

An analysis of patient satisfaction and its impact on patient loyalty towards hospital services

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Abstract

Patients in today's competitive healthcare market expect more than just satisfaction. As a result, patient satisfaction has become a high priority for hospitals and health plans across the country, and it is the hospital's most important determinant. Patient satisfaction is extended to which patients are expectation are met and satisfied with the services provided by the hospitals. Improved patient satisfaction will lead to good health outcomes and patient loyalty. The aim of the study is to analyse the patient satisfaction and its impact on patient loyalty towards hospital services. The study was conducted by using the survey method using structured questionnaire. The study was conducted among the 100 patients of the Madurai district using questionnaire. The study uses simple random probability method to choose samples(patients). The study found that there is a relationship between patient satisfaction with respect to gender, age, residential area and service quality factors. The female and people from semi urban area are less satisfied towards the services of hospitals. Empathy ranks low among the service quality factors. The study also confirms that patient satisfaction impacted on the patient loyalty. The hospitals employees have to improve caring and warming attitude towards patients. Moreover, the policy makers plan policy related to satisfy the expectation of the semi urban people and women.

Introduction

In 1948 World health organization (WHO) defined health as "a state of complete physical, mental, and social well-being" rather than "the absence of disease or infirmity". According to Last 2001 Health care Services are provided by agents of the health services or professions to individuals or communities to promote, maintain, monitor, or restore health. Health care extends beyond medical care, which implies therapeutic action by or under the supervision of a physician. Sometimes the term is extended to include self-care (Last, 2001). In 2020 WHO stated that every year, between 5.7 and 8.4 million deaths in low- and middle-income countries (LMICs) are attributable to poor quality care, accounting for up to 15% of all deaths in these countries. In 2013 Ali Mohammad Mosadeghrad defined Quality healthcare as

“Delivering efficacious, effective, and efficient healthcare services in accordance with the most recent clinical guidelines and standards, which meet the patient's needs and satisfy providers.”. Patient satisfaction is the most essential criterion for evaluating the quality of health care services. (Khushboo Sabharwal Gupta, Varsha Rokade 2016). In a service organization, "quality" is the degree to which the delivered service meets the customer's expectations (Abby Ghobadian et al 1994) Technical quality, outcome quality, and interpersonal quality are the medical aspects of care that have direct effects on patients' health and wellbeing. Services-capes, accessibility, and responsiveness are examples of the non-medical aspects of quality that indirectly affect the well-being of the patient through their interaction with the patient during the process of service delivery (RaghavUpadhyai 2019). There is a huge gap between how managers value service quality and how employees actually provide that service to customers. These discrepancies can be significant roadblocks when attempting to provide a service that consumers would consider high-quality (Parasuraman et al 1988) Compare to other services service quality in health care is very complex (Mamta Brahmhatt 2011) The quality in healthcare services was first studied by Donabedian (Berhanu Endeshaw 2020).As far as their evaluation of the hospitals on various dimensions of service quality is concerned there exists a difference in the perception and expectations of the patients/observers(Siddharatha S. Bhardwaj Komal Chawla 2013) Sabita Mahapatra 2013 studied the dimensions, as tangibles, reliability, responsiveness, assurance, empathy, accessibility and affordability and found that there is a gap between patient's expectation and experience regarding service quality hospitals.

When a patient is satisfied, they feel their needs have been met, and sometimes even exceeded. Satisfaction with medical care is defined as the degree to which actual results from treatment meet expectations. Patient satisfaction was impacted by the quality of services provided. The level of patient satisfaction was correlated with patient loyalty. A loyal patient is priceless to a healthcare facility because they are more likely to repurchase, switch between product lines and services, refer others, and resist switching to a competitor. Loyal customer behaviour is influenced by service quality and patient satisfaction (Juhana, D et al 2015) Due to the fact that each hospital has different specialties, patients will compare multiple hospitals before selecting one. Ultimately, they will choose the hospital that is best at treating their disease, but they will not become loyal customers. Patients are more likely to switch hospitals after being exposed to a large amount of information in the era of information (Liu, S.,et al .2021) . One of the most important components of a successful doctor-patient relationship and a useful instrument for evaluating the quality of care is the recognition of

patient satisfaction and expectations. (Bener, A., & Ghuloum, S. 2013). Thus the present study analyses the patient satisfaction and its impact on patient loyalty.

