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International Journal of Current Research Vol. 9, Issue, 11, pp.60905-60915, November, 2017 INTERNATIONAL JOURNAL OF CURRENT RESEARCH

RESEARCH ARTICLE

SERVING PATIENTS BEYOND BORDERS: A STUDY AT A SELECTED PRIVATE TERTIARY CARE HOSPITAL IN EASTERN INDIA

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ARTICLE INFO

ABSTRACT

Article History: Received 20th August, 2017 Received in revised form 26th September, 2017 Accepted 27th October, 2017 Published online 30th November, 2017

Medical Tourism, Hospitals, Quality.

Key words:

The term medical tourism is the amalgamation of two highly essential entities; medical which defines the health care sectors and tourism that defines travelling for any purpose. Due to globalization and thereby generated consumerism, when the physical, financial and psychological barriers are diminishing between the countries, the people are more aware, conscious, informed and they don't hesitate to avail the good quality products and services irrespective of their proximities. In this line, the phenomenon of medical tourism has also exploded over the years and currently it has become a \$100 billion industry. Though a late starter, India has done relatively well in attracting the medical tourists after implementing the liberalization process in 1990s. The whole hearted support given by the government, pool of talented & experienced doctors, other technical & nursing staffs, affordability, English speaking population, rich natural and cultural heritage sites etc. has made it an attractive proposition over the years. But the million dollar question that arises here is about competitiveness with existing global powers in terms of quality, affordability, technology and infrastructure. If we visit the recent occurrences in television and news papers, we come across very distressing news about the healthcare failures across India. Incidences of child and maternal mortalities, undeveloped/ under developed health care infrastructures, social taboos, outbreak of several life risking diseases like dengue, malaria, swine flu etc., are the common headlines appearing in the media. It puts a serious question mark on our efforts towards offering world class health care facilities. With this in background, we have tried to assess the current health care service quality in the state of Odisha with the use of SERVQUAL scale. Samples were taken from three of the renowned private teaching / tertiary care hospitals situated in the state capital. Based on the findings and instigated by the recommendations, we have listed many areas where we can improvise in order to upgrade over the current state of affairs.

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Citation: Dr. Ansuman Samal, Prof. Bibhuti Bhusan Pradhan, Dr. Divya Agrawal and Dr. Sanjay Kumar, 2017. "Serving patients beyond borders: a study at a selected private tertiary care hospital in eastern India", *International Journal of Current Research*, 9, (11), 60905-60915.

INTRODUCTION

As per definitions, the name medical tourism confines to touring a foreign land for availing medical care (Connell 2006; Horowitz, *et al.*, 2007). Previously, people from the developing nations used to travel to developed destinations to seek better health care which are normally not available in their countries. But this scenario is gradually changing when the physical, financial, and psychological barriers between the countries are getting diminished due to globalization. Now a days, people irrespective of their cast, creed, gender and

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nationality are not hesitating to travel to far-lands and use alternatives that will bring them satisfaction and in turn promote a healthy living (Singh, 2014). Factors like unavailability of specific medical services in the home country, legality / morality issues, costs, waiting time, privacy/ confidentialities, tourism and vacation purposes etc. are the dominating ingredients of the global medical travel (Horowitz *et al.*, 2007). When we study the global trends of medical tourism in the past few decades, health care services such as various surgeries (cosmetic, cardio vascular or others), chemotherapy, dental treatments, fertility services, psychiatry, alternative medicine, and convalescent care are found to be the major forms of International health care travel (Mattoo and Rathindran, 2006). With globalization and adaptation to free market economies, the consumerism scenario has changed

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significantly. The explosion in services industry has brought radical changes to the healthcare sector and the need for a better health care has been on a incremental stride in the recent years (Singh, 2014). With its knowledge of ancient medicinal systems and rich cultural heritage, India possesses tremendous opportunities in terms of medical care. After Independence, as the Indian economy was based upon the soviet style state owned model; we became a late entrant in the global medical tourism scenario (Kumar and Raj, 2015). But Since the Indian economy opened up in the 1990s, we have relatively done well in the world medical tourism map attributed to many factors like highly skilled physicians, technicians, nursing care quality, implementation of modern technology, internationally accredited medical supplies, stronger cost advantage, favourable exchange rates, facilities of international banking, plastic money, rise in the local insurance sector, least waiting periods for the international patients, easier visa formalities, emergence of private players, modern hospitals, world class hotels, use of renowned alternative medicine systems, wellness / rejuvenation programs associated with ancient religious, cultural and natural attractions etc. (Gupta, 2008; India brand equity foundation research report 2012). The International Health care Research Centre and Global Healthcare Resources which publishes the world medical tourism index in 2016, ranked India in position no 5 which covered almost 176 countries in the World.

