International Journal for Modern Trends in Science and Technology, 8(08): 230-239, 2022 Copyright © 2022 International Journal for Modern Trends in Science and Technology ISSN: 2455-3778 online DOI: https://doi.org/10.46501/IJMTST0808033

Available online at: http://www.ijmtst.com/vol8issue08.html





# A Comparative Gap Analysis of Service Quality Provided by Cancer Hospitals in Nagpur City with Special Reference to HCG and RST Hospital

Sarang Warudkar<sup>1</sup>, Dr. Praveen Mustoor<sup>2</sup>, Prof. Mahesh Joshi<sup>3</sup>

<sup>1</sup> Research Scholar, Place for Higher Learning and Research, Tirpude Institute of Management Education, Nagpur.
 <sup>2</sup> Professor, School of Management, Presidency University, Banglore.
 <sup>3</sup> Assistant Professor, Tirpude Institute of Management Education, Nagpur.

#### To Cite this Article

Sarang Warudkar, Dr. Praveen Mustoor, Prof. Mahesh Joshi, A Comparative Gap Analysis of Service Quality Provided by Cancer Hospitals in Nagpur City with Special Reference to HCG and RST Hospital. International Journal for Modern Trends in Science and Technology 2022, 8(08), pp. 230-239. https://doi.org/10.46501/IJMTST0808033

#### Article Info

Received: 28 July 2022; Accepted: 24 August 2022; Published: 26 August 2022.

# ABSTRACT

With affordable health care that India is providing to the citizens and with many more advancements in technology, comes the concern about the quality of services provided in the health care facilities by the different service providers like government and non-governmental organizations. With growing demand for the various healthcare service facilities there is a need to check the quality of services provided by these organizations so as to identify the various gaps in healthcare services and mitigate those gaps, as healthcare sector is one of the growing sector in India. Nagpur being the center of healthcare facilities like cancer hospitals. This study assesses the gap between expected and actual service quality provided by the cancer hospitals of Nagpur city with special reference to HCG-NCHRI and RST- RCH cancer hospitals. Also to identify the comparative gap analysis of both the hospitals. SERVQUAL test is being used while identifying the gap in service quality parameters. The study identify the gap in five dimensions of service quality. i.e. tangibility, reliability, responsiveness, assurance and empathy. 22 statements of SERVQUAL divided into 5 dimensions of service quality to identify the gap. In study patients experience the gap the respondents or patients were asked to rate their experience after availing the services in Hospital.

Keywords:Service Quality, Tangibility, Reliability, Responsiveness, Assurance, Empathy, Cancer Hospitals, Nagpur, Gap Analysis.

#### 1. INTRODUCTION

India is one of the fastest growing economies in the world, according to prediction we could be the developed nation by 2047, so is the case with increasing population.

In 2023, India has the highest population in the world with close to 140 crore people lives in India followed by China. With growing population in country produce much importance to health care sector of country. Keeping in mind the majority of the population who hails from the lower middle class and middle class, providing proper health care facilities is a major concern for the private as well as government entities.

With affordable health care that India is providing to the citizens and with many more advancements in technology, comes the concern about the quality of services provided in the health care facilities by the different service providers like government and non-governmental organizations.

With growing demand for the various healthcare service facilities there is a need to check the quality of services provided by these organizations so as to identify the various gaps in healthcare services and mitigate those gaps, as healthcare sector is one of the growing sectors in India.

As standard of living and per capita in India is growing, so is the consumption pattern is changing and more and more people started living in urban areas.

According to reports and survey, there is increase in number of cancer patients in the country. If we talk about central India, so Nagpur is the Hub for healthcare facilities which cater the demand of Vidarbha, Madhya Pradesh, Jharkhand and Chhattisgarh. Most of the patients from these states comes to Nagpur for treatment. Currently Nagpur has four specialist hospitals in cancer care i.e. HCG-NCHRI, RST – RCH, NCI, American Oncology. These hospitals provide the specialized cancer care.

People from various strata comes to these hospitals as majority of the people avail the benefits of various schemes provided by the government.

As service quality is one of the major concerns of the hospitals who provides treatment related to various cancer.

#### FiveDimensions of Service Quality:

**1. Tangibility**: the appearance of physical facilities, equipment, appearance of personnel and communication material.

