EXECUTIVE SUMMARY

The quality of service from a hospital is the number one factor that will either turn a customer/patient away or make one for life. More and more hospitals are competing for greater shares in the market and customer-driven quality management is becoming the preferred method for improving their performance. Vydehi Hospital is a private hospital in Bangalore. It is a 1000-bed multi-specialty hospital that offers private medical services to the public. With the introduction of more patients came higher expectations of quality and higher demands on the overall services. An English version of the questionnaire based on SERVQUAL was developed and placed in Vydehi hospital to test these service quality shortfalls.

This study intends to evaluate these areas by answering questions about the relevant areas of service provided by the hospital. It measured patient satisfaction by looking at human aspects of service (responsiveness, reliability, empathy and assurance) with only one factor of the instrument being devoted to the non-human aspect of care rendered (tangibles). The SERVQUAL instrument has five dimensions that were measured by 20 items statements. Every statement reflects perceptions of the patients. Measurement was accomplished by rating perceptions resulting in a service quality score. Positive or zero scores would reflect ideal or adequate service quality offered by the hospital. A negative score would be indicative of a service experience that did not meet customer expectations. Using the SERVQUAL questionnaire provided, quantifiable reasoning to the research questions in each dimension could be obtained so that precision, objectivity and rigour replaced hunches, experience and intuition as a means of investigating problem areas.

Customers were first asked to supply some additional demographic information, for example gender, number of hospital visits, and type of visit (inpatient, outpatient or both).

They were then asked to rate the hospital service on a 7-point Likert scale ranging from Strongly Agree (7) to Strongly Disagree (1). At the end of the questionnaire was space to write open comments.

In total 200 paper questionnaires were distributed in the hospital, all the questionnaires could be statistically analyzed. The empirical data results showed that the perception scores were significant. This indicated that patients were satisfied in all five dimensions of services offered by the hospital. Of the five dimensions responsiveness and empathy had the largest satisfaction with assurance and reliability following with no significant differences between them.

The demographic information revealed some interesting differences between the groups. Of all the demographic groups the most significant differences were between groups, and "types of visit", which showed differences between patients who used the hospital only as an outpatient and patients who used both services, outpatient and inpatient.

In terms of the managerial implications. A process model for continuous measurement and improvement of service quality was recommended that looks as asking questions about how the hospital is performing. By adopting some of the recommendations identified in the research questions, Vydehi hospital could improve their quality of service, and as a consequence, their customer satisfaction and loyalty.

"If we don't take care of our customers, someone else will."

- Unknown

TABLE OF CONTENTS

| Particulars | Page No |
|--|----------|
| CHAPTER 1: INTRODUCTION | |
| 1.1 WHAT IS A SERVICE? | 3 |
| 1.2 Characteristics of service | 4 |
| 1.2.1 Intangibility | 4 |
| 1.2.2 Inseparability | 5 |
| 1.2.3 Variability | 6 |
| 1.2.4 Perishability | 6 |
| 1.3 Challenges for service marketing | 7 |
| 1.4 Understanding service quality | 9 |
| 1.4.1 Dimensions of service quality | 9 |
| 1.4.2 Sources of customer expectation | 12 |
| 1.4.2.1 Word of mouth | 12 |
| 1.4.2.2 Personal needs | 12 |
| 1.4.2.3 Past experiences | 13 |
| 1.4.2.4 External communications | 13 |
| 1.4.3 Gap in service quality | 14 |
| 1.4.4 Measuring service quality | 17 |
| 1.4.5 Criticism of service quality | 18 |
| 1.4.6 SERVQUAL | 19 |
| 1.4.7 SERVQUAL in health care | 21 |
| 1.4.8 Measuring SERVQUAL in health care | 23 |
| 1.5 Health care services in India | 25 |
| 1.5.1 Policy & strategic direction of health care services | 25 |
| 1.5.2 Public & Private healthcare in India | 25 26 |
| 1.5.3 Healthcare services in Bangalore | 27 |
| 1.5.5 Treatmente services in Bungarore | 2, |
| CHAPTER 2: RESEARCH DESIGN | 28 |
| 2.1 Statement of the problem | 29 |
| 2.2 Need for the study | 29 |
| 2.3 Objectives of the study | 29 |
| 2.4 Scope of the study | 30 |
| 2.5 Research Methodology | 30 |
| 2.6. Sampling design and data collection | 30 |
| 2.6.1 Sampling Technique | 30 |

| | 1.6.2 Sample size | 31 |
|-----------|---|--|
| | 1.6.3 Sample description | 31 |
| | 2.7 Instrumentation technique2.8 Plan of analysis2.9 Limitations of the study2.10 Chapter scheme | 31 31 31 32 |
| CHAPTER3 | : ORGANIZATION 3.1 Organization chart 3.1 Vydehi Hospital History 3.3 Departments in organization | 33 36 37 37 |
| CHAPTER 4 | 4.1 Description of samples 4.2 Descriptive statement of demographic variable 4.3 Data analysis 4.4 Tangibility 4.5 Reliability 4.6 Responsiveness 4.7 Assurance 4.8 Empathy | 45 46 48 53 54 58 62 64 66 |
| CHAPTER5 | SUMMARY OF FINDINGS & CONCLUSION 5.1 Generalized finding 5.2 Summary of finding 5.3 Strength of organization 5.4 weakness of organization 5.5 Suggestion 5.6 Conclusion | 68 69 70 71 72 72 73 |
| BIBLIOGRA | APHY | 75 |
| , - | E estionnaire ients comments | 77 78 |

LIST OF TABLES

| Index | Particulars | Page No. | |
|-------------|----------------------------------|----------|--|
| | | | |
| 4.1 | Gender | 48 | |
| 4.2 | Regional | 49 | |
| 4.3 | Number of visits | 50 | |
| 4.4 | Types of visit | 51 | |
| 4.5 | Cleanliness & Hygiene | 52 | |
| 4.6 | Visitors parking available | 53 | |
| 4.7 | Personnel appearance | 54 | |
| 4.8 | Pleasant employees | 55 | |
| 4.9 | Updated equipments | 56 | |
| 4.10 | Prompt services | 57 | |
| 4.11 & 4.12 | Accurate reports | 58 | |
| 4.13 | Adequate information | 60 | |
| 4.14 | Patient feel confident | 61 | |
| 4.15 | Effective Administration staff | 62 | |
| 4.16 | Experienced personnel | 63 | |
| 4.17 | Patients are respected | 64 | |
| 4.18 | Employees are caring | 65 | |
| 4.19 | Individualized Medical attention | 66 | |
| 4.20 | Understanding of discomfort | 67 | |
| 5.1 | Generalized findings | 69 | |

LIST OF GRAPHS

| Index | Particulars | Page No. |
|-------------|----------------------------------|----------|
| | | |
| 4.1 | Gender | 48 |
| 4.2 | Regional | 49 |
| 4.3 | Number of visits | 50 |
| 4.4 | Types of visit | 51 |
| 4.5 | Cleanliness & Hygiene | 52 |
| 4.6 | Visitors parking available | 53 |
| 4.7 | Personnel appearance | 54 |
| 4.8 | Pleasant employees | 55 |
| 4.9 | Updated equipments | 56 |
| 4.10 | Prompt services | 57 |
| 4.11 & 4.12 | Accurate reports | 58 |
| 4.13 | Adequate information | 60 |
| 4.14 | Patient feel confident | 61 |
| 4.15 | Effective Administration staff | 62 |
| 4.16 | Experienced personnel | 63 |
| 4.17 | Patients are respected | 64 |
| 4.18 | Employees are caring | 65 |
| 4.19 | Individualized Medical attention | 66 |
| 4.20 | Understanding of discomfort | 67 |
| 5.1 | Generalized findings | 69 |
| L | <u>U</u> | |

LIST OF CHART

| Figure 1.1: Degrees of Intangibility | 05 |
|--|----|
| Figure 1.2: Correspondence between SERVQUAL Dimensions | 10 |
| Figure 1.3: Customer's perceived service quality | 11 |
| Figure 1.4: Adapted Service Quality Gap Model | 15 |
| Figure 3.1: Organization Chart of Vydehi Institute Of Medical Sciences and Research Centre | 36 |

CHAPTER 1

INTRODUCTION

People today have taken a new approach to healthcare services — they are informed, suspicious, and eager to take responsibility for their own care. In this era of information, consumers of healthcare have exceptionally high expectations. "If we are sick we go to the doctor and expect him to fix it. If he can't, we expect him to send us to a specialist who can. And we want the full range of medical services available to us regardless of our ability to pay." Thus, the post-modern hospital is a far different place as a result of the constant change in the needs and expectations of patients. Driven by economic necessity and technologic advances, the patient demands a higher level of accuracy, reliability and overall better service than in the past. Because of the Internet patients are well informed and research solutions to their health care problems. Due to this new paradigm in healthcare, hospital administrations need to be skilled practitioners in marketing and business planning. These skills can assist managers in increasing volume, controlling costs, and increasing profit. Managers with these skills can improve healthcare standards and add long term value because they know how to provide superior service and develop innovative strategies.

Quoting from his book entitled, *Hospital-Wide Quality Assurance*, Christopher Wilson highlights what is mentioned above. "Thus society, and we are society, says:

"Before we give you our money, our trust, our bodies, our children, answer these questions: how do you know how good is the service you are offering? What evidence do you have that you can show us and which convinces you that your care, administration, service, teaching are what you say they are, and what we want to receive?"

Understanding customer perceptions in any industry is the lifeblood for understanding what you are doing right and what you are doing wrong. Because customers compare their perceptions of something with reference points when evaluating a product or a service, thorough knowledge about customer expectations is critical to businesses and should function as standards or reference points against which performance is judged. Knowing what the customer expects is the first and possibly most critical step in delivering quality products or services (Zeithaml and Bitner, 2003:60). Measuring the beliefs or perceptions of the customer will create tangible reference points to work.

Thus the purpose of this research is to find from descriptive data, received using Parasuraman, SERVQUAL model, the standard of service quality offered by a private hospital in Bangalore.

1.1 WHAT IS A SERVICE?

A service is not something that is built in a factory, shipped to a store, put on a shelf, and then taken home by a customer. A service is a dynamic living process. A service is something that is executed on behalf of, and often with the involvement of, the customer. A service is performed. A service rendered. A service is motion and activity -- not pieces or parts. The "raw materials" of a service are time and process -- not plastic or steel. A service cannot be stored or shipped -- only the means for creating it can. A service cannot be held in one's hand or physically possessed. In short, a service is not a thing but an intangible aspect of customers'.

Many definitions of service are available but all contain a common theme of intangibility and simultaneous consumption. Put in the simplest terms, services are deeds, processes, and performances. The core of a service is that part of the service we think of when we name the service; examples would be the way dinner is served at a nice restaurant or the legal advice obtained from an attorney. The relationship aspect of a service describes the interpersonal

process by which the service is delivered and is thought to be especially important in customer interactions with professional service providers.

The growing importance of the role that services play in both the economy as a whole and organizations in particular cannot be over-estimated. This encompasses not only "pure" service industries as such, but companies selling physical goods where the element of service in their offering is increasingly one of the few sources of competitive differentiation. And while a focus on the customer underpins the marketing of both physical goods and services, it's critical to understand the limitations of traditional marketing when it comes to developing the most effective tools and techniques for services marketing.

1.2 Characteristics of Services

The service environment is sufficiently unique to allow us to question the direct application of traditional manufacturing-based techniques to services without some modification. Ignoring the differences between manufacturing and service requirements will lead to failure, but more importantly, recognition of the special features of services will provide insights for enlightened and innovative management. The distinctive characteristics of a service that set it apart from physical goods are: Intangibility, inseparability, variability (heterogeneity), and perishability (Kotler, *et al.* 2002:12).

1.2.1 Intangibility

Intangibility is obviously not an absolute term. It would be difficult to think of any service that was purely intangible and had no tangible elements associated with it.

Most services, as with most goods, can be viewed as a mix of tangible and intangible offerings to the buyer. Even within the professional service context (Figure 1.1) one can view varying degrees of intangibility both between professions and within the service offerings of one

profession. We can therefore view intangibility as a relative continuum in the professional service context.

Intangibility presents several marketing challenges. Services cannot be inventoried, and therefore fluctuations in demand are often difficult to manage. Services cannot be easily patented, and new service concepts can therefore easily be copied by competitors. Services cannot be readily displayed or easily communicated to customers, so quality may be difficult for consumers to assess.

