

## WHAT AILS THE HEALTHCARE INDUSTRY IN GUJARAT

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### ABSTRACT

The research paper focuses on the problems and prospects of healthcare industry in Gujarat, which illustrate the issues and problems associated with hospitals, management, employees and patients. Infrastructural facilities, financial issues, service related issues, hygiene and cleanliness issues have been discussed and analyzed at length. Further marketing, finance, human resources and administrative problems have been focused with statistical tests to arrive at conclusion based on sample study.

The findings of the study indicated varied views of respondents regarding problems of the healthcare industry faced by various stake holders. The study is focused by considering major parameters speciality areas of hospitals, computer department facilities, infrastructure facilities, paramedical facilities, education and research facilities, patient's facilities and employee facilities. Healthcare services in private and public hospitals have been compared.

**KEYWORDS:** Healthcare Industry, Paramedical Services, Healthcare Cost, Healthcare Infrastructure, Private Hospital, Public Hospital, Healthcare Services

### INTRODUCTION

At the outset, we go through the concept of hospital. With a change in the time cycle it is natural that we find a change in the concept and perception. Yesterday, the hospitals were considered to be "almshouses" which were endowed for the support and lodging of the poor. These houses were set up as a charity institution to take care of sick and poor. Today, we consider hospital a place for the diagnosis and treatment of human ills, for the education and training and research, for the promotion of healthcare activities and to some extent a centre also helping bio-social research. The document of World Health Organisation (WHO) focuses on the concept of hospital. In the document of WHO it is stated that hospital is an integral part of a social and medical organisation, the function of which is to provide for the population complete healthcare both curative and preventive and whose out-patient services reach out to the family in its home environment; the hospital is also a centre for training of health worker for bio-social research.

A hospital is a facility (building) where medical, surgical, psychiatric, and other treatments are provided. Health care management is the field relating to leadership, management, and administration of hospitals, hospital networks, and health care systems.

A hospital is different from a dispensary – a hospital being primarily an institution where in-patients are received while the main purpose of a dispensary is distribution of medicine and administration of outdoor relief.

Dorland's Illustrated Medical Dictionary defines a hospital as "a institution suitably located, constructed, organized, staffed to supply scientifically, economically, efficiently and unhindered, all or any recognized part of the complex requirements for the prevention, diagnosis and treatment of physical, mental and the medical aspects of social ills; with functioning facilities for training new workers in many special professional, technical and economical fields, essential to the discharge of its

proper functions, and with adequate contacts with physicians, other hospitals, medical schools and all accredited health agencies engaged in the better health programme.”

## **REVIEW OF LITERATURE**

Rygh EM, Hjortdahl P (2007) examined possible ways to improve healthcare services in rural areas. While there is abundant literature on making healthcare programs integrated, interdisciplinary and managed in order to reduce fragmentation and improve continuity and co-ordination of care, only some part of this relates to rural issues. An added challenge is the lack of a generally accepted international definition of reality, which makes it difficult to generalize from one region to another, and to develop an evidence-based understanding of rural health care. In evaluating the literature it was found that the development of new forms of interaction is particularly relevant in rural regions – such as interdisciplinary and team – based work with flexibility of roles and responsibilities, delegation of tasks and cultural adjustment. In addition, programs such as integrated and managed care pathways, outreach programs, shared care and telemedicine were relevant initiatives.

Vipla Chopra (2008) concluded in his article “Health and Healthcare in India – An Analysis” that recently globalization has posed new challenges to already existing inadequate and inefficient healthcare system existing in India. With the decline in the role of the state in health provisions, financing of health services has become one of the limitations. Private hospitals have been mushrooming in recent years and a large number of foreign tourists from developed countries are visiting India in search of quality health care at low price. In 2003, an estimated 1,50,000 foreigners visited India for medical treatment. In order to address some of the challenges of health sector some small portion of the profits of these hospitals may be channeled to create ‘Health Fund’ for providing primary level health facilities for millions of India’s poor.

