Patients' Perception towards the Digital Transformation in the Services of Multi Specialty Hospitals in Madurai City

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Abstract

Patients'mind set has changed drastically in the recent decade. They want to consume or receive services within a minimum time without waiting much longer. Medical services are not an exemption to such expectation. When a person is unwell, getting the best medical advice and the initial diagnosis correct matters the most. It is common to hear how patients often find themselves completely at loss in the line of treatment not knowing the right doctor to consult with. Tossed around among doctors, many times the solution to an ailment is elusive or delayed. The maze that our hospitals are, the crowds that pack in each day, the multitude of multi-specialty treatments and the array of choices available today are bewildering enough for a patient to decide which path to follow. Instead, nothing like a service that helps you to avoid crowd, locate a doctor of your choice nearby, schedule an appointment as per your convenience, get the lab tests done in the comfort of your home, get medicines delivered at doorstep and budget your healthcare expenses sitting at home [1]. Hospitals have now developed many software and apps to render such services just like swiggy, zomato. There are several health-related portals that offer stand alone services like a call or video chat with doctors, or present digital reports for investigations, or buy medicines online, or choose health insurance policy. This articles deals about the Patients' Perception towards the Digital Transformation in the Services of Multi Specialty Hospitals in Madurai City. Various statistical tools such as correlation, ranking methods, chi square test have also been employed to test the variables related to the study undertaken and the appropriate results have been arrived.

Keywords: *Multi Specialty Hospitals, Digital Transformation, Health-Related Portals, Health Insurance Policy*

I. Introduction:

India has been witnessing an increasing concern regarding the quality health care services especially after globalization and liberalization policies. With the increase in urbanization and standard of living of the people, the awareness on health care services also increases. The consumer's expectation on the quality in health care services is increasing at a faster rate. Service quality has been shown to be an important element in the consumer's choice of hospitals (Lynch and Schuler, 1990). Quality in health care is defined as the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs (Korwar, 1997). Health care service quality is giving patients what they want (patient quality) and what they need (professional quality), and doing so using fewest resources, without error, delays and waste, and within higher level regulations (management quality; Overtreit, 1992). The health care deals with different services such as hospital services, diagnosis services, physician consultancies and some other emerging fields. In the present study, the focusing services are all health care services together.

However, the government alone cannot meet the infrastructure, capacity and delivery

shortages existing in the current health care system. There has to be increased participation of private sector in the Public Private Partnerships (PPP) schemes for infrastructure, capacity development and delivery. Challenges do exist, some of the PPP initiatives have failed and discontinued due to lack of renewal of the services by the private service provider. The PPP budget allocation under NRHM as well as a number of PPP projects varies considerably across the states. This shows that the state governments are still apprehensive about the success and sustainability of these partnerships and hence not fully committed towards this avenue of development. This makes it different from those set up by individuals, known as private hospitals.

II.   Literature Review:

The research literature on service quality has thrown numerous models by different researchers across the world. Lehtimere and Jukka (1985) present a holistic view to measure, monitor, and operational customer perceptions of service quality in health care organisation. John (1989) opined that there are four dimensions of health care service quality: these are the caring dimension, the access dimension, and the physical environment. Babakus and Glynn (1992) evaluated SERVQUAL for its potential usefulness in a hospital service environment. Sharma and Chahal (1999) identified the need of evaluating the service quality of health care service. Bowers et al., (1994) studied the five common attributes of quality from SERVQUAL model. Caring and communication were found to be significant. Three of the generic SERVQUAL dimensions were found to be related significantly to patient satisfaction: empathy, responsiveness and reliability.

Takeuchi and Quelch (1983) assessed the service quality of health care services by six dimensions: a) reliability, b) service quality, c) prestige, d) durability e) punctuality and f) ease of use. Walters (2001) judged the quality of service

in health care organization by reliability, availability, credibility, security, competence of staffs, understanding of customer needs, responsiveness to customers, courtesy of staffs, comfort of surroundings, communication between participants and associated goods provided with the service. Griffth and Alexander (2002) compared the service quality rendered by private and public hospitals in UAE. Rohini and Mahadevappa (2006) stratified the hospitals on the basis of specialty and non-specialty; Government-Private; and missionary, ISO-9000 certified and ISO-9000 non-certified. Abu Naser et al., (2006) analysed the customer expectations and perceptions towards health services through SERVQUAL model especially in Diagnosis services at Bangaladesh.