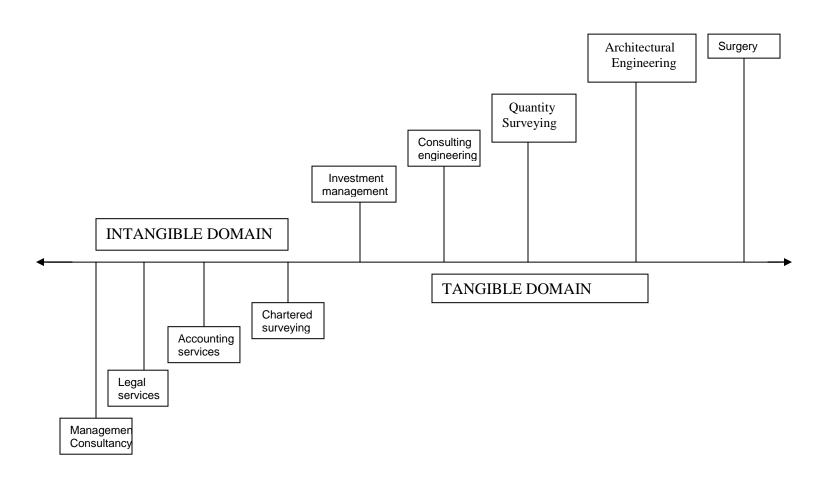


Figure 1.1: Degrees of Intangibility (Morgan, 1991:9)

1.2.2 Inseparability

Because the service cannot be separated from the service provider, how that individual is perceived – his or her professionalism, appearance, and demeanor – will all be used in judging the quality of the service firm. This inseparability carries over to those individuals who answer the phones for the organization or occupy the receptionist's desk. They often provide the first impressions prospective clients get of the service organization (Kotler, *et al.*, 2002:12). Because services often are produced and consumed at the same time, mass production is difficult if not impossible. The quality of service and consumer satisfaction will be highly dependent on what happens in "real time," including actions of employees and the interactions between employees and customers.

1.2.3 Variability (Heterogeneity)

Services, because they are performed and always involve a human element even if only on the part of the user, cannot be standardized in the way that goods can. A service is always subject to some variation in performance and developing realistic standards of performance is extremely difficult. Because services are heterogeneous across time, organizations, and people, ensuring consistent service quality is challenging.

Quality actually depends on many factors that cannot be fully controlled by the service supplier, such as the ability of the consumer to articulate his or her needs, the ability and willingness of personnel to satisfy those needs, the presence (or absence) of other customers, and the level of demand for the service. Because of these complicating factors, the service manager cannot always know for sure that the service is being delivered in a manner consistent with what was originally planned and promoted.

1.2.4 Perishability

Perishability of services means that they cannot be stored for later sale or use (Kotler, *et al.*, 2002:13). If a service is not used when available then the service capacity is wasted. For example, an empty seat on a particular flight from South Africa to Dubai cannot be sold to a passenger leaving on a later flight to Dubai. This characteristic of the service delivery process can cause severe problems if the demand for services (emergency room in a hospital) is not uniformly distributed over time. Strong demand fluctuations require excess capacity and careful planning at the level of the service provider. The fact that services cannot typically be returned or resold also implies a need for strong recovery strategies when things do go wrong.

1.3 CHALLENGES FOR SERVICE MARKETERS

The 11 questions below exemplify the challenges that face service marketers because of the basic differences between goods and services. These challenges revolve around: understanding customer needs and expectations for service, making the service offering tangible, dealing with myriad people and delivery issues, and keeping promises made to customers.

Question 1: How can service quality be defined and improved when the product is tangible and nonstandardized?

Question 2: How can new services be designed and tested effectively when the service is essentially an intangible process?

Question 3: How can the firm be certain it is communicating a consistent and relevant image when so many elements of the marketing mix communicate to customers and some of these elements are the service providers themselves?

Question 4: How does the firm accommodate fluctuating demand when capacity is fixed and service itself is perishable?

Question 5: How can the firm best motivate and select service employees who, because the service is delivered in real time, become a critical part of the product itself?

Question 6: How should prices be set when it is difficult to determine actual costs of production and price may be inextricably intertwined with perceptions of quality?

Question 7: How should the firm be organized so that good strategic and tactical decisions are made when a decision in any of the functional areas of marketing, operations, and human resources may have significant impact on the other two areas?

Question 8: How can the balance between standardization and personalization are determined to maximize both the efficiency of the organization and the satisfaction of its customers?

Question 9: How can the organization protect new service concepts from competitors when service processes cannot be patented?

Question 10: How does the firm communicate quality and value to consumers when the offering is intangible and cannot be readily tried or displayed?

Question 11: How can the organization ensure the delivery of consistent quality service when both the organization's employees and the customers themselves can affect the service outcome?

Competing organizations provide the same types of service – airline transportation; taxi services, hospital and outpatient services – but they do not provide the same quality of service.

There are many aspects that could affect the service delivered. There are therefore many facets for marketers to consider in order to maintain the competitive edge over other companies. No one knows this better than customers. To customers, competing service enterprises may look alike, but they do not feel alike. In fact, service quality has become the great differentiator, the most powerful competitive weapon most service organizations possess.

This highlights the fundamental core of the research in this dissertation - service quality – the differentiator between "average" and "wow" service delivery. This study will attempt to identify: what service quality is? what causes service-quality problems in hospitals, how service organizations can recognize service-quality problems and what service organizations can do to improve quality shortfalls to meet the customer expectations.

1.4 UNDERSTANDING SERVICE QUALITY

Service quality is the foundation for services marketing because the core product being marketed is a performance. The performance is the product; the performance is what customers buy. A stronger service gives companies the opportunity to compete for customers; a strong performance of the service builds competitiveness by earning customers' confidence and reinforcing branding, advertising, selling and pricing (Berry and Parasuraman, 1991:5). Parasuraman, *et al.*, (1988) found that the customer's perception of quality is not a unidimensional concept. They identified five dimensions that a client considers in his or her assessment of service quality. Descriptive

1.4.1 Dimensions of Service Quality

Exploratory research by Parasuraman, Zeithaml, and Berry (1985) revealed that the criteria used by consumers in assessing service quality fit 10 potentially overlapping dimensions. These dimensions were tangibility, reliability, responsiveness, communication, credibility, security, competence, courtesy, understanding/knowing the customer, and access. These 10 dimensions and their descriptions served as the basic structure of the service-quality domain from which five items was derived for the current SERVQUAL scale.

Various statistical analyses conducted in constructing SERVQUAL, revealed considerable correlation among items representing several of the original ten dimensions. In particular, the correlations suggested consolidation of the last seven dimensions into two broader dimensions labeled assurance and empathy (see Figure 1.2). The remaining dimensions – tangibles, reliability, and responsiveness – remained intact throughout the scale development and refinement process (Zeithaml, *et al.*, 1990:25).

Figure 1.2: Correspondence between SERVQUAL Dimensions and Original Ten

| | r | | | | I |
|---------------------|-----------|-------------|----------------|-----------|---------|
| Original Dimension | | | | | |
| for Evaluating serv | Tangibles | Reliability | Responsiveness | Assurance | Empathy |
| quality | | | | | |
| • | | | | | |
| Tangible | | | | | |
| | | | | | |
| Reliability | | | | | |
| Responsiveness | | | | | |
| F | | | | | |
| Competence | | | | | |
| Courtesy | | | | | |
| Credibility | | | | | |
| | | | | | |
| Security | | | | - | |
| Access | | | | _ | |
| Communications | | | | - | |
| Understanding the | | | | - | |
| customer | | | | - | |

Dimensions for Evaluating Service Quality (Zeithaml, et al., 1990:25)

Parasuraman, *et al.*, (1998) identified these five principle dimensions that customers use to judge service quality, which are listed and defined below in order of declining relative importance to customers.

- i) *Reliability*: The ability to perform the promised service both dependably and accurately. Reliable service performance is a customer expectation and means that the service is accomplished on time, in the same manner, and without errors every time.
- ii) *Responsiveness*: The willingness to help customers and to provide prompt service. Keeping customers waiting, particularly for no apparent reason, creates unnecessary negative perceptions of quality. If a service failure occurs, the ability to recover quickly and with professionalism can create very positive perceptions of quality.
- iii) *Assurance*: The knowledge and courtesy of employees as well as their ability to convey trust and confidence. The assurance dimension includes the following features:

Competence to perform the service, politeness and respect for the customer, effective Communication with the customer, and the general attitude that the server has the customer's best interests at heart.

- iv) *Empathy*: The provision of caring, individualized attention to customers. Empathy includes the following features: approachability, sensitivity, and effort to understand the customer's needs.
- v) *Tangibles*: The appearance of physical facilities, equipment, personnel, and communication materials. The condition of the physical surroundings (e.g. cleanliness & hygiene) is tangible evidence of the care and attention to detail that are exhibited by the service provider. This assessment dimension also can extend to the conduct of other customers in the service (e.g. a noisy guest in the next room at a hotel). From Parasuraman, *et al.*, (1998) marketing researchers use these five dimensions to form an assessment of service quality, based on the comparison between expected and perceived service. The difference between expected and perceived service is the measure of service quality.

Figure 1.3 illustrates this but also shows that customer expectation of a given service is formed or influenced as a result of many factors, word of mouth, personal needs, past experiences and external communication.

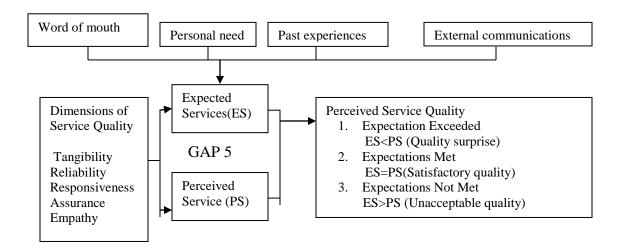


Figure 1.3: Customer's perceived service quality (Fitzsimmons and Fitzsimmons, 2001:44)

1.4.2 Sources of Customer Expectations

Given the importance of understanding customer expectations in order to deliver service quality, it is also clearly important to understand how such expectations might be formed. Finding out what customers expect is essential to providing service quality (Zeithaml and Bitner, 1996:4).

1.4.2.1 Word of Mouth Communication

Customers will have their expectations shaped, in part by word-of-mouth communications about the service provider. Effectively, this relates to communication from sources other than the service provider itself. Friends, family, colleagues are obvious sources in this context.

Equally, the media may be a source of such communication as may other organizations such as inspection and audit agencies and central government. An important question for a service is: do you know what others are saying about your service? (Accounts commission for India,

1999:10). While a professional service provider cannot directly control what one client tells another, he or she can influence it (Kotler, *et al.*, 2002:45). For example, if an optometrist gains a new patient as a result of a personal reference from an existing customer, the optometrist can send the referring customer a note of thanks, thereby encouraging such positive word of mouth.

1.4.2.2 Personal Needs

Any customer will have what they regard as a set of key personal needs which they expect the service to address. Clearly these will vary from service to service and importantly – from customer to customer. An inadequate understanding by the service of these personal needs will make it difficult to design an appropriate service (Accounts Commission for Scotland, 1999:10). Professional service providers must be aware of personal needs and desires of their clients. Client expectations can shift as a result of the circumstances surrounding the need (Kotler, *et al.*, 2002:45). For example, the parent of a sick child having symptoms of flu who brings that child to the doctor's office may be willing to wait a reasonable time, say 20 minutes, especially if there were other children with the same condition crowding the doctor's waiting room. On the other hand, if that same parent's child fell off a swing and cut his head and had serious bleeding, the parent would expect immediate attention.

1.4.2.3 Past Experiences

Some customers – many for some services – will be "repeat" customers in the sense that they have used the service before. Their previous experience as a customer will, in part, influence their expectations of future service. One customer, for example, may have low expectations because of previous poor service. Another may have high expectations because the service quality last time was high. However, customers may also use their previous experience of other organizations in this context. Another factor that would be influenced by past experience is perceived service alternatives. The more competitors a professional service provider has and the more clients are aware of their existence, the greater the expectations of quality service. Clients are not likely to put up with poor service when they can get better attention across the street (Kotler, *et al.*, 2002:45).

1.4.2.4 External Communication

This influencing factor can be divided into two sub-categories: Explicit external communication and implicit external communication.

Explicit Communication – relates to statements about the service made by the service itself. Such statements may come from service staff or from the service in form of leaflets, publicity and marketing material (Accounts Commission for India, 1999:10). The clients' expectations will obviously be affected by what they are told they can expect (Kotler, *et al.*, 2002:44).

Implicit Communication — Because services are intangible, clients will look for some other clues as to the potential quality of the service. They look at the physical evidence provided by the professional service provider and the price they will be charged for services. An office furnished with Persian rugs, etched glass, and fine art may communicate that a professional service provider is successful, and also expensive. Because there is an implied price-quality relationship, a higher price implies a higher quality. Thus, clients who are willing to pay higher fees do so because they expect a greater amount of attention and a more positive outcome (Kotler, *et al.*, 2002:44).

1.4.3 Gaps in Service Quality

The central focus of the gaps model is the customer gap, i.e. the difference between customer expectations and perceptions Expectations are the reference points customers have coming in to a service experience; perceptions reflect the service as actually received. The idea is that businesses will want to close this gap – between what is expected and what is received – to satisfy their customers and build long-term relationships with them.

To close this all-important customer gap, the model suggests that four other gaps – the Provider gaps – need to be closed. The provider gaps are the underlying cause behind the Customer gap:

Gap 1 – Not knowing what customers expect.

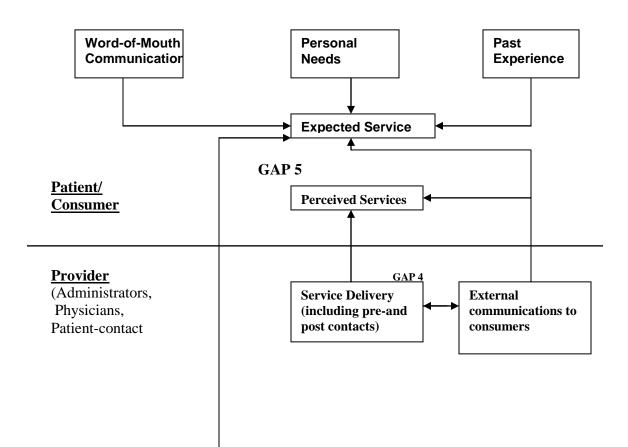
Gap 2 – Not selecting the right service designs and standards.