**2. Reliability**: the ability to perform the promised service accurately.

**3. Responsiveness**: the willingness to help customers and provide prompt service.

**4. Assurance**: the knowledge of employees and their ability to inspire trust and confidence.

**5. Empathy**: individual attention the firm provides to its customers.

# The Factors Which Have Taken Into Consideration Are:

**1. Physical Aspects:** retail store appearance and store layout.

**2. Personal interaction:** store personnel are courteous and helpful.

**3. Problem solving:** store personnel are capable to handle returns and exchanges, problems and complaints.

**4. Empathy:** stores policy on merchandise quality, operation hours.

# Significance of the Study:

This research has lots of applied aspects. It may be useful to the hospitals to improve the quality of serviceand apply necessary implementation. This will also help hospitals to identify the gap in service delivery.

#### **Objectives of the Study:**

- To compare the service quality gap in tangibility.
- To compare the service quality gap in reliability.
- To compare the service quality gap in responsiveness.
- To compare the service quality gap in assurance.
- To compare the service quality gap in empathy.

# Methodology Used:

A questionnaire is designed to evaluate the service quality and identify the service quality gap of cancer hospitals in Nagpur city. It measures five dimensions of service quality – tangibility, reliability, responsiveness, assurance and empathy, to assesses the gap between the Actual and Expected service.

# Data Collection Methods: Questionnaire Development

The RSQS scale was applied to measure five dimensions of service quality i.e. tangibility, reliability, responsiveness, assurance and empathy. A five point likert scale was used starting from "strongly disagree" to "strongly agree" was used in questionnaire and the respondents were asked to evaluate parameters on overall service quality in point scale. The Respondents Were Asked:

1. To express their expectations before availing the services in Hospital.

2. Respondents were asked to rate their experience after availing the services in Hospital.

The questionnaire consists of 22 statements on expectations and 22 statements on perceptions. On comparing the two aspects expectations and actual service one can identify the gap. The gap is the indicator of customer dissatisfaction or satisfaction.

Sample design: simple random and convenient sampling was applied. Date was collected from the patientsof HCG – NCHRI and Rashtrasanttukdojimaharaj cancer hospital in Nagpur city.

Sample size: a sample of 400 customers was surveyed available in these hospitals.

200 from HCG- NCHRI and 200 from RST.

# Data Collection:

The primary data was collected from patients and their relatives with the help of structured questionnaire. The secondary data was collected from various journals, magazines and websites.

Statistical tools used: the collected data were analysed using SPSS software and to test the hypothesis, T-test is applied in appropriate context.

# Hypothesis:

The current study presumed that there is no significance difference between expected and actual service quality of cancer hospitals in Nagpur city.

Then it is assumed that there is no significant difference in dimensions of service quality i.e. tangibility, reliability, responsiveness, assurance and empathy.

#### Tangibility:

(H01): There is no significant difference in actual and expected tangibility.

(H11):There exists significant difference in actual and expected tangibility.

# **Reliability:**

(H02): There is no significant difference in actual and expected reliability.

(H12): There exists significant difference in actual and expected reliability.

#### **Responsiveness:**

(H03): There is no significant difference in actual and expected responsiveness.

(H13): There exists significant difference in actual and expected responsiveness.

# Assurance

(H04): There is no significant difference in actual and expected assurance.

(H14): there exists significant difference in actual and expected assurance.

#### **Empathy:**

(H05): There is no significant difference in actual and expected empathy.(H15): there exists significant difference in actual and expected empathy.

# Data Analysis and Interpretation: Tangibility – HCG - NCHRI

	Tangibility	Mean	rating	T. Stat	
	rangionity	Expected	Actual	1. Stat	p value
1	Hospital has modern medical equipments and fixtures/machines	3.7839	4.4925	-14.423	.000
2	The physical facilities and service escapes at the hospital are visually appealing	3.7286	4.4673	-13.830	.000
3	Materials associated with hospital's service (Such as information brochure, catalogues, different test information forms/pamphlets) are visually appealing and are displayed at strategic locations	3.6734	4.2613	-11.017	.000
4	Hospital has clean, hygienic and convenient public areas such as restrooms, waiting rooms, wash rooms	3.9347	4.5578	-12.448	.000
5	Hospital layout are scientifically designed and makes it easy for patients and their relatives to find what they need and have convenient operating hours	3.8291	4.4121	-10.915	.000

#### Table reveals that

• At HCG-NCHRI the expected mean rating of patients is lower for all the statements as compared to actual mean rating. It means the patients expectations are lower, they expect less when it comes to tangibility aspect.

