

# An Industry Analysis of the Hospital Sector in Mangalore – A Study

Sandhya C. <sup>1\*</sup> & Srinivasa Rao Kunte R. <sup>2</sup>

<sup>1</sup> Research Scholar, Institute of Computer Science and Information Science, Srinivas  
University, Mangalore, Karnataka, India,

Orcid ID: 0000-0002-8342-6386; Email ID: [sandyakvr@gmail.com](mailto:sandyakvr@gmail.com)

<sup>2</sup> Research Professor, Institute of Engineering & Technology, Srinivas University, Mangalore,  
Karnataka, India,

Orcid ID: 0000-0002-5062-1505; Email ID: [kuntesrk@gmail.com](mailto:kuntesrk@gmail.com)

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Sandhya C. <sup>1\*</sup> & Srinivasa Rao Kunte R. <sup>2</sup>

<sup>1</sup> Research Scholar, Institute of Computer Science and Information Science, Srinivas University, Mangalore, Karnataka, India,

Orcid ID: [sandyakvr@gmail.com](mailto:sandyakvr@gmail.com); Email ID: [sandyakvr@gmail.com](mailto:sandyakvr@gmail.com)

<sup>2</sup> Research Professor, Institute of Engineering & Technology, Srinivas University, Mangalore, Karnataka, India,

Orcid ID: 0000-0002-5062-1505; Email ID: [kuntesrk@gmail.com](mailto:kuntesrk@gmail.com)

### ABSTRACT

**Purpose:** *The purpose is to analyze the hospitals and their processes for knowing their functions and commonalities for the benefit of the best hospital choice for patients. In this study, five hospitals of Mangalore have been considered for the analysis. There are a few common things among these hospitals and certain competitive advantages that a few of them have. Hence, analysis is done based on various approaches like marketing, finance, HR, Strategy as well as the service in general. It is also to know the growth, uniqueness, competitive advantage, patient satisfaction, social contribution, and sustainability measures as well as to know the survival ability of hospitals.*

**Design:** *This study is designed to collect information from various stakeholders of the respective hospitals and to analyze the same using various statistical tools. The data is then interpreted to ensure there is a perfect cross-sectional analysis of each organization from top to bottom as well as bottom-to-top approach.*

**Findings:** *The findings are based on the data collected about the commonalities and differentiation of services that these five hospitals offer. KMC stands out to be number one among the five.*

**Originality:** *This is a first of its kind approach to analyze five hospitals in one city in a paper and the entire study is done by the researcher as part of a bigger study.*

**Type of Paper:** *Empirical Case study.*

**Keywords:** Hospital service, NBA accreditation, Teaching hospitals, doctors, nurses, operation theaters, hospital departments, patients, ambulance service, trauma centers, satellite hospitals, research and medicine, Pharmacy, pharmaceutical companies, equipment suppliers, hospital food and nutrition.

### 1. INTRODUCTION :

Hospitals and their infrastructure are important indicators of how well a society is operating. Each hospital has its own procedures and areas of expertise. Because of their reputation, patients see them and even suggest them to others if necessary. Patients can get specialized medical and nursing care, as well as pharmaceutical supplies, in a hospital. The most well-known type of hospital is a general hospital, which often features an emergency room to treat patients with life-threatening conditions as well as those who have just been in accidents or fires and require quick medical assistance.

Depending on how they are funded, hospitals are categorised as general, teaching, specialized, or government facilities. According to the hospital definition, a district hospital is often the main healthcare facility for a certain region (Bajapi 2014) [1]. It has a large number of beds for intensive care as well as extra beds for patients who need long-term care. Trauma centres, children's hospitals, rehabilitation hospitals, hospitals, and seniors' (geriatric) hospitals are more examples of specialty hospitals and ailment categories that deal with certain medical difficulties including mental care. Specialized hospitals, as opposed to general hospitals, can help lower healthcare costs (Swain. S, 2019) [2].

Nursing education and patient care are both interwoven in a teaching hospital. A clinic is a type of healthcare facility that is smaller than a hospital. There are numerous departments (such as surgery and emergency care) and specialty units in a hospital (like cardiology). Some hospitals have outpatient departments and chronic care facilities. Radiology, pharmacy, and pathology are a few examples of typical support units. As the level of healthcare has become a global priority, hospitals have been forced to focus more on patients, who can only expect this when a holistic strategy is used (Medhekar A. et al, 2019) [3]. One technique to carry out an impartial, external quality assessment, which is one of the most efficient ways to examine health care, is to accredit hospitals. Accreditation of international healthcare is the Accreditation of hospitals is one approach to carry out an independent, external quality assessment, which is one of the most efficient ways to examine healthcare. In a teaching hospital as a category, nursing education and patient care are included. Accreditation by other countries in various parts of the world is known as international healthcare accreditation (Swain D. & Sahu S. 2008) [4]. The phrase "HSAA Indicator Technical Specifications," as changed or replaced from time to time (Sengupta A & Nudy S. 2005) [5], refers to the document titled "HSAA Indicator Technical Specifications." Hospital Services include both the integrated clinical services provided by the hospital as well as the operational activities that support those clinical services and are either fully or partially supported by the local health indication network (LHIN)

### 1.1 Hospitals under study:

Five hospitals of Mangalore have been taken for study and they are as follows:

KMC Hospital, AJ Hospital, Indiana Hospital, Father Muller's Hospital, Mangalore Institute of Oncology. These hospitals have various departments as given below (Shetty P 2010) [6].

**1.1.1 Departments of Hospitals:** Accident and trauma department, outpatient department (OPD), surgical department, nursing department, inpatient service, physical medicine and rehabilitation department, dietary department, pharmacy department, operation theatre complex (OT), and radiology department (x-ray, CT Scan, MRI Scan,) (Bahadori M et.al., 2015) [7].

**1.1.2 Other departments:** Admin, purchase, HR, Marketing- digital Marketing, Accounts and Finance, Laundry, Canteen, Incinerate, Burning of waste, recycle, Gardening and plantation, Parking, and security.

**1.1.3 Infrastructural departments:** Lifts and Escalators, Bed and Equipment maintenance department, A.C and Oxygen Cylinders, Ambulance and equipment inside the ambulance (Sharma K.D. 2012) [8].

### 1.2 Hospital Services:

Hospital services are the foundation of a hospital's offerings. In an effort to make the hospital a neighbourhood institution, they frequently take the requirements or preferences of the hospital's main patients into consideration.

**Table 1:** Some of the hospital services are listed below:

S. No.	Category
1	Hospital emergency services
2	A brief hospital stays
3	Radiology services using X-rays
4	Services, both general and specialized
5	Laboratory Services Blood Services
6	Medical Services
7	Hospital emergency services

Source: Authors Own

**Table 2:** Health maintenance organization hospitals add a range of specialty and supplementary services to the core list, including:

S. No.	Category
1	Specialized pediatrics care
2	Services for prescriptions
3	Access to surgical experts
4	Services for rehabilitation and physical therapy

5	Home health care services
6	Care for mental health
7	Nutritional guidance
8	Counselling and genetic testing
9	Services for families
10	Monetary services
11	Case Management or Social work services

Source: Authors Own

**1.2.1 Ownership and overview of the selected five hospitals:** The below table indicates the ownership in terms of shareholding as per books of accounts and as per government records; the government records and procedures is hence forth called as statutory requirements. The table has information related to be understood in one reading as a comparative study of all the five hospitals under study.

**Table 3:** Comparison of hospitals

S. No.	Area of study	KMC Hospital	AJ Hospital	Father Muller's Hospital	Indiana Hospital Ltd	Mangalore Institute of Oncology.
1	<b>Ownership (Controlled and Owned by)</b>	Manipal Group	Laxmi Memorial Trust	Mangalore Diocesans	Public Limited Company	Trust and owned by few Doctors
2	<b>Type of Hospital</b>	Teaching Hospitals	Teaching Hospital	Teaching hospital	Standalone hospital	Standalone hospital
3	<b>Number of locations</b>	More than one unit	One unit	Two units	One unit	Two Locations
4	<b>Number of beds</b>	600 beds	300 beds	800 beds	300 beds	150 beds
5	<b>Number of Departments</b>	34	30	28	28	15
6	<b>Number of employees</b>	1200	740	834	432	112
7	<b>Number of Doctors</b>	45	41	40	28	14
8	<b>Number of Nurses</b>	135	123	130	116	43
9	<b>Number of specialties</b>	18	17	18	16	15

Source: Authors Own

### 1.3 Service Models:

Organizations can develop, test, and scale the design of comprehensive services using service models. A service model is how we shape and align design choices to assure consistency and quality as we construct, pilot, and scale entire services. In simple terms a business model is how an organization functions and delivers value; coupled with revenue generation method.