Conceptual framework

In 1988 Donabedian, classified the quality of care in to three: "structure," "process," and "results." Structure refers to the characteristics of the environments in which care is provided. The term "process" refers to the actual activities involved in providing and receiving care. Outcomes refer to the effects of care on the health status of individuals and populations. In 1992 Cronin & Taylor found out a strong relationship between service quality and satisfaction. In 2010 Hardeep Chahal and Neetu Kumari 2010 found out Service quality leads to patient satisfaction and patient loyalty. (Khushboo Sabharwal Gupta, Varsha Rokade 2016) Patient satisfaction is the most essential criterion for evaluating the quality of a health care service. Criteria for Evaluating the Quality of Health Care are Physician & staff Performance, Customer Satisfaction, Infection Rate, Length of Stay on Average, Responsiveness of Services, Standard Operating Procedures, Documentation. (Panchapakesan Padma et al 2009) Satisfied patients are also loyal and willing to pay more for better services. The Figure 1 show the conceptual framework of the study

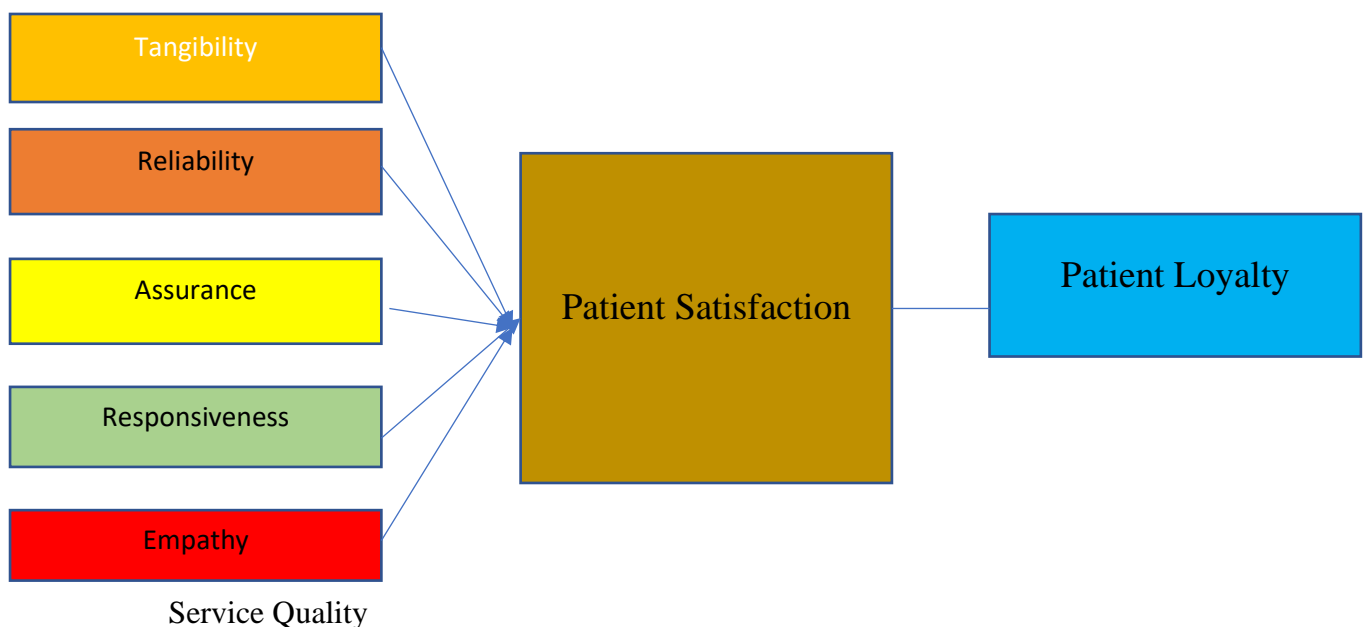


Figure 1: Conceptual Framework

According to Gronoos there were two quality dimensions which are quite different in nature which are technical quality or functional quality. Technical quality addresses the question of what the customer receives, while functional quality addresses the question of how he receives it (Christian Gronroos, 1984). Technical quality in the health care industry is primarily defined by the technical accuracy of medical diagnoses and procedures or by complying to professional standards. Functional quality refers to the manner in which patients receive health care service (Lam, 1997). HEALTHQUAL is composed of two components: processes and results. The processes of care service within the healthcare system provide patients with the actual or required level of care and service. The results of care treatments can either improve or deteriorate the patient's condition, depending on the efforts of medical personnel and the patient's willingness. HEALTHQUAL is a multi-item scale for assessing the quality of healthcare services. It consists of process (Empathy, Tangible, Safety, and Efficiency), results (the degree to which care services have improved) (DonHee Lee 2017).

