do squeeze your pockets. About 200,000 Kenyans every year are diagnosed with rheumatic heart disease due to smoky indoor cooking fires exposing children and women to air pollutants that can damage their heart and lungs (Table 3).

Table 1

Rates (US$) of Medical Care in Designated Countries

Procedure	US	India	Thailand	Singapore	Malaysia	Mexico	Cuba	Poland	Hungary	UK
Heart bypass	113 000	10 000	13 000	20 000	9 000	3 250	7 140	13 921		
Heart Valve replacement	150 000	9 500	11 000	13 000	9 000	18 000	9 520			
Angioplasty	47 000	11 000	10 000	13 000	11 000	15 000	7 300	8 000		
Hip replacement	47 000	9 000	12 000	11 000	10 000	17 300	6 120	7 500	12 000	
Knee replacement	48 000	8 500	10 000	13 000	8 000	14 650	6 375	10 162		
Gastric bypass	35 000	11 000	15 000	20 000	13 000	8 000	11 069			
Hip resurfacing	47 000	8 250	10 000	12 000	12 500	12 500	7 905			
Spinal fusion	43 000	5 500	7 000	9 000	15 000					
Mastectomy	17 000	7 500	9 000	12 400	7 500					
Rhinoplasty	4 500	2 000	2 500	4 375	2 083	3 200	1 535	1 700	2 858	3 500
Tummy Tuck	6 400	2 900	3 500	6 250	3 903	3 000	1 831	3 500	3 136	4 810
Breast reduction	5 200	2 500	3 750	8 000	3 343	3 000	1 668	3 146	3 490	5 075
Breast implants	6 000	2 200	2 600	8 000	3 308	2 500	1 248	5 243	3 871	4 350
Crown	385	180	243	400	250	300	246	322	330	
Tooth whitening	289	100	100	400	350	174	350	500		
Dental implants	1 188	1 100	1 429	1 500	2 636	950	953	650	1 600	

Source: Neil et al., (2015).

Table 2

The Rate for Patients Travelling to India and medical procedures

Procedure	Rates in UK (£)	Rates procedure India (£)	Fair for flight	Total rates India	Cost saved per operation (£)	Waiting list	Total saved (£)
Coronary artery bypass graft	8,631	3,413	500	3,913	4,718	97	457,646

Coronary angioplasty	2,269	2,363	500	2,863	-594	25,241	Not worth it
Hip replacement	8,811	3,413	500	3,913	4,898	28,800	141,062,400
Knee replacement	6,377	5,145	500	5,645	732	53,911	39,462,852
Femoral hernia repair	1,595	819	500	1,319	276	1,686	465,336
Inguinal hernia repair	1,595	717	500	1,217	378	65,064	24,594,192
Total	206,042,426						

Source: The Organization for Economic Co-operation and Development (OECD) (2015)

Table 3

Rate of Medical Care in Diverse Hospitals and Ailments in Nairobi and Mombasa Counties (Inpatient/Outpatient)

Private Hospitals	Consultation fee	Ward bed charges per day	General ward bed charge per month	VIP-Bed charge per day	ICU per day	*Heart surgery	Delivering a baby
Mater hospital	1,300	8,000	240,000		24,000		
M.P. Shah hospital	2,000	8,000	240,000				99,000-250,000
Nairobi hospital	2,000	9,500	285,000	60,000	33,000		
Karen hospital	1,800	7,500	225,000				110, 000 - 230,000
Pandya-Mombasa	1,000	5,500	165,000				
Avenue healthcare	1,000 - 2,400	6,500	195,000				50,000-210,000
Mombasa hospital	1,100	6,000	180,000				
KNH private wing		4,000	120,000				150,000 – 200,000
Aga khan hospital	1,940						

Source: Daily Nation, (2016)

3.0 RESEARCH METHODOLOGY

3.1 Research Design

The study adopted the descriptive cross-sectional design to show the association among the variables namely, quality services, service delivery, competent doctors and costs and the effect of performance in-depth of private hospitals in Kenya.

3.2 Study Area

The study was conducted in Nairobi County, since it has got the highest number of hospitals than other counties in the country (Economic Review, 2018).

3.3 Target Population

According to the Kenya Association of Private Hospitals (KAPH) (2015), there are 25 private hospitals in Nairobi (Table 4) with an average of 5,000 medical tourists visiting the hospitals per year. The researcher used all the private hospitals in Nairobi for the study, which is a census method of study.

