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## A STUDY OF FACTORS AFFECTING QUALITY OF HEALTHCARE AND ITS EFFECTS ON CUSTOMER SATISFACTION: WITH REFERENCE TO ALL CORPORATE HOSPITALS IN NAGPUR CITY

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**HYDERABAD**

### ABSTRACT

*A modern health system which provides high quality care has trickle-down effect on the quality of life of the individual citizens and the overall economic development of the country. Quality care has become an important aspect in the development of healthcare services. Customer/Patient satisfaction on healthcare quality plays a vital part on the assessment of healthcare frequently. Improvement in quality reflects on the satisfaction level of the patients. The higher the quality the higher the satisfaction level of the patient This study focuses on finding out the factors affecting quality of healthcare and its effects on customer/Patient satisfaction with special reference to a private hospital in Nagpur city, Maharashtra, India.*

### KEYWORDS

customer/patient satisfaction, economic development, quality of healthcare, modern health system, satisfaction level.

### INTRODUCTION

**C**ustomer/ Patient satisfaction is a **marketing term** that measures how products or services supplied by a company meet or surpass a customer's expectation. Customer satisfaction is important because it provides marketers and business owners with a metric that they can use to manage and improve their businesses. It can be also defined as The degree of satisfaction provided by the goods or services of a company as measured by the number of repeat customers.

It is a measure of how products and services supplied by a company meet or surpass customer expectation. Customer satisfaction is defined as "the number of customers, or percentage of total customers, whose reported experience with a firm, its products, or its services (ratings) exceeds specified satisfaction goals". Customer satisfaction provides a leading indicator of consumer purchase intentions and loyalty. Customer satisfaction data are among the most frequently collected indicators of market perceptions. In most of the cases the consideration is focused on two basic constructs as customer's expectations prior to purchase or use of a product and his relative perception of the performance of that product after using it.

### IMPORTANCE OF CUSTOMER SATISFACTION

#### 1. Customer satisfaction is a gateway to earning loyalty.

Measuring customer satisfaction and loyalty are like comparing apples to oranges because the former is a function of attitude while the latter goes much deeper. Loyalty is a belief that was formed from having a customer encounter good experiences from a particular brand. Ensuring that a client is satisfied with every point of interaction is a process that leads to loyalty down the road.

#### 2. You must keep customers satisfied to maintain their loyalty.

On average, it takes up to three years for a customer to become loyal to your business. Once loyalty has been earned, it's important not to slack off because these are clients that can give insights for improvement to the marketer. More importantly, they are the best candidates for becoming ambassadors, and those who'll keep coming back to buy from the same marketer during their lifetime—as long as the marketer keeps them satisfied.

#### 3. It's a key metric for project management success.

In project management, the key factors that are often given priority are time, scope, and budget. Client satisfaction is important but it's usually given mere lip service, and not tied into the day -to-day decision-making process.

#### 4. Measuring satisfaction lets you know if a client will buy from you again.

There's a strong correlation between satisfaction and repeat business. Keeping new customers happy will increase the likelihood of them buying from you again while poor customer service on marketer's part, then lowers the chances of them coming back.

#### 5. Clients leave because of poor quality service more than price considerations.

The main reason for attrition is not changes in marketer's price points, but bad customer service experience. The good news here is that as long as marketer pays attention to his customer's needs and continue to "wow" them by exceeding their expectations, it's easier to justify price increases when the time comes.

#### 6. It keeps you ahead of your competitors.

As a market differentiator, nothing beats consistently delivering excellent service, and always going above and beyond marketer's customer needs. Take the case of brands like Starbucks, the Ritz-Carlton, or Disney. One needs only mention the names of these successful brands and services to know that it's their commitment to customer satisfaction that has kept them miles ahead from their peers.

#### 7. It promotes customer retention.

Retention is closely tied to loyalty. Satisfaction keeps clients coming back for more and doing business with the marketer in the future. They're more likely to stick with marketer's brand longer and eventually turn into the kind of advocates that will help spread the word for marketer, thereby earning more customers down the road.

#### 8. Acquiring new clients is more expensive than keeping the ones you already have.

It's an oft-repeated statistic among customer service practitioners that it costs up to seven times more to acquire new clients than it does to retain the ones you already have. This is why marketer's should put more of resources toward keeping your existing marketer customers happy, instead of trying to reach out cold to new ones.

#### 9. Disgruntled customers will spread the word about your business.

Negative word of mouth can be a death knell to a company, especially in today's wired and interconnected world. It's so much easier to spread negative reviews on various platforms.