In the title of “Opportunities and Challenges of Health Tourism in India”, Dindayal Swain & Suprava Sahu (2008) examine that global competition is emerging in the health care industry. Wealthy patients from developing countries have long travelled to developed countries for high quality medical care. A growing number of less affluent patients from developed countries are travelling to regions once characterized as “third world.” These patients are seeking high quality medical care at affordable prices. Reports on the number of patients travelling abroad for health care are scattered, but all tell the same story. An estimated 500,000 Americans travelled abroad for treatment in 2005. A majority travelled to Mexico and other Latin American countries; but Americans were also among the estimated 250,000 foreign patients who sought care in Singapore, the 500,000 in India and as many as 1 million in Thailand.

Global competition is emerging in the health care industry. Wealthy patients from developing countries have long travelled to developed countries for high quality medical care. Now, growing numbers of patients from developed countries are travelling for medical reasons to regions once characterized as “third world.” Many of these “medical tourists” are not wealthy, but are seeking high quality medical care at affordable prices. To meet the demand, entrepreneurs are building technologically advanced facilities outside the United States, using foreign and domestic capital. They are hiring physicians, technicians and nurses trained to American and European standards, and where qualified personnel are not available locally, they are recruiting expatriates.

*Mukta S Adi* (March 2011) “Financing Healthcare in India” conclude at present the services provided by our government are inadequate both in quality and quantity, and hence forces the poor to incur considerable expenditure on private health care which they can ill afford. In future, it is absolutely essential to arrest and reverse these trends. Since India’s level of government health spending is quite low in absolute terms as well as in comparison to some other Asian countries, increasing of the same is inevitable. Improved services of and access to government health facilities will have to continue as a major thrust area of the policy makers. At the same time it is necessary to regulate the expansion of the private sector health care market.

Dr. Patel R. K. (2014), "A comparative study of performance of selected Government Hospitals, Private Hospitals and Trust Hospitals in Gujarat" try to attempt is made to study performance of selected Government Hospitals, Private Hospitals and Trust Hospitals functioning in Gujarat state. Data has been collected through Schedule for Hospitals. Average Doctors to Bed Ratio, Average Nurses to Bed Ratio, Average Paramedical Staff to Bed Ratio, Average Non-Technical Staff and Clerical Staff to Bed Ratio, Average Length of Stay for In Patients, Average Number of Patients Treated in OPD per Day, Average Number of Patients Admitted per Day, Average Number of Patient Discharge per Day, Average Number of Patients attended during Emergency per Day and Average Number of Investigations Conducted per Day have been used as performance indicators of the hospitals. The study revealed that there is no significant difference in the performance of Government Hospitals, Private Hospitals and Trust Hospitals.

### **OBJECTIVES OF THE STUDY**

- a) To examine the present status and problems of healthcare services in Gujarat.
- b) To examine the quality of health services in Gujarat
- c) To identify the motivational and development practices in healthcare sector in Gujarat
- d) To examine the effect of HRD Policies on employees in selected units of Gujarat
- e) To inquire into the problems faced by the patients, their attitudes and reactions on the facilities provided by the selected units.

### **HYPOTHESIS**

Following null hypothesis have been tested in the study to judge population parameters.

- a) **H<sub>0</sub>**: There is no significant difference between healthcare services between private and public sector industry.
- b) **H<sub>0</sub>**: Medical and Paramedical services are not correlated.
- c) **H<sub>0</sub>**: Healthcare services are independent of employee services.

### **SAMPLE DESIGN**

|                         |   |                                                                                                              |
|-------------------------|---|--------------------------------------------------------------------------------------------------------------|
| <b>Coverage</b>         | : | For the present study, healthcare units of Gujarat have been selected as sampling units.                     |
| <b>Sample Size</b>      | : | Large sample size Fifty Hospitals comprises of private, public and semi government organisations of Gujarat. |
| <b>Sampling Method:</b> |   | Simple Random Sampling                                                                                       |

### **SOURCE OF DATA COLLECTION**

**Primary Data** : Through questionnaire and field work  
**Secondary Data** : Published data and websites

### **TOOLS AND TECHNIQUES OF DATA ANALYSIS**

Questionnaire and SPSS Software have been used to collect, analyzed and interpret the data and information to extract the facts.