Table 4

Private Hospitals in Nairobi County

Private Hospitals		
1.The Nairobi Hospital	2.M.P. Shah Hospital	3.Metropolitan Hospital, Nairobi
4. The Aga Khan University Hospital	5. Mater Misericordiae Hospital	6. Gertrude's Children Hospital
7.Guru Nanak Hospital	8.The Karen Hospital	9.The Nairobi Women's Hospital
10. Avenue Healthcare Nairobi	11. Coptic Hospital	12.Jamaa Mission Hospital
13. The Nairobi West Hospital	14.Meridian Equator Hospital	15.Parklands Hospital
16.St. Mary's Mission Hospital Nairobi	17.South B. Hospital Ltd	18. Chiromo Lane Medical Centre(CLMC)
19.Melchizedek Hospital Ltd	20.Lions SightFirst Eye Hospital	21.Family Care Medical Centre – Nairobi
22.New Langata Medical Centre (Nairobi, Kenya)	23.Madina Nursing Home	24.Mother and Child Hospital Ltd.
25. Mariakani Cottage Hospital		

Source: Kenyapharmtech,2019

3.3 Sampling design and procedure

3.3.1 Sampling design

Sampling design is a task which provides the probability of any sample being drawn from a population of study (Kothari, 2005). The administrators were used through the nurses to assist to distribute the questionnaire and get those patients who are in a stable condition and willing to participates in the study. A non-sampling method was chosen, the census, where the population was basically reached and observed by the nurses handling all medical tourists from the private hospitals in Nairobi (Table 4). The questionnaires were distributed to hospitals in the month of August 2019.

3.3.2 Sample Size

All the medical tourist's hospitals (Table 5) were used in the study, census study, while, convenient sampling method was used to select patients per hospital. There was an

average of 5,000 medical tourists per year which translates to 200 patients per year per hospital, hence, a sample size of 16 patients per month per hospital was established, making patients interviewed for the month of August, 2019, 400 patients (Table 5), by using Krejcie and Morgan Table (1970; Table 6), it gave sample size 196 patients, which means 8 patients per hospital were selected for the study (Table 7).

Table 5

Number of Patients in Private Hospitals

Private hospitals	**No. of patients per year**	**No. of patients per hospital**	**No. of patients per hospital per month**	**Total no. of tourists per month**
25	5,000	200	16	400

Table 7

Krejcie and Morgan Table (1970)

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	373
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377

75	63	230	144	550	225	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Source: Krejcie and Morgan (1970)

3.4 Data Collection Instruments

The hospital nurses introduced themselves to the patients as well as the rationale of the research so that they get their permission to conduct the study to those who are willing to share their experience as medical tourists in the research. The questionnaires were preferred in the study since it was assumed the respondents or the guardian are literate to answer questions asked.

3.5 Data Analysis

The research yielded both quantitative and qualitative data. Quantitative data collected was presented by descriptive statistics through means, standard deviations and frequencies, analyzed by use of Statistical Package for Social Sciences (SPSS). The study used multiple regression and correlation as statistical tools. Regression was used to determine the relationship between service quality and performance variables of Private Hospitals.

The study applied the following regression model

$Y= a +bi Xi + e$ Where i=1, 2, 3, 4

Where Y = Performance

a= constant, value of Y when the value of X=0

bi = Co-efficient of X when Y changes

Xi = Independent Variable- Service quality

e = is the random error of variables relating to performance but not shown in the model.

4.0 DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Rate of response

All questionnaires were read, interpreted to medical tourists by nurses to the language they understand and filled and returned them without altering the significance of the questionnaires. The response rate of 80% filled up and returned while 20% did not return the questionnaires due to time since others were being discharged (Table 8). However, the findings did not defer significantly (X^2=6.667, df=1, p=.001). The response rate was

commendable to give a credible outcome of the study for medical treatment in private hospitals

Table 7

Questionnaires Respondents Rate

Questionnaires	Filled up and returned	Not returned	X^2	df	p-value
Response rate	157(80%)	39(20%)	6.667	1	0.001

Source (Researcher, 2019)

4.2 Gender

The respondent in the questionnaire were asked to indicate their gender, the response was 63% were male and 37% female (Table 9). determine the gender study sought to determine the gender of the respondent and therefore requested the respondent to indicate their gender as shown inTable 8 below,

Table 9

Gender Respondents on Questionnaires

Gender	Male	Females	x^2	df	p-value
Response rate	99(63%)	58(37%)	2.222	1	0.001

Source (researcher, 2019)

