Quality of Healthcare Facilities: A Conceptual Analysis

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Abstract

This research provides a conceptual analysis of the quality of healthcare facilities, aiming to enhance our understanding of the multifaceted dimensions inherent in delivering high-quality healthcare services. The study employs a comprehensive approach to dissect the key components that contribute to the overall quality of healthcare facilities. Through an exploration of foundational concepts, this research seeks to establish a framework for evaluating and improving the quality of healthcare infrastructure. The conceptual analysis encompasses factors such as patient outcomes, safety protocols, accessibility, and patient satisfaction, offering a holistic perspective on healthcare quality. By synthesizing existing literature and theoretical frameworks, the study aims to contribute to the development of an in-depth understanding of the complex interplay of elements that define quality in healthcare facilities. Furthermore, the implications of this conceptual analysis extend to practical applications within healthcare management and policy development. Insights derived from this study can inform decision-makers on strategies for enhancing the quality of healthcare services, resource allocation, and the development of evidence-based practices.

Keyword: *Quality, Healthcare, Facilities, Conceptual Framework*

Introduction

The concept of health has been forwarded by one of the earliest known philosophers Boorse (1977) which was later elaborated by many other definitions. WHO (2006) also gave a more comprehensive definition of health and the healthcare system which acts as the guiding principles in healthcare systems throughout the world. The concept of health given by Boorse (1977) is the absence of diseases in the simplest form. It regards health as a value-free notion. It simply puts "Health as freedom from disease is then statistical normality of function, i.e., the ability to perform all typical physiological functions with at least typical efficiency." A "Disease is a type of internal state which is either an impairment of normal functional ability, i.e., a reduction of one or more functional abilities below typical efficiency, or a limitation on functional ability caused by environmental agents."

Another scholar Nordenfelt (2007) presented his 'holistic theory' (HTH) to address the issue of the concept of health. It refers to "not only survival but the quality of life of an individual." According to this theory, "A patient can be ill, not only if the probability of the patient's survival has been lowered but also if he/she does not feel well/ has become disabled about some goal other than survival." Accordingly, "A is completely healthy if, and only if, A has the ability, given standard circumstances, to reach all his or her vital goals." While "A has a disease if and only if, A has at least one organ which is involved in such a state or process as tends to reduce the health of A".

The definition of health cannot be taken as limited only to the absence of diseases. As per WHO (2006), "Health is a state of complete mental, physical and social well-being and not merely the absence of diseases or infirmity." This definition of health cannot be taken as an all-encompassing definition. It has been criticized as health involves a lot of other criteria which is not covered in the definition. Health has also been defined as "The ability to adapt and to self-manage, in the face of social, physical and emotional challenges as a reaction to the static nature of the WHO definition. In a similar nature, health has also been defined as "Continuing property that could be measured by the individual's ability to rally from a wide range and considerable amplitude of

insults, the insults being chemical, physical, infections, psychological, and social (Audy as cited in Meade and Erickson, 2000)."

Objective of Research:

The conceptual study of healthcare quality is undertaken with the overarching goal of improving patient outcomes, ensuring safety, and optimizing resource utilization. By systematically assessing and measuring the quality of healthcare, organizations aim to identify areas for improvement, establish benchmarks and standards, and inform policies that enhance the overall delivery of care.

Review of Literature

A thematic literature review was carried out for the study namely; the Quality of healthcare services and dimensions of quality of care.

Quality of Healthcare Services:

Quality of healthcare services has also been studied in public healthcare facilities like Primary Health Centres in India. Public health care has been provided in rural areas through primary healthcare centres, community healthcare centers and district hospitals through long-term and short-term plans ever since Bhore Committee (1946). It has been carried through various five-year plans and schemes and its importance has been asserted by an endless list of policies formulated by the government of India. Reproductive and Child Health Programme, National Health Programme for Communicable Diseases, Cancer, Diabetes, Cardiovascular diseases detection etc. to name a few, But the critical questions to be asked are whether the healthcare centres are functioning properly, whether the healthcare centres have adequate facilities and equipment, whether quality guidelines given by Indian Public Health Survey (2007& 2012) are being followed properly. There is also the need to find out the role of healthcare providers in providing quality healthcare services and the constraints faced by them in delivering healthcare services. Often, narratives are perceived against the doctors but one also needs to look into the actual working conditions of the healthcare providers as a poor work environment acts as a deterrent against providing healthcare by the doctors, nurses, and staff. These problems need to be studied as they form an important part of quality care.