### **LIMITATIONS OF THE STUDY**

Following are main limitations of the study

1. Availability of reliable primary data.
2. Lack of adequate responses from various stakeholders.

**MAJOR PROBLEMS FACED BY MANAGEMENT**

Management is all about planning, monitoring and control. Effective and efficient management relies on routine data collection, compilation, analysis and estimation of performance indicators at regular intervals, and not on adhoc and un-thoughtful data collection for statutory reporting needs.

**1. Financial Challenges**

Hospitals are the second most energy-intensive buildings after restaurants, and globally, healthcare costs are on the rise. These financial challenges— in addition to an aging world population and increasing energy costs—are putting pressure on healthcare organizations to do more with less without compromising quality of care.

**2. Health Reform Implementation**

Managerial solutions may lie in the areas on organisational changes to respond to client needs, decentralization, granting autonomy, logistics management, resource mobilization through public-private partnership, management information system and so on. Many of these solutions are attempted through Health Sector Reforms in developing countries

Health sector is complex involving several stakeholders, multiple goals, multiple products and different beneficiaries. Health sector reforms have to be carefully designed and implemented. Health System change is political and calls for behavioural changes. Below table is the list of critical areas of management concerns, causes amenable to health sector reforms and relevant reform levers. To address the managerial challenges in delivering quality health services at affordable cost.

Table Areas of Concern and Relevant Reform Levers

| Area of Concern                         | Causes amenable to Reforms                                                                       | Relevant Reform Levers                                                                                      |
|-----------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Non- availability of Staff              | Outdated policies & incentives Structure<br>Role of Paramedics Limited<br>Remote Decision Making | Organisational Change and Policy Reforms<br>Empowerment of Nurses and Paramedical Staff<br>Decentralisation |
| Weak Referral Syatem                    | Lack of Integration<br><br>Ignorance of Referral System                                          | Strengthen Communication and Transport Infrastructure<br>Behavioural Change<br>Health Awareness             |
| Poor Service Delivery                   | Weak logistic Management<br>Underutilisation of Resources                                        | Data based management Planning, Monitoring and Granting Autonomy                                            |
| Funding Shortfalls                      | Absolute Shortfall<br>System is Inefficiencies                                                   | Public-Private Partnerships<br>Increasing Government Health Budgets<br>Organisational Change                |
| Lack of Accountability for Quality Care | Obsession with FP Targets<br>Low Staff Motivation<br>Lack of Transparency                        | Overall Performance of the Health System<br>e-Governance                                                    |

**3. Patients Satisfaction**

The well-being of patients is a key to reducing length of stay and preventing readmissions. According to the American Society for Healthcare Engineering (ASHE), in green hospitals, patients are discharged an average of 2.5 days earlier compared to traditional hospitals. Additionally, patient satisfaction can also affect a hospital's revenue. If the systems are operating poorly or not at all, quality metrics such as Hospital Consumer Assessment of Healthcare Providers and Systems can be adversely affected.

So, how can healthcare organizations deal with these challenges while controlling costs, reducing waste and implementing a sustainability strategy? By utilizing an open and integrated solution that provides the right information to the right user at the right time—such as Schneider Electric's [StruxureWare for Healthcare](#)—healthcare organizations can make more informed decisions about their facilities to meet these challenges head on.

For instance, for a hospital looking to combat rising energy costs and consumption, an intelligent infrastructure can be used as the central tool for monitoring and controlling facility systems. With the installation of meters and sensors, energy information is collected from designated areas of the hospital. Together, intelligent control, management, and analytics improve infrastructure efficiency and allow maintenance to be scheduled to reduce system downtime. In addition, energy procurement and sustainability planning software can help set the facility's energy strategy and add money back to the operating budget.

Another example: let's say someone tries to remove an infant from a hospital ward. In a hospital that utilizes an integrated security system with real-time location system tracking, specific sequences can be implemented to protect against infant abduction. Staff would receive alerts so they can respond according to their standard operating procedures. Alarms would sound; access control systems would lock designated perimeters and internal doors to push the abductor to a staircase, where he or she can be apprehended. Video cameras can scan the area and send live camera feeds to security staff, as well as provide identification for police.

While these are just a few examples of the benefits that fully integrated solutions can provide to address the top challenges, hospitals must also be ready to respond to both expected and unexpected changes, such as possible increased regulatory demands, environmental mandates, and future healthcare innovations.