Gap 3 – Not delivering to service standards.

Gap 4 – Not matching performance to promises.

The consumer evaluations of service quality centre on the balance of their expectations and perceptions of a service. Expectations that are met or exceed in a service encounter, or series of service encounters, will result in adequate or ideal service quality evaluations. Alternatively, expectations that are not met will result in negative service quality evaluations.

The service quality gap model in Figure 1.4 provides a framework for organisations seeking to systematically improve consumer perceptions of service quality (Parasuraman, *et al.*, 1985:42). Figure 1.4 illustrates five gaps as mentioned. Gap 5, the difference between consumer expectations and perceptions is a direct reflection of Gap 1-4. This means that the smaller the discrepancy observed in Gaps 1-4, the more likely consumers will favorably evaluate service quality.



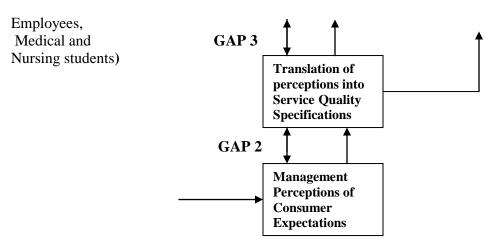


Figure 1.4: Adapted Service Quality Gap Model

A primary cause in many firms for not meeting customers' expectations is that the firm lacks accurate understanding of exactly what those expectations are (Zeithaml and Bitner, 2003:32). "Understanding customer expectation is a prerequisite for delivering superior service; customers compare perceptions with expectations when judging a firm's service".

The author's prime contribution was the development of the zone of tolerance concept. Conceptually, the zone of tolerance is an area between a customers' adequate service level and the desired service level. For example, when you use a laboratory department in a hospital, your desired service level, in regard to waiting time, is most likely zero minutes. In order for the hospital to keep you as a customer, you, on average, may not want to wait longer than 1 hour – the adequate service level. The difference between zero wait time and a 1 hour wait time is the zone of tolerance. There are a number of factors that can be affected by situational factors. For example, if a major motor vehicle accident has occurred involving a large number of people, the doctors using the laboratory (laboratory customers) are willing to wait a little longer for blood results due to the unforeseen situation and the larger work volume. Due to their past/everyday experience they expect results quickly because of the explicit service promises given by the laboratory that guarantee a 1 hour turn around for urgent work. This new model is based upon the following two propositions:

- (1) Customers assess service performance based on two standards: what they desire and what they deem acceptable and
- (2) A zone of tolerance separates desired service from adequate service. The model highlights an outcome where performance or perceived service that is below adequate is a competitive disadvantage. An outcome where the perceived service falls between adequate and desired expectations, within the zone of tolerance, would be classified a competitive advantage.

The perception is the focal point of this dissertation. Empirical data obtained from consumers' results of SERVQUAL, will be used to look at the relationship between the five dimensions that customers' use to form their expectations and perceptions of the service and to identify the key areas of strength and weakness in the service quality delivery process of a private hospital in Bangalore. Using the statistical data and customer feedback obtained from the surveys for the different dimensions of service quality, the zone of tolerance for each of the five dimensions will be determined.

1.4.4 Measuring Service Quality

Measuring service quality is a challenge because customer satisfaction is determined by many intangible factors. Unlike a product with physical features that can be objectively measured (e.g., the fit and finish of a car), service quality contains many psychological features (e.g., the ambience of a restaurant). In addition, service quality often extends beyond the immediate encounter because, as in the case of health care, it has an impact on a person's future quality of life.

Finding out what customers expect is essential to providing service quality, and marketing research is a key vehicle for understanding customer expectations and perceptions of services. In services, as with any offering, a firm that does no marketing research at all is unlikely to understand its customers. A firm that does marketing research, but not on the topic of customer expectations, may also fail to know what is needed to stay in tune with changing customer

requirements. Marketing research must focus on service issues such as what features are most important to customers, what levels of these features customers expect, and what customers think the company can and should do when problems occur in service.

High service quality appears to result in measurable benefits, sometimes directly detectable as increases in profits and market share. The Strategic Planning Institute of Cambridge, Massachusetts has compiled data concerning 2600 firms over the last 15 years. The results of their research have shown that the perceived quality of a company's goods and services is directly tied to financial performance. In particular, they found that, from almost any performance measure – including market share, return on investment and asset turnover – those businesses that offer higher quality perform better. Among the most powerful tool for shaping perceptions of overall quality is customer service. The point is simply that quality measurement and customer satisfaction deserve special attention if service firms are to remain competitive.

Market research methods can be divided into primary and secondary data collection. Primary data collection refers to data collected for the first time, such as through interviews or questionnaire surveys, whereas secondary data are taken from other sources that have already carried out primary data collection. The most widely used and tested service quality survey instrument has been SERVQUAL.

1.4.5 Criticisms of SERVQUAL

Many criticisms of the SERVQUAL scale have appeared over recent years: Blanchard and Galloway (1994) argued that it confuses outcome, process and expectation and neglects the price factor. Carmen (1990) argued that it is not generic and needs to be customized to the service in question. He also suggests that the instrument could only be used as a guide to research service quality in various industries. He also suggested a problem exists in

Parasuraman, Zeithaml and Berry's treatment of expectations where a respondent error could exist due to different interpretations of questions. Carmen reported psychometric problems with the use of the difference scores and suggested that the five dimensions may in fact represent a unidimensional construct. Another matter suggests that the model should not be limited to the five dimensions proposed by Parasuraman, Zeithaml and Berry. Up to seven or eight dimensions have been identified by various researchers in a variety of studies.

Researchers pointed out that this "disconfirmation paradigm" or perception measures customer satisfaction instead of service quality. In their study, Cronin and Taylor (1992) used the performance scale (SERVPERF) and found that SERVPERF outperformed SERVQUAL. Cronin and Taylor indicate that SERVPERF was a more appropriate measure, because they felt that consumer satisfaction has a greater influence over the purchase intentions of the consumer, than service quality.

Despite numerous suggestions regarding reappraisal and restructuring, expectations of what service quality might be – fed by the sheer mass of Parasuraman, Zeithaml and Berry - inspired literature – have now become our perceptions of what service quality really is; and this perception continues to inform mainstream service quality research today. Even where work is primarily focused on the technical and functional aspects of service quality, the SERVQUAL dimensions may still be used to inform, or even determine, their structure. This instrument has been widely used in many service industries, including hotels, dentistry, travel, higher education, real estate, accountancy, architecture, hospitals and construction services.

1.4.6 SERVQUAL

SERVQUAL is an instrument "for assessing customer perceptions of service quality in service and retailing organizations" (Parasuraman, *et al.*, 1988:12). Exploratory research conducted in 1985 showed that clients judge service quality by using the same general criteria, regardless of

the type of service. Parasuraman *et al.* (1988) captured these criteria using a scale composed of 20 items (statements) designed to load on five dimensions reflecting service quality as defined by its authors. Each item is to measure perceptions of performance of a particular firm.

The 20 statements in the survey describe aspects of the five dimensions of service quality. The evaluations of these 20 statements are collected using a seven-point Likert scale. According to Parasuraman *et al.* (1988), the service quality is then the difference between customers' perceptions and expectations.

The score for the quality of service is calculated by computing the difference between the ratings that customers assign to perception statements. This score is referred to as GAP 5, as was shown in Figure 1.4 (refer to page 15).

Scores for the other four gaps can also be calculated in a similar manner.

Q = Perceived service quality

Pi = Performance level perceived on attribute I for the delivered service

Ei = Expected performance level on attribute I for the service generally.

An average score for each dimension is then calculated across all respondents. Also an overall service quality score is calculated by taking the mean score for the five dimensions.

Positive scores show better than expected service while negative scores show poor quality. A zero score implies that quality is satisfactory. In Parasuraman *et al.*, (1991), a more recent version of the instrument includes a third section that measures the relative importance of the five dimensions to the customer. These scores are then used to weight the perceived service quality measure of each dimension, the main purpose being to give a more accurate overall perceived service quality score.

Data gathered through a SERVQUAL survey can be used for a variety of purposes (Zeithaml and Bitner, 2003:138):

•
\[
\text{To determine the average gap score (between customers' perceptions and expectations) for each service attribute.}
\]

| • | ☐ To assess a company's service quality along each of the five SERQUAL dimensions. |
|---|---|
| • | $\hfill\Box$ To track customers' perceptions (on individual service attributes and/or on the SERVQUAL dimensions) over time. |
| • | ☐ To compare a company's SERVQUALscores against those of competitors. |
| • | ☐ To identify and examine customer segments that differ significantly in their assessments of a company's service performance. |
| • | ☐ To assess internal service quality (that is, the quality of service rendered by one department or division of a company to others within the same company). |

Despite all well-documented criticism, it is still widely used as there are no other well established alternatives. Parasuraman *et al.*, (1988; 1991; 1993) claim that the instrument is applicable to a wide variety of service industries although it may be necessary to reword and/or augment some of the items.

This instrument spawned many studies focusing on service quality assessment and is used all over the world in service industries. Published studies have used SERVQUAL and adaptations of it in a variety of contexts: real estate brokers, physicians in private practice, public recreation programs, a dental school patient clinic, a business school placement centre, a tire store, motor carrier companies, an accounting firm, discount and department stores, a gas and electric utility company, hospitals, banking, pest control, dry cleaning, fast food, and higher education.

As a general rule, reliability was found to be the most important dimension of service quality in Bangalore, with responsiveness typically the second most important. One question that have

begun to investigate is whether the dimensions and relative importance of the dimensions are the same across cultures.

1.4.7 Service Quality in Health Care

Concerns with quality in healthcare and its measurement are not at all new. As long ago as 1854, Florence Nightingale demonstrated that a statistical approach with graphical methods could be persuasive in reducing the cost of poor quality care by 90% within a short period of time.

Service quality has been increasingly identified as the key in differentiating services and building competitive advantage. Therefore, understanding, measuring and improving quality is a formidable challenge for all organizations since they compete to some degree on the basis of service. The bottom line for strategic advantage in health care is quality. People are not as accepting now as say ten years ago. The high cost for health care services and legal backing has placed a greater emphasis on service providers (doctors and hospitals) to deliver a thorough high quality service to the customer.

Patients now have a preconceived standard of quality before arriving at a hospital and therefore the understanding between the customer and provider needs to be understood clearly. Lim and Tang (2000) emphasized that in the healthcare industry, hospitals provide the same types of service, but they do not provide the same quality of service. Furthermore, consumers today are more aware of alternatives on offer and rising standards of service have increased their expectations. They are also becoming increasingly critical of the quality of service experience. Service quality can therefore be used as a strategic differentiation weapon to build a distinctive advantage which competitors would find difficult to copy.

To achieve service excellence, hospitals must strive for "zero defections", retaining every customer that the company can profitably serve. "Zero defections" require continuous efforts to improve the quality of the service delivery system. Rose, *et al.* (2004) identified that the service providers in health care increasingly have to deal with a wide range of social, financial, political, regulatory and cultural challenges, the impact of which, among other factors, is the

demand for greater efficiency, better quality and lower costs. Hence, quality management has emerged not only as the most significant and enduring strategy in ensuring the very survival of organizations, but also a fundamental route to business excellence.

Moreover, due to the availability of information and a better-educated population, the need to measure up is no longer a choice but a necessity in meeting rising expectations from better-informed customers. Knowing what the customer expects when they use health care services is ultimately the way to create good service quality. Doing market research amongst the health care users to determine their expectations and perceptions of services would give managers the strategic leap necessary to meet those customer expectations in their own organization. The strategic advantage is to understand the customers' needs and then make the changes to deliver that exceptional service. As mentioned earlier, customers today are well informed and know what they want. They would therefore have clear and precise needs that they would expect from any organization. Vandamme said, "In the healthcare sector, marketing has grown beyond the point of being neglected. Increased competition for both patients and funds has forced some organisations, more specifically hospitals, to become more market-oriented.

Resistance against marketing has diminished over time, and more and more hospitals and healthcare organizations now accept marketing as a valid management function." Yet, despite these motivations, service quality in healthcare is poorly understood and insufficiently explored. So where do we start? We need not reinvent the wheel; others know a great deal about service quality and we can learn from them.

Researcher say that most professionals recognize the value of information gathering in managing business. Yet they attach less importance to conducting formal research. Many fall prey to the "just talk to people" syndrome. Although no one would argue that professionals should be talking with current and prospective customers, there are serious problems in relying on this method of gathering "information" Firstly, the individuals they speak to may not be representative of their customer group. We all have a tendency to talk to people who are similar to us, and therefore the information that is collected by "just talking to people" is likely to support the person's preconceptions. This approach also typically is characterized by biased

interviewing techniques. Finally, there are likely to be inconsistencies between how individuals are asked questions. A well-planned research program should eliminate these problems.

1.4.8 Measuring Service Quality in Healthcare

Services in healthcare are intangible because it is not possible to count, measure, inventory test or verify them in advance of sale. Customer experience, either directly or vicariously from outside sources, is frequently the only means of verifying whether healthcare services meet quality standards and the nature of service performance diverges from one transaction to another. This "heterogeneity" can occur because the service is delivered by different physicians, nurses and others to a variety of patients with varying needs. In healthcare, production and consumption are inseparable. The services are consumed when they are produced, which makes quality control difficult. This necessitates that marketing and operations functions occur simultaneously. Due to these and other factors in services it makes it extremely difficult for the consumer to judge service quality.