• The actual mean rating in all the aspects is higher compared to expected mean rating, it means actual service quality in tangibility is high.

• The difference between the expected mean rating and the actual mean rating shows the gap in service quality of tangibility.

• The actual mean rating is higherfor statement'4'. i.e. 4.55, compared to any other statement.

• There is significant gap in expected and actual service quality for statement '1', with T.stat value of -14.423.

• patients have higher expectation instatement '4' as compared to any other statement. i.e. mean rating of 3.93.

• the expected and actual service quality gap is less in statement '5' with T.stat value of -10.915.

• In all the parameters, the expected mean rating is less and actual mean rating is higher. It means that the customers expectations is less from the hospital and actual service quality is higher.

Null Hypothesis:- there is no significant difference in expected and actual tangibility.

Alternative Hypothesis:- there exists significant difference in expected and actual tangibility.

By applying the T-test and calculating the mean rating and T stat. value for every parameters, the result of the experiment rejects the hypothesis. As p value is below 0.05

So we thus find out that at HCG – NCHRI, there exists significant difference between the actual and expected service quality' from patients point of view.

# Tangibility - RST

	Tangibility	Mean	rating	T. Stat	p value
	rangionity	Expected	Actual		
1	Hospital has modern medical equipments and fixtures/machines	3.3367	3.8593	-5.731	.000
2	The physical facilities and service escapes at the hospital are visually appealing	3.2563	3.5075	-2.574	.011
3	Materials associated with hospital's service (Such as information brochure, catalogues, different test information forms/pamphlets) are visually appealing and are displayed at strategic locations	3.4673	3.5729	-1.054	.293
4	Hospital has clean, hygienic and convenient public areas such as restrooms, waiting rooms, wash rooms	3.4070	3.5528	-1.531	.127
5	Hospital layout are scientifically designed and makes it easy for patients and their relatives to find what they need and have convenient operating hours	3.5025	3.6583	-1.603	.111

Table reveals that

• At RST the expected mean rating of patients is lower for all the statements as compared to actual mean rating. It means the patients expectations are lower, they expects less when it comes to tangibility aspect.

• The actual mean rating in all the aspects are higher compared to expected mean rating, it means actual service quality in tangibility is high.

• The difference between the expected mean rating and the actual mean rating shows the gap in service quality of tangibility. • The actual mean rating is higher for statement ". i.e. 3.85, compared to any other statement.

• There is significant gap in expected and actual service quality for statement '1', with T.stat value of -5.731.

• patients have higher expectation in statement '5' as compared to any other statement. i.e. mean rating of 3.50.

• the expected and actual service quality gap is less in statement '3' with T.stat value of -1.054

• In all the parameters, the expected mean rating is less and actual mean rating is higher. It means that the customers expectations is less from the hospital and actual service quality is higher.

Null Hypothesis :- there is no significant difference in expected and actual tangibility.

Alternative Hypothesis :- there exists significant difference in expected and actual tangibility.

By applying the T-test and calculating the mean rating and T stat. value for every parameters, the result of the experiment accepts the hypothesis.

So, we thus find out that At RST 'there is no significant difference between the actual and expected service quality from patients point of view.

Because p value shows no significant difference in most of the parameters, and value exceeds base value of 0.05, so no significant difference found.

# **Reliability – HCG-NCHRI**

	Reliability	Mean	rating		
		Expected	Actual	T. Stat	p valu
1	When the hospital promises to do something by a certain time, it will do so	3.6884	4.4070	-12.901	.000
2	Hospital insists on error - free transactions and well documented patient records and medical history	3.7286	4.4673	-8.329	.000
3	When a patient has a problem, hospital staff are empathetic and will show sincere interest in solving it	3.6482	4.2714	-11.547	.000
4	Hospital will perform the service right the first time	3.6985	4.3266	-10.915	.000
5	Hospital will provide their services at the time they promise to do so without delay	3.5729	4.1910	-9.793	.000

# Table reveals that

• At HCG-NCHRI the expected mean rating of patients is lower for all the statements as compared to actual mean rating. It means the patients expectations are lower, they expects less when it comes to reliability aspect.