#### 10. It improves customer lifetime value.

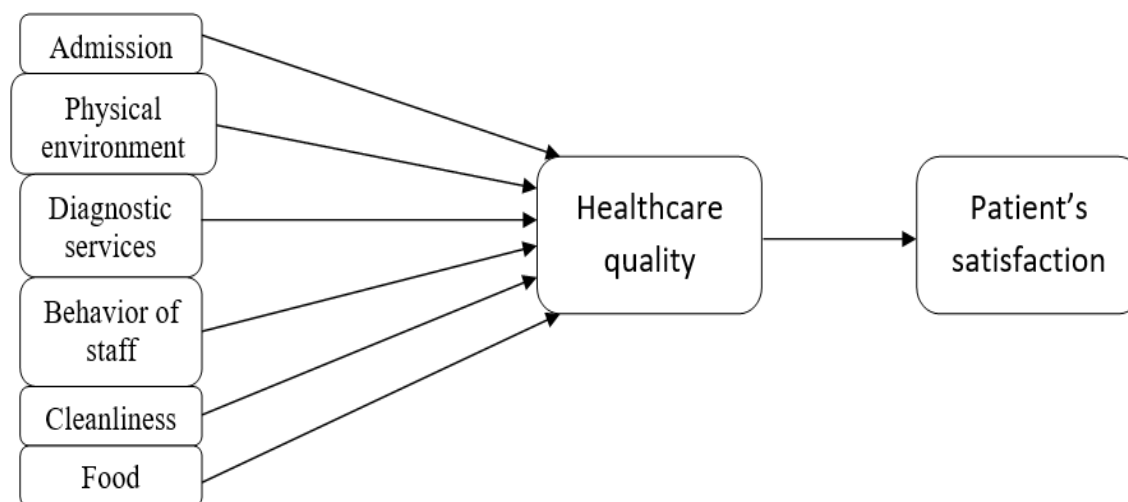
Customer lifetime value is a marketing term that predicts the net profit attributed to the entire future relationship with a customer. The longer a client remains satisfied with a product or service, the longer they'll stay with it, which in turn increases the chances of getting a return for the amount of time and money it took to acquire that customer.

### WHAT IS HEALTHCARE QUALITY?

Measuring the value of any healthcare resources level refers to healthcare quality. The main aim of healthcare is to provide medical resources of high quality to all. Most people would define healthcare quality as receiving best care possible for one's illness or condition, and for many, it also includes the entire experience

of receiving care including the avoidance of errors or mistakes. Quality measures enable us to see how we perform against benchmark. Quality reflects patient satisfaction, while patient satisfaction depends on several factors like, admission procedure, physical facilities, diagnostics services, behavior of staff, cleanliness, food.

FIG. 1



### FACTORS AFFECTING PATIENT'S SATISFACTION

- **Admission procedure**

If the admission procedure is too lengthy or time consuming is too complicated, then it might create bad impression in the minds of the patients and it may lead to patients dissatisfaction in the whole process of treatment.

- **Physical Environment**

A patient/attendant judges a hospital, the moment they lay eyes on it. Before a service experience even begins, the patient usually has already decided whether they will be returning to the hospital again. On understanding the connection between the quality in physical facilities and patient satisfaction, one can know that, it can have lasting

impact on both hospital's performance and its ability to provide quality care. Quality in lobby, out-patient clinics, inpatient rooms, operating rooms, exam/procedure rooms, support areas, reception counters, and administrative areas contributes to patient satisfaction.

- **Diagnostic Services**

Delay in diagnostic services leads to dissatisfaction amongst patients. Diagnostic facilities include laboratory and radiology services.

- **Behaviour of Staff**

This dimension measures patients' experience in respect to the quality of care delivered by doctors, nurses, paramedical. Staff and support staff. The medical encounter between a doctor and a patient requires intensive levels of interaction where it has a greater impact on patient satisfaction. As mentioned by Bitner in 1990, there is a long term relationship between the doctor and patient with the doctor having a significant discretion in meeting patient needs. Many studies have highlighted the vital contribution of nurses to the quality of patient care. Skills and behavior of the para-medical and support staff also plays a major role in measuring quality, with regard to the behavior of staff that influences patient satisfaction.

- **Cleanliness**

One area that has greater impact on hospital quality is patient perception towards cleanliness. Cleanliness includes environmental cleanliness, hygiene, hand washing techniques and everything. Interaction by administrators to patients will make them understand the efforts taken by staff to keep their hospital clean. This helps in boosting the satisfaction of patients on cleanliness which serves as a key element in attaining quality services.

- **Food**

Hospital administrators say the focus on food has gained extra importance among patients. There are many food management companies that specialize in healthcare facilities since they are getting more requests from hospitals. Food plays an vital role of game changer in the hospitals. Many patients hate dietary food style in hospitals. So management has taken steps along with dietary counselors in order to satisfy the patient taste without disturbing their nutritious diet.