Besides these factors that make measuring the quality of services so difficult compared to goods, health service quality is also multi-dimensional. Technical dimensions of health services are medical care: how quickly the doctor took to diagnose a problem. Patients also want to measure the functional dimensions like: comfortable rooms, courteous and empathetic staff. There are a range of models that attempt to provide a comprehensive understanding of the service factors and dimensions that most need to be improved in order to improve perceptions of a service.

A growing number of measurement tools aimed at assessing consumer ratings of their health care appear to reflect this trend. Examples include: (a) the Consumer Assessment of Health Plans Survey; (b) the Patient Satisfaction with Medical Care Survey; (c) the National Centre for Quality Assurance's – Member Satisfaction Survey; (d) the Picker Institute's Adult

Medical Surgical Inpatient' (e) Patient Judgments of Hospital Quality; and (f) The Outpatient Satisfaction Questionnaire.

Healthcare organizations in Asian countries are undergoing pressure from their governments and the general public to improve quality and compete effectively with their counterparts in the private sector.

Healthcare organizations today are not unique in pursuing consumer evaluations of their services. The focus of this research, as mentioned earlier in this chapter, would be to measure the service quality perceptions in the health care industry of service quality delivered in a private health sector. The work of Parasuraman *et al.*, (1988) on the service quality in service organisations resulted in the SERVQUAL research tool.

SERVQUAL has been used and studied extensively in both the health and non-health service industries. It has been widely criticized and has a number of shortcomings which have been highlighted, but it still forms the starting point of most reviews of service quality for any service organization. The detailed methodology of the SERVQUAL tool and its qualitative and quantitative evaluations in the healthcare sector in Bangalore will be discussed in chapter 2.

1.5 HEALTHCARE SERVICES IN INDIA

"We must reach beyond tomorrow in designing our system of health, for our actions today are the foundation of our future success. Our vision for an integrated health service system and the journey we are taking to achieve it is based upon our belief that the whole is greater than the sum of its parts. Looking beyond the walls of our facilities and blending services with the community and the education system, will change the way we perceive our health service. As we reach out to our partners in building this network of care, we create a force that will enable us to have an impact on our communities and our quality of life." (India, Ministry of Health Vision, 2006)

1.5.1 Policy and Strategic Direction of Health Care Services

"Health Services Without Walls – A Community Partnership of Health" was a theme selected to highlight the need to focus the Ministry of Health's efforts towards reducing barriers to

service. By improving access and referrals the commitment to the six core principles, that are the foundation of the Indian Health System, could be realized. The Ministry of Health laid out the following set of principles:

<u>Accessibility:</u> reasonable access to all medically necessary health care services provided by physicians or hospitals to all Indian residents, nationals and non nationals.

<u>Affordability:</u> reasonable costs for quality health care services that are within the fiscal resources and economic means of India.

<u>Appropriateness:</u> proper use of the health services provided through proven cost effective means including emergency, elective care, acute care, outpatient services, primary health, public health, home care, geriatric services, and psychiatric programs.

<u>Accountability:</u> responsible monitoring, evaluation and reporting of healthcare resources expenditure related to performance of health services, and health's outcomes.

<u>Accreditation:</u> official certification and licensure of health services and professionals in accordance with approved and appropriate international standards.

<u>Acceptability:</u> public confidence in the health services and shared responsibility for their health. Cooperation in ensuring that the healthcare is satisfactory, affordable, and accessible by participating in health promotion, disease prevention and the appropriate utilization of services.

The Ministry has realized that to meet such principles they will have to strengthen their strategic participation with other government services, private industry and most importantly communities, families and individuals. The philosophy and service policy of the Ministry of Health Policy Framework published in 2006, worked towards developing a more responsive, accessible system of service that provides for a seamless referral network across a fully integrated continuum of care. To improve responsiveness there would need to be a more open system of public consultation, program evaluation, and accountability. The Ministry indicated that it would undergo a restructuring of services to simplify and improve efficiencies of service delivery, management and decision making and to reduce unnecessary barriers or delays to appropriate care, service or information. As a priority they would develop policies, programs and services that support promotion of health and prevention of disease. (Ministry of Health Direction, 2006:5)

1.5.2 Public and Private Health Care India.

Public services in most countries are experiencing discerning and discriminating customers, who may choose between private and public sector services. Despite the strategic importance of quality in the context of any healthcare organization, it is popularly perceived that substantial differences in quality exist among healthcare providers. The healthcare industry is a highly competitive global industry. People are willing to travel to remote parts of the world in order to receive the service quality they hope for. Members of the ruling family and wealthy have all major operations done in metro cities, particularly in Bangalore, Mumbai and Delhi. Patients usually prefer to go to private hospitals, hoping to receive high service quality, flexible measures, less crowded facilities and rapid procedures in providing medical services. On the other hand, healthcare organizations operating in the public sector are undergoing pressure from governments and the general public to improve quality and compete effectively with their counterparts.

In November 2006, Indian News Agency reported that developing healthcare services rank on top of voters' priorities, and look forward to higher standards of healthcare infrastructure including high tech equipment and qualified staff.

Health risks, ageing, population growth and medical inflation are among factors that are predicted to drive up the cost of healthcare from \$12bn to \$60bn over the next 18 years (Singh, 2006). It predicts that by 2025, cardiology will account for 24 per cent of total healthcare costs, followed by infectious diseases, maternal and parental conditions, Digestive diseases, genitourinal disorders, cancer and other diseases.

The number of outpatient and inpatient visits is expected to grow by 350 per cent in India. All these increases however point to a nursing shortage across the country as a major concern. The current nursing levels across the region mean there are only 16.2 nurses per 1,000 people in India.

1.5.3 Health Care in Bangalore.

The quality of health care in Bangalore is generally high for all type of highly specialized treatment. Owing to Bangalore's large population and the numerous medical facilities in the private and public sectors, long waiting lists are almost unheard of. For specialized treatment, however, it's sometimes necessary to seek medical assistance outside Bangalore, and locals, who can afford it, often do so. Although many of Bangalore's doctors and medical staff are local, the some of them are foreign and were trained in their home countries. The attraction of Bangalore for them is the same as for most other expatriates: financial reward, which used to operate on a part-private (for those who could afford treatment), part-free (for those who couldn't) basis, played an important part in the development of medical services and can still be found today, although they no longer offer free treatment. Bangalore now has a public health service providing free or very low cost health care for its nationals and it's important to note that these services are also available to expatriates. For some time however, India has been encouraging businesses to provide medical insurance for their employees, to lighten the burden on the national purse.

CHAPTER 2

RESEARCH DESIGN

2.1 Statement of the problem/ Purpose:

The quality of service from a hospital is the number one factor that will either turn a customer/patient away or make one for life. Customer-driven quality management is becoming the preferred method in hospitals for improving their performance in terms of service. Vydehi is a private hospital which is very conscious about the health care service provided by them and so here the purpose of the study is to evaluate the patient satisfaction by looking at human aspects of service (responsiveness, reliability, empathy and assurance) with only one factor of the instrument being devoted to the non-human aspect of care rendered (tangibles).

2.2 Need for study/Significance of the dissertation:

This study will attempt to identify

- 1). what service quality is?
- 2). what causes service quality problems in hospitals?

- 3). how service organizations can recognize SERVQUAL problems? &
- 4). what service firm can do to improve quality shortfalls to meet the customer expectation

2.3 Objectives of the study

- 1. To study the perceptions of service quality offered by Vydehi Hospital.
- 2. To study how Vydehi hospital service equate along each of the five SERVQUAL dimensions.
- 3. To study the service standards of Vydehi hospital.
- 4. To study whether the Service Delivery of Vydehi hospital match to its service standards.

2.4 Scope of the study

Due to the new paradigm in healthcare, it is important for the hospital to improve its healthcare standards and add long term value and provide superior service and develop innovative strategies. This Study is only confined to Vydehi Hospital Services in Bangalore. This study also helps in giving an insight of how to balance between standardization and personalization be determined to maximize both the efficiency of the organization and the satisfaction of its customers. Patients now have a preconceived standard of quality before arriving at a hospital and therefore here in this study it helps in understanding the customer's perceptions after service delivered by the hospital.

2.5 Research Methodology

The Research methodology used for the study is Descriptive Research as no hypothesis is designed for the study. For elicitation of primary data questionnaires were designed which includes both structured and unstructured questionnaires and personal

interview was conducted. Secondary data was collected through Hospital reports, Journals and website of the organization as well as books related to the project under study.

2.6. SAMPLING DESIGN AND DATA COLLECTION

2.6.1 Sampling Technique

The sampling procedure used was Non-probability, simple random sampling. Each member of the population who used the hospital had an equal chance of being selected. Questionnaires were distributed on a random basis to patients who booked into the hospital as an outpatient or inpatient. Respondents (those who know English read and write) were asked to complete the questionnaire while waiting to use the hospital service, others personal interviewed. English versions of the questionnaire were given placed at the hospital front desk. As patients arrived at the hospital they were handed a questionnaire and asked to complete the form.

2.6.2 Sample Size:

A sample of 200 respondents has been selected for the study.

2.6.3 Sample Description:

The respondents of the study includes respondents of the study includes out patients, inpatients and both. Those who take free service and paid services.

2.6.4 Sources of Data Collection:

The primary data was collected through questionnaires which include both structured and unstructured questionnaires and personal interview was conducted for those who don't know English. Secondary data was collected through Hospital reports, Journals and website of the organization as well as books related to the project under study.

2.7 Instrumentation Technique:

Structured questionnaire and personal interview was used for data collection.

2.8 Plan of Analysis:

The data collected through questionnaire and survey was checked, classified and

tabulated, parametric techniques such as average and percentages are used for the analysis.

To make the interpretation very effective, presentation techniques such as Pie charts, tables

and Bar graphs were drawn to represent the data wherever it was required. MS-Excel is

used to make charts and tables.

2.9 Limitations of the Study:

1. The data collected will depend on the relevancy of information given by the

respondents. So the data may be bias as they are personal opinion.

2. The study is limited only for a period of time, so in a course of time findings may

be obsolete.

2.10 Chapter scheme:

Chapter 1: Introduction to the topic and review of research literature.

Chapter 2: Design of the study covering statement of problem, objectives of the study,

scope, sampling, methodology, limitations, plan of analysis.

Chapter 3: Hospital profile.

Chapter 4: Data analysis and interpretation.

Chapter 5: Summary of findings, conclusions and suggestions.

Chapter 6: Bibliography.

Chapter 7: Annexure.

CHAPTER 3

Organization profile

Vydehi Institute of Medical Sciences 4 Research Centre

Sri D.K.Audikesavulu- Chairman, Srinivasa Trust



With blessings of the Bhagavan Sri Satya Sai Baba, I have embarked on this journey of providing professional education and improve the health of the society through Vydehi

Institutions promoted by the Srinivasa Trust. Last couple of years has seen Vydehi grow tremendously in terms of infrastructure; faculty and volume of services provided and witnessed significant academic achievements by our students and substantive research accomplishments. Today we offer professional courses in Medicine, Dentistry, Biotechnology, Nursing and Rehabilitation.

The Vydehi Hospital provides free services to the poor & needy including free treatment, surgeries, diagnostics, imaging, free food, free medicines and follow-up care. By devoting resources and expertise to the investigations of problems contributing to Health disparities in minority populations, we can translate our understanding into clinical application to serve and improve the community. The Institute is actively organizing numerous community outreach programs. We are in the process of setting up the super specialties of Cardiology, Cardiothoracic Surgery, Oncology and Nephrology. The Institute has already made its mark in the global Healthcare education and services provision in terms of the international Universities providing their courses at Vydehi. We have placed additional emphasis on clinical and animal research.

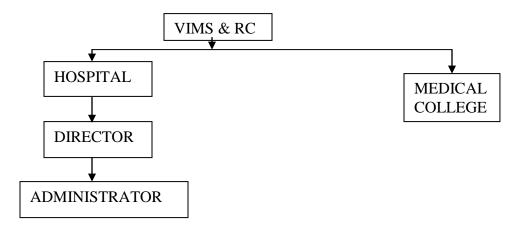
Vydehi is a remarkable and unique institution and is embarking on a promising venture, dedicating to making the coming years as rich and productive as its past while ensuring that our students are trained, our faculty serve our patients receive care in a twenty first century environment. My goal is to lead the effort and set the standard for excellent in these endeavors.

Mrs. Kalpaja D A - DIRECTOR



Since it's founding in 2001, Vydehi Institute has prepared students for lives of expanding opportunity, service and achievement. An independent, comprehensive college, we offer students of many ages and backgrounds purposeful learning for the whole of life. Vydehi advances the practical and professional relevance of the liberal arts tradition. In short, we assume that one's work in the world is a central concern for an educated person. Our students do not have to choose between the breadth of liberal learning and the depth of professional preparation. We know that the truly educated professional needs both. Our curriculum brings together these two indispensable elements of a complete college education. Working in harmony, they enable us to restore wholeness to the ancient tradition of liberal learning, by embracing practice as the first fruit of inquiry. Our primary institutional strength is the recognized excellence of our programs and faculty. Great teaching in classes lies at the heart of our heritage and mission. The average class at Vydehi has 150 students. These talented scholars are at the College because they love to teach, in an environment where they come to know their students as individuals, with distinct outlooks and unique gifts.