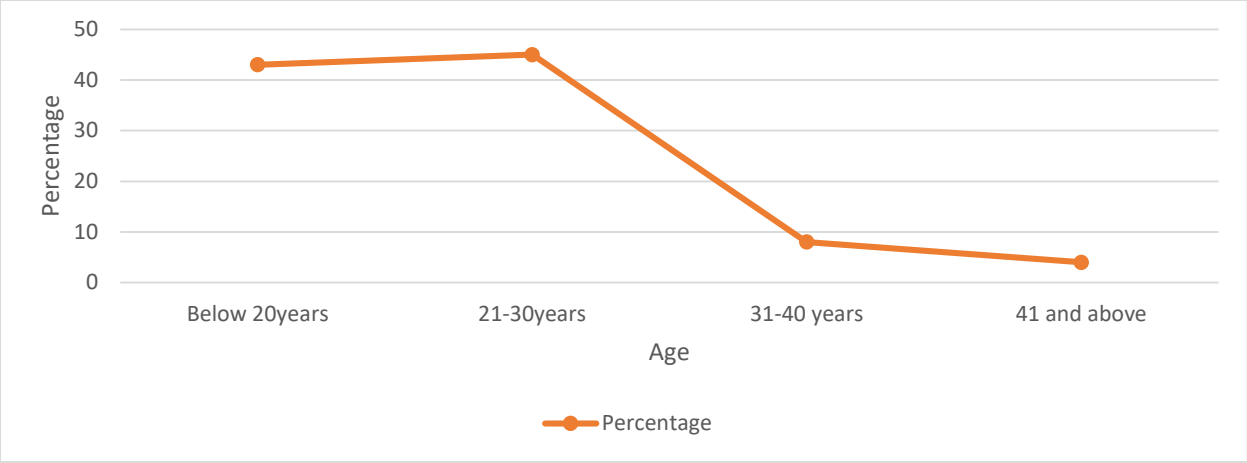
After analyzing the data, the response did not defer significantly (x^2 =2.22; df=1; p=0.001), which implied that both female and men were ready and eager to take part in the study.

4.3 Age

In the questionnaire, the respondents were requested to specify the age, the result of which is shown below (figure 1). From the figure 1 below, the distribution of age respondents was as follows; Below 20 years (43%), 21-30 years (45%), 31-40 years (8%) and 41 and above years (4%). Therefore, the result shows most of medical tourists are between the age of 21-30 years old.

Figure 1

Age of The Respondents



Source: Researcher (2019)

4.4 Medical insurance

From Table 9; the researcher findings are that most respondents, 78% have medical insurance compared to 22% who did not have medical insurances. This finding did defer significantly (x^2=142.54; df=1; p =0.001).

Table 10

Medical Insurance

Medical Insurance	Yes	No	x^2	df	p-value
Response rate	122 (78%)	35 (22%)	142.54	1	0.001

Source: Research data (2019).

4.5 Descriptive Statistics

The researcher conducted descriptive analysis, from the study findings shown below, All the results are significant which demonstrates that Quality Medical Treatment Facility, quality Service delivery and Competent doctors can be used to moderate medical tourist as explained

Majority of the respondents strongly agree with 67% while 22% of the respondents agreed in their statements while 11% were neutral, that Quality Medical Treatment Facility influenced their choice medical tourist destination and their responses did not defer significantly among the respondents (x^2=13.94; df=1; p=0.00).

In regards to Service quality, majority of the respondents strongly agree with 40% while 23% of the respondents agreed in their statements while 37% were neutral, that Service quality influenced their choice medical tourist destination their responses did not defer significantly among the respondents (x^2=11.58; df=1; p=0.000).

In respects to Competent doctor, 40% of respondents strongly agree, while 23% of the respondents agree in their statements while 37% were neutral, findings this did not defer significantly among the respondents (x^2=11.39; df=1; p=0.000).

With regards to costs, the majority of the respondents strongly agree with 66%, while 23% of the respondents agree in their statements while 37% were neutral, that costs influenced their choice medical tourist destination defer significantly among the respondents (x^2=11.39; df=1; p=0.000).

4.4 Inferential Statistics

4.4.1 Correlation Analysis

The researcher used correlation analysis to examine the relationship between Quality medical treatment facility, Service quality, Service delivery, Competent doctors and Medical tourist destination as shown below (Table 11).