This literature review suggests a study for the existence of research gap in service quality of health care centre (corporate vs non-corporate) in India. To fill the research gap, a service quality perception study was undertaken in two corporate and two non-corporate hospitals in Madurai, Tamilnadu.

III.   Research Objectives:

❖ To study the socio-economic status of the respondents from select multi-specialty hospitals at Madurai city, Tamil Nadu.
❖ To assess the perception level of the respondents towards promotional strategies offered by select multi-specialty hospitals at Madurai city.
❖ To find out the level of Digital transformation satisfaction of the respondents towards health care services.

IV.   Research Methodology

Research Design   :   Analytical Research Design has been chosen for the study undertaken.

Sample Size   :   70 respondents has been chosen as the sample for the study

Sampling Technique : Convenience sampling is adopted for the study since the population of the study undertaken is of large size.

Data Collection : Both Primary and secondary data collection techniques are adopted for the study. Primary data is collected through survey method using a questionnaire and the secondary data for the study is collected through websites, books, journals and the like.

Statistical Tools Used : Statistical tool such as correlation and chi square is used for analysis purpose. Simple Percentage analysis is used to present the data collected in Table and Chart formats for better and easy understanding. The data collected is analyzed using SPSS.

Data Analysis and Interpretation
Analysis of Socio Economic Profile:

Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	48	68.6	68.6	68.6
Female	22	31.4	31.4	100.0
Total	70	100.0	100.0	

The above data shows that 68.6% of them are male respondents and 31.4% of them are females. It was concluded that majority of the respondents 68.6% are male.

Age Group

	Frequency	Percent	Valid Percent	Cumulative Percent
20-30	6	8.6	8.6	8.6
31-40	28	40.0	40.0	48.6
41-50	12	17.1	17.1	65.7
Above 50	24	34.3	34.3	100.0
Total	70	100.0	100.0	

From the above table it was shows that 8.6% of the respondents are in the age group of less than 30 years, 40% of them are in the age group of 31-40 years, 17.1% of them are in the age group of 41-50 years, and 34.3% of them are in the age group of more than 50 years. Hence, it was concluded that age group of 31-40 years are more in number.

Education

	Frequency	Percent	Valid Percent	Cumulative Percent
School Level	20	28.6	28.6	28.6
UG	30	42.9	42.9	71.4
PG	20	28.6	28.6	100.0
Total	70	100.0	100.0	

From the above analysis, 28.6% of the respondents are qualified up to schoollevel , 42.9 % of them are qualified up to Under Graduate, and 28.6% of them are qualified up to Post graduate level. Majority of the respondents 42.9% are qualified up to under graduation level.

Occupation

	Frequency	Percent	Valid Percent	Cumulative Percent
Private Employee	50	71.4	71.4	71.4
Government Employer	10	14.3	14.3	85.7

Retired Person	10	14.3	14.3	100.0
Total	70	100.0	100.0	

From the above table it was found that 71.4% of the respondents areprivate employee, 14.3% of them are government employees, and 14.3% of them are retired persons.Hence majority of therespondents are private employees.

Monthly Income

	Freque ncy	Perce nt	Valid Percent	Cumulat ive Percent
Less than Rs.10000/-	22	31.4	31.4	31.4
Rs.10001 to Rs.20000	36	51.4	51.4	82.9
Rs.20001 to Rs.30000	12	17.1	17.1	100.0
Total	70	100. 0	100.0	

The above table exhibits the monthly take-home pay of the respondents taken for study. It was found that 31.4% have rupees ten thousand and below as their monthly earnings, 51.4% have rupees ten thousand and one to rupees twenty thousand as their monthly earnings, and 17.1% have monthly earnings of rupees twentythousand and one to thirty thousand. It was seen that majority of the respondents 51.4% havemonthly earnings between ten thousand and one to twenty thousand rupees.