#### 4. Physician – hospital Relations

As an increasing number of Americans gain insurance coverage, the demand for primary care increases. It is the building block of healthcare reform. Yet not enough medical students are going into primary care, instead choosing more lucrative subspecialties.

Approximately \$13 billion federal dollars are given to 759 medical institutions with residency programs, but 158 of them do not produce any primary care physicians, according to an *Atlantic* article from July 2013.

More than 6,000 regions across the U.S. are designated Health Professional Shortage Areas for their lack of primary care, according to the U.S. Department of Health and Human Services. Each physician in a Health Professional Shortage Area sees 3,500 or more patients.

Yet despite the increasing need for primary care, the health industry may still be able to fend off a full-blown crisis. Recently, there has been more conversation devoted to whether the physician shortage may unfold as predicted.

"The outdated shortage modeling is the assumption of how much an individual physician can treat. As we look at creating a more effective care model, we have seen a substantial increase in the number of patients that a primary care physician can see because they are working in conjunction with primary care coaches," says Rob Lazerow, practice manager of research and insights at the Advisory Board Company.

The shortage model may in fact be outdated — HHS shortage area modeling doesn't account for primary care provided by nurse practitioners or physician assistants in their projections.

"There is absolutely a move toward team-based care. In some cases it is nurse practitioners or community-based providers, [and] even paramedics are conducting in-home visits as part of their weekly shifts," says Mr. Lazerow. "Some have projected shortages there as well. It would not surprise me if supply does not keep up." If he is right, the gap in primary care physicians due to overspecialization can only be partially abated by other healthcare providers.

"One way around a shortage, if you can't increase supply, is to figure out how you can restrict demand. ACO-style models are all about preventing care in the first place. That absolutely could be a strategy. The reality, though, is that it takes time to do that," says Mr. Lazerow. "It's not an overnight solution. The amount of time it takes to prevent someone from needing a surgery is a matter of years." Until medical schools are incentivized to graduate more primary care physicians and ACOs catch up, healthcare reform may need to depend on alternate primary care providers.

## 5. Population Health Management

Population health was one of the biggest ideas in healthcare this past year, and it will likely maintain or gain momentum in the next few years to come. But despite the frequent use of the term in the healthcare bubble, population health is a multidisciplinary concept to be shared between public health agencies, social institutions and policymakers. Hospitals fit in there somewhere. Defining that role is one of the ongoing challenges they will face in 2015.

Hospitals' demand for population health expertise overwhelms the supply. Nearly 60 percent of health system and hospital CEOs ranked population health as the hardest skill set to find within the broader healthcare field. Further, nearly half of executives polled identified community and population health management as a talent gap within their organizations. Some health systems are filling this gap by creating new C-suite positions: 10 percent of executives indicated their health system had a chief population health manager.

Quantifying population health is another challenge. Although healthcare leaders need to think creatively about how to improve the health of a geographic population, they should also maintain a healthy sense of skepticism about population health efforts. What might seem like a much-needed intervention on paper, such as a grocery store in a food desert, may be one small piece of a multipronged solution. There are no silver bullets, after all. Amid excitement for population health, systems may oversimplify problems and overinvest in solutions only to see the same health outcomes.

To find success, hospital leaders may need to diminish their traditional reliance on "programs" and instead focus more on partnerships with community organizations and nonprofits. Some health systems still act as autonomously as they can, ignoring a wealth of expertise and resources.

"When we talk to other population health managers, they have unearthed a number of unique challenges inside their populations, such as domestic violence, elder abuse and other public health crises," says Jason Dinger, PhD, CEO of Mission Point Health Partners in Nashville, the accountable care organization affiliated with Saint Thomas Health. "Unfortunately, most respond by trying to implement their own unique program to respond to the issue. We usually encourage them to first speak with the experts in their community who work on these issues every day. In many cases these are nonprofit organizations that can add great value to the population health effort but often have trouble engaging and integrating with a health system's efforts."

## **MAJOR PROBLEMS FACED BY EMPLOYEES OF HEALTHCARE INDUSTRY**

### 1. Lack of advancement opportunities

Lack of advancement creates morale problems when employees realize they're stuck in a dead-end position. Poor morale manifests itself in a variety of ways, such as abuse of leave policies, underperformance in job positions and a reluctance to embrace changes in the workplace. Because small workforces create fewer open positions, it can be difficult for small business owners to internally promote their workers at a rate fast enough to negate issues that arise because of lack of promotion. Advancement opportunities don't need to be to higher positions within the company.