• The actual mean rating in all the aspects are higher compared to expected mean rating, it means actual service quality in reliability is high.

• The difference between the expected mean rating and the actual mean rating shows the gap in service quality of reliability.

• The actual mean rating is higher for statement '2'. i.e. 4.46, compared to any other statement.

• There is significant gap in expected and actual service quality for statement '1', with T.stat value of -12.901.

• patients have higher expectation in statement '2' as compared to any other statement. i.e. mean rating of 3.72.

• the expected and actual service quality gap is less in statement '2' with T.stat value of -8.329.

• In all the parameters, the expected mean rating is less and actual mean rating is higher. It means that the customers expectations is less from the hospital and actual service quality is higher.

Null Hypothesis:- there is no significant difference in expected and actual reliability.

Alternative Hypothesis:- there exists significant difference in expected and actual reliability.

By applying the T-test and calculating the mean rating and T stat. value for every parameters, the result of the experiment rejects the hypothesis. As p value is below 0.05.

So we thus find out that at HCG – NCHRI, 'there exists significant difference between the actual and expected service quality' from patients point of view.

# Reliability – RST

	D. P. 1 24	Mean	rating		
	Reliability	Expected	Actual	T. Stat	p value
1	When the hospital promises to do something by a certain time, it will do so	3.6784	4.4070	-13.023	.000
2	Hospital insists on error - free transactions and well documented patient records and medical history	3.6734	4.1709	-8.294	.000
3	When a patient has a problem, hospital staff are empathetic and will show sincere interest in solving it	3.6432	4.2663	-11.547	.000
4	Hospital will perform the service right the first time	3.6935	4.3116	-10.803	.000
5	Hospital will provide their services at the time they promise to do so without delay	3.5628	4.1859	-9.880	.000

Table reveals that

• At RST the expected mean rating of patients is lower for all the statements as compared to actual mean rating. It means the patients expectations are lower, they expects less when it comes to reliability aspect.

• The actual mean rating in all the aspects are higher compared to expected mean rating, it means actual service quality in reliability is high.

• The difference between the expected mean rating and the actual mean rating shows the gap in service quality of reliability.

• The actual mean rating is higher for statement '1'. i.e. 4.40, compared to any other statement.

• There is significant gap in expected and actual service quality for statement '1', with T.stat value of -13.023.

• patients have higher expectation in statement '4' as compared to any other statement. i.e. mean rating of 3.69.

• the expected and actual service quality gap is less in statement '2' with T.stat value of -8.294.

• In all the parameters, the expected mean rating is less and actual mean rating is higher. It means that the customers expectations is less from the hospital and actual service quality is higher.

Null Hypothesis:- there is no significant difference in expected and actual reliability.

Alternative Hypothesis:- there exists significant difference in expected and actual reliability.

By applying the T-test and calculating the mean rating and T stat. value for every parameters, the result of the experiment rejects the hypothesis. As p value is below 0.05.

So we thus find out that at RST, 'there exists significant difference between the actual and expected service quality' from patients point of view.

# **Responsiveness – HCG-NCHRI**

	Responsiveness	Mean	rating		
		Expected	Actual	T. Stat	p value
1	Hospital Staff of hospital will tell patient exactly when treatment/services will be performed	3.8141	4.5427	-14.812	.000
2	Hospital Staff in the hospital will give prompt service/care to patient	3.8492	4.4975	-14.821	.000
3	Hospital Staff in the hospital will always be willing to help and understand the patient	3.7286	4.3970	-11.721	.000
4	Hospital Staff in the hospital are never too busy to respond to patient/ relatives request	3.6181	4.1960	-9.288	.000

Table reveals that

• At HCG-NCHRI the expected mean rating of patients is lower for all the statements as compared to actual mean rating. It means the patients expectations are lower, they expects less when it comes to responsiveness aspect.

• The actual mean rating in all the aspects are higher compared to expected mean rating, it means actual service quality in responsiveness is high.