The correlation results below (Table 11) indicate a positive relationship between Medical tourism and Quality medical treatment facility, service delivery, competent doctors and cost with Pearson correlation coefficient values of 0.723**, 0.611**, 0.673** and 0.851** while, the relationship were statistically significant as the values were 0.00, 0.01, 0.00 and 0.00 respectively were less than 0.05. However, a Pearson correlation coefficient values of .611** and .673**indicated a strong positive relationship between Medical tourism and; Service delivery and Competent doctors respectively. In this case the relationship was statistically significant since significant values were 0.00 and less than 0.05. also, the relationship between Costs on medical tourism as specified by a Pearson correlation coefficient of 0.851** was establish to be statistically significant as the value was 0.00 which is less than 0.05.

Table 11

Summary of Findings

		Medical tourism	Quality medical treatment facility	Service delivery	Competent doctors	Costs
Medical tourism	Pearson Correlation	1	.723**	.611**	.673**	.851**
	Sig. (2-tailed)	-	0.00	0.01	0.00	0.00
	N	157	157	157	157	157
Quality medical treatment facility	Pearson Correlation	.723**	1	.422**	.452**	.480**
	Sig. (2-tailed)	0.00	-	0.00	0.03	0.00
	N	157	157	157	157	157
Service delivery	Pearson Correlation	.611**	.422**	1	.543**	.453**
	Sig. (2-tailed)	0.00	0.01	-	0.00	0.00

	N	157	157	157	157	157
Competent doctors	Pearson Correlation	.673**	.452**	.443**	1	.395**
	Sig. (2-tailed)	.00	0.03	0.00	-	0.00
	N	157	157	157	157	157
Costs	Pearson Correlation	.851**	.480**	.453**	.395**	1
	Sig. (2-tailed)	0.00	0.00	0.00	0.00	-
	N	157	157	157	157	157

Source: Researchers data (2019)

4.4.2 Regression Analysis

To establish the individual effect of independent on the dependent variable the study conducted a regression analysis. The results are summarized in Tables 13; 14 and 15. The coefficientTable 11; shows the constants and coefficients of the regression equation.

Table 12

Regression Analysis Coefficients

Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**p-v**
	Beta	**Std. Error**	**Beta**		
1 (Constant)	.176	.167	-	-1.515	.009
Quality Medical Treatment Facility (X1)	.446	.077	.251	6.482	.000
Service Delivery (X2)	.314	.059	.178	5.116	.000
Competent doctors (X3)	.305	.063	.202	3.227	.003
Costs (X4)	.535	.052	.298	4.676	.000

Source: Research data (2019)

Keeping other issues constant the medical would be 0.176. An increase in Quality medical treatment facility to a 0.446, increases medical, as other determinants remain the same. While, an increase in Service delivery of 0.314 increases medical. Also, an increase of Competent doctors to 0.305 will increase medical. Finally, an increase in Costs of 0.535 increases medical. Table 11; presents all predictors to be statistically significant as p-values are less than 0.05 (Quality medical treatment facility (p=0.00), Service delivery (p=0.00), Competent doctors (p=0.03), Costs (p=0.00).

4.4.3 Summarized Model

The summarized model (Table 13) shows r^2 of 0.7796, therefore, 77.96% of the dependent variable Y (Medical tourism) can explain the variations in the independent variables X1, X2, X3 and X4 (Quality Medical Treatment Facility, Service quality, Competent doctors

and Costs) which is used to predict medical treatment in private hospitals. In lieu of that, a multiple regression model is an efficient predictor in this study. The model summary is presented in Table 12.

Table 13

Model Summary

Dependent Variable: Medical Tourism				
Model 1	**R**	**r^2 Square**	**Adjusted r^2 Square**	**Std. Error of the Estimate**
	.883[a]	.7796	.901	.15946

a. Predictors: (Constant), Quality Medical Treatment Facility, Service quality, Competent doctors and Costs

Source: Research data (2019)

4.4.4 Analysis of Variance (ANOVA) technique

The study tested the significance of the model by use of Analysis of Variance (ANOVA) technique. From the findings (Table14), the techniques has a significant level of 0.002[b] (0.2%) which is less than 0.5% (p-values) significant level, therefore, the information was perfect for making a conclusion on the population factors.

Table 13

Analysis of Variance (ANOVA) Technique

Medical tourism[a]					
Model 1	**Sum of Squares**	**df**	**Mean Square**	**F**	**p-v**
Regression	11.879	3	2.7299	79.999	.002[b]
Residual	14.28	42	.034		
Total	25.159	46			

a. Dependent Variable: medical tourism

b. Predictors: (Constant), Quality Medical Treatment Facility, Service Delivery, Competent doctors and costs

Source: Research data (2019).