Digital Mode using a Patient

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	70	100.0	100.0	100.0

All the respondents of the study undertaken, Digital Mode using patients.

Aware about digital services of Health Care

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	70	100.0	100.0	100.0

All the 70 respondents of the study were about the digital services of Health care sector.

Digital Service often used

	Frequ ency	Perc ent	Valid Percen t	Cumulative Percent
Hospital Web site	32	45. 7	45.7	45.7
Health Care Apps	20	28. 6	28.6	74.3
Online Registratio n System	8	11. 4	11.4	85.7
Mobile SMS	10	14. 3	14.3	100.0
	70	100 .0	100.0	

From the above table it was found that 45.7.4% of the respondents areHospital web site user, 28.6.3% of them are Health care applicataions, 11.4% of them are Online Registration System and 14.3% Hence majority of therespondents are Hospital Web site users.

Correlation Analysis

Correlation analysis is used in the study to

1) The relationship between age group and issues faced.

Correlations

			Age group	Issues faced
Spear man's rho	Age group	Correlation Coefficient	1.000	.306
		Sig. (2-tailed)	.	.074
		N	70	70
	issues faced	Correlation Coefficient	.306	1.000
		Sig. (2-tailed)	.074	.

		N	70	70

2) Chi square analysis is used to test the following hypothesis

Ho : There is no association between socio economic variables and satisfaction level towards digital transformation of banks

H1 : There is association between socio economic variables and satisfaction level towards digital transformation of banks

Test Statistics

	gender	age group	education	occupation	monthly income	satisfaction level
Chi-Square	4.829[a]	9.000[b]	1.429[c]	22.857[c]	6.229[c]	.257[a]
Df	1	3	2	2	2	1
Asymp. Sig.	.028	.029	.490	.000	.044	.612

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.5.

b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 8.8.

c. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 11.7.

V. Findings

✓ Majority of the respondents are male
✓ Majority of the respondents belong to the age group between 28 – 38 years.
✓ Majority of the respondents are UG degree holders
✓ Majority of the respondents are private employees
✓ Majority of the respondent's (51%) earns a monthly income of 10,000 to 20,000
✓ All the respondents possess bank account
✓ All the respondents were aware about the digital transformation in Healthcare sector.
✓ Most frequently used digital services is ranked as per the respondent's perception as follows:
1) Hospital Website
2) Mobile SMS
3) Health care Application
4) Online Registration Website
• All the respondents agree that digital transformation in the Health care industry is need of the Hour
• Majority of the respondents stated that they support the digital services since it's available 24x7

- Technical problems is ranked as the first issue faced while using the digital services of Health care
- Majority of the respondents are satisfied towards the digitalization facilities.
- It is found from the Correlation analysis that there is a positive relationship between age group and the issues faced.

Chi square revealed that there is association between socio economic variables and satisfaction level towards digital transformation of Health Care.

VI. Conclusion

Satisfied patients are more likely to continue using the health care services and maintain their relationship with specific health care providers. Patient's satisfaction survey can be a driving force for changes in health care delivery with institutions and individuals.The concept of the patient experience as it relates to patient experience as it relates to patient satisfaction is a complex dynamic. It is a dynamic that is becoming increasingly more important as patients are faced with multiple choices for their hearing and balance care. As reimbursement and performance policies have become more normative within the health care, patient satisfaction is no longer contained to just the interaction with the audiologist. It extends to the entire experience the staff, the service, the product, and other factors. Many practices fail to capitalize on one of the primary components of the patient experience office design. This article discusses the role of evidence-based design in facility planning as it relates to patients satisfaction. It willillustrate how design principles and ideal attributes may be used to send conscious and subconscious cues that will motivate staff, facilitate patients-centered care, and ultimately increase patient satisfaction.

VII. Reference

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