• The difference between the expected mean rating and the actual mean rating shows the gap in service quality of responsiveness.

• The actual mean rating is higher for statement '1'. i.e. 4.54, compared to any other statement.

• There is significant gap in expected and actual service quality for statement '2', with T.stat value of -14.821.

• patients have higher expectation in statement '2' as compared to any other statement. i.e. mean rating of 3.84.

• the expected and actual service quality gap is less in statement '4' with T.stat value of -9.288.

• In all the parameters, the expected mean rating is less and actual mean rating is higher. It means that the customers expectations is less from the hospital and actual service quality is higher.

Null Hypothesis :- there is no significant difference in expected and actual responsiveness.

Alternative Hypothesis :- there exists significant difference in expected and actual responsiveness.

By applying the T-test and calculating the mean rating and T stat. value for every parameters, the result of the experiment rejects the hypothesis. As p value is below 0.05.

So we thus find out that at HCG-NCHRI, there exists significant difference between the actual and expected service quality' from patients point of view.

**Responsiveness - RST** 

	Responsiveness	Mean	rating	TOUL	
		Expected	Actual	T. Stat	p value
1	Hospital Staff of hospital will tell patient exactly when treatment/services will be performed	3.8141	4.5477	-14.796	.000
2	Hospital Staff in the hospital will give prompt service/care to patient	3.8392	4.4975	-14.914	.000
3	Hospital Staff in the hospital will always be willing to help and understand the patient	3.7286	4.4020	-11.825	.000
4	Hospital Staff in the hospital are never too busy to respond to patient/ relatives request	3.6131	4.1910	-9.288	.000

Table reveals that

• At RST the expected mean rating of patients is lower for all the statements as compared to actual mean rating. It means the patients expectations are lower, they expects less when it comes to responsiveness aspect.

• The actual mean rating in all the aspects are higher compared to expected mean rating, it means actual service quality in responsiveness is high.

• The difference between the expected mean rating and the actual mean rating shows the gap in service quality of responsiveness.

• The actual mean rating is higher for statement '1'. i.e. 4.54, compared to any other statement.

• There is significant gap in expected and actual service quality for statement '2', with T.stat value of -14.914.

• patients have higher expectation in statement '2' as compared to any other statement. i.e. mean rating of 3.83.

• the expected and actual service quality gap is less in statement '4' with T.stat value of -9.288.

• In all the parameters, the expected mean rating is less and actual mean rating is higher. It means that the customers expectations is less from the hospital and actual service quality is higher.

Null Hypothesis:- there is no significant difference in expected and actual responsiveness.

Alternative Hypothesis:- there exists significant difference in expected and actual responsiveness.

By applying the T-test and calculating the mean rating and T stat. value for every parameters, the result of the experiment rejects the hypothesis. As p value is below 0.05.

So we thus find out that at RST, 'there exists significant difference between the actual and expected service quality' from patients point of view.

#### Assurance -HCG-NCHRI

	A	Mean	rating	— T. Stat	p value
	Assurance	Expected	Actual		
1	The behaviour of Hospital Staff will instill confidence in patient	3.8593	4.4975	-12.546	.000
2	Patients in the hospital will feel safe in their transactions	3.8744	4.5075	-12.431	.000
3	Hospital Staff will be consistently courteous with patient	3.7337	4.4673	-13.470	.000
4	Hospital Staff will have the knowledge and information to answer patient questions	3.7638	4.3015	-10.020	.000

#### Table reveals that

• At HCG-NCHRI the expected mean rating of patients is lower for all the statements as compared to actual mean rating. It means the patients expectations are lower, they expects less when it comes to assurance aspect.

• The actual mean rating in all the aspects are higher compared to expected mean rating, it means actual service quality in assurance is high.

• The difference between the expected mean rating and the actual mean rating shows the gap in service quality of assurance.

• The actual mean rating is higher for statement '2'. i.e. 4.50, compared to any other statement.

• There is significant gap in expected and actual service quality for statement '3', with T.stat value of -13.470.

• patients have higher expectation in statement '2' as compared to any other statement. i.e. mean rating of 3.87.

• the expected and actual service quality gap is less in statement '4' with T.stat value of -10.020.