Thus, we can derive that free market economy has uplift the global medical tourism sector and thus helped the countries like India to become a part of the "one-knowledge society" leaving behind their isolated existence (Kumar and Raj, 2015). The whole idea behind these is to change the regional roles of the healthcare institutions of the host countries to become global servers (Reddy and Quadeer, 2010). In the year 2012, the global medical tourism industry was estimated at USD100 billion in 2017 with an estimated growth of up to 25% in the coming years (Medical Tourism Index, 2017). The ministry of tourism, Government of India, has recently revealed the figures of tourists availing medical tourism services which are pretty much encouraging for everyone (Chowdary, 2017). In the year 2016, around 1.78 lakhs medical visas were issued as against the 1.22 lakhs in 2015, which includes the follow-up treatments.As per the data, currently India is witnessing around 22-25 percent growth each year and it is predicted to reach around \$6 billion by the end of 2018 from \$3 billion as in 2016. This gives a very bright prospective of the medical tourism sector in the country. The whole hearted support from the Government and ignited by the growth of the corporate sector in recent years, India is increasingly positioned as a favoured destination for the medical tourists seeking medical treatments and thus crossing their national boundaries (Gupta, 2008). Majority of the patients coming to India for treatment

Table 1. 2016 MTI Competitive Ranking

Sl.	Countries	MTI Ranking	Sl.	Countries	MTI Ranking
1	Canada	76.62	9	Italy	69.50
2	UK	74.87	10	Colombia	69.48
3	Israel	73.91	11	Spain	68.29
4	Singapore	73.56	12	Japan	68.00
5	India	72.10	13	Panama	67.93
6	Germany	71.90	14	Costa Rica	67.67
7	France	71.22	15	Dominican Republic	67.58
8	South Korea	70.16			

Source: International Health care Research Centre and Global Healthcare Resources

Table 2. Comparison of C	Costs for various	Medical Procedures
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Medical procedure	USA	Costa Rica	Colombia	India	Jordan	South Korea	Mexico	Israel	Thailand	Malaysia
Heart	\$123,000	\$27,000	\$14,800	\$7,900	\$14,400	\$26,000	\$27,000	\$28,000	\$15,000	\$12,100
Bypass										
Angioplasty	\$28,200	\$13,800	\$7,100	\$5,700	\$5,000	\$17,700	\$10,400	\$7,500	\$4,200	\$8,000
Heart Valve Replacement	\$170,000	\$30,000	\$10,450	\$9,500	\$14,400	\$39,900	\$28,200	\$28,500	\$17,200	\$13,500
Hip Replacement	\$40,364	\$13,600	\$8,400	\$7,200	\$8,000	\$21,000	\$13,500	\$36,000	\$17,000	\$8,000
Hip Resurfacing	\$28,000	\$13,200	\$10,500	\$9,700	\$9,000	\$19,500	\$12,500	\$20,100	\$13,500	\$12,500
Knee Replacement	\$35,000	\$12,500	\$7,200	\$6,600	\$9,500	\$17,500	\$12,900	\$25,000	\$14,000	\$7,700
Spinal Fusion	\$110,000	\$15,700	\$14,500	\$10,300	\$10,000	\$16,900	\$15,400	\$33,500	\$9,500	\$6,000
Dental Implant	\$2,500	\$800	\$1,200	\$900	\$900	\$1,350	\$900	\$1,200	\$1,720	\$1,500
Lap Band	\$14,000	\$9,450	\$8,500	\$7,300	\$7,000	\$10,200	\$6,500	\$17,300	\$11,500	\$8,150
Gastric Sleeve	\$16,500	\$11,500	\$11,200	\$6,000	\$7,500	\$9,950	\$8,900	\$20,000	\$9,900	\$8,400
Gastric Bypass	\$25,000	\$12,900	\$12,200	\$7,000	\$7,500	\$10,900	\$11,500	\$24,000	\$16,800	\$9,900
Hysterectomy	\$15,400	\$6,900	\$2,900	\$3,200	\$6,600	\$10,400	\$4,500	\$14,500	\$3,650	\$4,200
Breast Implants	\$6,400	\$3,500	\$2,500	\$3,000	\$4,000	\$3,800	\$3,800	\$3,800	\$3,500	\$3,800
Rhinoplasty	\$6,500	\$3,800	\$4,500	\$2,400	\$2,900	\$3,980	\$3,800	\$4,600	\$3,300	\$2,200
Face Lift	\$11,000	\$4,500	\$4,000	\$3,500	\$3,950	\$6,000	\$4,900	\$6,800	\$3,950	\$3,550
Liposuction	\$5,500	\$2,800	\$2,500	\$2,800	\$1,400	\$2,900	\$3,000	\$2,500	\$2,500	\$2,500
Tummy Tuck	\$8,000	\$5,000	\$3,500	\$3,500	\$4,200	\$5,000	\$4,500	\$10,900	\$5,300	\$3,900
Lasik (Both)	\$4,000	\$2,400	\$2,400	\$1,000	\$4,900	\$1,700	\$1,900	\$3,800	\$2,310	\$3,450
Cornea (One)	\$17,500	\$9,800	N/A	\$2,800	\$5,000	N/A	N/A	N/A	\$3,600	N/A
Cataract surgery (One)	\$3,500	\$1,700	\$1,600	\$1,500	\$2,400		\$2,100	\$3,700	\$1,800	\$3,000
IVF	\$12,400	N/A	\$5,450	\$2,500	\$5,000	\$7,900	\$5,000	\$5,500	\$4,100	\$6,900

Source: Source: Ministry of Tourism, OECD & Industry Sources

If we make a comparative study of various healthcare procedures conducted by the major players of medical tourism, we can find the cost advantage feature of India which is unmatched. are from the Middle East, Africa, Bangladesh, Afghanistan, Maldives, Pakistan, Bhutan and Sri Lanka (Sharma, 2017).