### REVIEW OF LITERATURE

**Parasuraman, Zeithaml, & Berry, 1985**, Over the past thirty years, the nature, dimensionality and measurement of service quality has been debated by academics. The concept of service quality has been described as elusive and abstract. This elusiveness is attributable to the unique characteristics of services: *intangibility, inseparability of production and consumption, heterogeneity, and perishability*.

**Berwick, 1989**, Today's quality movement in health care draws on disparate roots in medicine and other industries. Medicine historically has taken a watchdog approach, relying on government licensing, professional credentials, internal audits, and, more recently, external inspections to maintain standards solve problems and quality management. Other industries have adopted a different philosophy over the past 50 years: training employees to prevent problems, strengthening organizational systems, continually improving performance, and patient safety and satisfaction.

**Brown, 1991**, Quality is especially difficult to define, describe and measure in services. While quality control measures have long existed for tangible goods, few such measures have traditionally existed for services. In essence, quality is determined by imprecise individual factors: perceptions, expectations, and experiences of customers and providers, and in some cases, additional parties such as public officials.

**Madeline, 1991**, Customers inability to form accurate judgment based on objective evaluation of technical outcome often makes them bank upon the tangential cues that are encountered during the services delivery process. The functional quality dimensions become the basis of judging the technical outcome. For instance, the quality of services provided by physicians is likely to be judged by the impressions of his behavior, listening openness, accessibility and empathy.

**Vera, 1993**, Assuring the good quality of health care services is an ethical obligation of health care providers. Research is showing that good quality also offers practical benefits to patients. Good- quality care makes, for example, contraception safer and more effective. Poorly delivered services can cause infections, injuries, and even death. Poor services, in family planning clients and programmes also can lead to incorrect, inconsistent, or discontinued contraceptive use and thus to unwanted pregnancies. Interviews with clients in Chile, for example, found that good quality clinical services reduced clients' fears, increased their confidence in the care received, and generated loyalty to the clinic.

**Zineldin, 1998, 2000a, 2000b, 2004**, argues that total relationship management (TRM) highlights the role of quality and customers/patients service, the impact of the external environment on business rules and performance, on relationships and networks, on communications and interactions with different actors, other collaborators and employees in different departments/functions.

**Campbell J, 1999**, Patient satisfaction is generally defined as the consumer's view of services received and the results of the treatment. The importance of patient satisfaction has had a long history of debate, beginning, over two millenniums ago in ancient Rome. Plato suggested in a statement that since the doctor "cuts us up, and orders us to bring him money.. as if he were exacting tribute.. he should be put under rigid control," and that this could be done by calling an assembly of the people and inviting opinions about "disease and how drugs and surgical instruments should be applied to patients".

**Sofaer and Firminger, 2005**, identified seven categories or dimensions that were important to patients:

1. Patient-centred care
2. Access
3. Courtesy and emotional support
4. Communication and information
5. Technical quality
6. Efficiency of care Organization
7. Structure and facilities

**Hollis, 2006**, argued that there was a strong link between service quality and satisfaction, to the extent that it is believed that quality has been defined in other consumer-orientated industries as perceived satisfaction.

**Tam, 2007**, argued that satisfaction arises from a process of comparing perceptions of service with expectations. The initial expectations that patients have about care and services act as a major determinant of satisfaction. If perceived care falls short of expectations, the likely outcome is dissatisfaction. On the other hand, when those meet or exceed expectations, the result is likely to be an increase in the level of satisfaction.

**Badri, Attia, & Ustadi, 2008**, believed that patients and their satisfaction are considered the most crucial point in the planning, implementation and evaluation of service delivery and that meeting the needs of the patient and creating healthcare standards were imperative towards achieving high quality.

**Saila, 2008**, rated effective communication as the key to patient satisfaction. Informed consent has been routinely performed by care providers in countries where litigation against care providers is common. Informed consent is becoming equally important, where medical scheme patients are now on savings plans and are thus more responsible with the funds allocated. Thus, with patients making informed decisions about their health, it becomes imperative that communication between the care provider and patient is clear.

## OBJECTIVES

1. To analyze factors influencing quality in healthcare and patient satisfaction in all corporate hospitals in Nagpur city of Maharashtra, India.
2. To study patient perception towards factors influencing quality in all corporate hospitals in Nagpur city of Maharashtra, India.
3. To assess the role of hospital administrators towards quality and patient satisfaction quality in all corporate hospitals in Nagpur city of Maharashtra, India.

## METHODOLOGY

The study adopted a questionnaire survey amongst patient/attendants and administrators. The hospital chosen for study were all corporate hospitals in Nagpur city of Maharashtra, India. These hospitals provide a wide range of healthcare and research services through various health professionals and trainers to diverse patient populations. Quantitative and qualitative data were collected using standardized questionnaire. The questionnaire specifically addresses the patient perception towards quality in services, factors influencing patient satisfaction, role of hospital administrators in providing quality services. Totally 272 samples were collected, 208 from patients/ attendants and 64 from hospital administrators using simple random sampling technique. Friedman test and chi-square test were used for statistical analysis.