The dimension of service quality is reliability, courtesy, responsiveness, tangibles, credibility, competence, security, access, understanding, communication (Parasuraman et al 1985). The SERVQUAL instrument consists of Tangible, Reliability, Responsiveness, Assurance, and Empathy. SERVQUAL can assist a variety of service and retailing organizations in determining consumer perceptions of service quality (Parasuraman et al 1988). As an outlook, service quality should be conceptualized and measured. SERVPERF explains more variation in service quality variance than SERVQUAL. In fact, the SERVQUAL conceptualization is flawed: (1) It is based on a satisfaction paradigm as opposed to an attitude model, and (2) the empirical analysis of the structural model suggests that the SERVQUAL model is only confirmed in two of the four industries. Consequently, the weight of the evidence strongly supports the utilization of performance-based measures of service quality. The developed performance-based scale (SERVPERF) is more effective than the SERVQUAL scale. (J. Joseph Cronin, Jr. & Steven A. Taylor 1992) Public hospital service quality (PubHosQual) is a reliable and valid scale that measures the five dimensions of hospital service quality: admission, medical service, overall service, discharge process, and social responsibility. (Jayesh P. Aagja, Renuka Garg 2010) The physical facilities (e.g., structure, building, equipment) and personnel (quantity and quality) that create the capacity to provide healthcare services are referred to as tangible attributes of healthcare services (Environment). Intangible attributes of healthcare services are further classified into four categories: empathy, efficacy, effectiveness, and efficacy (Ali Mohammad Mosadeghrad 2012)

Objectives

1. The purpose of this paper is to analysis the patient satisfaction towards hospital services
2. To review the measurements of service quality
3. To find out the relationship between patient satisfaction with gender, age, residential area
4. To find out the relationship between patient satisfaction with various service quality factors
5. To find out the impact of patient satisfaction on loyalty

Hypothesis

1. There is no relationship between gender and patient satisfaction
2. There is no relationship between age and patient satisfaction
3. There is no relationship between residential area and patient satisfaction
4. There is no relationship between service quality and patient satisfaction
5. There is no relationship between patient loyalty and patient satisfaction

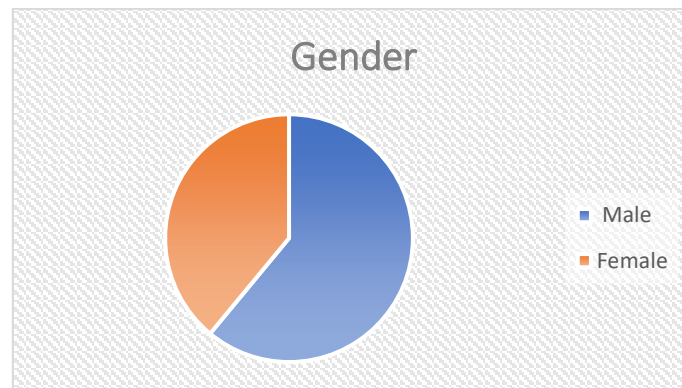
Methodology

The purpose of the paper is to analyse the patient satisfaction and its impact on patient loyalty towards hospital services. The descriptive research design is chosen to conduct the research. The study was conducted by using the survey method using structured questionnaire. The 5-point Likert scale was used and 35 statements were framed to access the factors service quality factors tangibility, reliability, assurance, responsiveness and empathy, patient satisfaction and patient loyalty and. The participants of the study were 100 patients of the Madurai district. The questionnaire was distributed randomly to the patients who have access hospital services in Madurai district during September to December 2022. The study uses simple random probability method to choose samples(patients). The questionnaire was distributed among 163 patients and 100 questionnaires were returned. First to find out the relationship between patient satisfaction with gender t test is used. To find out the relationship between patient satisfaction with age, residential area annova is used. To find out the relationship between patient satisfaction with various service quality factors Freidman rank

method is used. Finally, to find out the impact of patient satisfaction on loyalty linear regression analysis is used.

Classification based on Gender of the respondents

The graph 1 shows the Gender base classification of respondents.