### 1.4 Hospital Service, health care Models:

The following are the important health care models:

**Beveridge Model:** People pay taxes and when governments collect tax they tend to provide health care to citizens. This model is copied by many governments for the support of its citizens.

**Bismarck Model:** Anything free makes people easy going and the same when paid by people they respect and honor it. It's a model of paying for the health care, provided by government bodies.

**National Health Insurance Model:** This model is also called as statutory health Insurance (SHI). This helps health insurance for all people.

**The out- of-pocket model:** Patients need to pay from their pocket to treat themselves. The poor people have challenges and they need enough money to treat themselves. This is out of pocket expenses.

### 1.5 Six Major healthcare services provided as business model:

1.6 The above four models are implemented in the following six major health care service providing to the general public. These services form the value delivery to a patient. The below types mentioned communicate their services and it's a choice for the patients to choose from.

- (1) Medical Laboratory
- (2) Hospital
- (3) Surgical Center
- (4) Doctors Polyclinics
- (5) Doctor's Consultation Clinic
- (6) Nursing Home

These services are provided by all five hospitals in one location for better and quick service to patients. In a city like Mangalore, there are healthcare units which are run by individuals as well as Doctors. Therefore, a patient does not have to move around for the above services in any of the five hospitals under study. Quality makes the difference in terms of patient recovery (Varkey, P., & Kollengode, A.2011) [9].

**Key performance indicators:** These are to be achieved to attain benchmark performance in terms of business growth. The model encompasses things that need to be incorporated by any hospital to be a successful entity (Dhar S.S & Mendonca. T.L.,2013) [10].

- (1) Admissions to the hospital: Does it happen as per plan to meet budget expenses
- (2) Accident and traumas center: Functional 24/7 or not
- (3) Accreditation achievements: Maintaining standards
- (4) Appreciation for specific areas of medical treatment dominance: Competitiveness
- (5) Allocation of funds: For growth and scaling of services
- (6) Ability to manage a crisis or a pandemic: Overcome challenges
- (7) Advanced operations technology: New machines and equipment

## 2. OBJECTIVES RELATED TO THE STUDY :

Following are the objectives of analyzing the five hospitals as an industry analysis

- (1) To understand their services and the uniqueness
- (2) To learn their operations and their competitive advantage
- (3) To know the speed of their operations and patient satisfaction
- (4) To measure their growth rate and social contributions
- (5) To count on the number of students who qualify as Doctors and para-medical experts
- (6) To calculate their sustainability measures
- (7) To contemplate on their survival in the health care business itself.

## 3. LITERATURE REVIEW FOR THE STUDY :

Literature review of various aspects of the hospital industry was undertaken and its details are mentioned in the following Table. 4.

**Table 4:** Literature review of Hospital Industry

S. No.	Area of Study	Conceptual thoughts	Reference
1	Social media Marketing	Hospitals need to use social media to market their processes and advance things in hospital care	Smith, K. T. (2017) [11]
2	Integrated marketing Communication	Hospitals need to integrate all their communications to create synergy	Fischer, S. (2014). [12]
3	Brand Equity plays a major role	Brands plays a major role and Brands have a memory in the minds of the customers and create a long-term impact	Vinodhini, Y., & Kumar, B. M. (2010) [13]
4	Finance and revenue generation	Hospital need to study their revenue generation at a faster pace to clear loans and debts	Singh, S. R., & Wheeler, J. (2012) [14]

5	Performing well in financial management	Good financial management leads to good quality care of patients	Dong, G. N. (2015). [15]
6	IT technology investment makes a clear impact	Good IT leads to better treatment and has a long term impact.	Wang, T., Wang, Y., & McLeod, A. (2018). [16]
7	Nurses play a major role	Nurses need to make things fine for their future else they would loose focus	Kovner, C. T., & Mose, J. (2018). [17]
8	Process based hospital	A process based hospitals has a faster growth performance	Vera, A., & Kuntz, L. (2007). [18]
9	Waste discharge of chemicals	Waste management and hospital discharge is critical for sustainability of	C. R., & Jack, B. W. (2007) [19]
10	Admissions and discharge of patients flow	To have a good process the flow of discharge of patients needs to be streamlined. This ensures good admissions	Ortiga, B., Salazar, A., Jovell, A., Escarrabill, J., Marca, G., & Corbella, X. (2012). [20]
11	Human resource management in large hospitals	A good Human resource managements is critical in rejecting wrong candidates and taking the right candidate to the right job	Singh, G., & Negi, K. S. (2013). [21]
12	Small hospitals and HR	HR is a department that can change the overall activities of the daily flow and an organization should create a better team	Chowdhary, N. (2010). [22]
13	Public Hospitals and private hospitals	Public hospitals and private hospitals have a different HR practices and have a different objectives to be met	Singh, G., Singh, A., & Singh, S. (2012). [23]
14	Sustainable human resource planning	Planning is a must for any hospital and HR planning plays a major role in executing things in terms of recruiting and selection	Bhattacharya, S., & Bhattacharya, C. (2021). [24]
15	Cancer treatment is expensive	Exorbitant pricing is dangerous and it should be value based pricing for chemo therapy or radio therapy. It should be affordable	Prinja, S., & Gupta, N. (2021). [25]
16	Stents have become expensive	Heart Hospitals should make the stents less costly than what is available in other countries. Indians are large in numbers and need to have them at a low cost	Pandey, N., & Thombal, A. E. (2018). [26]
17	Integration of all communications is essential	Integrated marketing is essential to create synergy and growth through all hospital communication	Fischer, S. (2014). [27]
18	Brand equity	Brand equity means profitability of three years, to be known for making mergers and acquisitions	Vinodhini, Y., & Kumar, B. M. (2010). [28]
19	Hospital financial management	This is where the hospitals can create an impact on their turnover and growth for scaling up	Singh, S. R., & Wheeler, J. (2012). [29]
20	Quality care requires better financial management	Quality care needs money to be spent and it is possible to create better only when financials are better. Payment to vendors need to be done for rendering better services to patients	Dong, G. N. (2015). [30]
21	Health Information technology	Investments in technology that covers health can change the way a hospital generates reports and diagnosis	Wang, T., Wang, Y., & McLeod, A. (2018). [31]

22	Sustainable HR planning	2 and 3 tier cities have a challenge, people work for few years and move abroad especially nurses and this become a challenge. Hence sustainable planning is required.	Bhattacharya, S., & Bhattacharya, C. (2021). [32]
23	Cancer drugs	Planning for purchase for cancer drugs is the key to bring down the prices. Prices need to be brought down to make treatment less costlier	Prinja, S., & Gupta, N. (2021). [33]
24	Single use	Single use of items makes all the difference and eliminates contamination and spreading of infection. That also means it creates higher costs.	Jacobs, P., & Akpınar, I. (2018). [34]
25	Drug Pricing	Most of the drugs are to be controlled by the government, seldom it happens on a large scale and hence the generic drugs are forcibly released by the government	Radhakrishnan, V. (2021). [35]
26	Marketing strategy	Marketing strategy should be profitable and long lasting and hence it is important to make profits	Thakur, S., & Gupta, D. K. (2018). [36]
27	Marketing activity impact	Marketing impact has to be felt in business and it should reflect in the top line and bottom line	Kumar, R. S., Dash, S., & Malhotra, N. K. (2018). [37]
28	Hospital service quality	Leads to satisfaction and value additions and creates new entry of patients	Swain, S., & Kar, N. C. (2018). [38]
29	7 P's of Marketing	People, Process and Physical evidence is critical to make things happen	Yaghoubian, S., Jahani, M. A., Yazdani-Charati, J., & Mahmoudi, G. (2018)[39]
30	Strategies	Strengths and weakness can be looked in to when there is a better strategy and new thinking	Sarma, A. (2020). [40]
31	Unit cost of treatment	Unit cost of treatment should be uniform across the nation as people keep trying to make things happen	Chatterjee, S., Levin, C., & Laxminarayan, R. (2013). [41]
32	Service quality	It should be measureable and should have uniformity and good output that could be seen for a long time	Mohapatra, G., & Punniyamoorthy, S. (2017). [42]
33	Environmental Impact	Burning inside facilities makes a huge difference and can create less pollution that can change the way hospitals dispose waste especially bio waste	Awad, A. A. U. S., & Al Bajari, F. (2018). [43]
34	Emotional Labour	Emotional labour is a kind of attitude that	Grandey, A. A. (2000). [44]
35	Concept of Queueing and its theory	Hospital capacity management based on the queueing theory	Bittencourt, O., Verter, V., & Yalovsky, M. (2018). [45]
36	Real time capacity and AI	Data mining and Artificial Intelligence makes a huge difference	Munavalli, J. R., Boersma, H. J., Rao, S. V., & Van Merode, G. G. (2021). [46]
37	Work breaks	Nurses need to take breaks in their daily works and can make a difference. A bit of relaxation can make a difference	Cordoza, M. et al (2018). [47]
38	Hospital Gardens	Make a difference in terms of patient satisfaction and development	Paraskevopoulou, A. T., & Kamperi, E. (2018). [48]