#### **Poor salary**

There are two main avenues of employment for these compassionate yet strong professional women: Public sector hospitals or the multitude of private outfits that have mushroomed across cities and small towns. A comparison of the working conditions in these two sectors can easily be made on the twin scales of remuneration and basic work environment.

Take an average government hospital. The implementation of the Sixth Pay Commission recommendations has reportedly brought in some positive changes in the lives of nurses here - they get a fairly good pay packet and, at times, even their working conditions have been described as "better". Yet, a poor nurse-patient ratio makes the work "back-breaking".

The private sector, though, is a different story altogether. Exploitation marks the experiences of nurses here. Critical areas of neglect and mismanagement exist and rules are often flouted to make higher profits. It's the lower level staff and nurses who mainly bear the brunt of this because it is their salaries that get compromised and not that of the specialist physicians, whose power and mobility can't be controlled by hospital managements.

### **MAJOR PROBLEMS FACES BY PATIENTS IN HOSPITALS**

Coupled with shortages in staff and resources, overuse of the central hospitals has caused the already limited resources to be stretched thin and has been blamed as the main 11 constraint towards extending healthcare accessibility to the majority of the population. This has negatively impacted on the quality of the patient care offered particularly in the following:

- (1) Inpatient wards are overcrowded, with patients who sleep on the floor accounting for almost one-third of the total patient population,
- (2) Patients frequently wait for hours outside the outpatient clinics to see a provider,
- (3) The amount of time spent with clinicians has been steadily reduced in order to accommodate all patients,
- (4) The drug supply is usually running very low, and the medical equipment is frequently not functional.

These underlying factors have made it extremely difficult for hospital managers at all levels to manage. The managers identify with their sense of powerlessness and helplessness to address the problems and also recognize the need for drastic actions. In view of the above reasons, primary health care provided at central hospitals has become a very costly exercise for government.

| No. | Name of the District | Run by Government                  | Run by Private                                                                       | Run by Charitable Trust                                                          |
|-----|----------------------|------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| 1   | Ahmedabad            | Civil Hospital                     | Parekhs Hospital<br>Nirmay Hospital Pvt. Ltd.<br>Siddhi Vinayak Hospital             | Nidhi Hospital<br>Kakadiya Hospital                                              |
| 2   | Amreli               |                                    |                                                                                      | Astha Hospital                                                                   |
| 3   | Anand                |                                    |                                                                                      | Cambay General Hospital<br>Shree Krishna Hospital<br>Emery Hospital              |
| 4   | Bharuch              |                                    | Jambusar General Hospital                                                            | Kakaba Hospital                                                                  |
| 5   | Bhavnagar            | Sir Takhtasinhji General Hospital  | Hanumanat Hospital                                                                   |                                                                                  |
| 6   | Gandhinagar          | Civil Hospital                     |                                                                                      | Goenka Hospital                                                                  |
| 7   | Jamnagar             | Guru Gobindsing Hospital           |                                                                                      |                                                                                  |
| 8   | Junagadh             |                                    |                                                                                      | Trimurti Hospital                                                                |
| 9   | Kheda                |                                    | Amees Multispeciality Hospital                                                       | Mahagujarat Medical Society<br>KMG General Hospital                              |
| 10  | Kutch                |                                    | AIMS Hospital                                                                        | Kusumben Kantilal Dedhia Hospital                                                |
| 11  | Mehsana              |                                    |                                                                                      | Jyoti Hospital<br>Lions General Hospital<br>Nootan Hospital                      |
| 12  | Navsari              |                                    |                                                                                      | Yashfee Hospital<br>KDN Gohil Hospital<br>D. N. Mehta Hospital                   |
| 13  | Patan                |                                    |                                                                                      | Patan Janta Hospital                                                             |
| 14  | Rajkot               | Pandit Deendayal Upadhyay Hospital |                                                                                      | H J Doshi Hospital                                                               |
| 15  | Sabarkantha          |                                    | Medistar Hospital                                                                    | Bhagyoday Hospital                                                               |
| 16  | Surat                | New Civil Hospital                 | Nirmal Hospital Pvt. Ltd.<br>Tristar Hospital<br>Anand Hospital<br>Ashutosh Hospital | Mahavir Hospital<br>Shri Sardar Smarak Hospital<br>Dinbandhu Charitable Hospital |
| 17  | Vadodara             | Sir Sayajirao General Hospital     | Metro Hospital & Research Institute<br>Spandan Multispecialty Hospital               | Parul Sevashram Hospital                                                         |
| 18  | Valsad               | GMERS Hospital                     | Lotus Hospital                                                                       | Pardi Hospital                                                                   |
| 19  | Vapi                 |                                    | Aayush Hospital                                                                      |                                                                                  |