Key Operators in Health Tourism Industry



Figure 1. Different aspects of Medical Tourism Industry

If we draw the various essential components of medical tourism industry, we get the above mentioned concept where the hospitals play a major role as backbones of any healthcare initiatives. The whole Idea behind these phenomena of medical tourism is to earn from the visitors and invest them for developing healthcare facilities for the localities. In this direction, Cuba is a pioneering country where the concept of medical tourism has been placed in the system since the last five decades. They have successfully implemented a model where the medical tourism is vigorously promoted to generate income and then ploughed it back for the benefit its country's citizens thus giving a win-win situation for the country and its residents. Based on this fact, when we look towards our own country, statements of contradictions are found. As a destination, India is fast emerging as a hub for medical tourism, attributed to factors like high quality treatment in affordable costs, and provision of alternative forms of medicine like ayurveda, yoga, homeopathy, naturopathy etc. But when, we keep these illustrious stories aside and look towards the other side, shockingly it appears to be full of errs. If we follow the news available on print and electronic media in recent years, we can get very distressing & disheartening news about infant and maternal mortalities, negligence / misbehaviour shown by the doctors and staffs, social taboos, eruption of epidemics like Dengue, Chikungunya, Japanese Encephalitis etc., pathetic health care infrastructures that points towards a very gloomy side. The current healthcare system in India appears to be more contradictory in nature where at one hand, we are speaking about establishment of brand India as a world-class health destination that will attract medical tourist from across the globeand on the other side we are unable to provide the basic health care amenities to its citizens. The saga of medical tourism is effectively being used as a winning ticket by the corporate and private sector players in India, where as the public sector is not getting any kind of benefit from it. On a similar note, the healthcare initiatives of the bigger metropolitan cities are earning profitability which is not getting transferred to the common man of the country residing it tier II & III cities as well as rural areas that largely depend upon the public system of healthcare (Gupta, 2008). Coming to the story

of Odisha, the health care scenario projects a more dismal state even after 70 years of Independence. Within India, Odisha is a high focus state, for its culture, heritage as well as for its diseases and natural disasters (Ray, 2010). Badly affected by natural calamities, poverty, illiteracy it has got very poor health indicators as per the recent WHO reports. With all this in background, there is a need to find the actual state of health care services in a developing country like India and especially in a state like Odisha, where there exist contradictions against the bright prospect of medical tourism. In the year 2015, the central Government has declared to develop smart cities across India to promote them as citizen friendly and sustainable over the coming years. In the first list generated by the Government the capital city of Odisha, Bhubaneswar emerged as no. 1 contender for the job and works have already started in order to develop it as a world class city (wikipedia). In this regard, we have tried to assess the service quality of three nos. of renowned private teaching hospitals situated in Bhubaneswar and to find out the ground realities prevailing there. The idea behind all this is to comprehend and thereby suggest remedies for the improvement of healthcare scenario in the state. We have used the hugely popular multi dimensional SERVQUAL scale to measure the difference between the expectations and perceptions of patients visiting to the hospitals and tried to capture their views for improvement of the facilities.

Literature Review

After the great wars in the early parts of the 20th century, when the whole world was trying to rebuild their countries, the concept of services and service quality came to limelight and everyone started to highlight it. In the later parts many researchers, academicians and Industry professionals have conducted research on the concept and later associate it with customer satisfaction which further translated into generating customer loyalty and ensure their repeat purchase intentions (Jaswal and Walunj, 2017). In order to become successful in this hyper competitive market place, the concepts of service quality, customer satisfaction and customer loyalty have become the three cornerstones of success (Shahnaz and Kianoush, 2014). It can be inferred that, the quality of services is a major player in making or breaking a deal and help in creating the brand image of the company in longrun (Arsanam and Yousapronpaiboon, 2014). Definition wise, the term quality can be defined as the summation of technical and functional attributes where technical quality is defined as the aptitudinalknowhow (What is given ?) and functional quality is the process of service delivery (How it is given?) (Gronroos, 1984; Andaleeb, 1998; Yousapronpaiboon and Johnson, 2013). Some other states it as the difference arising between the perceptions and expectations of the customers that arised before and after availing the products / services (Parsuraman et al., 1988; Wang and Shieh, 2006). It can also be defined as a process of increasing the satisfaction level amongst the customers, by superior criterion (Jones et al., 2003; Lymperopoulos et al., 2006), and thereby help the company earn profitability and increase its market share (Newman, 2001; Szmigin and Carrigan, 2001; Caruana, 2002; Dadoa et al., 2012; Sharma, 2014). As the concept of services holds the unique characteristics like intangibility, perishability, variability and simultaneous production & consumption, more care has to be taken while evaluating the qualitative parameters in them (Gronroos, 1990). Therefore, while speaking about services and their quality, we normally take note of the perception of the customers regarding the way services are delivered (Functional quality) rather than the technical aspects (Parsuraman et al., 1985, 1988).