39	Hospital Internal route and structural Design	Biophilic theory of hospital internal route design states that it creates a greater impact on patients naturally	Totaforti, S. (2018). [49]
40	Therapeutic landscapes	Environments play a major role in curing diseases both physical as well as psychological and hence therapeutic landscapes create a great energy feeling of life	Marcus, C. C. (2018). [50]
41	Bio medical generation of waste	Bio medical generation of waste and the environment makes a difference in total towards the wellbeing of the patients	Mathur, P., Patan, S., & Shobhawat, A. S. (2012). [51]
42	Waste management a barrier	In general waste management creates a bigger impact in managing hospitals which are in small size	Delmonico et al. (2018). [52]
43	Biomedicalwastem anagement in teaching hospitals	What do they teach to students and the same would be followed once they join as professionals	Rao, D. et al.(2018). [53]
44	Prediction of surgery time	Scheduling of surgery times is critical in ophthalmology and othe services	Devi, S. P. et.al (2012). [54]
45	Six sigma	Reducing waste of time inside the operation theaters zone	S., Nair, D., & Nair, P. (2014). [55]
46	Self Care	All diabetes patients need to be taught self care to enhance their chances of living to long	Basu, S. et al (2018). [56]
47	Trauma Center	Accidents are really life threatening and if good trauma centers are created they can really save lives. The first step to save a life would be those golden moments	Misra, P et.al (2017). [57]
48	Trauma centers in Teaching hospitals	This is crisis management and the entire team needs to work in shifts to make it for the survival of a patient	Flayyih, S. S., Hameed (2017). [58]
49	Medical scanning and technical equipment maintenance	Medical scanning and technical equipment needs to be maintained for the great good of the hospital. They need to be more relevant when worked up on patients	Arab-Zozani et.al (2021). [59]
50	Value based maintenance	Buildings need to be taken care before patients are taken care and building generate value to people and value can make a huge difference	Wong, W. F., Olanrewaju, A., & Lim, P. I. (2021). [60]
51	Significance of management information system	Teaching hospitals need to make things better for students to understand the significance of MIS in health care	Kusumapradja, R. et al, (2021). [61]
52	Crisis management	Averting disaster management by creating and anticipating impressions that could happen. This way young teams can be trained for better management of critical situations	Elsbach, K. D et.al (1998). [62]
53	Inappropriate medication	Wrong medicines can lead to major problems hence proper diagnosis is a must	Bhatt, A. N et.al (2019). [63]
54	Needles	A basic tool to ad-minster treatment can cause injuries to the medical teams. They need to be careful and this has to be trained from the beginning	Sriram, S. (2019). [64]



55	Hospital Management system	Software is critical and plays a role in the effectiveness in the areas of financial management.	Kumar, R et al (2021). [65]
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From the above literature review we understand that various aspects are related to each other. For example service ability of a hospital needs to be marketed by communication to a large number of people. We also understand bio-waste, as well as specialty drugs like cancer drugs, etc. This literature review is connected in this study to understand in depth about the hospital industry beyond the websites of the five hospitals.

#### 4. RESEARCH METHODOLOGY FOLLOWED :

Qualitative and quantitative approach is followed in collecting data. A simple questionnaire is asked to patients in general using the digital mode and the questions are related to service and product process. The data is collected from 120 patients and told to rank all the five hospitals in various parameters and these answers are tested using statistical tools like the brand name positioning of the hospital and what are the factors that constitute a good hospital in their approach.

The questionnaire is first tested using Cronbacs alpha. Cronbacs alpha is a statistical tool that determines whether the questionnaire is right or not. If the value of the Cronbacs alpha is more than 0.75 that means that means the sample test done with the questionnaire indicates that the questionnaire is right and can be used for further studies.

**Result:** The Cronbacs alpha results show a reliability of the questionnaire as 0.836 based on the 30 questionnaire results. Hence the result was validated for further study.

**Qualitative approach:** Like asking various stakeholders like the nurses, canteen staff, pharmacy teams, security teams, maintenance teams and finance and marketing teams. This confidential interviews were unstructured and was subtly recorded in the mobile in few cases after due permission to record their voice.

**Population in general:** Mangalore is a taluk in the Karnataka state's Dakshina Kannada District. In this Taluk, there are 2,16,300 dwellings and a total population of 9,94,602. To decide the dependability of the survey, a pilot study was conducted.

$$n = \frac{N}{1 + N(e)^2}$$

Where,

n= Considering the Number taken for Sample Size

N= The entire population Size

e= Considering the Level of accuracy

According to the statistical formula, with a 95% confidence level and 10% precision the sample size will be calculated as follows:






$$n = \frac{2,16,300}{1 + 2,16,300 (0.1)^2} = \frac{2,16,300}{1 + 2,16,300 (0.1)^2} = 100$$

Hence, we distributed 122 questionnaires an addition of 22 more than 100 to have a buffer so that wrongly filled questionnaires could be eliminated filled by patients, out of which 122 questionnaires were properly filled and properly received. The analysis was done using descriptive statistics as well as Multidimensional scaling. Multidimensional scaling was done to know what are the key factors that affect a hospital's, preference by patients.

#### 5. RESEARCH SURVEY :

A Survey questionnaire was used for the survey is a structured questionnaire and certain brochures of each hospital were shown to patients. Logos of all the five hospitals were shown to patients to know if they can recognize the hospital and it was easy for the respondents to identify the hospitals and their logos The same is listed in the below table.

**Table 5:** Logo's of the hospital to know if they can recognize them.

S. No.	Name of the hospital	LOGO'S
1	KMC Hospital	
2	A J Hospital	
3	Father Mullers Hospital	
4	Indiana Hospital	
5	MIO- Hospital	

Source: Public Domain- respective web sites

### Inference:

The logos were recognized by patients comfortably and hence when questions related to a specific hospital were asked they could answer by them comfortably. The questions were to know the preference of hospitals based on their experience and choice.

## 6. BRIEF OVERVIEW OF EACH HOSPITAL UNDER STUDY :

### 6.1 KMC Hospital:

Two cutting-edge and advanced hospitals are connected to KMC, they intend to give students practical clinical experience. The undergraduate teaching hospitals of KMC, Mangalore include KMC Hospital, Attavar, Government Wenlock Hospital, and Lady Goschen Hospital.

The six-bed multi-disciplinary specialist centre KMC Hospital, at Attavar is famous for the calibre of its diagnostics, nursing care, and medical knowledge. Due to its affiliation with the medical college, the hospital has established a strong reputation as a pioneer in offering top-notch healthcare services to the general public at reasonable prices. The hospital keeps up with new developments in technology to provide patients with the best possible care and wellbeing. The "patient-centricity" that distinguishes KMC Hospital from its competitors is one of its defining characteristics.

KMC is attached to two state-of-the-art hospitals to provide hands-on clinical exposure to the students. KMC Hospital, Attavar and Government Wenlock Hospital and Lady Goschen Hospital are the undergraduate Teaching Hospitals of KMC, Mangalore.