3.1 Organization Chart of Vydehi Institute Of Medical Sciences And Research Centre



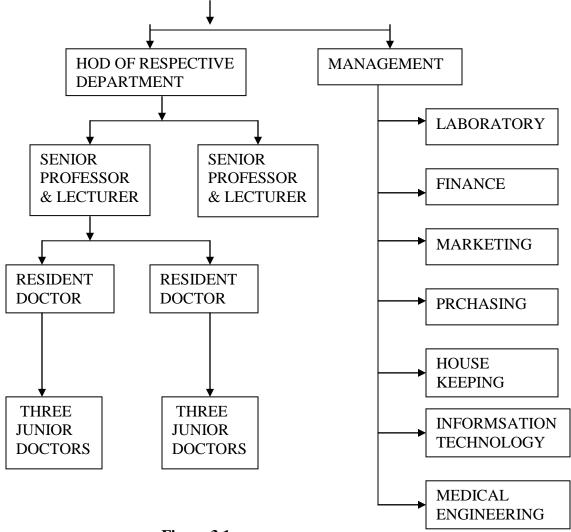


Figure 3.1

3.2 VYDEHI HOSPITAL



Vydehi Hospital is a 1000 bedded Superspeciality Hospital providing focused healthcare services. The hospital building is divided into six blocks with a built up area of 500000 Sq. ft. Around 50,000 Sq.ft is earmarked for Super Specialty venture providing Cardiology, Neurology, Urology, Neuro Surgery Nephrology Services. A dedicated Oncology Center is the latest addition, the multispecialty Hospital provides following services complementary to Super Specialty Centre

Emergency services are available in ICU, NICU and Casualty round the clock with high tech equipment like Ventilators, monitors, defibrillators, pulse oxymeters etc.

3.3 Different Departments of Vydehi hospital

3.3.1 Out Patient Departments:

Medical **Orthopedics Rehabilitation Centre** Yoga **Radiology Psychiatry Dialysis** Oncology Casualty **Pediatrics General Medicine OBG- Gynecology** TB & Chest **Ophthalmology** Cardiology **Dermatology Nephrology Urology Neurology Neurosurgery** Cardiothoracic **ENT General Surgery** Ayurveda

3.3.2 Ward Management:

Master Health

- 1) Neuro ICU
- 2) Medical ICU
- 3) Surgical ICU
- 4) Operation Theater

3.3.3 Inpatient Department:

- 1) All male general wards (with respective departments)
- 2) All female general wards (with respective departments)
- 3) Special wards a) Private ward
 - b) Semi private ward
- 4) General payment ward
- 5) Oncology ward

3.4 DEPARTMENT OF MEDICINE

Department of Medicine runs OPD services on all days for all types of cases. Cases requiring admission are admitted. All types of emergency cases of heart, lung, and neurology are admitted and immediate care is provided. We also deal with all type of poison and medico legal cases. We have facility for emergency monitoring and ventilator management. In addition treadmill and echocardiography facilities are also available and are regularly carried out.

Department of Tuberculosis & Chest Diseases Facilities available for the patients

- Out patients on an average about 20-25 patients per day
- In patients facilities: on an average about 7-8 patients are treated in the wards.
- Laboratory investigation a. Sputum examination for diagnosis of tuberculosis done free of cost. b. Spirometry (Lung function test) is done to diagnose & follow up of various respiratory diseases.
- Department gives anti-Tuberculosis drugs as per WHO guidelines free of cost for entire treatment course to all T.B. patients
- Department diagnoses and treats various diseases E.g. Tuberculosis affecting any organ of the body; Bronchial Asthma, Lung diseases caused by smoking & pollution; Respiratory infections e.g. Pneumonia, lung abscess etc.,

3.5 Departments of Paediatrics:

The department of paediatrics was started in 2001 Dec with 30 beds. Neonatology department was started on Jan 2003 with 10 beds today the department has capacity of 60 beds in paediatrics and 10 beds in NICU The department is being managed by two senior staffs as professors and two lecturers with MD qualification and four Sr. Residents and Six Junior Residents In paediatric department all the childhood diseases are investigated and managed the common diseases are investigated and managed. The common diseases like Gastroentemtric & dehydration acute respiratory infections. Congenital heart diseases Rheumatic Heart diseases, Pneumonias, and childhood Tuberculosis in all forces Infectious diseases like typhoid malaria are routinely managed. Rare cases like Tuberulomas, Neurocysticerocis, Bronchiectasis Nephrotic syndromes diabetic ketraudosis hare been diagnosed and managed successfully. Neonatalogy units there are facilities for

- Incubator care for small pramaturebatrics
- Phototherapy for founded babies both single double surface.
- Exchange transferors have been performed in case of severe hypertlimbenamias
- Babies born of caesianan section, Babies with birth aephyxia are admitted and managed routinely.

Facilities to accept emergency cases through casualty and treating in the ward are present round the clock.

3.6 Department of Surgery

Department of Surgery is one of the major departments of this Hospital. Out patient department is located in the West-II. Ground Floor. In the out patient we have 4 examination facilities including view boxes. There are 2 dressing rooms separate for male and female patients. In the outpatient we also have facilities for upper & lower Gastrointestinal endoscopies & Minor O.T, where minor procedures are done. On an average we have around 90-110 cases

The facilities are utilized by both rural & urban population Each day is run by one unit, which have minimum of three qualified teaching staff working hours are form 9.00 to 4.00 pm & after that emergencies are attended to by a qualified surgeon.

Surgical department has 120 beds including Male & Female wards. General surgical department, alone has 6 OT's one exclusively for Laparoscopic surgeries. All OT's are air conditioned. Each OT is equipped with good OT tables, lights, cautery, NIBP, pulse oximeters, defibrillators. Two steel OT's with laminar floor & C-arm facilities are available.

- Lap cholecystectomies
- Lap Appendicectomies
- Lap Adhesiolysis
- Lap Diagnostic
- Lap Ovariectomy
- Lap Tubectomies
- Lap for infertility & tubal cannulations

All types of major general surgeries including cancer surgery are done, like Thyroidectomies, Abdomino – perineal resection, Esophageal resections, Gastrectomies, Intestinal resections, Radical mastectomies, etc.,

3.7 OBG

This department is fully functional and is carrying out Antenatal and Postnatal checkups. The Health services regarding womenfolk is totally takencare by OBG. OPD functions from 9 am to 4 pm on all weekdays. The average out patients is around 100 patients per day, which includes special clinics like

- High risk pregnancy Clinic nfertility
- Cancer screening
- Mother craft class as we have the facility of physiotherapy at our hospital

With conjunction with super specialty facilities at Vydehi hospital they are managing

- Cardiac disease in pregnancy
- Pregnancy with renal failure
- Neurological problems in Pregnancy
- Endocrinological disorders in pregnancy like Diabetes Mellitus, Thyroid Disorders.
- As we have GYNAEC ENDOSCOPIC unit LAPROSCOPY, HYSTEROSCOPY we deal with all the infertility cases except assisted reproductive technique like IVF, CANCER SCREENING Routinely PAP SMEAR is done VEDIO COLPOSCOPY is also available Routinely vaginal hysterectomy is done for un descent uterus Laproscopic hysterectomy and myomectomy is being done at our hospital.

3.8 Orthopedics'

Department of Orthopedics at Vydehi Institute of Medical sciences and research center has 40 beds apart from the special wards. OPD has 4 examination room, plaster application room and dressing room; where in daily consultation of the patients is carried out. The hospital causality is well equipped and immediate attention to the patients is given and minor orthopedic procedures are carried out. There are tow operation rooms meant for orthopedics and the interior of them are made out of steel and the theaters are well equipped with all the advanced equipments such as image intensifier, Pneumatic drills, arthroscope, automatic operation table with all the attachments to carry out different procedures. All kinds of orthopedic procedures are carried out here. Every year camps are conducted to carry out joint replacement surgeries at a very low cost for the benefit of poor patients. Treatment of the patients both medical and surgical management is inexpensive. We have come across rare cases such as congenital anomalies of hip, knee and feet. Development disorders of bone and joint such as osteoporosis treatment of which were effectively carried out skeletal tuberculosis is particular spinal tuberculosis which is rare is seen more frequent in patients coming from west Bengal. Here we have come across patients from different parts of the country belonging to different socioeconomic status. Undergraduate and post graduate students are trained here, there is also nursing college attached and all these students have good clinical material necessary for there training.

3.9 DEPARTMENT OF ENT

Dept of ENT has a dedicated team comprising of Prof. Prabhakar, Principal, Prof. G.Mohan, Prof. & HOD, Dr. Satish Kumar Assoc. Prof. Dr. Vasnathi- Asst. Professor, Dr. Santhosh Lecturer, & two Senior Residents and four Junior Residents. We are striving for quality health care under the able guidance of our advisor & the responsive support of Management have been successful in providing the same. The OPD Block Consists of 6 consultation chambers with fully equipped examination units (also we have two examination units for the students) A demonstration room with all the teaching aids is very much in place & order. We also have a minor OT in the OPD Block, with all necessary accessories like (operating) Microscope O.T light & Suction apparatus. Microscopic examination of the ear is an essential integral part of any ENT examination & the Management has been magnanimous in providing costly operative microscope to the OPD The OPD Block also have a state of art sound Proof Room for Audiological tests. This unit is fully equipped to updated & patient get complete service under one roof free of cost, with out having to go other places for different investigations. Our audiologist Mrs. Jayanthi well experienced speech therapist too, handles all the cases competently. The equipments in the audiology unit includes costlier equipments namely

- Pure tone audiometry
- Impedance audiometry
- Brain stem evoked response audiometry
- OTO Acoustic emissions

Apart form the investigations being free we also dispense free hearing aids to the deserving patients. In the major OT, we have all the equipments & instruments and we are happy to say we are completely updated in this regard. Management has always been generous with regard to the instruments & we have been provided with latest ziess microscope for micro ear surgeries which would cost fortunes in private set up. This being a teaching hospital, we have all the necessary teaching aids includes audio visual documentations & demonstration units. Students can see the surgeries live On T.V. Monitors;

The eye department has good spacious examination room with, mechanized examination chairs: three slit lamps, application monometer to record the eye prism, an Autoretractometer for prescription of glasses by computer technology, an automated computerized perimeter to record visual field useful in the management of glaucoma cases and gemological arc, a Keratometer & A-scan to celisulate intromler has power and a state of the art operating microscope for eye surgeries. A State of the art operating microscope for eye surgeries. A state of the art vitreoretinal department with lasers for treatment of Diabetic Vetinopathy & retinal detachment cases is being established soon. The hospital has been regularly doing free cataract surgeries. The other cases treated & operated in this hospital are glaucoma, Orbital malignancy, and malignant tumour, of the lid, squints, plosim and repairs of injured eyes. We also give ophthalmic cover to Sri Satya Sai Superspecialities Hospital to assist them in the management of nemological cases. We also give ophthalmic cover to Vydehi Institute of Rehabilitation & help in the rehabilitation of visually handicapped children. Shortly we are going to come up with a low vision aid center.

3.10 DEPARTMENT OF UROLOGY AND RENAL TRANSPLANTATION Diseases

The section of urology and Renal Transplantation headed by qualified specialists' deals with both general urological problems and complex urological diseases.

The general urological problems dealt are kidney and bladder stones; Urinary difficulties due to Benign prostatic enlargement and structure uthera and infective urinary diseases. The kidney stones are removed without surgery (ESWL) and also by minimally invasive surgeries (Key hole surgery) Advanced urological interventions available at our center include

- Advanced cancer surgeries.
- Neo Bladder (New bladder replacements) reconstructions
- Laparoscopic renal surgeries.
- Endourology
- Female Urology

Urology Section: Reconstruction of Bladder from intestines (Neobladder) after its removal due to cancer or non-cancer diseases is done at this institute very few institutes in this city do such advanced surgeries at minimal expenses.

Department of Anaestheisa

There are 10 operation theatres having total 10 tables. They are fully air-conditioned. Each O.T. is having central oxygen & nitrous oxide supply and central suction. The facilities for preanaesthetic(10 beds) and post anaesthetic (10 beds)care are available. Two OTs are completely fabricated with Stainless Steel all around with laminar airflow.

Arrangement and Distribution of OT

- OTI & II -General Surgery
- OTIII- ENT
- OTIV-Ortho (steel OT Laminar airflow)
- OTV- General Surgery
- OTVI & VII-OBG
- OTVIII- Ophthalmology
- OT IX- Septic OT
- OT X- Emergency OT

DEPARTMENT OF RADIOLOGY & IMAGING

Vydehi Medical institution is fortunate to have a department that is upto date is Equipment and infrastructure. Right from inception, the department is proud to have had the latest of equipments in the form of X-Ray machines, C.T. Scanner, M.R.I. Scanner, Ultrasound and Colour Doppler machines, Mammography, X-ray image intensifiers and automatic film processors. This department is completely computerized and has the infrastructure and the clinical capability to undertake any and all investigations that may be required by patients admitted to the hospital. This is probably the first teaching Hospital to start off with all the latest of Gadgetry in the department of Radiology.

Apart from catering to the needs of clinical specialities of Modern Medicine, this department also caters to the needs of the Ayurvedic department as also the Dental Department. This department from inception is geared to provide teaching facilities for

Under Graduate students, Post graduate students of all branches and also to graduate courses in Nursing and Dental Sciences.