There exist many models to capture the perception of customers (Sasser et al., 1978, Lehtinen and Lehtinen, 1982, Grönroos, 1984, Garvin, 1987, Coddington and Moore, 1987, Haywood, 1988, Brogowicz et al., 1990, Cronin and Taylor, 1992; Mattsson, 1992, Teas, 1993; Rust and Oliver, 1994; Dabholkar et al., 1996, Sweeney, Soutar, & Johnson, 1997, Philip and Hazlett, 1997, Evans and Lindsay, 1999; Frost and Kumar, 2000; Victor et al., 2001; Brady and Cronin, 2001, Zhu, et al., 2002; Parasuraman et al., 2005; Landrum, et al., 2008; Lee, 2016) amongst which the SERVQUAL scale developed by Parsuraman, Zeithamal and Berry (1985, 1988) for measuring the gap between the perception and expectation levels of the customers, have become the major scale in recent years. Over the years, many researchers have tested the applicability of the scale and found it to be a valid, robust, reliable, and predominate over all other types of scales (Babakus and Mangold, 1992, Asunbonteng et al., 1996, Heung et al., 2000). The SERVQUAL scale normally contains 22 set of parameters divided into five dimensions such as

Tangibles – It covers the physical facilities, equipments, personnel, their uniforms, the language they speak etc.

Reliability – It's the capacity as well ability of the entity to carry on the services as promised.

Responsibility – It's the readiness of the company to provide the services.

Assurance: This includes the knowledge and courtesy of the firm to carry the service delivery process.

Empathy - The caring nature and ability to understand the feelings of others.

In order to carry out the survey, we have put these five dimensions to test by implementing them in a questionnaire consisted of 22 nos. of questions covering all aspects of a service delivery process asked to capture both expectations and perceptions.

Objectives: The various objectives of this study can be listed as follows.

- To know the various reasons for which people visit to a particular hospital.
- To assess the level of satisfactions and feelings of the customers towards the hospitals.
- To assess the average spending of customers visiting the hospitals and to map their feelings towards the pricing options.
- To assess the gap between their expectation and perception levels.
- To sum of suggestions for improving service quality hospitals.

Hypotheses: For the study we have taken the following null hypothese as our base.

 H_{01} : There is no significant association in the satisfaction level of the patients belonging to the different social -economic profiles & demographics towards the services of the selected hospitals.

Research Methodology: This research was conducted in the state of Odisha, in the capital city of Bhubaneswar of Khurda district. As the phenomena of medical tourism is majorly directed towards the private and corporate sector hospitals, the private teaching hospitals of IMS & SUM Hospital, Kalinga Institute of Medical Sciences (KIMS) and Hi-tech Medical hospital which provides the tertiary care were selected for the study. Currently these three are the only private medical college hospitals available in the state apart from the government institutes. After thorough review of various literatures, a SERVQUAL based questionnaire was developed for the study which contains five service quality dimensions of empathy, assurance; tangible, timeliness and responsiveness that are spread across 22 nos. questionnaire set. The perception and expectation of the respondents were recorded on a five point scale. For capturing their expressions, afive-point Likert Scale from entirely disagrees to the entirely agrees was used for empirical analysis. The coding of the Likert scale was made as[1 = Strongly disagree], [2 = disagree], [3 = neither]agree nor disagree], [4 = agree], [5 = entirely agree]. The total samples taken were 180(60 samples per hospitals) conducted through non-probability convenience sampling. The target population belonging to SEC A, B and C were considered for the studies that have come to the hospital for availing healthcare. The descriptive statistics of the respondents of this study is given below.

Interpretations

Table 1 reveals about the demographic profiles of the respondents across various parameters.

- Out of the total 180 respondents, 71.60 percent were males where as 28.4 percent were females.
- Age wise, majority of the people were in the age group of 31 to 40 years (40.0 percent of the total population) whereas around 37.2 percent of people were in the age

group of 18 to 30 years. Around 16.4 percent of the people were in the age group of 41 to 50 years, followed by 6.4 percent of people in the group with more than 50 years.

- The highest literacy rate belonged to the group of people with degreesas41.6 percent where as 26 percent were with PG and above. 21.2 have studies upto the levels of ITI or diploma whereas around 11.2 have studied up to HSC (10th Class).
- Around 42.6 percent of people were businessmen followed by 33.6 percent who were service holder of anykind. 17.6 percent were students, 4.4. Percent were retired pensioners where as only 2.00 percent were housewives.
- If we focus on the monthly household income, almost 43.2 percent of population were in the income group of Rs. 15,001/- to Rs. 25,000/- Only whereas around 24.6 percent of people were in the range above Rs. 25,001/- to Rs. 35,000/-only per month. Around 19.40 percent of people were having monthly household income less than Rs. 15,000/- only.And 12.8 percent of people were having income in excess of Rs. 35,000/-
- 61.67 percent of the respondents were the repeat customers visiting the hospitals where as the rest 38.33 percent people found to be the first timers.
- When asked about the average spending per visit to a hospital, around 33.89 percent said they spend between Rs. 5,001/- to Rs. 10,000/- Only per visit whereas 27.22 percent of people said that they usually spend between Rs. 3001/- to Rs. 5000/- Only while visiting a hospital. Around 20.00 percent said they usually spend more than Rs. 10,000/-followed by 13.33 percent people who spend between Rs. 1,000/- to Rs. 3,000/- and only 5.56 percent who spend less than Rs. 1,000/-.
- 60 nos. (33.33 percent to be precise) of respondents were taken from each teaching hospitals for the study.