5.0 SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Discussion of Findings

The section discusses the findings of respondents towards the objectives of the study. The rate of response by respondents was considered reliable in arriving at the conclusion. Both gender participated in the study and majority of them have medical insurances. The researcher conducted descriptive analysis which indicated that all the results are significant. The findings established that Quality medical treatment facility, Service

quality Service delivery and Competent doctors can be used to moderate medical tourists in a medical care. Therefore, the relationship was found to be statistically significant (Quality medical treatment facility (p=0.00), Service delivery (p=0.00), Competent doctors (p=0.03), Costs (p=0.00) as the p-value was less than 0.05. The ANOVA analysis (Table 13), the F-test (79.999%) is statistically significant which is suggesting, Quality medical treatment facility, Service delivery, Competent doctors have a significant effect on medical care. These findings are in agreement with Lewis (1989), since service quality is confirmed as a vital factor of effectiveness in private hospitals for the satisfaction the medical tourist and the reasons to travel.

These findings are also, echoed by Crooks et al. (2011), whereby competition in private hospitals totally depends on the service provided by competent doctors to get more medical tourist. In such a case, a tourist who is satisfied with the services of a medical care, he/she is likely to refer to a friend to that hospital and vice-versa if the services are poor. Attitudes of a medical tourist towards a medical care is important for referrals and its sustainability in a competitive environment.

In reference to Competent doctors, medical tourists, are faced with uncertainty in making medical decisions like high medical care bills which scare them from being treated in private hospital. However, competent doctor's variances act as an inducement for medical tourists in search of alternative medical care.

5.2 Conclusion

The ANOVA analysis (F-test value of 79.999) is statistically significant as the p-value is 0.002 but less than 0.05. Therefore, all predictors have affirmative relationship between medical tourism; and Quality medical treatment facility, Service delivery, Competent doctors and Costs of medication, since the predictors are statistically significant at α=0.05, while, p-values are less than 0.05.

5.3 Recommendations

Recommendations were centered on the findings and discussions of the study as follows:

The management of private hospitals to ensure that: quality medical treatment facilities/equipment are in place to influence tourists to the hospitals; Competent and skilled medical doctors for different treatment to give quality services or treatment to patients; competitive costs of medication, the government to put in place policies and guidelines to protect medical tourists from being exploited by private hospitals and public hospitals provide quality services to discourage medical tourism being treated in private hospitals.

5.4 Suggestions for Further Research

The researcher suggests further studies be done on public and private hospitals in Kenya for comparison purposes for the services offered to medical tourists visiting Kenya.

6.0 Acknowledgement

Foremost, I would like to praise and express my gratitude to our almighty God, for granting me myriads of blessing, knowledge, and prospects to enable me accomplish this study. I say, "Salaam Maria…. Amen".

References

Buhalis, D. (2000). Marketing the Competitive Destination of Future. *Tourism Management, Vol.21,* p. 97-116.

Chen, C. F., Chen, F. S. (2010). Experience quality, perceived value, satisfaction and behavioral intentions for heritage tourists. *Tourism management, Vol. 31, No 1*, p. 29-35.

Cohen, S. A., Prayag, G., Moital, M. (2014). Consumer behaviour in tourism: Concepts, influences and opportunities. *Current Issues in Tourism, Vol. 17, No 10,* p. 872-909.

Crooks VA, Turner L, Snyder J, Johnston R, Kingsbury P (2011). Promoting medical tourism to India: Messages, images, and the marketing of international patient travel. *Soc Sci Med, 72 (5): 726–732.*

Daily Nation (2016). TOPIC. Higher hospital fees raise pressure levels on household budgets Wednesday, April 6, 2016. By k. Njoroge

Djeri, K, Plavša, J. and Čerovic, S. (2007). Analysis of potential tourists' behaviour in the processof deciding upon a tourist destination based on a survey conducted in Bačka region. *GeographicaPannonica, Vol. 11,* p. 70-76.

Glasser, W. (1998). *Choice theory:* A new psychology of personal freedom. New York, NY: Harper.

Global Access to Healthcare Index (2017). by the Economist Intelligence Unit,

GoK (2007). *Vision 2030 Delivery Secretariat.* Government printer, Nairobi, Kenya

GoK (2013). *Health Tourism Strategy 2013-2030*. Government printer, Nairobi, Kenya

GoK (2016). *Kenyan Healthcare Sector*. Government printer, Nairobi, Kenya.

Gok (2016). *Ministry of Health in Kenya*, edited by Pharm Access.