Medical Records

Department is also well established and computerized.



DEPARTMENT OF MEDICINE

Department of Medicine runs OPD services on all days for all types of cases. Cases requiring admission are admitted. All types of emergency cases of heart, lung, and neurology are admitted and immediate care is provided. We also deal with all type of poison and medico legal cases. We have facility for emergency monitoring and ventilator management. In addition treadmill and echocardiography facilities are also available and are regularly carried out.

Cases required to undergo sophisticated cardiac and neurology surgery are initially admitted in this hospital for basic work up and later for follow up when required. For this facility many patients from North East of India frequent our hospital and make use of the facility with us. Some sophisticated investigations are given at subsided rates. A diabetic specialty clinic is run in the department once a week to centralize treatment, carry out diabetic education and dietary advise from our dietician is provided.

Being a teaching hospital we conduct regular clinic and lectures to undergraduate students appearing for MBBS of Rajiv Gandhi University of Health Sciences.

Facilities for superspeciality services of cardiology, neurology and nephrology and the required laboratory are being provided

CHAPTER 4

ANALYSIS AND INTERPRETATION OF DATA

4.1 DESCRIPTION OF SAMPLE

The demographic data for the descriptive analysis was collected through the survey questionnaire. The SPSS software program was used to calculate the frequencies of the data.

Demographic data for patients included **gender**, **state or region**, **number of visits to Vydehi hospital**, and **types of visits to Vydehi hospital** (In-patient or Outpatient). The group of participants consisted of 122 males and 88 females. The highest number of visits by a participant to the hospital in the last year was 15 times with the majority of participants ranging between 1 to 3 visits in the last year. The highest number of individuals from a state to answer the questionnaire was from Karnataka (60%) followed by West Bengal (25%). Out of all the survey questionnaires completed, 30 participants were from other states of India.

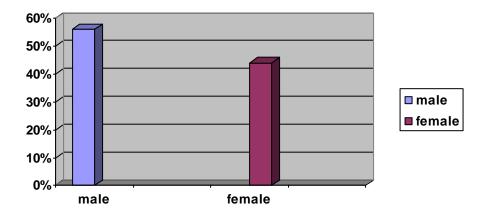
4.2 Descriptive Statistics of the Demographic Variables (N=200)

DEMOGRAPHICS: FREQUENCIES PERCENTAGE:

Gender of the respondents:

| Gender | Number of respondents | Frequency |
|--------|-----------------------|-----------|
| Male | 112 | 56% |
| Female | 68 | 44% |
| Total | 200 | 100% |

Table 4.1



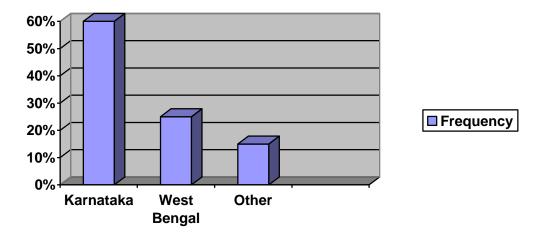
Graph 4.1

The above table indicates that 56% of the respondents were male and 44% of them are females. It shows most of the patients in the hospital are male.

State that patients belong to:

| State belongs to | Number of respondents | Frequency |
|------------------|-----------------------|-----------|
| Karnataka | 120 | 60% |
| West Bengal | 50 | 25% |
| Others | 30 | 15% |
| Total | 200 | 100% |

Table 4.2



Graph 4.2

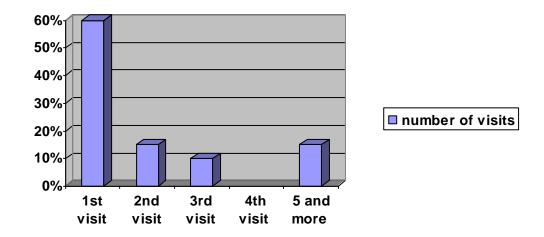
Data in the table represents that 60% of the respondents belongs to Karnataka, 25 % of them belongs to West Bengal, and remaining 15% of the respondents belongs to other states.

The majority of the patients are localities, i.e. they belongs to Bangalore and surrounding area, however patients from West Bengal are also many but the number of other state residents are less compared to both Karnataka and West Bengal.

Number of visits to Vydehi Hospital:

| Number of | Number of | |
|-----------|-------------|-----------|
| visits | respondents | Frequency |
| | 120 | |
| 1 | | 60% |
| | 30 | |
| 2 | | 15% |
| | 10 | |
| 3 | | 10% |
| | 0 | |
| 4 | | |
| | 30 | _ |
| 5 &more | | 15% |

Table 4.3



Graph 4.3

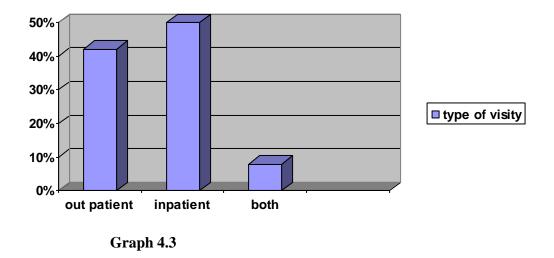
Interpretation: Table shows the frequency of visits by the respondents, it indicates 60% of the respondents are first time visitors, 15% of them are second time visitors, 10% of them are third time visitors and 15% of them have visited five or more times.

We can easily find that majority of the patients are first time visitors where they don't know the treatment procedure and generally have more expectations.

Types of visits to Vydehi Hospital: 4.3 Table and Graph

| Types of visit | Number of respondents | Frequency |
|----------------|-----------------------|-----------|
| out patient | 84 | 42% |
| inpatient | 100 | 50% |
| Both | 15 | 8% |

Table 4.3



Data in the table and graph represents that 42% of the respondents have visited hospital as out patients, 50% of them are inpatients and rest 8% of them have visited as both out patients and inpatients.

Almost half of the patients entered into hospital become the inpatients; less than these gets the treatment and goes back to home. Only few of them are repeated patients who used the services as both inpatient and out patient.

Descriptive analysis of the mean scores was run using SPSS on the questionnaire data for the perceptions values. The data analyzed was from 200 respondents. The lowest "Perception score" was for statement 13 which stated that the hospital should have convenient times for patients to use their services, while the highest score was statement 7 which related to accuracy of medical reports.

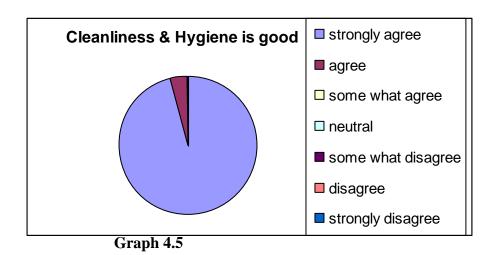
DATA ANALYSIS

Tangible Statements

P1) Vydehi Hospital's cleanliness and hygiene is excellent.

| Strongly agree | 94% |
|--------------------|-----|
| Agree | 4% |
| Some what agree | 0 |
| Neutral | 0 |
| Some what disagree | 0 |
| Disagree | 0 |
| Strongly disagree | 0 |

Table 4.5



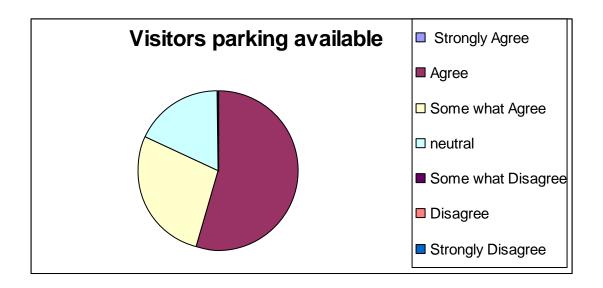
Interpretation: 94% of the respondents strongly agree to the statement Hospitals Cleanliness & Hygiene is excellent and 4% of them agree to the statement.

It is appreciable on the part of House keeping for maintaining the best environment in the hospital. Cleanliness & hygiene maintenance is excellent than any other hospitals in Bangalore.

P2) Vydehi Hospital always has visitors parking available.

| Strongly agree | - |
|--------------------|-----|
| Agree | 60% |
| Some what agree | 30% |
| Neutral | 20% |
| Some what disagree | - |
| Disagree | - |
| Strongly disagree | - |

Table 4.6



Graph 4.6

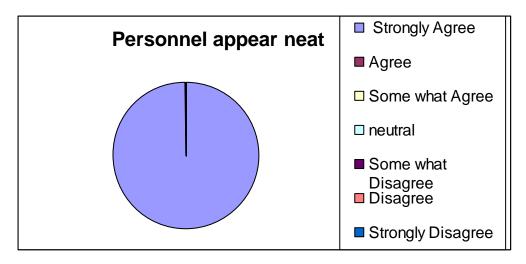
Graph indicates that 60% of the total respondents agree to the statement that Vydehi Hospital has visitors parking available, 30% of them some what agree to the statement and 10% of the respondents are neutral about the parking because they don't use as they come from far distances or from other states.

It is good for Vydehi to maintain a convenient parking facility near the hospital.

P3) Vydehi hospital personnel appear neat.

| Strongly Agree | 100% |
|--------------------|------|
| Agree | - |
| Some what Agree | - |
| Neutral | - |
| Some what Disagree | - |
| Disagree | - |
| Strongly Disagree | - |

Table 4.7



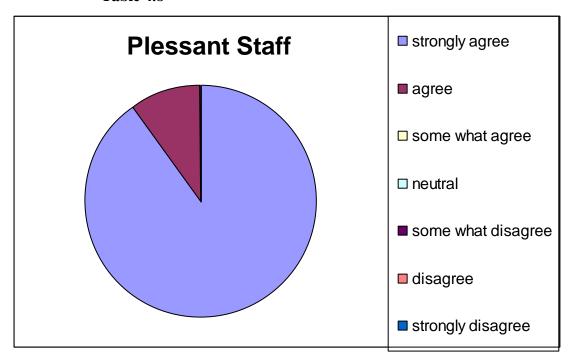
Graph 4.7

All the respondents strongly agree to the statement that Hospitals personnel appear neat. It indicates the staffs of the hospital are conscious about neatness.

P4) Staffs are pleasant when dealing with patients.

| Strongly agree | 90% |
|--------------------|-----|
| Agree | 10% |
| Some what agree | - |
| Neutral | - |
| Some what disagree | - |
| Disagree | - |
| Strongly disagree | - |

Table 4.8



Graph 4.8

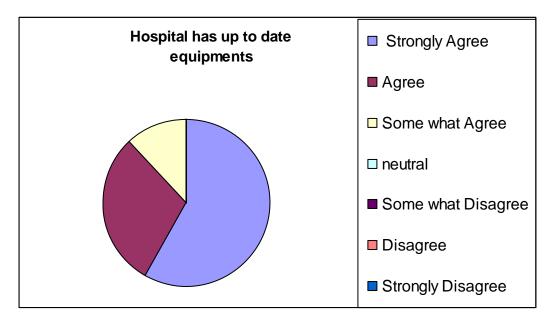
90% of the respondents strongly agree that the hospital staffs are pleasant when dealing with the patients and 10% agrees to the statement.

Most of the patients are satisfied with the approach of the employees of the hospital, they are very friendly.

P5) Vydehi hospital has up to date equipments.

| Strongly Agree | 58% |
|--------------------|-----|
| Agree | 30% |
| Some what Agree | 12% |
| Neutral | - |
| Some what Disagree | - |
| Disagree | - |
| Strongly Disagree | - |

Table 4.9



Graph 4.9

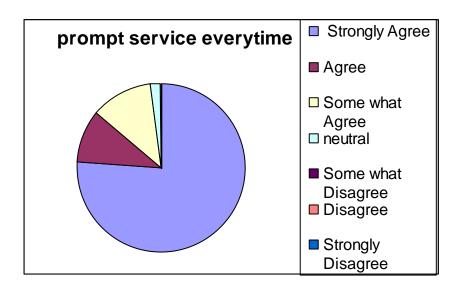
It is evident from the chart that 58% of the respondents strongly agree to the statement that hospital has up to date equipments, 30% of them agree to the statement and 12 % of them some what agree.

It is evident that hospital has updated equipments, but still technology changes everytime it is good to have new automatic machines to conduct operations, dialysis and laboratory work.

P6) Vydehi Hospital provides a prompt service every time.

| Strongly Agree | 76% |
|--------------------|-----|
| Agree | 10% |
| Some what Agree | 12% |
| Neutral | 2% |
| Some what Disagree | - |
| Disagree | - |
| Strongly Disagree | - |

Table 4.10



Graph 4.10

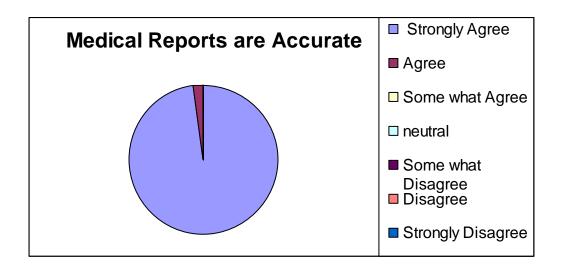
The table and the graph shows 76% of the respondents strongly agree the statement that Hospital provide a prompt service every time, 10% of them agree the statement, 12% of the respondents some what agree to the statement and 2% of them are neutral about the prompt service provided by Vydehi.