KMC Hospital, Attavar is a 600-bed multi-disciplinary specialty centre renowned for its medical expertise, nursing care and quality of diagnostics. Being attached to the medical college, the hospital has earned a very good recognition as a leader in providing world-class healthcare services to the common man at an affordable cost. The hospital is continuously in tune with the latest technology that promotes the most modern healthcare and well-being of the patient. The hallmark of KMC Hospital which distinguishes it from its contemporaries is the 'patient-centricity' which can be seen in the services

it provides to people. KMC Hospital is also a forerunner towards social service and has been actively promoting a proactive approach to diseases by conducting free health checkup and out-reach camps as a part of the corporate social responsibility.

Ambedkar Circle's, Kasturba Medical College Hospital is an excellent and a super specialty corporate hospital developed with the intention of providing connectivity to multiple specialties under one building. KMC Hospital offers unique and specialized medical services and tertiary care at a reasonable price, supported by a group of some of the greatest doctors in India, experienced nursing and paramedical personnel, cutting-edge equipment, and a 250-bed inpatient facility. The KMC Hospital is constantly updating its clinical knowledge, cutting-edge machinery, and most recent diagnostic and imaging services in an effort to maintain high standards. Since 2005, KMC Hospital has met the highest standards for curative and preventive healthcare, earning it the ISO certification. The KMC hospital received a new ISO 9001:2008 certification in 2010. The National Accreditation Board for Testing has granted accreditation to KMC Laboratories Services.

**Vision and Mission statement:** "Kasturba Hospital is committed to be the most preferred and comprehensive hospital through clinical excellence, patient's centricity and ethical practices to meet the health care needs of the community".

### **6.2 A. J. Hospital**

One of the top and the best tertiary hospitals in India is A.J Hospital and Research Centre. This prestigious school offers excellent medical facilities and care in all thirty main medical specialties. When the hospital opened its doors to patients in the year 2001, the visionary idea of renowned entrepreneur, excellent person, educator, and philanthropist Dr. A.J. Shetty became a reality, and it now stands as a distinctive with unique capabilities as a centre of medical excellence. The Laxmi Memorial Educational Trust, a prestigious and respected organisation that oversees a number of professional colleges, like medical, dental, and engineering, operates the A.J. Hospital and Research Center.

**Vision Statement:** "A.J Hospital & Research Centre is committed to bring quality medical care of the highest standard within the reach of every individual. To realize this dream of 'Quality Health Care for All', we shall strive for excellence in medical services, health education and research".

**Mission Statement:** "A.J. Hospital shall constantly strive to":

- (1) Achieve customer satisfaction by compassionate attitude and quality healthcare services.
- (2) Provide comfortable and a risk free environment for our patients.
- (3) Bring quality health care within the financial reach of every individual.
- (4) Attain excellence in medical education and research,
- (5) Provide comfortable and safe working environment for our employees,

### **6.3 Indiana Hospital & Heart Institute**

It is a 300-bed, cutting-edge multispecialty hospital. The hospital follows process-driven quality systems that follow international standards of clinical care in a safe, infection-free environment that respects patients' rights and privacy. It is situated at a crucial intersection on National Highway 66 in Mangalore where the Bengaluru Highway, the Kerala Highway, and the Mumbai Highway meet. It touts the top clinical talent in the area and has full-time consultants available around-the-clock, as stated in its motto, "Indian at heart, Global in healthcare." Therefore, it should come as no surprise that the facility has earned accreditation from the National Accreditation Board of Hospitals and Healthcare, the National Neonatology Forum, and the NABH Nursing Excellence Certification. Indiana offers a superb staff of medical specialists, including doctors that have had national and international training and are authorities in their fields, capable of handling the most complex cases, they provide optimal and evidence based treatment with a multidisciplinary approach. Indiana Hospital centres, of excellence are the best in the region and has, stood out for its effectiveness and efficiency in detecting, diagnosing and treating complex and rare ailments. To its credit, Indiana Hospital also serves as a training centre for DNB specialty and super specialty courses and offers an academic course, NNF Fellowship in Neonatology, for doctors and nurses. We welcome you to Indiana Hospital, Mangaluru where a large dose of compassion awaits you. Says the website. A name synonymous with 21st century healthcare, Indiana Hospital and Heart Institute combines healthcare expertise, technology, innovative healthcare management, and global outlook, is all set to redefine the health care delivery of Mangalore. Located in the emerging medical hub of the country, Mangalore, at the convergence of two national highways

Mahaveera circle (Pump Well Circle) we ensure fast medical attention to critical patients. Adding life to the 300 bed hospital is the renowned team of doctors who have been serving the people of the city for over a decade. Indiana Hospital aspires to be Mangalore's finest Hi-Tech corporate hospital, purely – An India's global hospital. We provide Multispecialty and also super specialty medical support through our well qualified and experienced team of doctors and supporting staff. With a 1:1 ratio nursing care we are also have the South India's best Neonatal Care centre that is one of its kind in the world.

**Vision Statement:** “To be considered as the global health care facilitated hospital in south Asia and to provide the best care in all departments so to be recognized as the global destination in healthcare”

**Mission Statement:** “To provide the global standards in healthcare to the public through professional expertise, quality services with special focus on patient safety. Also to provide support to financially challenged people to get the best health care in a very affordable price. We also strive towards achieving a goal that would make us serve this nation to make it a better place to live in”

#### 6.4 Father Mullers' Hospital

For the past one hundred and thirty six years, Father Muller Charitable Institutions have made a unique difference in the lives of millions of individuals. Fr. Augustus Muller's institution, which was established in 1880, is notable as a leader in the field of medical care and training in our nation. It is dedicated to providing medical comfort to the suffering people of the world, as expressed in its motto, "Heal and Comfort." the hospital focuses on installing sophisticated precision equipment, non-invasive diagnosis and surgeries and other state-of-the-art techniques with quality and ethical service. It provides super specialty treatment with state of the art facilities with experienced doctors following world-class health care practices. Father Muller Charitable Institutions are registered under the Societies Registration Act of 1860 with SI. No. 1 of 1960. The institution lays a strong focus to provide cutting edge services with a strong foundation of medical education and research, reaching out to towering heights of expertise in health care comparable to the best in India. To put it in a nutshell, ‘The institution has rendered more than a century of service to humanity with dedication, trust, excellence and nobility for non-profit’

**Vision Statement:**

“Our Vision is to heal and comfort the suffering humanity with compassion and respect, and to be recognized as a global leader in medical education and research”.

**Mission Statement:**

“To be progressive in providing holistic health care services to all”

“To ensure global standards in medical education”

“To create and foster centre of excellence for medical research”

#### 6.5 MIO- Mangalore Institute of Oncology:

Mangalore Institute of Oncology is a complete cancer hospital with arrange of hundred and twenty bed facilities

MIO has also a daycare, facility with sixty beds offering out-patient treatment including state of the art Rapid Arc Linear Accelerator, PET-CT and day care chemotherapy treatment.

MIO Hospital is a sixty bedded in-patient facility equipped with state of the art Laminar flow OT, Hepa Filter rooms for acute leukemia with experienced oncologists and dedicated nursing care.

Mangalore Institute of Oncology actually is situated at Pumpwell, and is a comprehensive cancer center with the latest technology, a good environment and run by the best professionals in the field. The oncology team is of highly experienced, knowledgeable and multidisciplinary, with nursing staff, physiotherapists and counseling staff.

Patients some time times, battle against cancer as it becomes complicated for the patient and their family, but make it all either a success or a failure.

The hospital is always there and ready to offer the best treatment with support and empathy. The MIO team works extremely hard to deliver the top cancer care always and every day and for every patient of any location in the best of the situations available at Mangalore.

The hospital is aided by a state of the art technology and proven innovative therapy to achieve optimal clinical outcome for complicated and advanced cancers.