GoK (2018). *Economic Review*. Government Printer, Nairobi, Kenya.

Hjalager AM (1997). Innovation patterns in sustainable tourism: an analytical typology. *Tourism Manage, 18 (1): 35–41.*

Holloway, C., Humphreys, C., Davidson, R. (2009). *The Business of Tourism*. 8th Edition. Essex, Pearson Education Limited.

Horowitz, M.D., Rosensweig, J.A. (2007. Medical Tourism-Health Care in the Global Economy. *The Physician Executive, 33 (6) (2007), pp*. 24-31

Hsu, T. K., Tsai, Y. F. and Wu, H. H. (2009). The preference analysis for tourist choice of destination: A case study of Taiwan. *Tourism Management, Vol. 30, No 2, p*. 288-297.

Kothari, C. (2005). *Research Methodology;* Methods and Techniques. New Delhi, India: New Age International (P) Ltd.

KPMG (2016). Phoomchai Audit Ltd., a Thai limited company and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved.

KPMG (2018). *Publication; Medical value travel in India*, The Economist Intelligence Unit.

Krejcie, R.V., & Morgan, D.W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement, 30,* 607-610Lewis BR (1989). Quality in the service sector-A review. Int J Bank Mark, 7(5).

Neil, L., Richard, S., Mark, E., Stephen, T.G., Daniel, H. and Russel, M. (2011). *Medical tourism*: treatments, Markets and Health system implications:

OECD (2010), *Health Accounts Experts, Progress Report*. Trade in Health Care Goods and Services Under the System of Health Accounts. Paris: OECD.

Parasuraman A, Zeithaml VA, Berry LL (1994). Reassessment of expectations as a comparison standard in measuring service quality: implications for future research. *J Market, 58: 111–124*

Saiprasert, W. (2011). An Examination of the Medical Tourists Motivational Behavior and Perception: A Structural Model. (Unpublished doctoral dissertation). Oklahoma State University, Oklahoma, USA. Retrieved from

https://shareok.org/bitstream/handle/11244/7116/Environmental%20Sciences%20Program _24.pdf? sequence=1

Sheikha, M. A. A, Dr. Khan, M. F. R. (2017). Factors influencing the preference of private hospitals to public hospitals in oman. *International Journal of Management, Innovation & Entrepreneurial Research EISSN: 2395-7662, Vol. 3, No 2, September 2017*, pp 67-77

The Netherlands Enterprise Agency report (2016). Kenyan Healthcare Sector Opportunities for the Dutch Life Sciences & Health Sector. Study commissioned by the Embassy of the Kingdom of the Netherlands in Nairobi September, 2016. Publication number: RVO-138-1601/RP-INT.

Tumlinson, K., Pence, B. W., Curtis, S. L., Marshall, S. W., & Speizer, I. S. (2015). Quality of care and contraceptive use in urban Kenya. *International Perspectives On Sexual And Reproductive Health, (2), 69. doi:10.1363/4106915*

UNCTAD,(2017). *Economic development in Africa report 2017*: Tourism for transformative and inclusive growth 2017

UNWTO. (2007). *A Practical Guide to Destination Management*. UNWTO, Madrid, France.

UNWTO. (2015), *UNWTO Tourism Highlights*, 2015 Edition, UNWTO, Madrid, France.

Van Vuuren, C., Slabbert, E. (2011). Travel motivations and behavior of tourists to a South African resort. Book of proceedings Vol. I – International conference on tourism & management studies 2011: Full papers – Algarve, p. 295-304. Retrieved from https://dialnet.unirioja.es/servlet/articulo?codigo=5018529

Wilkinson, A., Witcher, B. (1991). Quality concerns for managers. *Int J Qual Reliab Manage, l9 (2): 64–67.*

World Bank, (2014). *Kenya Public expenditure review,* Washington DC, USA

World Health Organization (2017). *Towards long-term care systems in sub-Sahara Africa*: WHO series on Long-term care. Geneva:

World Health Organization (2018). *Public spending on health*: A closer look at Global trends. Geneva:

Ye, B. H., Yuen, P. P., Qiu, H. Z., & Zhang, V. H. (2008). Motivation of medical tourists: An

exploratory case study of Hong Kong medical tourists. Paper presented at the Asia Pacific Tourism Association (APTA) Annual Conference, Bangkok, Thailand.

WWW:

www. Medicaltourismmag.com of 29/12/2019

www.businessdailyafrica.com it now costs sh 200,000 to deliver in private hospital dated 2/1/2020