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An Empirical Study to Assess Relevant Healthcare Service Quality Dimensions for Healthcare Settings

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Abstract. As socio-economic status increases, patients' awareness of the facilities and quality of service provided in hospitals has improved. This work identified the eight most significant healthcare quality dimensions through a combination of qualitative and quantitative research methods. Using these dimensions, we developed a scale.

Keywords: Healthcare Quality, Service Quality, Healthcare Dimensions, Customer Satisfaction

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I. INTRODUCTION

Everyone wants to be healthy because it is a fundamental human right. Health issues are increasing as the population grows. The healthcare sector is evolving to deal with health-related problems. Hospitals are setting standards for more efficient patient/consumer care which is timely, precise, and ensures the resolution of diseases. As time progresses, patients' demands will also increase, changing the competitive service landscape. Customers are becoming more conscious about their rights and expectations regarding medical practices, procedures, doctors, and service response. The opinions of patients are one of the main factors used to evaluate the quality of service. Key factors for evaluating service quality focus on patients' needs, opinions, and experiences. Ongoing government efforts are improving healthcare quality in India. Various accreditation bodies conduct quality assessments in the public and private sectors to improve healthcare quality. Physician availability and healthcare resources are insufficient. This paper aims to develop a tool for determining healthcare service quality metrics aligned with customer expectations.

II. LITERATURE REVIEW

Parasuraman et al. (2005) introduced the SERVQUAL model, a widely used tool for evaluating service quality across industries. It provides a framework for assessing perceived service quality across five criteria: assurance, tangibles, responsiveness, empathy, and consistency. In assessing healthcare quality, Donabedian (1993) highlighted three fundamental elements: outcome, process, and structure. This framework has greatly influenced the development of quality improvement programs in healthcare systems worldwide. Gupta and Rokade (2016) examined the healthcare quality dimensions studied by many authors. The following authors identified the service quality dimensions as follows:

Table 1: Literature review of dimensions analysed by authors

S.No.	Source	Dimensions	Sector
1	Parasuraman, et al. (1985)	Reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding customers, tangibles	Retail banking, Credit card, Securities, Brokerage & Product repair and maintenance
2	Woodside et al. (1989)	Admission, nursing care, meals, housekeeping, technical services, discharge	Healthcare
3	Sower et al. (2001)	JCAHO dimensions -Efficacy, appropriateness, efficiency, respect & caring, safety, continuity, effectiveness, timeliness, availability	Healthcare
4	Andaleeb (2001)	Responsiveness, assurance, communication, discipline& baksheesh	Healthcare
5	Sureshchandar et al. (2002)	Human Element- widespread impact tangibles, essence of services, quality features, systematisation of service delivery: non-human element, social responsibility	Banking
6	Cheng et al.(2003)	Clinical Competence(Hospital equipment, physician competence & treatment outcome), interpersonal skills of Physician (Doctor's attitude, doctor's caring manner& doctor's explanation of illness or condition)	Healthcare
7	Siddiqui & Khandaker (2007)	Physicians – empathy, availability, assurance /competence, empathy of nurses, availability of drugs, tangibility and perceived cost	Healthcare
8	Naidu (2009)	Access, care quality, cost, physician role & behaviour, tangibles.	Healthcare
9	Sharma & Narang (2011)	Healthcare delivery, interpersonal & diagnostic aspects of care, facility, health personnel conduct & drug availability & financial & physical access to care.	Healthcare
10	Souza & Seqeria (2012)	Doctors' quality of care, nursing quality of care and operational quality of care	Healthcare
11	Bhardwaj & Chawla (2013)	Service bonding, accessibility, timeliness, accuracy, promptness, ambience, competence, impressiveness, customisation	Healthcare
12	Naik et al. (2015)	First impression, clinical care, communication, food & housekeeping service & nursing care	Healthcare
13	Sahoo 2016	Service personnel conduct & cleanliness, service delivery, ambience & facilities, location & look, appealing decoration, upgraded safety service, and patient satisfaction	Healthcare
14	Abbasi et al. (2019)	Accessibility, waiting time, admission process, physical environment, physician consultation, service cost, information to patient	Healthcare
15	Kumar & Anand (2023)	Clinical quality, patient safety, patient-centeredness, efficiency, equity	Healthcare

III. OBJECTIVE OF THE STUDY

This study has two objectives:

1. To explore the service quality dimensions affecting consumer satisfaction.
2. To develop the conceptual model of healthcare quality.