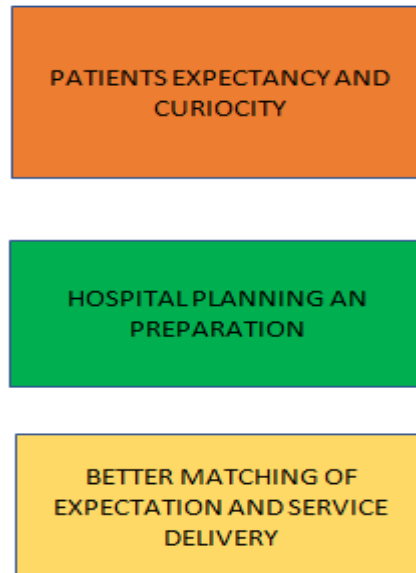
Based on the unstructured interview conducted the following parameters were found to be important and are made in to a model that connects various parameters for becoming a successful hospital.

**Vision Statement:** “To provide affordable, high quality services for early detection and cancer treatment with utmost ethics”.

**Mission Statement:** “To be state of the art cancer care hospital of International repute”

## 7. THE HOSPITAL CONCEPTUAL MODEL :

The below model consists of three components:



**Fig. 1:** Indicates from the patient point of view

**Source: Authors Own**

**A. Cost to patient-** Patients point of view Access to hospital- Distance the patient has to travel, service process and procedures.

**B. The other three aspects are from the hospitals point of view:**

- (i) Medical expertise
- (ii) Insurance and government schemes
- (iii) Post treatment and support system

**C. Better Matching of expectations:**

When patients and hospitals expectation, match, it would result in to healthy patients and revisits.

**Parameters That Define a Good Hospital depicted into a model:**

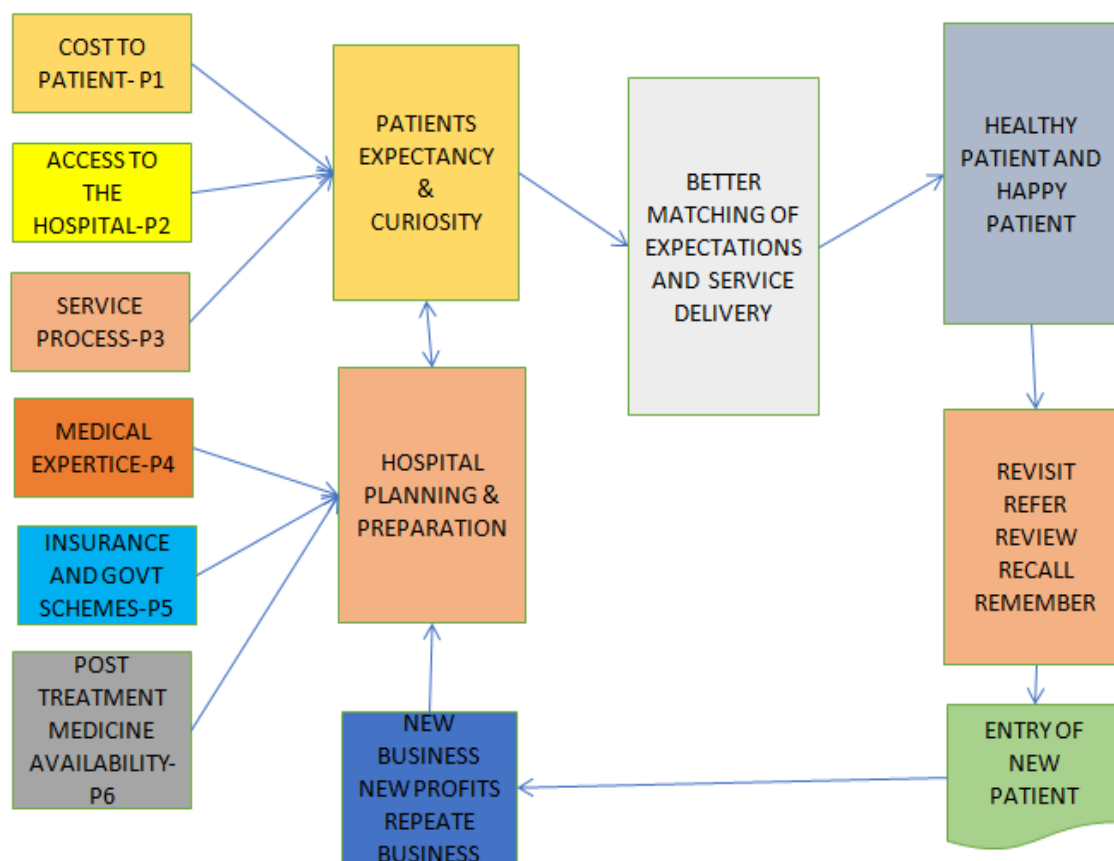


Fig. 2: Indicates P1-P6 Parameters that lead to Repeat Business

Source: Authors Own

Various factors that constitute for a better formation of a hospital are as follows:

- 7.1. **Emotional Labour:** How best can the reception team smile or how best can the nursing staff smile, in spite of hard situations that they are facing. Emotional labour is all about smiling even if one is feeling bad inside. This contributes a lot to the organization; it creates a feel good factor to the patients, though it may not be from the bottom of the heart.
- 7.2. **Equipment Investment:** Equipment s can make or break a hospital. More the equipment better the diagnosis and faster the analysis. Return on investment will be high if more and more investments happen in the field of testing equipment
- 7.3. **Efficiency of staff:** Staff efficiency when coupled with good equipment can make a major difference in the patients outputs and end delivery of feel good in a patient.
- 7.4. **Effectiveness of treatment:** Patients should be cured. The medicines administered should be of high quality and should match to an individual’s intake capacity based on the age, gender and weight of the patient.
- 7.5. **Experiences of past patients:** it is a recall and a factor that would contribute for future revisits.
- 7.6. **Experiments and research:** Every hospital should have a department to do experiments and test them for results that is suitable for Indian conditions.

**CONCEPTUAL HOSPITAL SERVICE MODEL:**

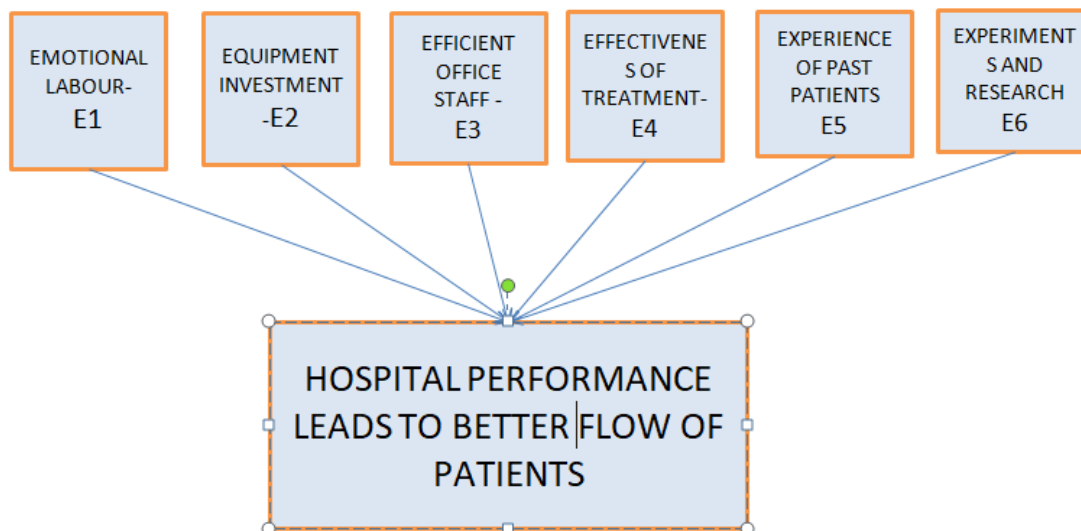


Fig. 3: Performance of a Hospital is based on various factors- A conceptual model

Source: Authors Own

**Hospital Service Model Performance:** Every hospital performs based on the above conceptual approach. These approaches are universal truths and are a common sense enduring methodology for a better flow of patients. So let us put the same in a matrix to understand whether all the factors E1 to E6 exist in each of these hospitals or not.