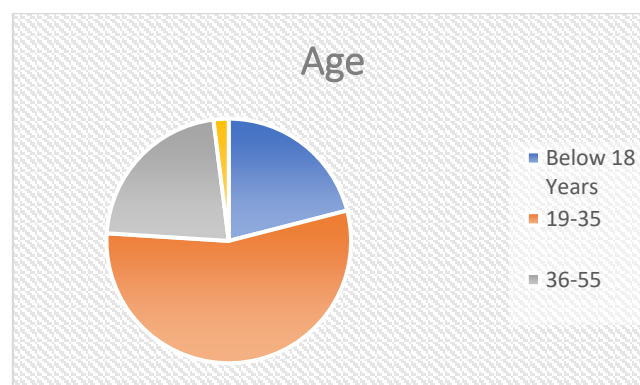


Graph1: Gender base classification

From the above graph it is found that majority of the 61% respondents are male and 39% of respondents are female.

Classification based on age of the respondents

The graph 2 shows the age wise classification of respondents

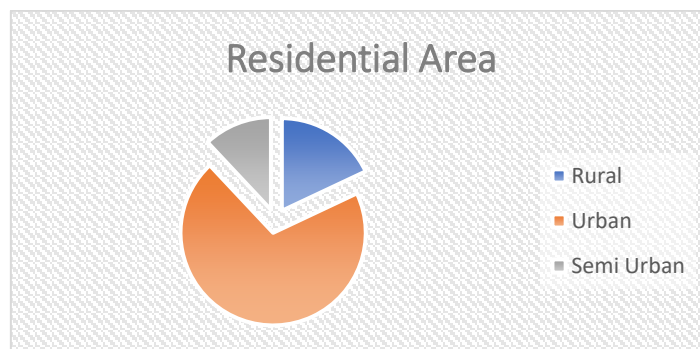


Graph 3: Age wise classification

From the above graph it is found that 21% respondents are below 18 age, 55% respondents are 19-35 years, 22% respondents were 36-55 years and 2% respondents were above 56 years.

Classification based on residential area of the respondents

The graph 3 shows the residential area base classification of the respondents.



Graph 3: Residential area wise classification

From the table it is found that 18% respondents belong to rural area, 70%, 12% of respondents were from urban and semi urban area respectively.

Relationship between gender and patient satisfaction

The satisfaction towards hospital services was differing among male and female because both the groups had different attitude in assessing their needs provided by hospitals. To find out the relationship between gender and patient satisfaction t test is used.

Null hypotheses: there is no significant difference between gender and Patient satisfaction.

Table 1: Relationship between gender and patient satisfaction

Patient satisfaction	Gender	Mean	Std. Deviation	T value	P value
	Male	3.0820	.74778	2.094	.039
	Female	2.7795	.63045		

From the above table there is significant difference in male and female patient satisfaction towards hospitals, $P=.039$. Therefore, null hypothesis is rejected. Compare to female mean value of male (3.0820) is higher which indicates male are more satisfied towards hospital services. Our finding is line with Woods, S. E., & Heidari, Z. (2003) women expressed significantly less satisfaction compared to men Patient satisfaction.

Relationship between age and patient satisfaction

The satisfaction of patients towards hospitals varies with respect to age. To find out the relationship between age and patient satisfaction annova is used.

Null hypotheses: there is no significant difference between age and Patient satisfaction.

Table 2: Relationship between age and patient satisfaction

Patient satisfaction		Mean	Std. Deviation	F value	Sig
	Below 18 Years	2.5714	.48285	3.647	.015
	19-35	3.0545	.71228		
	36-55	3.0364	.80389		
	Above 56 Years	3.8000	.00000		

Since P value less than .5 null hypothesis is rejected at 5% level of significance. Hence reject null hypothesis. The age group above 56 years are satisfied towards the hospital services with mean value 3.8000 followed by the age group 19-35 with mean value 3.0545. The below 18-year age group were less satisfied with the hospital services with mean value 2.5714.

Relationship between area and patient satisfaction

The satisfaction of patients towards hospitals varies with respect to residential area. To find out the relationship between age and patient satisfaction annova is used.

Null hypotheses: there is no significant difference between residential area and Patient satisfaction.