There are 33 districts in Gujarat out of which 19 districts selected for the research purpose. The study considers only 8 Government, 16 Private and 26 Charitable Trust Hospitals where taken from the different places of Gujarat State.



**Result**

**Table 1 Test of Homogeneity of Variances**

| Test of Homogeneity of Variances |                  |     |     |      |
|----------------------------------|------------------|-----|-----|------|
|                                  | Levene Statistic | df1 | df2 | Sig. |
| Specialty Area                   | .526             | 2   | 47  | .594 |
| Computer Department              | .620             | 2   | 47  | .542 |
| Infrastructure Facility          | 19.787           | 2   | 47  | .000 |
| Paramedical Facility             | 5.618            | 2   | 47  | .006 |
| Education and Research Facility  | 2.231            | 2   | 47  | .119 |
| Patient Facility                 | 1.404            | 2   | 47  | .256 |
| Employee Facility                | .728             | 2   | 47  | .488 |

**Table 2 ANOVA**

| ANOVA                           |                | Sum of Squares | df | Mean Square | F      | Sig. |
|---------------------------------|----------------|----------------|----|-------------|--------|------|
| Speciality Area                 | Between Groups | 39.982         | 2  | 19.991      | 1.702  | .193 |
|                                 | Within Groups  | 551.938        | 47 | 11.743      |        |      |
|                                 | Total          | 591.920        | 49 |             |        |      |
| Computer Department             | Between Groups | 102.927        | 2  | 51.464      | 17.271 | .000 |
|                                 | Within Groups  | 140.053        | 47 | 2.980       |        |      |
|                                 | Total          | 242.980        | 49 |             |        |      |
| Infrastructure Facility         | Between Groups | 19568492.692   | 2  | 9784246.346 | 23.653 | .000 |
|                                 | Within Groups  | 19441762.510   | 47 | 413654.521  |        |      |
|                                 | Total          | 39010255.202   | 49 |             |        |      |
| Paramedical Facility            | Between Groups | 365.298        | 2  | 182.649     | 10.523 | .000 |
|                                 | Within Groups  | 815.822        | 47 | 17.358      |        |      |
|                                 | Total          | 1181.120       | 49 |             |        |      |
| Education and Research Facility | Between Groups | 51.654         | 2  | 25.827      | 30.360 | .000 |
|                                 | Within Groups  | 39.982         | 47 | .851        |        |      |
|                                 | Total          | 91.636         | 49 |             |        |      |
| Patient Facility                | Between Groups | 4.413          | 2  | 2.207       | 5.295  | .008 |
|                                 | Within Groups  | 19.587         | 47 | .417        |        |      |
|                                 | Total          | 24.000         | 49 |             |        |      |
| Employee Facility               | Between Groups | 2023.596       | 2  | 1011.798    | 14.708 | .000 |
|                                 | Within Groups  | 3233.284       | 47 | 68.793      |        |      |
|                                 | Total          | 5256.880       | 49 |             |        |      |

H<sub>0</sub>: There is no significant difference between healthcare services between private and public sector industry.

Here we have taken the type of facilities as dependent variables and types of hospitals as factor.

The results of ANOVA test shows that in specialty area there is significant difference between healthcare services between private and public sector industry.

Here the Hypothesis accepts as p value > 0.193

Other then these all facilities have significance difference.