Table 6: Overview of Observation Based on The Conceptual Model

Category	KMC Hospital	A.J. Hospital	Father Muller Hospital	Indiana Hospital	MIO Hospital
E1	A Medium state	A Good state	A Good state	A Good state	An average state
E2	A Good state	A Good state	A Good state	A Good state	Medium
E3	A Good state	A Good state	A Good state	A Good state	Medium
E4	A Good state	A Good state	A Good state	A Good state	Good
E5	A Medium state	A Good state	A Good state	An average state	An average state
E6	A Medium state	A Good state	A Good state	A Medium state	A Medium state

Table 7: Overview of All Five Hospitals Based On the Functions

Functions	KMC Hospital	A.J.Hospital	Father Muller Hospital	Indiana Hospital	MIO Hospital
Marketing	Aggressive	Mild to aggressive	Mild to aggressive	Mild to Aggressive	Aggressive
Finance	Very strong	Loans from State Government bodies	Cash Rich	Community Money	Loans and Self funding
HR	Good Process	Good Process	Good Process	Average process	Average Process
Care Process	Excellent	Excellent	Excellent	Excellent	Excellent
Investment	Very high	Very high	Very high	Very high	Moderate
Vintage	80 + years	30+ years	140+ years	15-20 years	10 years

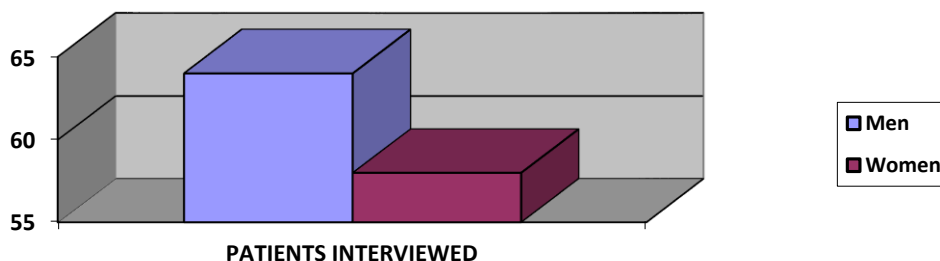
**Table 8:** Four P’s of Marketing at all the five hospitals

4 Ps	KMC	A.J. Hospital	Indian Hospital	Father Mullers	MIO
<b>Product</b>	All specialties	All specialties	Heart	All specialties	Cancer
<b>Pricing</b>	High	High	Very high	Moderate	Very high
<b>Place</b>	Multiple locations	Few locations	Few locations	Few locations	Two locations
<b>Promotions</b>	Digital and traditional	Traditional	Traditional	Traditional	Traditional

**8. DATA ANALYSIS :**

Based on the questionnaire the following data was analyzed and documented accordingly. Understanding the data it reveals that there is a huge impact on the brand due to the expectation and the service provided. The gaps were felt and these gaps could be bridged to create a greater impact by the organization.

**8.1 The details of the respondents are as follows:**

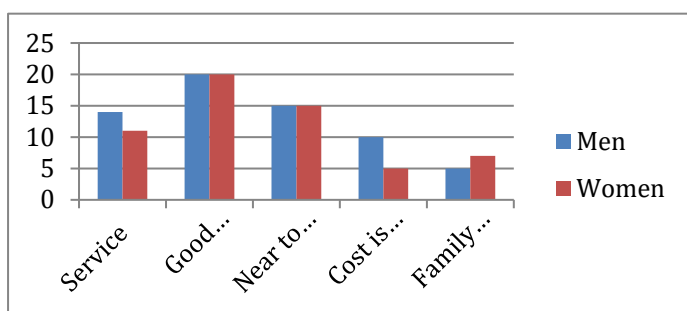


**Fig. 4:** Details of Patients interviewed

Men= 64, Women= 58, Total=122

The above data is from the survey done in the hospitals on patients. Hence the data is related to patients who are admitted.

**8.2 The following are the details of the factors that made patients to choose a hospital:**



**Fig. 5:** Factors that made patients to choose a hospital

**Table 9:** Factors that make a patient to choose a hospital

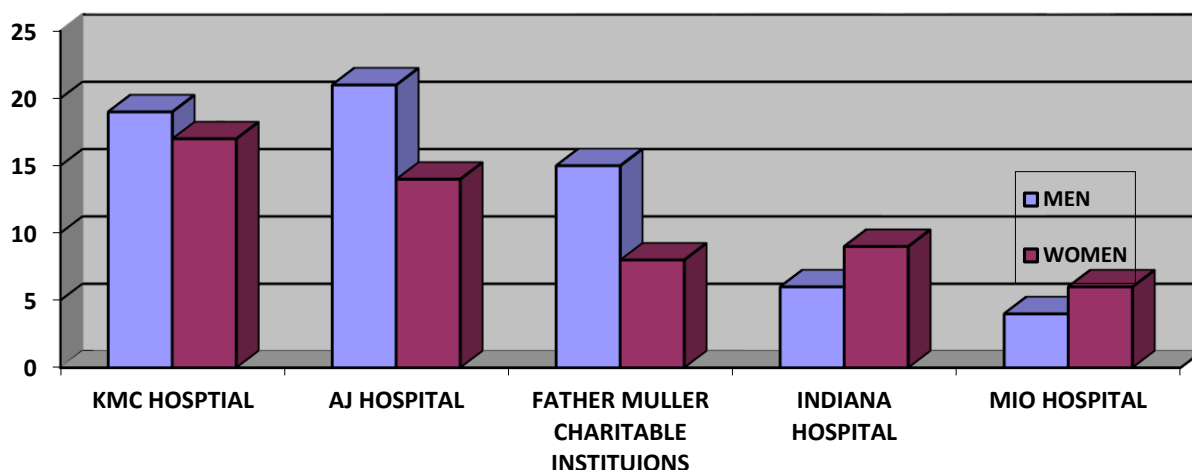
Gender	Service	Good Treatment	Near to the house	Cost is very effective	Family Doctor recommended	TOTAL
MEN	14	20	15	10	5	64
WOMEN	11	20	15	5	7	58
TOTAL	25	40	30	15	12	122



**Inference:**

Every patient looks for good treatment and cost effectiveness. Near to the house of the patient is also a major factor that helps patients choose a hospital. The third factor is the non-medical service in terms of cleanliness, room service attenders, cleanliness security, medical shop facility, ATM, etc. The most important factors that make a patient to choose a hospital is Good treatment.

**8.3 The patient wise and hospital wise visits data is as follows:**



**Fig 6:** Patient and Hospital wise visits data

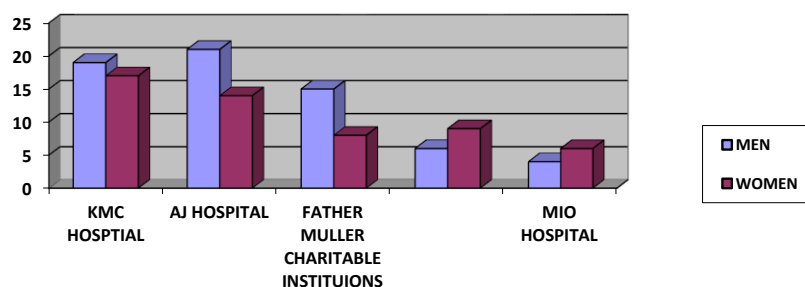
**Table 10:** Break up of patients in the following hospitals

Gender	KMC	AJ	FMC	INDIANA	MIO	TOTAL
MEN	19	21	15	5	4	64
WOMEN	17	14	12	8	7	58
TOTAL	36	35	27	13	11	122

**Inference:**

The visits to hospitals by patients is seen in the above data. It also indicates that three hospitals make a major visits by patients: KMC, AJ as well as Father Muller’s Hospital.

**8.4 The following is the break-up of ailments that patients are suffering from:**



**Fig. 7:** Indicates break-up of ailments that patients are suffering from

**Table 11:** Major Ailments and their admission to hospitals

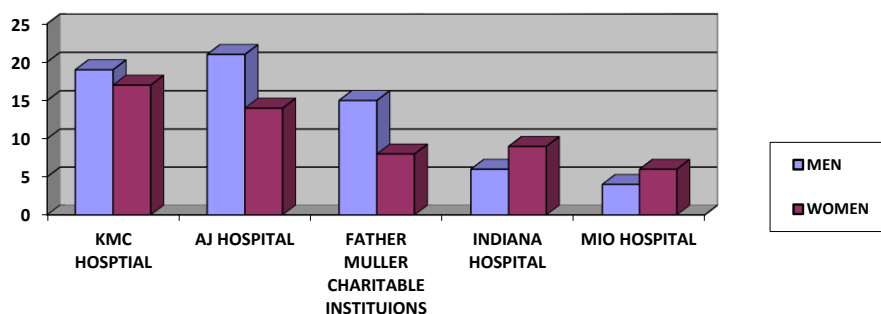
Gender	Heart related	Diabetes or cancer	Gastro- enteritis	Gynecological	Others	TOTAL
MEN	24	20	15	0	5	64

WOMEN	16	15	10	15	2	58
TOTAL	40	35	25	15	7	122

**Inference:**

It is found that highest health problem is related to the heart. This is followed by Diabetes and Cancer. Most of the customers have BP problems and are under medication.