## DATA ANALYSIS

**TABLE 1: PERCEPTION OF PATIENTS ON FACTORS INFLUENCING HEALTHCARE QUALITY AND PATIENT SATISFACTION (FRIEDMAN TEST)**

Factors influencing quality of healthcare	Mean Rank	Chi-Square Value	P-Value
Physical environment	4.80	775.930	<0.001
Food	4.50	775.930	<0.001
Behavior of staff	4.50	775.930	<0.001
Admission procedure	4.20	775.930	<0.001
Cleanliness	2.00	775.930	<0.001
Diagnostic services	1.00	775.930	<0.001

**H0:** There is no significance between perception of patient on factors influencing healthcare quality and patient satisfaction.

**H1:** There is significance between perception of patient on factors influencing healthcare quality and patient satisfaction.

Since P value is less than 0.01, H0 is rejected at 1% level of significance, where H0 is no significance between perception of patient on factors influencing healthcare quality and patient satisfaction. There is significance difference between mean ranks of factors influencing quality of healthcare and patient satisfaction. Based on mean rank, (4.80) physical facilities is the most important factor on quality, followed by food (4.50) and behavior of staff and admission procedure (4.20).

**TABLE 2: YEARS OF EXPERIENCE AND ADMINISTRATORS' UNDERSTANDING ON HEALTHCARE QUALITY (CHI- SQUARE)**

Years of experience	Chi-Square	Value
1-7 years	1.280	<0.001
8-15 years	1.280	<0.001
16-25 years	1.280	<0.001
26 years & above	1.280	<0.001

**H0:** There is no significance between years of experience and administrators understanding on healthcare quality.

**H1:** There is significance between years of experience and administrators understanding on healthcare quality.

Since P value is less than 0.01, H0 is rejected at 1% level of significance, where H0 is no significance between years of experience and administrators understanding on healthcare quality. Based on the years of experience administrators' understanding on healthcare quality differs widely.

**TABLE 3: ADMINISTRATOR UNDERSTANDING ON HEALTHCARE QUALITY (FRIEDMAN TEST)**

Administrators understanding on healthcare quality Mean	Mean Rank	Chi-Square	Value
Service outcomes are regularly communicated to all employees	12.74	728.42	<0.001
Progress towards achieving hospital wide quality indicates goals is tracked and communicated, to medical and paramedical personnel	11.79	728.42	<0.001
Clinicians, administrators involve patients and families in effort to improve patient care quality	11.79	728.42	<0.001
Physical environment improves the mood and boosts the morale of both patient and provider	11.79	728.42	<0.001

**H0:** There is no significance on administrators understanding on healthcare quality and patient satisfaction

**H1:** There is significance on administrators understanding on healthcare quality and patient satisfaction

Since P value is less than 0.01, H0 is rejected at 1% level of significance. There is significance difference between mean ranks on administrators' understanding of healthcare quality. Based on mean rank communication of services outcomes (12.74) is most important factor followed by progress toward achieving hospital wide quality indicators goals is tracked and communicated, to medical and paramedical personnel (11.79), clinicians, administrators involve patients and families in efforts to improve patient care quality (11.79) and physical environment improves the mood and boosts the morale of both patient and provider (11.79).

TABLE 4: QUALITY IMPROVEMENT INITIATIVES (FRIEDMAN TEST)

Quality improvement initiatives	Mean Rank	Chi-Square	P Value
Hospital has established an organization wide quality mission statement	9.55	728.42	<0.001
Work process redesign or reengineering is done regularly for quality	8.61	728.42	<0.001
Bench marking within the hospital	8.34	728.42	<0.001
Management walk around to identify quality problems or issues	7.92	728.42	<0.001

**H0:** There is no significance on quality improvement initiative and healthcare quality

**H1:** There is significance on quality improvement initiative and healthcare quality

Since P value is less than 0.01, H0 is rejected at 1% level of significance. There is significance difference between mean ranks on quality improvement initiatives. Based on mean rank quality mission statement established by hospital is most important with mean rank of 9.55, followed by work process redesign and reengineering with 8.61, bench marking within the hospital with 8.34 and management walk around to identify quality problems and issues with mean rank of 7.92.

## CONCLUSION

Regarding the importance of healthcare quality dimensions, the study concludes that physical facilities is the most important factor on healthcare quality, followed by food and behavior of staff and admission procedure from patient perspective. Based on the years of experience of staff the level of understanding on healthcare quality differs widely with high experienced staff with more knowledge on healthcare quality. Quality improvement initiatives like quality mission statement of the organization, redesigning and reengineering in hospital regularly, bench marking within the hospital and management walk around to identify problems and issues on quality helps the administrators to work towards quality.

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