

An Empirical Study of the Factors Influencing Quality of Healthcare and Its Effects on Patient Satisfaction

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ABSTRACT: The need for quality improvement in healthcare has become universal. Although patients demand quality in the services provided to them, achieving overall success in quality healthcare is not well understood. The poor understanding level, on the quality by the healthcare professionals has put performance far below the acceptable level, in spite of the rapid expansion of knowledge and technology in healthcare system. Improvement in quality reflects on the satisfaction level of the patients. The higher the quality the higher the satisfaction level of the patient. The aim and purpose of this research paper is to provide people, especially the patients and healthcare professionals with sufficient information to understand the fundamentals of quality improvement, and to provide a starting point for improvement in quality that has greater influence on patient satisfaction.

KEY WORDS: Patient satisfaction, improving quality, quality care, healthcare quality.

I.INTRODUCTION

Quality care has become an important aspect in the development of healthcare services. Patient satisfaction on healthcare quality plays a vital part on the assessment of healthcare frequently. A critical challenge for health service providers in India is to find ways to make them more client- oriented. All healthcare providers should realize the fact, that the main beneficiary of healthcare- system is clearly the patient. Patients who are satisfied stay with the hospital for long term, and also come back or recommend the hospital for others. The term 'patient satisfaction' is rapidly changing to 'customer delight'. The degree of patient satisfaction play like a vital tool in the assessment of quality care provided. Since healthcare is growing rapidly and patients' knowledge level about their rights is increased, they are demanding that hospitals meet their needs. The key factors that affects patients satisfaction are admission procedure, diagnostic services, employees' behavior towards them, cleanliness, nursing care, food, communication, interpersonal manner of the physicians, housekeeping, technical services, accessibility and convenience.

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, techniques.

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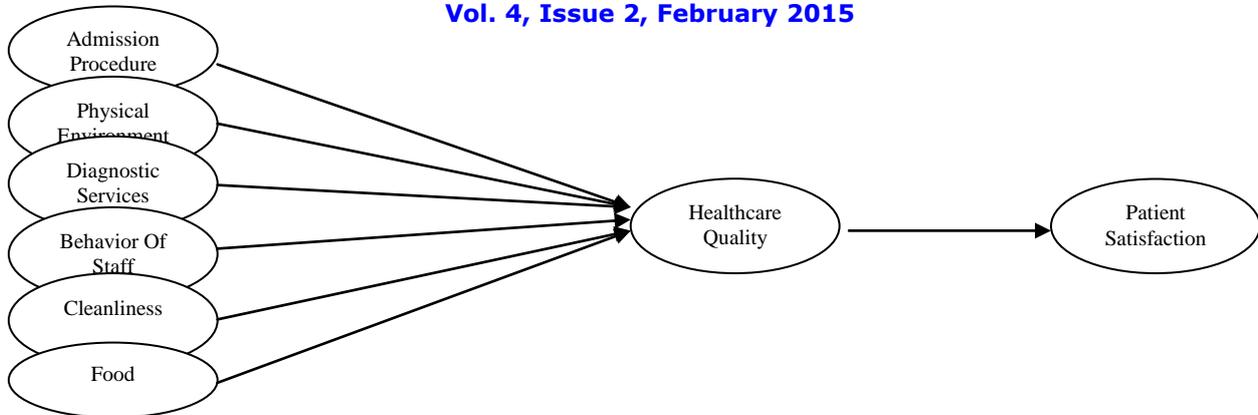


Figure 1: Factors influencing quality of healthcare

- **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.

- **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, administrative areas contributes to patient satisfaction.

- **Diagnostic Services**

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

- **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.

II. 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

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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

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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.

III. OBJECTIVES

- To analyze factors influencing quality in healthcare and patient satisfaction
- To study patient perception towards factors influencing quality
- To assess the role of hospital administrators towards quality and patient satisfaction
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IV. METHODOLOGY

The study adopted a questionnaire survey amongst patient/attendants and administrators. The hospital chosen for study were all corporate hospitals in the capital city of Tamil Nadu, 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.

V. DATA ANALYSIS

Table 1: Perception of patients on factors influencing healthcare quality and patient satisfaction (Friedman Test)

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.

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

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)

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.

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

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)

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

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

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)

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

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

Quality improvement initiatives	Mean Rank	Chi-Square Value	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 improvement	8.61		
Bench marking within the hospital	8.34		
Management walk around to identify quality problems or issues	7.92		

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.

VI. 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

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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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