Table 1. Demographic Profiling of the Respondents

Parameters	Demographic Profiles	Percentage
Gender	Male	71.60
	Female	28.40
Age	18 to 30 Years	37.20
-	31 to 40 Years	40.00
	41 to 50 Years	16.40
	More than 50 Years	6.40
Educational Background	Up to HSC	11.20
	ITI / Diploma	21.20
	Degree	41.60
	PG & Above	26.00
Occupation	Students	17.60
-	Business	42.60
	Employed / Salaried	33.40
	Housewife	2.00
	Retired	4.40
MHI	Below Rs. 15,000/-	19.40
(Monthly Household	Rs. 15,001/- to Rs. 25,000/-	43.20
Income) in Rs.	Rs. 25,001 to Rs. 35,000/-	24.60
	Above Rs. 35,000/-	12.80
Type of Visit	First Visit	38.33
	Repeat Visit	61.67
Hospital	IMS & SUM Hospital	33.33
	KIMS	33.33
	Hi-tech MCH	33.33
Average Spending per visit	Less than Rs. 1000	5.56
in Rs.	Rs. 1000 to Rs. 3000	13.33
	Rs. 3001 to Rs. 5000	27.22
	Rs. 5001 to Rs. 10000	33.89
	More than Rs. 10000	20.00

Source: Primary data

Reasons for availing health care in the particular hospital

When asked about the reasons for which they preferred the particular hospital, highest inclination of about 36.11 percent said due to higher service quality in comparison to other hospitals followed by factors such as hospital image (32.22), range of service (30.56) professional advises (30.00), convenience in access (26.67) etc. Some other factors like patient delight, administrative procedures, payment modes and coverage of health insurance play comparatively lesser roles than others. Interestingly the cost factor plays a comparatively least affecting role while choosing health care services in private sector hospitals.

The SERVQUAL Statements (Expectations Vs Perceptions)

When we are tried to map the difference of their opinions before and after availing the services, we got considerable amount of gaps between some parameters like the higher costs of treatment as well as inconsistency in charges, provision of prompt services, getting the feedbacks from the patients on a regular basis, round the clock availability of services etc where as negligible GAP scores were obtained in terms of providing clean and comfortable environment to stay, professional and competent staffs up-to-date and modern equipments etc. Dimension wise, highest gap score was found for the assurance parameter followed by other aspects such as empathy, reliability, responsiveness and tangibility.

Overall Satisfaction towards the hospital

When asked about the satisfaction level, almost 40percent (40.20 to be precise) gave a relatively positive feedback of extremely satisfied whereas around 39.80percent said they are somewhat satisfied by the services. About 6.00 percent of people remained negative towards the hospital services.

Concern towards the Pricing of various services

When we tried to map their concerns towards the pricing of various hospital services, almost half (49.44 percent) found it to be expensive whereas 23.33 percent of people found it to be very expensive and 21.11 found it to be reasonable. Also a very negligible percentage of about 6.11 stated it as cheap.

Attitudinal loyalty

When we tried to map the attitudinal loyalty levels of the patients, we got a relatively positive attitudes from them as they find the available services to be comparatively good than the public sector hospitals. As the study was only confined to the Bhubaneswar city therefore the customers normally gave a comparatively positive note towards the services. But when compared to other major hospitals in the more cosmopolitan cities, they were not ready to return back once gone from the proximities of the current city.

Suggestions for Improvement

With the help of an open ended question, when we asked them about the factors disliked and the improvement parameters, we got the above responses. This derives for implementing stricter administrative measures to ensure availability of round the clock medical facilities, neutral feedback collection from the





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Parameters	Statements	- Mean Expectations	Mean Perception	Gap Analysis
Assurance	Courteous and friendly behaviour of Doctors and staffs	4.18	2.95	1.23
	Wide spectrum of knowledge possessed by the doctors	4.35	3.32	1.03
	Treatment of patients with dignity and respect	4.15	2.86	1.29
	Thorough explanations to Patients about their conditions	4.29	2.8	1.49
Empathy	Feedbacks from the patients	4.32	1.88	2.44
	Round the clock availability of services	4.14	2.28	1.86
	Patients' best interests at heart	4.25	2.35	1.9
	Understanding about the specific needs of patients	4.22	3.37	0.85
	Personal attention given to the patients	4.11	2.42	1.69
	Patients are dealt in a caring fashion	4.22	2.15	2.07
Reliability	availability of Services in the appointed time	4.26	2.95	1.31
	Carrying out the services accurately	4.22	3.37	0.85
	Professional and competent doctors and staffs	4.2	3.58	0.62
	System of error free and fast retrieval of documents	4.12	2.8	1.32
	Cost of treatment and consistency of charges	4.2	1.52	2.68
Responsiveness	Provision of prompt services	4.34	1.88	2.46
	Responsive shown by doctors and staffs	4.32	2.88	1.44
	Attitude of doctors and staff that instil confidence in patients	4.22	3.35	0.87
	Waiting time not exceeding one hour	4.17	2.6	1.57
Tangibility	Up-to-date and well-maintained facilities and equipment	4.37	3.14	1.23
-	Clean and comfortable environment and with good directional signs	4.26	3.6	0.66
	Neat appearance of doctors and staffs	4 17	3.09	1.08