One of the most important aspects of studying quality care is the study of the perception of patients regarding the healthcare services being provided to them. Perception study is important as it gives an idea about how the user makes sense of the healthcare services being provided and the need to improve the healthcare services. However, the perception of patients can also be influenced by their socioeconomic background. Economically well of sections of the population may already have a perception that the quality of public healthcare facilities is poor. While those sections of the population who do not have any option but to depend upon public healthcare facilities may have a different perception.

WHO (2016) defined quality of care as "*The extent to which healthcare services provided to individuals and patient populations improve desired health outcomes. To achieve this, healthcare must be safe, effective, timely, efficient, equitable, and people-centred*."

Ovretveit (1992) defined quality in health services as "Meeting the needs of those who need the services most, at the lowest cost to the organization, within limits and directives set by higher authorities and purchasers." Quality is poor in healthcare services due to 'badly designed and operated process, not from lazy or incompetent health workers. He is of the view that 'continual quality improvements come from giving people the new methods and skills to analyse quality problems and processes, and by empowering them to make the necessary changes. It does not simply come from inspection and standard-setting, nor simply from exhortation and customer relations training". Quality should also mean that the healthcare services are used by all those who need them apart from satisfying a few patients.

It is important to study the quality of healthcare as the state of healthcare in India is poor reflecting the need to improve it to provide good quality healthcare. Studies by Banerjee et al., (2004) and Bhandari & Dutta (2007) have found a huge shortage of infrastructure as well as human resources along with absenteeism. Banerjee et al., (2003) found that public healthcare facilities were highly inefficient and plagued by absenteeism while private practice was unregulated. 45 per cent of the nurses from sub-centers, 46 per cent from primary health centers, and community health centers were found to be absent which showed that the healthcare centers remained closed for more than fifty percent i.e., 56 per cent of the time. While Bhandari & Dutta (2007) found that there were 12 per cent, 16 per cent, and 50 per cent shortages of sub-centres, primary health centers, and community health centers respectively. Moreover, there was a huge shortage of human resources, for instance, 50 per cent of the sanctioned post in community health centres were found to be vacant in 2005. This shows that there is a need to study the quality of healthcare in India as sometimes healthcare facilities are found to exist as mere infrastructure rather than providing quality care which may lead to wastage of the infrastructure as well as resources spent upon building the infrastructure.

Continuing from the earlier argument that studying health will help ensure finding the ways and means to bridge the gap in the availability of healthcare to the people in turn helping the disease resistance of the community through support from healthcare facilities. It is equally important to study the quality of healthcare available as it will ensure that the resistance to diseases available to the people is built up through the availability of quality healthcare to the community at large. Also, studying the quality of healthcare is important for providing timely and effective healthcare services to people. Studying the quality of healthcare will help in finding out the areas where the healthcare is lacking and also find ways to improve it.

Various Dimensions of Quality of Healthcare:

The earliest study on service quality was done by Gronroos (1984) which talked about four dimensions in healthcare: *expected service and perceived service, promises and performance, technical and functional quality, and image as quality dimension*. "*Perceived* quality of a given service is the outcome of an evaluation process, where the consumer compares his expectations with the service he perceives has received, i.e., he puts the perceived service against the expected service. "Expectations of services can be measured in the same way as perceived healthcare quality can be measured. But in the Indian public healthcare context, the expectation on the part of the patient, which is always high, and measuring it against the perceived quality needs an altogether different study. Expectations can be studied using a separate index for expectations in various dimensions. Measuring expectations of patients as against their perceived service quality just to disconfirm the service quality is 'measuring neither service quality nor consumer satisfaction'. It is better to study the perceived service quality instead. Also, keeping in mind the nature of the study which is driven towards the availability of healthcare and then to find the quality of care, it is important to know how the community as well as the patients perceive the quality of services and not disconfirm their expectations against perceived quality.