Though majority of the respondents strongly agree to the statement the hospital staffs should be kind and provide prompt service everytime. Most of the doctors are the students of the internship, so the patient's belief on them should change to accept the prompt service.

P7) Vydehi hospitals medical reports are accurate.

| Strongly Agree | 98% |
|--------------------|-----|
| Agree | 2% |
| Some what Agree | - |
| neutral | - |
| Some what Disagree | - |
| Disagree | - |
| Strongly Disagree | - |

Table 4.11



Graph 4.11

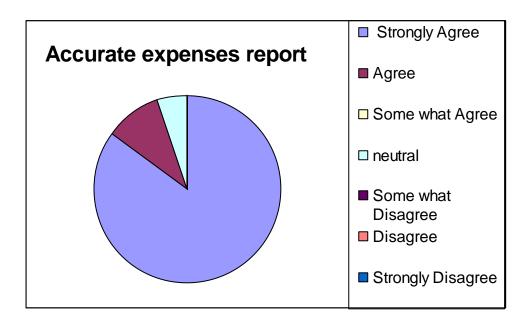
98% of the respondents strongly agree to the statement that medical reports are accurate and 2% of them agree to the statement.

Medical reports of the hospital are accurate, comparing to other hospitals here the time taken to prepare is large, hence management is requested to product quick reports.

P8) Vydehi Hospitals expenses reports are accurate.

| Strongly Agree | 85% |
|--------------------|-----|
| Agree | 10% |
| Some what Agree | - |
| Neutral | 5% |
| Some what Disagree | - |
| Disagree | - |
| Strongly Disagree | - |

Table 4.12



Graph 4.12

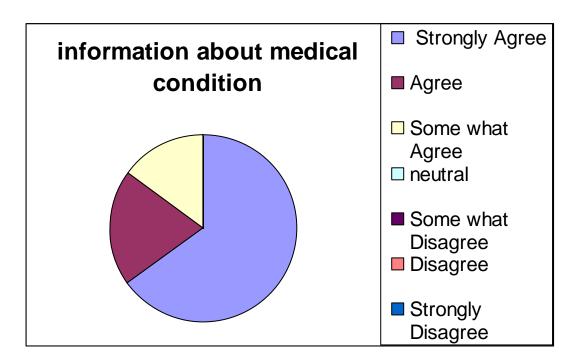
85% of the respondents strongly agree to the statement that expenses reports are accurate, 10% agree to the statement and 5% of the respondents are neutral about the expenses reports accuracy.

Since the hospital provides most of thservices for free of cost the expenses are only on medicines, for special ward patients have to pay less amount compared to other multyspeciality hospitals, so the patients are satisfied from the low expenses for good treatment.

P9) Vydehi hospital provides the adequate information about patient's medical condition.

| Strongly Agree | 65% |
|--------------------|-----|
| Agree | 20% |
| Some what Agree | 15% |
| Neutral | - |
| Some what Disagree | - |
| Disagree | - |
| Strongly Disagree | - |

Table 4.13



Graph 4.13

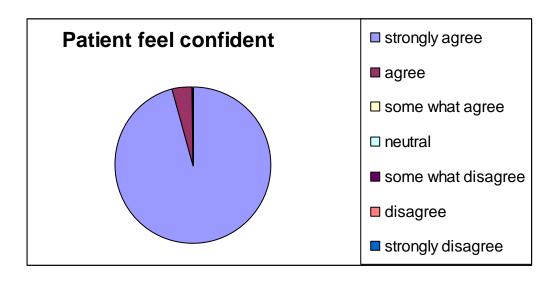
65% of the respondents strongly agree to the statement that hospital provides information about medical condition, 20% agrees to the statement and 15% some what agree to it.

It is advisable for the hospital to provide complete information about patient medical condition.

P10) Patients feel confident when receiving medical treatment at hospital

| Strongly agree | 94% |
|--------------------|-----|
| Agree | 4% |
| Some what agree | 0 |
| Neutral | 0 |
| Some what disagree | 0 |
| Disagree | 0 |
| Strongly disagree | 0 |

Table 4.14



Graph 4.14

94% of the respondents strongly agree to the statement and 4% agree that they feel confident while receiving treatment at the hospital.

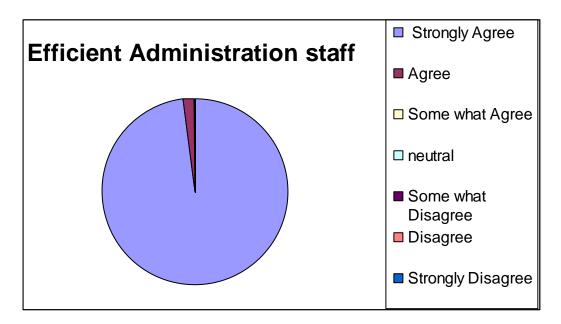
Patients feel confident about the treatment because most of the doctors are highly specialized. They provide prompt service every time.

Responsiveness

P11) Vydehi hospital administration staff was efficient at dealing with queries.

| Strongly agree | 98% |
|--------------------|-----|
| Agree | 2% |
| Some what agree | - |
| Neutral | - |
| Some what disagree | - |
| Disagree | - |
| Strongly disagree | - |

Table 4.15



Graph 4.15

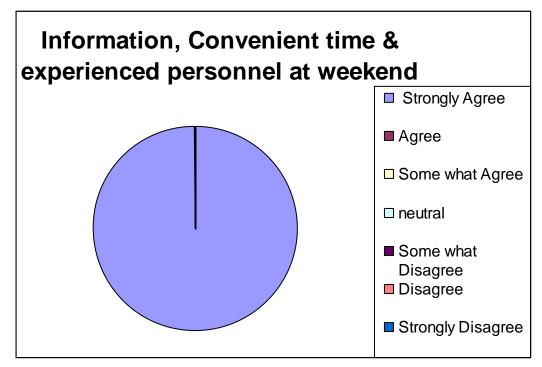
98% of the respondents strongly agree to the statement that Administration staffs are efficient and 2 % agree to the statement.

All the administration staffs are very kind in dealing with patients, so patients are satisfied for efficient problem solving approach by hospital staffs

- P12) Employees informed patients when services would be performed.
- P13) Hospital provides convenience time for patients to use their services.
- P14) There are experienced personnel on duty at weekend.

| Strongly agree | 100% |
|--------------------|------|
| Agree | - |
| Some what agree | - |
| Neutral | - |
| Some what disagree | - |
| Disagree | - |
| Strongly disagree | - |

Table 4.16



Graphs 4.16

All the respondents strongly agree to the above statements. And it is confirmed that Vydehi hospital staffs informs the patients when the services would be performed, they offer convenient time for using services, and there are experienced personnel on duty at weekends.

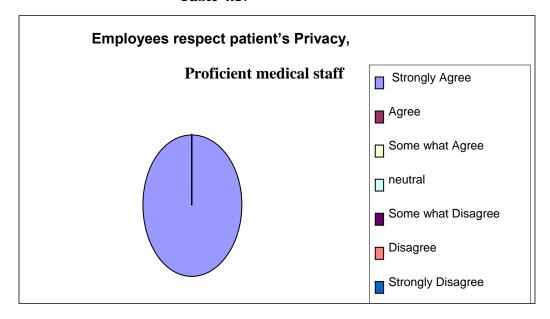
Responsiveness of the hospital is good. Hospital informs the patients when the services are performed. It provides convenience time to use the services of the hospital, and there are experienced personnel on duty at weekends.

Assurance

- P15) Vydehi hospital employees always respected patient's privacy.
- P16) Vydehi hospital makes use of proficient medical staff.

| Strongly agree | 100% |
|--------------------|------|
| Agree | - |
| Some what agree | - |
| Neutral | - |
| Some what disagree | - |
| Disagree | - |
| Strongly disagree | - |

Table 4.17



Graph 4.17

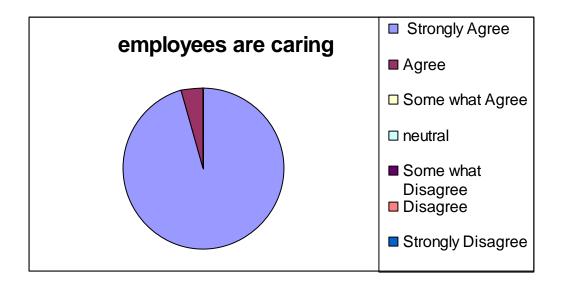
All the respondents strongly agree to the statements that staffs of the hospital respects patient's privacy and there are proficient medical staffs.

Patients are satisfied by the assurance of employees towards patient's privacy, and hospital use experienced medical staffs all the time.

P17) Vydehi hospital employees are caring.

| Strongly agree | 94% |
|--------------------|-----|
| Agree | 4% |
| Some what agree | - |
| Neutral | - |
| Some what disagree | - |
| Disagree | - |
| Strongly disagree | - |

Table 4.18



Graph 4.18

94% of the patients strongly agree to the statement-hospital employees are caring and 4% of the respondents agree to the statement.

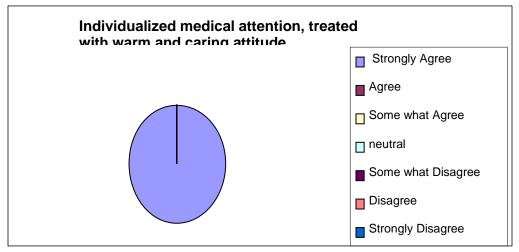
It is evident that patients are well cared in the hospital and they are very satisfied due to care.

Empathy Statement

- P18) Hospital employees gave individualized medical attention.
- P19) Patients are treated with warm and caring attitude in the hospital.

| Strongly agree | 100% |
|--------------------|------|
| | |
| Agree | - |
| | |
| Some what agree | - |
| | |
| Neutral | - |
| | |
| Some what disagree | - |
| | |
| Disagree | - |
| | |
| Strongly disagree | - |

Table 4.19



Graph 4.19

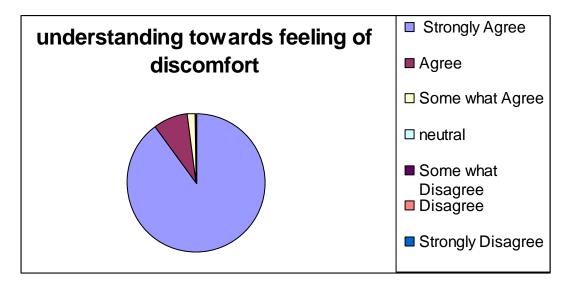
100% of the respondents agree to the statement that employees gave individualized medical attention and treated with warm and care.

All the respondents are satisfied due to the empathy of the staffs towards the patients during the treatment. They give customized and individualized treatment for every patient, and treated with warm and care

P20) Employees always showed understanding towards patients feeling of discomfort.

| Strongly agree | 90% |
|--------------------|-----|
| Agree | 8% |
| Some what agree | 2% |
| Neutral | - |
| Some what disagree | - |
| Disagree | - |
| Strongly disagree | - |

Table 4.20



Graph 4.20

90% of the respondents strongly agree to the statement that employees showed understanding towards patients feeling of discomfort, 8% agree and 2% some what agree to the statement.

Employees of the hospital are quick in responding to the inconvenience faced by the patients, nursing staffs are friendly in solving the discomfort of the inpatients. All the doctors are understanding and strive to make patient happy while receiving the treatment.

CHAPTER 5

SUMMARY OF FINDINGS AND CONCLUSIONS

5.1 GENERALIZED FINDINGS

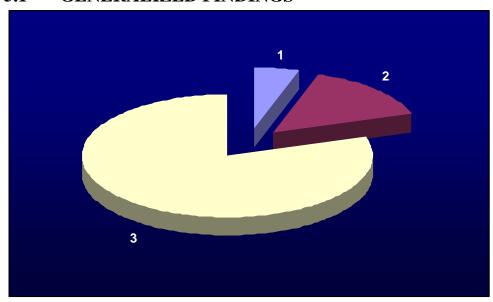
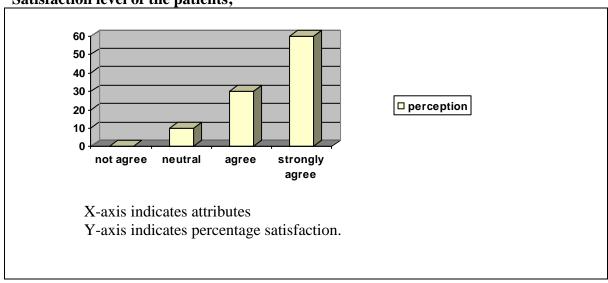


Chart indicates:

80% of the respondents are strongly agree to all the statements given, 15% of the respondents just agree to statements and rest 5% of them some what agree to the statements.

95% of the respondents are satisfied with the service provided by Vydehi and 5% were not satisfied completely.

Satisfaction level of the patients;



5.2 SUMMARY OF FINDING

- It is appreciable on the part of House keeping for maintaining the best environment in the hospital. Cleanliness & hygiene maintenance is excellent than any other hospitals in Bangalore.
- o It is good for Vydehi to maintain a convenient parking facility near the hospital.
- Most of the patients are satisfied with the approach of the employees of the hospital, they are very friendly.
- It is evident that hospital has updated equipments, but still technology changes everytime it is good to have new automatic machines to conduct operations, dialysis and laboratory work.
- All the respondents strongly agree to the statement that Hospitals personnel appear neat. It indicates the staffs of the hospital are conscious about neatness.
- Though majority of the respondents strongly agree to the statement the hospital staffs should be kind and provide prompt service everytime. Most of the doctors are the students of the internship, so the patient's belief on them should change to accept the prompt service.
- Medical reports of the hospital are accurate, comparing to other hospitals here the time taken to prepare is large, hence management is requested to produce quick reports.
- Since the hospital provides most of the services for free of cost the expenses are only on medicines. For special ward, patients have to pay fewer amounts compared to other multy speciality hospitals, so the patients are satisfied from the low expenses for good treatment.