IV. QUALITATIVE RESEARCH

To identify key dimensions of healthcare quality and develop questionnaire items describing each dimension, we conducted a qualitative study. Eight dimensions of healthcare quality have been identified from the literature review. Based on these

dimensions, we developed the following conceptual model of healthcare quality (Fig. 1).

Physical Aspects

Physical aspects are basic amenities provided to patients to make treatment procedures comfortable. Physical aspects vary in both public and private hospitals. Private hospitals spend more to make patients more comfortable. Physical aspects include the hospital's appearance, seating facilities, trolleys and chairs in proper condition for patient movement, cleanliness, proper signage, symbols, and display boards.

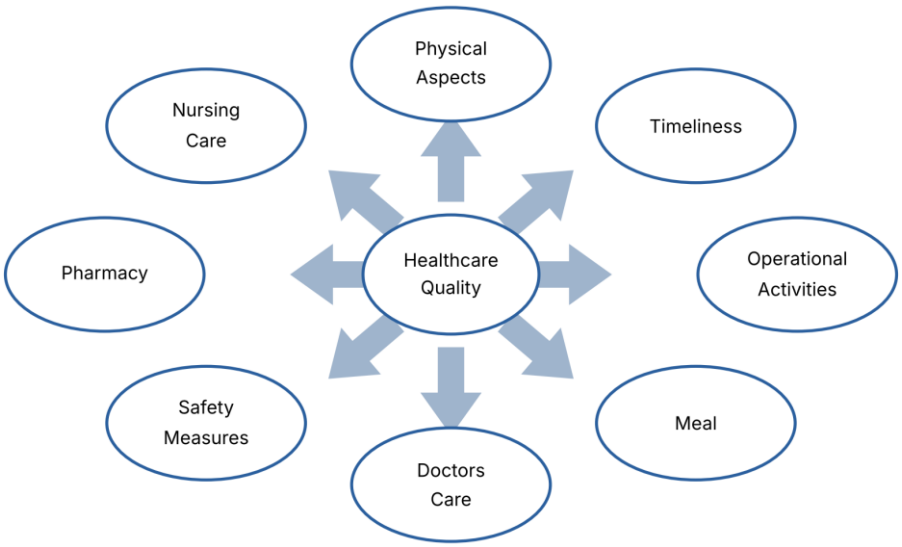

Fig.1 Healthcare quality conceptual model
(Source: authors)

Operational Activities

Operational activities are the facilities that keep hospital processes running smoothly. They include admission, documentation, diagnosis, billing, and laboratory services.

Nursing Care

In the absence of doctors, nurses are the main role players in supervising patients' health and administering medications prescribed by doctors. Nursing care supports admitted patients 24 hours a day. Nursing care keeps patients comfortable until they are discharged from the hospital.

Doctor's care

Doctors' care is an important dimension of healthcare quality that patients seek when they visit hospital premises. The patient's main objective is to receive the best treatment from doctors. Doctors' care is the main aspect of healthcare quality, whether public or private. Efficient, effective doctor care leads to patient satisfaction.

Timeliness

Timeliness is the readiness of hospital staff to deliver emergency services to patients or provide services on time.

Patient Safety Measures

Patient safety is the most important dimension of healthcare quality and helps prevent negligence and hospital-acquired infections.

Meal

Meals are a basic part of a patient's diet during treatment. Meals include food prescribed by the patient's dietician. In private hospitals, dietitians prepare diet charts, but in public hospitals, doctors prescribe them. In India, public hospitals provide meals to patients free of cost, but private hospitals charge for them.

Pharmacy/Medical Store

A pharmacy or medical store is a place where prescribed medicines are available. It may be within hospital premises. The pharmacy should be open 24 hours a day and have a pharmacist on duty. Hospitals maintain a stock of medicines in their own inventory,

but some medicines are not available, so emergency patients need to purchase them outside the hospital.

V. CONCLUSION

Healthcare quality dimensions vary by country, so the sector has no stable dimensions. Service quality is essential in today's competitive marketplace. The eight healthcare quality dimensions identified are physical aspects, timeliness, doctors' quality of care, operational activities, pharmacy, nursing quality of care, safety measures, and meals. These dimensions enable hospitals to develop strategies to improve service quality and meet customer expectations. Both the public and private healthcare sectors can improve customer satisfaction, loyalty, and trust by consistently providing high-quality services using identified dimensions.

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