Table 2. GAP Analysis of SERVQUAL dimensions

Source: Primary Data



Source: Primary Data





Source: Primary Data

Figure 4. Overall Satisfaction scores

patients and their relatives, shortening the waiting periods before the patients get frustrated, physical safety precautions etc. Also it can be found that, feedbacks from the reference group of the patients also affect their outlook towards quality services. The calculated chi square value is (9.963) greater than thetable value (9.49) at the 5 percent level of significance. The testis significant. This means that there is a significant association between the satisfaction level of the male and female respondents towards services of the selected hospitals in



Source: Primary data

Figure 5. Views towards Pricing Options

Table 4. Attitudinal Loyalty

S.	Statements	Mean Scores
1	I consider this hospital's services are good	4.12
2	This hospital's services are better than those of other hospitals	4.03
3	In general, the quality of this hospital's service is high	4.08
4	I will say positive things about this hospital	4.15
5	I will recommend this hospital to someone who seeks my advice	4.12
6	I will encourage my friends and relatives to undergo medical treatment in this hospital	4.17
7	I consider this hospital as the first choice for medical treatment	4.09
8	I will do all medical treatments in this hospital in the future	3.65
9	I will continue my medical treatment in this hospital, in case I change my residence to any other locality	2.94
10	In every visit, I find better quality in this hospital's service	3.18

Source: Primary data

S.	Dislikes / Grievances about the hospitals	Percentage
1	Waiting time for availing healthcare and associated services	58
2	Absence of feedback & grievance handling mechanisms	52
3	Rude Behaviours of Doctors and Staffs	42
4	Inefficient medical recordkeeping / retrieval system	42
5	Unavailability of Ambulance at the time of need	42
6	Uncontrollable Crowding at key places like the OPD Units, OT, medicine outlets and testing labs	41
7	Improper lab tastings (Delay & Chaos in obtaining, processing, & publication of reports)	35
8	Unavailability of round the clock services and irresponsive nature of staffs in odd hours of operations	34
9	Inadequate facilities / amenities for patient's attendants	33
10	Informal / longer procedures of discharging after treatment / death / post mortem procedure	32
11	Improper attention towards the indoor patients	27
12	Improper functioning of specialist information system in the premises for the patients (Where to go and whom to consult?)	26
13	Inadequate / Inconvenient and unsafe parking places	22
Source	: Primary data	

Hypotheses Testing

Gender: As gender has always been prescribed as a decisive factor while choosing or attributing a product or service therefore we tried to study the association between gender of the respondents and their satisfaction towards services of the selected hospitals.

Bhubaneswar. Therefore, the null hypothesis is (H_{01}) rejected. Further, the average satisfaction score of the male respondents is (4.15) high, followed by the satisfaction score of the female respondents (4.09). Thus, the male respondents are more satisfied towards the services of the hospitals.

Gender	Extremely Satisfied	Somewhat Satisfied	Neither Satisfied nor dissatisfied	Somewhat dissatisfied	Extremely dissatisfied	Mean Score
Overall	40.20	39.80	14.00	5.40	0.60	4.13
Male	38.54	43.85	12.56	4.46	0.55	4.15
Female	44.37	29.57	17.6	7.74	0.7	4.09
	Association	between Gende	er and Satisfaction			
	Calculated (9.96	Chi square valu	e D.F. 4	Table Value at 5% 9.49	Result Significant	

Source: Primary Data

Age: As the age is a very useful demographic variable for distinguishing segment, an attempt was made to find out the association between age and satisfaction.

has been made to find out if there is any significant association between occupation and level of satisfaction.

Age	Extremely	Somewhat	Neither Satisfied	Somewhat	Extremely	Mean
Age	Satisfied	Satisfied	nor dissatisfied	dissatisfied	dissatisfied	Score
Overall	40.20	39.80	14.00	5.40	0.60	4.13
18 to 30	31.18	47.85	18.27	2.68	0.00	4.07
31 to 40	46.50	29.50	13.50	9.00	1.50	4.10
41 to 50	48.78	39.02	7.31	4.87	0.00	4.31
Above 50	31.25	59.37	9.37	0.00	0.00	4.21
Association bet	tween Gender and S	Satisfaction				
Calculated Chi	square value	D	р.F. Т	Table Value at 5%		Result
38.505	-		12	21.03		Significant
ource: Primary I	Data					

The calculated chi square value is (38.505) greater than the table value (21.03) at the 5 percent level of significance. Thus, the test is significant. This means that there is a significant association between the satisfaction levels of the respondents belonging to different age groups towards services of the hospitals in Bhubaneswar. Therefore, the nullhypothesis is (H_{01}) rejected. The mean satisfaction score of the respondents in the age group 41 - 50 years is (4.31) high, followed by the respondents in the age group above 50 years (4.21). Thus, the respondents in the age group 41 - 50 years are more satisfied towards the services of the select multi specialty hospitals in Mumbai.