**Table 3 CORRELATIONS**

| <b>Correlations</b>  |                     |                  |                      |
|----------------------|---------------------|------------------|----------------------|
|                      |                     | Medical Facility | Paramedical Facility |
| Medical Facility     | Pearson Correlation | 1                | .475**               |
|                      | Sig. (2-tailed)     |                  | .000                 |
|                      | N                   | 50               | 50                   |
| Paramedical Facility | Pearson Correlation | .475**           | 1                    |
|                      | Sig. (2-tailed)     | .000             |                      |
|                      | N                   | 50               | 50                   |

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Ho : Medical services and paramedical services are not correlated.  
 Here the significance value is <0.05. Thus as both the services are not correlated with each other.

**Table 4 Chi-Square**

| <b>Test Statistics</b> |             |                      |                           |                       |                      |                       |
|------------------------|-------------|----------------------|---------------------------|-----------------------|----------------------|-----------------------|
| Type of Hospital       |             | Level of Work        | Opportunities at Hospital | Relations with Staff  | Recognition          | Opportunities at Work |
| Government             | Chi-Square  | 246.350 <sup>a</sup> | 290.713 <sup>b</sup>      | 296.450 <sup>b</sup>  | 46.225 <sup>c</sup>  | 46.225 <sup>c</sup>   |
|                        | df          | 26                   | 2                         | 2                     | 1                    | 1                     |
|                        | Asymp. Sig. | .000                 | .000                      | .000                  | .000                 | .000                  |
| Private                | Chi-Square  | 509.245 <sup>d</sup> | 1066.564 <sup>e</sup>     | 833.514 <sup>f</sup>  | 352.332 <sup>g</sup> | 352.332 <sup>g</sup>  |
|                        | df          | 29                   | 4                         | 3                     | 2                    | 2                     |
|                        | Asymp. Sig. | .000                 | .000                      | .000                  | .000                 | .000                  |
| Charitable Trust       | Chi-Square  | 950.324 <sup>h</sup> | 2884.067 <sup>i</sup>     | 2104.846 <sup>j</sup> | 564.566 <sup>k</sup> | 564.566 <sup>k</sup>  |
|                        | df          | 31                   | 7                         | 5                     | 3                    | 3                     |
|                        | Asymp. Sig. | .000                 | .000                      | .000                  | .000                 | .000                  |

Ho : Healthcare services are independent of employee services.

| Hypothesis                                                                   | Accepted / Rejected | Test value               |
|------------------------------------------------------------------------------|---------------------|--------------------------|
| Health care services in govt sector are independent of employee services     | Accepted            | Asymp. Sig. value < 0.05 |
| Healthcare services in pvt sector are independent of employee services       | Accepted            | Asymp. Sig. value < 0.05 |
| Healthcare services in charitable trust are independent of employee services | Accepted            | Asymp. Sig. value < 0.05 |

## **FINDINGS OF THE STUDY**

1. Gujarat is highly industrialised developed state with GDP of 11% against the GDP of nation 7%. It has comparatively better infrastructure facilities including of healthcare industry.
2. Public sector and private sector renders healthcare services to the people by offering medical, paramedical and other such services through allopath, Ayurvedic, Homeopathy, UNANI and other methods.
3. Majority of the hospitals provide the services of Anaesthesia, Obstetrics Gynaecology, and Ortho while less services of Medicine, ENT, Otolaryngology, Dental, Rheumatology and Neonatology given in Gujarat. So for the betterment of society other service also should be more focused.
4. Majority of the problems are found in the hospitals/ healthcare institutions are lack of awareness among the society, health insurance, limited health benefits to employees and increasing cost of medical services are found in majority of the hospitals.
5. The management should give the chance to the new comers and those who want to work for the society so that they can prove themselves and they develop their skills. In the area of improving the scenario of health and doing new researches they should be given chance.
6. In the government hospitals the treatment charges are low but in the private and some charitable trust hospitals the consultancy charges, different tests charges, fees of wards, etc are high so that the middle class and BPL (Below Poverty Line) people cannot afford.
7. Majority of the hospitals provide the services of Anaesthesia, Obstetrics Gynaecology, and Ortho while less services of Medicine, ENT, Otolaryngology, Dental, Rheumatology and Neonatology given in Gujarat. So for the betterment of society other service also should be more focused.

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