The second dimension developed by Gronroos (1984) i.e., promises and performance related to *promises* done by traditional marketing activities such as 'advertising, field selling, pricing, etc.' to target the customers which may increase the expectations. While *performance* may include the technical part of a service as well as the psychological part of the user which is also known as expressive performance. In the Indian context, promises can be measured in private hospitals as well as public healthcare services. In private hospitals or clinics, the advertisements done by them to attract patients as well as the quality care can be measured from literatures as well as a survey of the healthcare provider and patients. In terms of public healthcare centers in India too, promises given by the government in the form of healthcare schemes, national programmes etc. can be studied subjectively from the programme's literature of the government of India. It can also be measured through the perspectives of healthcare providers and users on the promises made and delivered by them. The same goes for the performance of healthcare facilities. But to study the performance of the healthcare facilities against the promises needs an in-depth study completely focused upon the processes of the services provided which cannot be done in the study due to certain technical limitations such as the requirement of in-depth knowledge of the medical field and also the fact that it has to be done by the concerned authority such as the government of India and the concerned department.

The third dimension developed by Gronroos (1984) includes technical and functional dimensions. *The technical* quality dimension is the "technical outcome of the process, i.e., what the customer receives as a result of his interactions with a service firm, is important to him and to his evaluation of the quality of the service." However, this technical quality will be influenced by the way it is transferred to the consumer functionally. Technical dimension can be measured in the study by checking the availability of healthcare facilities in the community healthcare centres and the consumer perception of the quality of healthcare provided. The availability can be studied in two forms the availability of essential healthcare facilities and the essential human resources. "*Functional* quality corresponds to the expressive performance of a service". It tends to be subjective and deals with how the consumer gets quality service not what the consumer gets which comes under technical quality. This part can be studied from the perspectives of users which is the patients in terms of how the healthcare providers deliver services. The last dimension developed by Gronroos is *image* may be in the form of corporate image, organizational image, or the image of a local officer which can be built up by the technical and functional quality as well external factors such as 'tradition, ideology and word-of-mouth'.

Research on quality of care is usually done in the perception of patients or consumers. However, there is a need to explore the problems faced by healthcare providers in providing healthcare services to patients in a public healthcare setting.

Parasuraman, Zeithaml & Berry (1985) talked about service quality in four service businesses and built a model to improve the quality of services. They proposed a model of service quality based upon five gaps that

existed between executive perceptions and consumer expectations of service quality, difficulty in fulfilling consumers' expectations on the part of the management, the third gap exists because it is difficult to standardize the performance of health patients new. The other gaps include the gap between advertising to media and communicating it to the consumers and the last gap is "meeting or exceeding what consumers expect from the service". This model is known as the GAPS model. The GAPS model is an improvement over the Gronroos model as it intends to measure gaps in expectations and perceptions of service quality, standardizing the performance of the healthcare providers etc., and hence cannot be adopted in the study for the same reason that the expectation and perceived quality cannot be measured i.e., disconfirming the expectation against the perceived quality is not a good measure of the quality of care. Ten determinants given in the GAPS model include reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding or knowing the customer, and tangibles.

Parasuraman, Zeithaml & Berry (1988) further modified the gaps model and gave five dimensions for measuring the service quality known as SERVQUAL (service quality). It included tangibles, reliability, responsiveness, assurance, and empathy. Tangibles include the "physical facilities, equipment and appearance of patients new". Reliability means "the ability to perform the promised service dependably and accurately." Responsiveness means the "willingness to help customers and provide prompt service". Assurance includes the "knowledge and courtesy of employees and their ability to inspire trust and confidence". Empathy means "caring, individualized attention the firm provides its customers". In the Indian context, tangibles can be measured in the form of the availability of physicians, specialist doctors, staff, Minor Operation theatre, emergency services etc. Reliability can be measured only from the perspective of the patients which itself is not an accurate measure as the performance of services accurately can only be done by the patients with technical knowledge. Responsiveness of the healthcare provider can be measured through the perception of patients and observers by their friendly attitude towards the patients and relatives. Likewise, the assurance and empathy of providers can be measured through the way medical treatment is provided, their co-operative attitude and their understanding towards the patient.