• In all the parameters, the expected mean rating is less and actual mean rating is higher. It means that the customers expectations is less from the hospital and actual service quality is higher.

Null Hypothesis:- there is no significant difference in expected and actual assurance.

Alternative Hypothesis:- there exists significant difference in expected and actual assurance.

By applying the T-test and calculating the mean rating and T stat. value for every parameters, the result of the experiment rejects the hypothesis. As p value is below 0.05. So we thus find out that at HCG-NCHRI,'there exists significant difference between the actual and expected service quality' from patients point of view.

Assurance	– RST
-----------	-------

	Assurance	Mean	rating	T. Stat	p value
		Expected	Actual	1. Stat	p value
1	The behaviour of Hospital Staff will instill confidence in patient	3.8543	4.4975	-12.663	.000
2	Patients in the hospital will feel safe in their transactions	3.8744	4.5075	-12.431	.000
3	Hospital Staff will be consistently courteous with patient	3.7286	4.4774	-13.599	.000
4	Hospital Staff will have the knowledge and information to answer patient questions	3.7688	4.3015	-9.671	.000

# Table reveals that

• At RST, the expected mean rating of patients is lower for all the statements as compared to actual mean rating. It means the patients expectations are lower, they expects less when it comes to assurance aspect.

• The actual mean rating in all the aspects are higher compared to expected mean rating, it means actual service quality in assurance is high.

• The difference between the expected mean rating and the actual mean rating shows the gap in service quality of assurance.

• The actual mean rating is higher for statement '2'. i.e. 4.50, compared to any other statement.

• There is significant gap in expected and actual service quality for statement '3', with T.stat value of -13.599.

• patients have higher expectation in statement '2' as compared to any other statement. i.e. mean rating of 3.87.

• the expected and actual service quality gap is less in statement '4' with T.stat value of -9.671.

• In all the parameters, the expected mean rating is less and actual mean rating is higher. It means that the customers expectations is less from the hospital and actual service quality is higher.

Null Hypothesis:- there is no significant difference in expected and actual assurance.

Alternative Hypothesis:- there exists significant difference in expected and actual assurance.

By applying the T-test and calculating the mean rating and T stat. value for every parameters, the result of the

experiment rejects the hypothesis. As p value is below 0.05.

So we thus find out that at RST, 'there exists significant difference between the actual and expected service quality' from patients point of view.

#### **Empathy – HCG-NCHRI**

	Empathy	Mean	rating		
		Expected	Actual	T. Stat	p value
1	Hospital will give patient individual attention	3.6784	4.4171	-13.590	.000
2	Hospital will have the patients best interest at heart	3.7688	4.3769	-12.623	.000
3	Hospital Staff who deal with patient will provide proper care	3.7940	4.3869	-12.138	.000
4	The Hospital Staff of hospital will understand the specific needs of patient and their relatives	3.7085	4.3166	-10.528	.000

#### Table reveals that

• At HCG-NCHRI, the expected mean rating of patients is lower for all the statements as compared to actual mean rating. It means the patients expectations are lower, they expects less when it comes to empathy aspect.

• The actual mean rating in all the aspects are higher compared to expected mean rating, it means actual service quality in empathy is high.

• The difference between the expected mean rating and the actual mean rating shows the gap in service quality of empathy.

• The actual mean rating is higher for statement '1'. i.e. 4.41, compared to any other statement.

• There is significant gap in expected and actual service quality for statement '1', with T.stat value of -13.590.

• patients have higher expectation in statement '3' as compared to any other statement. i.e. mean rating of 3.79.

• the expected and actual service quality gap is less in statement '4' with T.stat value of -10.528.

• In all the parameters, the expected mean rating is less and actual mean rating is higher. It means that the customers expectations is less from the hospital and actual service quality is higher.

Null Hypothesis:- there is no significant difference in expected and actual empathy.

Alternative Hypothesis:- there exists significant difference in expected and actual empathy.

By applying the T-test and calculating the mean rating and T stat. value for every parameters, the result of the experiment rejects the hypothesis. As p value is below 0.05.

So we thus find out that at HCG-NCHRI,'there exists significant difference between the actual and expected service quality' from patients point of view.