Table 3: Relationship between area and patient satisfaction

Patient satisfaction		Mean	Std. Deviation	F value	Sig
	Rural	3.2111	.64159	7.944	.001
	Urban	3.0200	.72163		
	Semi Urban	2.2667	.26054		

Since P value less than .5 null hypothesis is rejected at 5% level of significance. Hence reject null hypothesis. The patients from semi urban area are less satisfied with hospital services with mean value 2.2667 followed by the urban area with mean value 3.0200. The patients with rural area are more satisfied with service provided with mean value 3.211.

Relationship between Service quality and patient satisfaction

To find out the relationship between Service quality and patient satisfaction Freideman test is used

Table 4: Relationship between Service quality and patient satisfaction

		Mean Rank	Chi-square	P value
Patient satisfaction	Tangibility	4.43	268.698	.000
	Reliability	2.94		
	Assurance	2.64		
	Empathy	1.12		
	Responsiveness	3.89		

Since P value less than .5 null hypothesis is rejected at 5% level of significance. Hence reject null hypothesis. Among the patient satisfaction factor tangibility ranks 1st with mean rank 4.43 followed by responsiveness with mean rank 3.89. The reliability ranks third with mean rank 2.94 and assurance rank fourth with mean rank 2.64. The empathy ranks least with mean rank 1.12.

Relationship between Patient satisfaction and Patient loyalty

To find out the impact of patient satisfaction on patient loyalty linear regressions analysis is used.

Table 5: Regression analysis Patient satisfaction and patient loyalty

Model	R	R Square	F value	Sig.
1	.451 ^a	.203	24.962	.000

The correlation coefficient R value is .451 measures the degree of correlation. The R² value explained 20% variation in patient satisfaction and patient loyalty. The dependent variable is significantly well. Here $P < .01$, which is 1% significant and indicates that overall, the regression model statically predicts the outcome variable (i.e., it is a good fit for data)

Table 6: Variables in regression analysis between patient satisfaction and patient loyalty

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.107	.257		4.301	.000
1 Patient Satisfaction	.422	.084	.451	4.996	.000

a. Dependent Variable: Patient Loyalty

The regression equation is

$$\text{Patient Loyalty} = 1.107 + .422(\text{Patient Satisfaction})$$

The dependent variable here is Patient loyalty and independent variable is Patient satisfaction. From the above table it is evident that the of patient satisfaction impact on patient loyalty.

Discussion

The research study was conducted to understand the patient satisfaction towards hospital services in Madurai district. The findings of the study indicate there is relationship between different set of and patient satisfaction

First finding of the study is there is a relationship between gender and patient satisfaction. Female expressed less satisfaction compared to men towards satisfaction of hospital services. This is due to the expectation of the male and female are different towards the hospital services. Men and women often have different needs. There is a difference in hospitals' and staffs' ability to meet these needs for men and women.

The second finding of the study is there is a relationship between age and patient satisfaction. The age group above 56 years are satisfied towards the hospital services. Higher expectation towards hospital services among younger age patient leads low satisfaction.

The third finding of the study is there is a relationship between residential area and patient satisfaction. The patients with rural area are more satisfied with service provided by the hospitals. The patients from rural area are more satisfied with welfare measures of the services.

The fourth finding of the study is there is a relationship between service quality and patient satisfaction. The tangibility ranks first. The patients are satisfied with well illuminated waiting rooms, clean toilets, parking facility, employees' neat appearance and well-ventilated wards. The responsiveness ranks second. The patients are satisfied with response of the nurses, doctors. They are satisfied towards doctors eager listening and hospital employees are actively taken action when patient have problem. The empathy ranks least. Caring and warming attitude of doctors and nurses are not satisfied by the patients.

Finally, the patient satisfaction impacted patient loyalty. The satisfied patients were like to go the same hospital again and they won't switch to other hospitals since they are loyal. The patients will have positive attitude towards hospital services and they will recommend the hospital to their friends.

Conclusion

The good service quality in hospital will improve the patient satisfaction and the satisfied patients will visit the same hospital again which helps the hospitals to sustain in healthcare industry competition and provide better health outcomes to the patient. The purpose of the study is to find out the patient satisfaction and its impact on loyalty. The study will help the policy makers and hospital management to improve quality of services in hospitals. Many factors are associated with patient satisfaction namely age, gender, residential area. The finding of the study shows empathy of the doctors, nurses was low towards the patients. Healthcare providers gain and maintain patient satisfaction through improving caring and warming attitude towards patients. The study also confirms that patient satisfaction impacted on the patient loyalty. Moreover, the policy makers plan policy related to satisfy the expectation of the semi urban people and women.

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