**8.5 The following hospitals have the best of the equipment for various surgeries:**



**Fig. 8:** Hospitals and their equipment

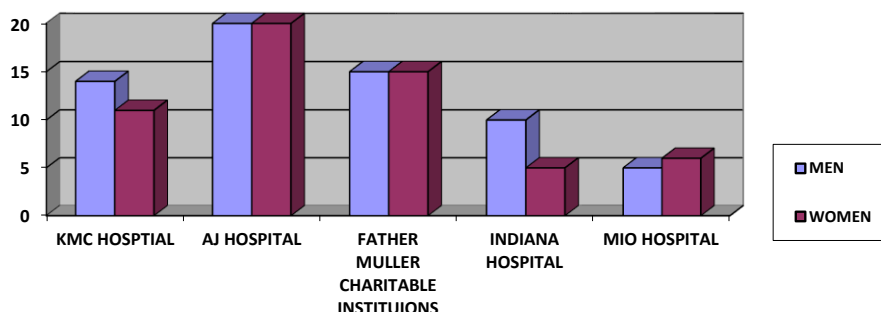
**Table 12:** Hospitals and their equipment as felt by patients

Gender	KMC	A. J. Hospital	Father Muller’s	Indiana Hospital	Mangalore Institute of Oncology	TOTAL
MEN	20	25	15	15	5	64
WOMEN	10	20	10	0	2	58
TOTAL	30	45	25	20	7	122

**Inference:**

Most of the patients feel that AJ hospital has the best of hospital equipment and followed by KMC and Father Muller’s Hospitals. Equipment too is key deciding point for patients to visit a hospital.

**8.6 The chances of best recovery as felt by patients are as follows:**



**Fig. 9:** The feelings of patients in terms of best recovery

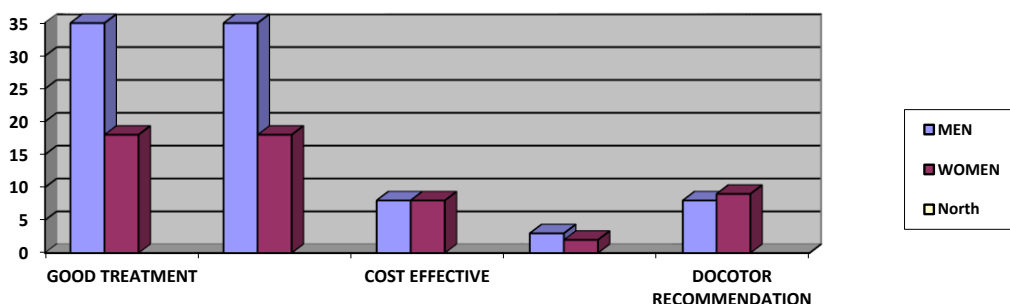
**Table 13:** Chances of recovery as felt by Patients in general for Major Ailments

Gender	KMC	A.J. Hospital	Father Muller's	Indiana Hospital	Mangalore Institute of Oncology	TOTAL
MEN	14	20	15	10	5	64
WOMEN	11	20	15	5	7	58
TOTAL	25	40	30	15	12	122

**Inference:**

Chances of recovery is felt by patients is based on their past experience as well as family members experience. This table shows that people feel they will be cured in AJ as well as Father Mullers than compared to the other three hospitals.

**8.7 Least chances/ Difficulty in recovery as felt by patients:**



**Fig. 10:** Least chances and difficulty in recovery as felt by patients

**Table 14:** Perception of Least recovery chances of patients from these hospitals

Gender	KMC	AJ Hospital	Father Muller's	Indiana Hospital	Mangalore Institute of Oncology	TOTAL
MEN	5	10	14	15	20	64
WOMEN	7	5	11	15	20	58
TOTAL	12	15	25	30	40	122

**Inference:**

Patients feel that Mangalore institute of Oncology as well as Indiana Hospital is a place where there would be least chances of recovery.

**8.8 Paired comparison of hospitals by patients; multidimensional scaling was used for the same:**

Multidimensional scaling:

Goodness of Fit

**Stress and Fit Measures**

A Normalized Raw Stress	.02271
B Stress-I	.15069 <sup>i</sup>
C Stress-II	.49464 <sup>i</sup>
S-Stress	.04621 <sup>l</sup>
Dispersion Accounted For (D.A.F.)	.9772 <sup>e</sup>
G Tucker's Coefficient of Congruence	.9885 <sup>e</sup>

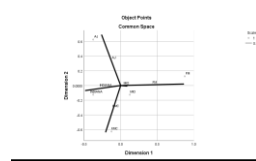
PROXSCAL minimizes Normalized Raw Stress.

- a. Optimal scaling factor = 1.023.
- b. Optimal scaling factor = 1.023.

**Common Space**

**Final Coordinates**

	Dimension	
	1	2
KMC	-.204	-.630
AJ	-.259	.686
FM	.858	.020
INDIANA	-.479	-.068
MIO	.084	-.008



**Fig. 11: Multidimensional observations**

**8.9 Multidimensional Scaling Inference:**

A. J. hospital and Father Muller’s Hospital both shows positive. Rest all hospitals show negative impressions in the minds of the patients as per multidimensional scaling.

AJ= 0.686 and Father Muller’s hospital= 0.20 both are positive and hence AJ is the best among the five. Hence AJ Hospital and Father Muller’s Hospital are competing brands when compared to other brands in similar features of services that they offer.

Indian Hospital, Mangalore Institute of Oncology, and KMC hospitals are on the costlier side. These Hospitals can be considered only for cancer or other ailments that are expensive in nature.

**8.10. Can you recollect your Doctors name?**

Patients could recollect two doctors name each and it indicates that doctors play a major role in the brand building of a hospital. They remember the name with a reason that they could recollect. Few could write their name and few could only recollect.

**9. COMMON FEATURES :**

**7P’s PERTAINING TO SERVICE MARKETING: They are primarily** Product, Rate or Price, location or Place, communication or Promotion, proof or Physical evidence, Method or Process and People, makes the difference. This together should add value to the patient. Before and after a service has been rendered then it could be measured in treatments and in terms of realizations of greater value

delivery to patient and his family. This service industry can create a great value and a greater impact when seen from a global perspective about India in general from health tourism point of view.

#### **10. CSR ACTIVITIES AT HOSPITALS :**

Profit, People, Planet is a must. Profits need to be spent on people and planet for survival. This can happen when we have the concept of reduce, reuse and recycle the use of materials and energy sources. When we reject and reuse things the planet becomes healthy. Most of the problems that people face are due to environmental damages and pollution. The contribution of industrialization is bad health interns of breathing and lungs problems.

Ailments like Tuberculosis, H1NI, Corona or be it HIV can all be prevented by changing the way we live. Hospitals need to do training and conduct awareness programs to bring down pollution and prevent burning of waste on a large scale. CSR initiatives also mean that they should create investments in to drinking water facilities along with the government authorities.

#### **11. OBSERVATIONS :**

The following are the observations based on this study.

- (1) A J Hospital ranks number one in terms of equipment engaged in the procedures, as well as the patient satisfaction.
- (2) Father Muller's Hospital ranks Number two in the procedures and methodologies to be followed by the patient is the best
- (3) KMC Hospital ranks Number three in terms of the number of patients attended taken from the data collected from the respondents.
- (4) Indiana Hospital is at the high end in terms of costs and ranks fourth Similarly
- (5) Mangalore Institute of Oncology ranks fifth among the five known for oncology

#### **12. LIMITATIONS :**

The limitations of the study is the data collected belongs to people of Mangalore, DK only. The respondents are from salaried class and are patients who have got admitted very recently. The patients who came to Mangalore from Kasargod, Kerala were also part of the survey. It was not separated and was considered as one population.