Education: It becomes important to calculate the relation between education levels of the patients and their satisfaction level as education changes the perception of people. Therefore, the respondents from different educational status are requested to state their level of satisfaction towards services of the hospitals and an attempt was made to find out the association between educational status and satisfaction. The calculated chi square value is (41.136) greater than the table value (26.296) at the 5 percent level of significance. Thus the test is significant. This means that there is a significant association between the satisfaction levels of the respondents belonging to different occupations towards services of the select multi specialty hospitals. Therefore, the null hypothesis is (H_{01}) rejected. The average satisfaction score of the business group is (4.22) high, followed by the retired persons (4.18). Therefore, the businessmen are more satisfied towards the services of the selected hospitals.

Income

The calculated chi square value is (32.526) greater than the table value (21.03) at the 5 percent level of significance. Thus, the test is significant. This means that a significant association is found between the satisfaction levels of the respondents belonging to different income groups towards services of the select multi specialty hospitals. Therefore, the null hypothesis is (H_{01}) rejected. The average satisfaction score of the

Age	Extremely Satisfied	Somewhat Satisfied	Neither Satisfied nor dissatisfied	Somewhat dissatisfied	Extremely dissatisfied	Mean Score
Overall	40.20	39.80	14.00	5.40	0.60	4.13
Up to H.S.C	42.85	53.57	0.00	3.57	0.00	4.35
ITI / Diploma	34.90	48.11	13.20	2.83	0.90	4.16
Degree	47.59	37.01	11.53	3.36	0.48	4.27
PG and Above	31.53	31.53	24.61	11.53	0.76	3.81
		Association	netween Gender and Sa	atisfaction		
		1 155001441011 0	ethioth Schuch and St			
Calculated Chi square	e value	D.F.	Tab	ble Value at 5%		Result
45.453		12		21.03		Significant

Source: Primary Data

The calculated chi square value is (45.453) greater than the table value (21.03) at the 5 percent level of significance. Thus the test is significant. This means that a significant association is found between the satisfaction levels of the respondents having different educational qualifications towards services of the select multi specialty hospitals. Therefore, the null hypothesis is (H_{01}) rejected. Moreover, the mean satisfaction is (4.35) high, followed by the respondents having degree qualification (4.27).Therefore, the respondents having up to H. Sc qualification are more satisfied towards services of the selected hospitals in Bhubaneswar.

Occupation: The respondents belonging to different occupations are requested to state their level satisfaction towards the services of the selected hospitals and an attempt

respondents belonging to monthly family income above Rs.35000 is (4.28) high, followed by the respondents whose monthly family income is Rs.15001/- - Rs. 25000/-. Therefore, the respondents whose monthly family income were above Rs.35000/- are more satisfied towards the services of the selected hospitals.

Way forward: The ultimate goal of a healthcare initiative is to provide cure from the diseases as well as satisfy the needs of the customers and consistently deliver high quality of services to provide the ultimate level of customer satisfaction. Then the generated customer satisfaction will lead to customer retention and earning the respect as well as profitability for the organization. In this regard, our study has revealed certain areas which can be improved and acted upon in order to generate sustainability in healthcare sector. The recommendations in this regard are as follows.