Donabadien (1988) put forward the Structure, process and Outcome (SPO) model to overcome the lack of patient focus in the quality of healthcare studies. Study of outcomes in various forms such as "of restoration, of recovery and survival has been frequently used as an indicator of the quality of medical care". The study of structure as a quality measure studies the settings in which healthcare takes place and the 'instrumentalities of which it is the product.' It may include the study of administrative and related processes that support and direct the provision of care. The processes part of the study deals with whether the application of 'what is known to be good medical care' has been applied or not and not with the power of medical care. The outcome has been taken as a reliable measure of the quality of healthcare and its reliability is seldom questioned. However, the outcome may not be the best measure of the quality of certain diseases which may not be life-threatening but is most likely to 'produce suboptimal health or crippling conditions.'

Hawthorne (2012) studied the quality of healthcare from an altogether different perspective using GIS street network distances and creating a Satisfaction Adjusted measure (SAD) of quality of care. Moreover, in-depth interviews with 65 participants were conducted to get a "perceived distance-based analysis of healthcare accessibility." Questions were asked based on the Likert scale about quality-of-care experiences. The new perceived distance was combined with the conventional street network distance. This study is useful for accessibility studies and finding out the differences in "perceived distance and quality of care in lower-income urban communities" and does not apply to quality-of-care studies alone.

Berwick, Snair & Nishtar (2018) cited the Institute of Medicine (IOM) framework for healthcare system service quality includes safety, effectiveness, efficiency, patient-centeredness, equity and timeliness, accessibility, and affordability. Safety means "avoiding harm to patients from the care that is intended to help them". The feasibility of conducting a study of safety in quality care has been discussed before and the same applies here too.

Table 1 Dimensions of quality of healthcare services based on previous literature

Author/Model used by previous literatures	Dimensions used
Gronroos (1984)	• Expected service & Perceived service • Promises & performance • Technical and functional quality • Image as quality dimension

Parasuraman, Zeithaml & Berry (1985) - GAPS MODEL	• Gap in executive perceptions & consumer expectations of service quality. • Difficulty in fulfilling consumer expectations as a part of the management. • Standardize the performance of health patients. • Gap in advertising to media & communicating it to consumers. • Gap meeting or exceeding what consumers expect from the service.
Parasuraman, Zeithaml & Berry (1988)- SERVQUAL MODEL	• Tangibles. • Reliability. • Responsibility. • Assurance. • Empathy.
Donabadien (1988)- SPO	• Structure. • Process. • Outcome.
Cronin & Taylor (1992)	• Relationship between • Service quality. • Consumer satisfaction. • Purchase intention.
Ovretveit (1992)	• Three dimensions • Client quality • Professional quality • Management quality
Panchapakesan et al., (2009) - suggested dimensions of hospital study.	• Infrastructure. • Patient quality. • Process of clinical care. • Administrative procedure. • Safety indicators. • Hospital image. • Social responsibility. • Trustworthiness of the hospital
Lee (2016)	• Empathy • Tangibles • Efficiency • Safety • Degree of care services
IOM (Berwick, Snair & Nishtar, 2018)	• Safety. • Effectiveness. • Efficiency. • Patients-centeredness. • Equity. • Timeliness/accessibility.

Source: Author

Conclusion

Quality of healthcare is an important aspect of ensuring good health. A robust understanding of healthcare quality allows for a nuanced discussion on improving patient outcomes, safety, and overall effectiveness of healthcare delivery. By delving into these concepts, healthcare providers can identify areas of improvement, streamline processes, and enhance the patient experience.

Moreover, such studies contribute to the ongoing discourse surrounding healthcare policy and reform. Policymakers can leverage insights derived from the examination of healthcare quality to shape regulations, allocate resources effectively, and implement evidence-based practices. This, in turn, has the potential to optimize healthcare systems, making them more efficient, accessible, and equitable.

Additionally, studying the quality of healthcare is pivotal in fostering a culture of continuous improvement within the medical community. It encourages healthcare professionals to adopt evidence-based practices, adhere to standardized protocols, and engage in ongoing education to stay abreast of advancements. Ultimately, a focus on healthcare quality ensures that the medical field evolves in tandem with the evolving needs of patients and society, fostering a healthcare ecosystem that prioritizes excellence and patient well-being.

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