The study does not cover employees or doctors or nurses for any of the hospitals in the study. The second information or secondary data collected which is from multiple websites, journals as well as publications.

#### **13. ABCD ANALYSIS OF THIS STUDY :**

The analysis gives us a cross sectional view in terms of advantages benefits, challenges, and disadvantages in terms of all the five hospitals. A stands for advantages, B is for benefits, C for Challenges and D for Disadvantages.

##### **A-Advantages felt and gained from this study:**

The advantages are in terms of locations and connectivity, which is a key factor for a hospital. The scale and size of the hospital makes a difference. AJ, KMC and Father Muller's have all scaled up with great skills to their staff. These organizations have created a dent in the market. The advantage is their vintage and their existence in the hospital industry for a long period has given them the advantage of learning and advancing.

##### **B-Benefits gained and felt from this study:**

The benefits of all these five hospitals are they are connected to two states: Karnataka and Kerala. The patients of two states keep coming to these hospitals and the benefits can add to the business in terms of teaching hospitals too. Teaching hospitals are helping them to gain an insight into the hospital infra, as students become the ambassador to the brand to which they are connected.

##### **C-Challenges seen through this study:**

The Challenges are critical in terms of cost and margins. The pharmaceutical companies have control on these hospitals to a large extent in terms of making them obligated to sell exclusively their products and can make a difference in terms of creating the most skewed way of services blended towards one pharmaceutical company. This can go a bad way if it is favoured towards organizations who have malicious intentions towards patients and market share.

**D-Disadvantages seen and felt through this study:** The study is only limited to five hospitals and these five hospitals have their own strengths and vintage in terms of their stay in the business. The business is satisfying in terms of making things better for the people of Mangalore. The disadvantages are they are escalating prices in a syndicate method. (Shenoy, V., & Aithal, P. S. 2017) [66].

#### 14. SWOC ANALYSIS :

SWOC stands for strength, weakness, opportunities, and challenges. This helps in understanding the industry in a proper manner. These are listed below as per the observation seen by the researcher in all the five hospitals.

##### **S-Strength:**

The strengths of all the five hospitals are they have good expert doctors. This was created over a period of time and is time tested. The credibility of these hospitals lies in recruiting and paying very high and competitive salaries to these specialty doctors. Doctors form a team and are able to solve any kind of complex and difficult situation that a patient might face. A highly skilled doctor can make a difference in everyone's life. The brand of a hospital is defined by the team of doctors and these doctors create strength to the system and the processes in it.

A Good doctor when well equipped with good machines can make a lot of difference and can create good finance to these hospitals.

##### **W-Weakness:**

Every hospital among the five have challenges in terms of space and location. Though they stay in the central location they have parking problems and security issues. Though these are minor issues, they still can hamper the walk-ins into the hospital. The hospitals that have had a plan in the past have created a new impact on life. The staff and their training is a challenge. When constant resignations happen new teams need to be trained as quickly as possible. New teams need to deliver as quickly as possible so that the same standards are maintained and followed.

##### **O-Opportunities**

Population is increasing and there is tremendous pressure to maintain and increase facilitates keeping the growing population in mind. The population can make a difference in making or breaking a hospital. Hospitals need to equip themselves with greater facilities and make sure that they are functional to the best of their abilities. These opportunities create great business sense and need to be taken in one's stride for making it happen for the greater good of people and business.

##### **C-Challenges**

Natural resources are a challenge and they need to be persevered to make sure they are maintained to the best in terms of sustainability and maintenance. Hospitals need to invest in non-renewable resources to create a sustainable environment by bringing down their expenses in terms of their electricity and hot water requirements. These are especially critical to make things happen in terms of profits. The challenge is the investments required to make it happen.

#### 15. SUGGESTIONS :

The following are the suggestions:

- (1) Bring down the cost of basic treatments.
- (2) Change the attitude of leaning toward Pharmaceutical companies for their wimps and fancies.
- (3) Come out of the lackadaisical attitude of only attending to the rich.
- (4) Have a fair intention, do not misuse the insurance coverage and bill it to the fullest extent.
- (5) Train your staff to have a heart with feelings which are real and make sure that nurses do not steal the medicines from the patients table and bring it back to the pharmacy as reported by many patients
- (6) Apply brains to be told to your staff and try to avoid unnecessary tests which are in no way related to the cause and disease.
- (7) Maintain your equipment properly. Caliber them every month.
- (8) Proper maintenance of AC system, Oxygen systems, Kitchen systems, waste management systems, underground drainage systems, and pipeline systems as well as the CCTV systems are necessary and they are to be checked on regular intervals.
- (9) Fungus in walls, fungus and algae in the common area need to be removed.
- (10) Doctors need to be polite and soft while talking and administering treatments.
- (11) Nurses need to use good language and avoid comments to patients while administering them.

(12) Management Information systems should be updated.

(13) Documentation is a must for every department. Digital storage of documents should be properly protected by anti-virus/ cyber-attacks.

#### 16. FUTURE SCOPE FOR RESEARCH :

There is plenty of scope for research for developing things in the hospital industry. Hospital industry contributes about 80% to the healthcare sector therefore the industry is currently growing CAGR 16-18%. The size of the Indian Hospital industry is about 420,000 as per economic times published on 19<sup>th</sup> Jan 2022. The scope of the industry is tremendous and can contribute great value to the nation. The five hospitals that we have currently seen in this research contribute a lot to the nation in terms of indirect and direct taxes to the exchequer. A great research can be done in terms of opportunities for young doctors who want to make a leap into this industry. The changes that happen can help everyone in the value chain. Research can be done in the areas of expansion and its potential, new medical growth trajectories, new areas of vendors who can add value in terms of supplies to the hospitals. A lot of research is expected to be done in the field of HR related to hospitals, especially the stress area and the women's challenges and their lifestyle. Research in the area of doctors and their challenges can be studied.

#### 17. CONCLUSION :

The best organization among the five in all parameters is **A J Hospital** followed by Father Muller's Hospital and they have done a good amount of contribution in terms of value addition, charity and social sustainable operations. The other three hospitals do score in various other parameters but fail on the social side as they are meant for profit only. They would present themselves as an organization towards charity, but it fails to score the same in the minds of the patients. This challenge creates a hurdle when it comes to reference and add on business.

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## Appendix: 1

### Questionnaire:

This is for an academic study and the information will be kept confidential and will be used for research purposes only. As a research scholar am currently conducting this to learn more about the Hospital Industry and I thank you in advance for taking up this interview.

1. Your Name : .....
2. Age:
3. Gender:
4. E- Mail ID if any.....
5. Mobile Number:.....

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#### 1. You got admitted to which of the following hospitals recently or currently?

- a) KMC Hospital
- b) AJ Hospital
- c) Father Muller Hospital
- d) Indiana hospital
- e) MIO- Hospital

#### 2. What makes you feel the hospital you got admitted is good and why?

- a) Service
- b) Good treatment
- c) Near to your house

- d) Cost is very less or as per your budget
- e) Your family doctor recommended

**3. Do you have any of the following problems**

- a) Heart related problems or High BP
- b) Diabetes, Cancer
- c) Gastro-enteritis
- d) Gynecological
- e) Others

**4. Which hospital has the best of the equipment for various surgeries**

- a) KMC Hospital
- b) AJ Hospital
- c) Father Muller Hospital
- d) Indiana hospital
- e) MIO- Hospital

**5. Which hospital has the best chances of recovery**

- a) KMC Hospital
- b) AJ Hospital
- c) Father Muller Hospital
- d) Indiana hospital
- e) MIO- Hospital

**6. Which hospital has the least chances of recovery**

- a) KMC Hospital
- b) AJ Hospital
- c) Father Muller Hospital
- d) Indiana hospital
- e) MIO- Hospital

**7. Kindly rate your preference on the following paired comparison:**

	Least Preferred (1)						Highly preferred (7)
KMC VS AJ	1	2	3	4	5	6	7
KMC VS FM							
KMC VS INDIANA							
KMC VS MIO							
AJ VS FM							
AJ VS INDIANA							
AJ VS MIO							
FM VS IH							
FM VS MIO							
INDIANA VS MIO							

9. Can you remember your doctor's name after five years? YES/ NO, If yes mention the name.  
Name of the Doctor.....

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