Age	I S	Extremely Satisfied	Somewhat Satisfied	Neither Satisfied nor dissatisfied	Somewhat dissatisfied	Extremely dissatisfied	Mean Score	
Overall		40.20	39.80	14.00	5.40	0.60	4.13	
Students		31.81	50.00	17.04	1.13	0.00	4.12	
Business		45.53	35.21	15.49	3.75	0.00	4.22	
Employed /	Salaried	36.52	40.71	10.77	10.17	1.19	4.00	
Housewife		10.00	40.00	40.00	10.00	0.00	3.90	
Retired		63.63	36.36	0.00	0.00	0.00	4.18	
		Associ	ation between	n Gender and Satisfac	ion			
Calculated Chi s 41.13	uare value		D.F. 16	Tab	e Value at 5% 26.296		I Sig	Result gnifica
Calculated Chi s 41.130 Primary Data	uare value	Com control of	D.F. 16	Tab	e Value at 5% 26.296	Fretranch	I Sig	Result gnifica
Calculated Chi s 41.130 Primary Data Age	uare value Extremely	Somewhat	D.F. 16	Tab Satisfied nor Sor	e Value at 5% 26.296	Extremely	I Sig Mean Score	Result gnifica
Calculated Chi s 41.130 Primary Data	Extremely Satisfied	Somewhat Satisfied	D.F. 16 Neither S dissa	Tab Satisfied nor Sor atisfied diss	e Value at 5% 26.296 newhat atisfied	Extremely dissatisfied	I Sig Mean Score	Result gnifica
Calculated Chi s 41.130 Primary Data Age Overall Below 15000	Extremely Satisfied 40.20 42.26	Somewhat Satisfied 39.80 35.05	D.F. 16 Neither S dissa	Tab Satisfied nor Sor atisfied diss 4.00 :	e Value at 5% 26.296 newhat atisfied 5.40 0.30	Extremely dissatisfied 0.60	Mean Score 4.13 4.09	Result gnifica
Calculated Chi s 41.130 Primary Data Age Overall Below 15000 15001-25000	Extremely Satisfied 40.20 42.26 42 12	Somewhat Satisfied 39.80 35.05 36.11	D.F. 16 Neither S dissa 1	Tab Satisfied nor Sor atisfied diss 4.00 : 2.37 1 5.27	e Value at 5% 26.296 newhat atisfied 5.40 0.30 5.48	Extremely dissatisfied 0.60 0.00 0.00	Mean Score 4.13 4.09 4.13	Result gnifica
Calculated Chi s 41.130 Primary Data Age Overall Below 15000 15001-25000 25001-35000	Extremely Satisfied 40.20 42.26 42.12 30 89	Somewhat Satisfied 39.80 35.05 36.11 53.65	D.F. 16 Neither S dissa 1 1 1 1	Tab Satisfied nor Sor atisfied diss 2.37 1 5.27 0 1 38	e Value at 5% 26.296 newhat atisfied 5.40 0.30 5.48 62	Extremely dissatisfied 0.60 0.00 0.00 2.43	Mean Score 4.13 4.09 4.13 4.08	Result gnifica
Calculated Chi s 41.130 Primary Data Age Overall Below 15000 15001-25000 25001-35000 Above 35000	Extremely Satisfied 40.20 42.26 42.12 30.89 48.43	Somewhat Satisfied 39.80 35.05 36.11 53.65 32.81	D.F. 16 Neither S dissa 1 1 1 1 1 1	Tab Satisfied nor Sor atisfied diss 4.00 : 2.37 1 5.27 0 1.38 7.18	e Value at 5% 26.296 newhat atisfied 5.40 0.30 5.48 1.62 56	Extremely dissatisfied 0.60 0.00 0.00 2.43 0.00	Mean Score 4.13 4.09 4.13 4.08 4.28	Result gnifica
Calculated Chi s 41.130 Primary Data Age Overall Below 15000 15001-25000 25001-35000 Above 35000	Extremely Satisfied 40.20 42.26 42.12 30.89 48.43	Somewhat Satisfied 39.80 35.05 36.11 53.65 32.81 Associ	D.F. 16 Neither S diss 1 1 1 1 1 1 1	Tab Satisfied nor Sor atisfied diss 4.00 : 2.37 1 5.27 1 1.38 7.18 n Gender and Satisfac	e Value at 5% 26.296 newhat atisfied 5.40 0.30 6.48 1.62 1.56	Extremely dissatisfied 0.60 0.00 0.00 2.43 0.00	Mean Score 4.13 4.09 4.13 4.08 4.28	Result gnificar

Source: Primary Data

- Implement of an effective system of administrative process in order to ensure smooth flow of activities, fastening the service offerings as well as ensuring discipline, punctuality from the doctors and other staffs.
- On a similar note, we need to enhance the operational efficiency of the hospitals by ensuring efficient medical record keeping & retrieval systems, proper waiting line management system, managing the traffic at various key points like the OPD units and pathological labs to avoid chaos and other related problems.
- In the service encounter phase, it becomes very essential to constantly keep in touch with the customers. On the same note, we need to ensure a pleasant / comfortable stay of the patients by constantly keeps in touch with them. In this regard the feedback from patients has to be taken on a regular basis as it gives us an idea about the areas where we are lacking as well as gives a sense of assurance to the patients that someone is listening to their grievances.
- Doctors used to be treated as demigods which trend has been declining since. If we search for the reasons for the same, we can find loopholes in both the ends. Rude behaviour, misbehaviour, use of abusive language from the doctors / staffs often causes problems and generated dissatisfaction amongst the patients. On this line, proper behavioural training for all staffs including the doctors has to be ensured to mitigate any such unpleasant incidences within or outside the hospital premises.
- The views and choices of customers also get hugely affected by their reference group who in case of hospitals are the attendants. We also need to make minimum provisions for them like rest shades, dormitories, provision of clean drinking water, food at affordable costs etc. which will generate good prospects about the hospitals amongst them.
- Similarly we need to tighten the security aspects to eliminate the danger from both the facilities related (Safer equipments, safety from electrical failures, water

slippage, other infrastructural facilities like broken staircases, lifts etc.) as well as from human elements (such as thieves, drunkards, brokers etc.)

Need to ensure the strengthening of the infrastructural facilities like the helpdesk, clear signage & directional boards (multi language), ambulance services, elevators (where it is required), convenient & safe parking places and others to improve upon the patient care.

Final Words: India is being promoted as the next big thing in medical tourism. But with more than a billion people to cater at home, the healthcare services appear to be more paradoxical nature when it comes to providing sustainable health care facilities to the common man. Here the needs are in great extent but resources are scare that demands for radical thinking and assessment of current position to build upon the strengths and provide reliable, affordable as well as innovative health care to the people. As the health care facilities helps in maintaining a health human capital for a country by providing hope, help and relief to the patients, it always requires special recognition from the key stakeholders. In this line, we need to focus upon improving the current state of the existing hospitals and try to upgrade the overall quality of services offered.

Source of Support: Nil.

Conflict of Interest: None.

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