- It is advisable for the hospital to provide complete information about patient medical condition.
- Patients feel confident about the treatment because most of the doctors are highly specialized. They provide prompt service every time.
- All the administration staffs are very kind in dealing with patients, so patients are satisfied for efficient problem solving approach by hospital staffs
- O All the respondents strongly agree to the statements. And it is confirmed that Vydehi hospital staffs informs the patients when the services would be performed, they offer convenient time for using services, and there are experienced personnel on duty at weekends.
- Responsiveness of the hospital is good. Hospital informs the patients when the services are performed. It provides convenience time to use the services of the hospital, and there are experienced personnel on duty at weekends.
- All the respondents strongly agree to the statements that staffs of the hospital respects patient's privacy and there are proficient medical staffs.
- Patients are satisfied by the assurance of employees towards patient's privacy, and hospital use experienced medical staffs all the time.
- It is evident that patients are well cared in the hospital and they are very satisfied due to care.
- All the respondents are satisfied due to the empathy of the staffs towards the
 patients during the treatment. They give customized and individualized treatment
 for every patient, and treated with warm and care.

Employees of the hospital are quick in responding to the inconvenience faced by the patients, nursing staffs are friendly in solving the discomfort of the inpatients. All the doctors are understanding and strive to make patient happy while receiving the treatment.

Positives of the hospital from patients' observation;

- 1) Hospital has very good house keeping, it is appreciable to continue the same for years to come.
- 2) Vydehi hospital gives free and effective treatment, its good for poor people it is doing a noble and social service.
- 3) Many are satisfied with the social consciousness of the management.
- 4) "Heaven for poor" getting good treatment from experienced doctors for free.
- 5) Very good hospital, because none of the other hospitals provide this type of caring for poor in the city.

Negatives of the hospital from the patients view;

- 1) Patients should visit several times for one treatment.
- 2) Waiting time is very large.
- 3) 5% of the patients tell that attitude towards the patients to be improved.
- 4) Due to heavy work, nurses may not respond quickly for some patients queries.

SUGGESTIONS FOR THE HOSPITAL

- 1) Management should take care to reduce the number of visits by the patients by giving effective treatment at once.
- 2) Should give less number of tablets, so that it is not wasted.
- 3) Hospital should provide separate lift for visitors.
- 4) Lead time for inpatients treatment should be reduced.
- 5) Junior doctors should be pleasant and have good attitude towards the patients.
- 6) Laboratory reports are very late; its time should be reduced.
- 7) Better to have a paid medical shop inside to hospital.
- 8) Management should care employees to reduce turnover of lab technicians by increasing salary.
- 9) Hospital should provide drinking water facilities in the campus.
- 10) Shelter facilities should be provided for visitors to stay in hospital campus.
- 11) Hospital should provide food facilities for patient's attendee on weekends.

CONCLUSION

It is clear from the SERVQUAL results that there is a satisfaction in the patients for services that hospital is providing. A lot of criticism, over a number of issues, has been published about the SERVQUAL instrument but clearly this instrument does identify and has identified weaknesses in Vydehi hospital services that management can now work at upgrading. The research findings show that SERVQUAL identified key service quality issues and is a more than sufficient yardstick to measure service quality in a hospital.

A good listening system could incorporate approaches to address all possible reasons for not understanding what customers expect. Reading the patient comments and connecting it to what the study data has revealed shows that administration and medical staff know what customers expect. Knowing what customers expect is the most important step in delivering quality service.

Service Quality is the most essential aspect for the service providers, it is the key competitive issue to differentiate from the competitors. SERVQUAL is the perception of customers after receiving the service. In hospitals SERVQUAL is the perception of patients after receiving the treatment, knowing how the customer/patient interprets the information from environment is most essential for a service provider. It is evident from the findings that, in most of the cases patients were satisfied from the service provided by hospital, their perception exceeds expectations. It is an opportunity for service provider to make the customer delight.

How ever there are few service quality short falls which can be solved easily overtime.

Thanks to "Vydehi Institute of Medical Sciences & Research Centre" for providing an auspicious medical services for everybody.

It is appreciable on the part of House keeping for maintaining the best environment in the hospital. Cleanliness & hygiene maintenance is excellent than any other hospitals in Bangalore. All the patients and visitors appreciate the consciousness of clean and neatness. Every body hopes to continue the same for many years to come.

Here the Doctors and staffs are very friendly and co-operative, the cost of treatment is affordable to everybody, I request you to continue the same forever.

BIBLIOGRAPHY:

Books and Journals:

- ZEITHAML.V.A. and PARASURAMAN.A, 2004, Service Marketing, Cambridge,
 United States: Marketing Science Institute.
- WARE J.E. and SNYDER M.K. 1975. Dimensions of patient attitudes regarding doctors and medical care, Medical Care, vol. 8
- ROSE R.C., ULI F., ABDUL M., and NG K.L. 2004. Hospital service quality: a managerial challenge, International Journal of Health Care Quality Assurance, vol. 17
- J K Sachdeva, Business Research Methodology, I Edition, Himalaya Publishing House.
- Service Quality Perceptions. Journal of Service Research. vol. 2, no. 4, pp. 355-371.
- KOTLER, P. and ARMSTRONG, G., 2003. **Principles of Marketing** (9th Edition). Englewood Cliffs, N.J.: Prentice Hall.
- KOTLER, P., HAYES, T., and BLOOM,P.N., 2002. Marketing Professional Services (2nd Edition). New Jersey: Prentice Hall Press.
- Market Research in Health and Social Care (1st Edition). India.
- Service Quality Measurement. Journal of Health Care Marketing. vol. 14, no. 3, 34-39.
- Professional Services Marketing (1st Edition). Oxford,
- **Managing Service Quality.** vol. 11, no. 1, pp. 22-31.
- **Journal of Health Care Marketing.** vol. 14, no. 1, pp. 34-44.
- International Journal of Health Care Quality Assurance. vol. 9, no. 1, pp. 15-28.

Websites:

- www.socialresearchmethods.net/kb/destypes.php
- www.scribd.com/doc/686343/Three-Types-of-Research
- www.vims.in
- info@vims.ac.in

ANNEXURE

ANNEXURE 1: English Survey Questionnaire

VYDEHI INSTITUTE OF MEDICAL SCIENCES & RESEARCH CENTRE

We hope you enjoyed your visit with us! To help us better serve you, please complete this survey and return it to the public relation officer at your convenience. Thank you!

Below are list of points describing your PERCEPTIONS of Hospital services. On a 1 to 7 scale, with "1" being Strongly Disagree and "7" Being Strongly Agree, how do you rate hospital services on the following attributes?

| | rongl _e Disa | • | e | Neutral | | | Strongly Agree | | | |
|--|----------------------------|---|-----|----------|---|---|-------------------|------|-----|--|
| P1 Vydehi Hospitals cleanliness and hygiene is excellent P2 Vydehi Hospital always have visitor parking available | | 1 | 2 | 3 | | 4 | 5 | 6 | 7 | |
| P3 Vydehi Hospital personnel appear neat | | 1 | 2 | 3 | | 4 | 5 | 6 | 7 | |
| P4 Vydehi Hospital staffs are pleasant when dealing with | th | 1 | 2 | 3 | | 4 | 5 | 6 | 7 | |
| patients P5 Vydehi Hospital has up to date equipment | - | 1 | 2 | 3 | | 4 | 5 | 6 | 7 | |
| r 5 v ydein riospitai nas up to date equipment | - | 1 | 2 | 3 | | 4 | 5 | 6 | 7 | |
| Reliability Statement | _ | | | <u> </u> | | | | | | |
| P6 Vydehi Hospital offers prompt service every time | | 1 | . 2 | 2 3 | 3 | 4 | 5 | 6 | 7 | |
| P7 Vydehi Hospitals medical reports are accurate | | 1 | 2 | 2 3 | 3 | 4 | 5 | 6 | 7 | |
| P8 Vydehi Hospitals expense reports are accurate P9 Vydehi Hospital provide me with adequate informa | tion | - | + | | | - | | ÷ | 7 | |
| about my medical condition | | 1 | - | | | 4 | 5 | 6 | ļ · | |
| P10 I feel confident when receiving medical treatment at | | | . 2 | 2 3 | 3 | 4 | 5 | 6 | 7 | |
| hospital | | 1 | . 2 | 2 3 | 3 | 4 | 5 | 6 | 7 | |
| Responsiveness | | | | | | | Sta | item | ent | |
| P11 Administration staff were efficient at dealing with my queries P12 Employees informed me exactly when services would | 1 | 2 | 2 | 3 | 4 | 4 | 5 | 6 | 7 | |
| | 1 | | 2 | 3 | 4 | 4 | _ | 6 | 7 | |
| be performed | _ | | | | | - | | _ | | |
| P13 Hospital offered convenient times for patients to use their services | 1 | 2 | 2 | 3 | 4 | - | 5 | 6 | 7 | |
| P14 There is experienced personnel on duty at weekends | 1 | 2 | 2 | 3 | 4 | 4 | 5 | 6 | 7 | |
| Assurance Statement | 1 | | 2 | 3 | 4 | | 5 | 6 | 7 | |
| P15 Vydehi Hospital employees always respected my | | | _ | <i>J</i> | | | | O | | |
| privacy | 1 | | 2 | 3 | 4 | | 5 | 6 | 7 | |
| P16 Vydehi Hospital employees are caring P17 Vydehi Hospital makes use of proficient medical staff | 1 | - | 2 | 3 | 4 | | 5 | 6 | 7 | |

Empathy Statement P18 Hospital employee gave me individualized medical 7 2 3 5 4 6 attention P19 Employees always showed understanding towards my 5 1 2 3 4 7 6 feelings of discomfort P20 I was treated with a warm and caring attitude in 1 2 5 7 3 6 4 hospital Many thanks for your participation in this hospital quality survey

Other comments: **ANNEXURE 2: Patient Comments** 1. Thanks 2. All I can say is that over the last 6 years we have always had a good service from the Hospital 3. □ In general, the Vydehi hospital admin does its best to provide the quality of service requires with the personnel and equipment currently available. The medical records kept electronically. I would like to thank the wonderful staff for giving comfort and medical treatment during patient's last in house visit. Thank you very much. 4. VYDEHI HOSPITAL HAS A VERY CURTIOUS CAO, PRO, CHIEF NURSING OFFICER AND ASSISTANT. 5. In the efforts to modernize there are understandably far more administrative staff and offices and one can't avoid the impression that the hospital has become too commercial and more distant from the patients. Most people I come into contact do try to be helpful and seem interested in helping. 6. There is such an amazing group of nurses who are qualified in many areas that are not utilized. The doctors and nurses need to be more proactive.

7. \square On a positive note staff provide good care, are well presented and approachable.

8. The cleaning staffs do an excellent job!

| 9. | \Box I have no information about expenses. Keep up the good work! We are so fortunate to have such a resource. |
|-----|--|
| 10. | ☐ As many people do not like hospitals as such, I can say that when I have had the misfortune to be admitted or attend as an outpatient, I have only the highest praise for the staff of Vydehi Hospital (great work guys and gals) |
| 11. | $\hfill\Box$ The medical staff is excellent and house keeping is maintained well I ever seen. |
| 12. | ☐ Everyone is very friendly at the hospital. Thankyou |
| 13. | \Box I have very special memories of Vydehi hospital. Our three children were born there and have been treated there over the years, in particular Doctors have been very kind and experienced, and we have been lucky to deal with them. |
| 14. | □ While it is easy to identify expected services it is more difficult to judge whether the medical care I received in Vydehi Hospital is the best as it is difficult to compare it with any other. In addition my visits to Vydehi Hospital have been few and between over the years and like many other service industries, it depends on the individual doctor or nurse. Having said that, I have received very welcoming treatment many times over the years and feel very confident in returning there for future consultations as they arise. |
| 15. | ☐ It is an excellent hospital |
| 16. | ☐ Medical care was good but had trouble with the business and accounting side. Took far too long to get our needed financial business correct and completed. |
| 17. | $\hfill\square$ Only highest honors for Vydehi with treatment of my pregnancy, caesarean and stay in hospital. |
| 18. | \square I was surprised by the attractive medical care my wife got, the overall was very good. |
| 19. | ☐ The main issue I have is the convenience times. The times should be more flexible and the appointments with doctors should be made also later in the day (beyond 4:30) |
| 20. | Vydehi hospital is unique in its services - doctors esp. are caring and meet patients. |
| 21. | Psychosomatic (both body & mental) attention patients feel very comfortable at Vydehi hospital atmosphere. |
| 22. | ☐ My experience of having a baby at Vydehi Hospital was very positive and I would recommend it to others. |
| 23. | ☐ Parking is not sufficient for all patients and needs to be enlarged. |
| 24. | ☐ Wish you all the best. |
| | ☐ Wish you all the best with your work. Very good hospital.☐ Thank you for the service from Vydehi hospital. |