# Empathy – RST

	Empathy	Mean	rating	T. Stat	
		Expected	Actual	1. Stat	p value
1	Hospital will give patient individual attention	3.6683	4.4221	-13.720	.000
2	Hospital will have the patients best interest at heart	3.7588	4.3869	-12.564	.000
3	Hospital Staff who deal with patient will provide proper care	3.7789	4.4020	-12.203	.000
4	The Hospital Staff of hospital will understand the specific needs of patient and their relatives	3.7186	4.3166	-9.897	.000

Table reveals that

• At RST, the expected mean rating of patients is lower for all the statements as compared to actual mean rating. It means the patients expectations are lower, they expects less when it comes to empathy aspect.

• The actual mean rating in all the aspects are higher compared to expected mean rating, it means actual service quality in empathy is high.

• The difference between the expected mean rating and the actual mean rating shows the gap in service quality of empathy.

• The actual mean rating is higher for statement '1'. i.e. 4.42, compared to any other statement.

• There is significant gap in expected and actual service quality for statement '1', with T.stat value of -13.720.

• patients have higher expectation in statement '3' as compared to any other statement. i.e. mean rating of 3.77.

• the expected and actual service quality gap is less in statement '4' with T.stat value of -9.897.

• In all the parameters, the expected mean rating is less and actual mean rating is higher. It means that the customers expectations is less from the hospital and actual service quality is higher.

Null Hypothesis:- there is no significant difference in expected and actual empathy.

Alternative Hypothesis:- there exists significant difference in expected and actual empathy.

By applying the T-test and calculating the mean rating and T stat. value for every parameters, the result of the experiment rejects the hypothesis. As p value is below 0.05.

So we thus find out that at RST, there exists significant difference between the actual and expected service quality' from patients point of view. DAL

# **Findings:**

# At HCG – NCHRI

In all the parameters i.e. tangibility, reliability, responsiveness, assurance, empathy, there is significant gap in service quality, it means the patients expectations are less compared to what hospital is providing.

• Hospital providind far superior service way above patients expectations.

Specially in non-surgical section the service quality exceeds the expectations.

In terms of assurance and empathy i.e. related to communication between patients and hospital staff, majority of the patients provides a higher ranking i.e. very much satisfied and hospital is providing excellent service and hospital staff including doctors are well with information equipped necessary and understanding of an individual patient.

In terms of parameters, tangibility scores high in Tstat value compared to other dimensions of service quality, it means patients are giving more importance to tangibility dimension.

In tangibility, actual service is more than the expected one, most of the respondents agreed that the hospital has modern medical equipments, excellent service facilities, well maintained hygiene.

There is a co-relation between responsiveness, assurance, empathy, these 3 factors goes hand in hand as it is improving the service quality. In IPD, they feel satisfied because the hospital staff is taking care of all their need in better manner.

Staff is well trained, they are more empathetic, • willing to help the patients and their relatives in every possible way.

Middle class and above avail the services at HCG.

RSTRCH RashtrasantTukdojiMaharajRegional **Cancer Hospital** 

IN RST-RCH, the overall service quality ratings are low compared to HCG, the reason being the demographic profile like most of the lower middle class and BPL card holder goes to RST.

In Tangibility, where the appearance of hospital matters and factors such as cleanliness, seating arrangements, facilities, scores low.

In all the parameters i.e. tangibility, reliability, responsiveness, assurance, empathy, there is significant gap in service quality, it means the patients expectations are less compared to what hospital is providing.

In tangibility, no significant gap was found it means hospital needs to improve their physical facilities. Patients expectations are more than what hospital is providing.

Tangibility actually is very much important when it comes to cancer treatment and RST-RCH scored low in this dimension.

Majority of the people in both the hospitals comes • the avail government schemes such as pradhanmantriswasthayojna, CGHS scheme, schemes specially made for women regards to breast cancer treatment.

Cancer treatment In Nagpur city has been improved more specialised cancer hospitals such as as HCG-NCHRI, NCI established.

Service quality of cancer hospitals in Nagpur city has been improved, hospitals are more service oriented in both Medical and surgery department.

IN RST, the tangibility is not that much significant • compared to HCG.

# **Conclusion:**

The given paper helps to identify the gap netween actual and expected service quality of cancer hospitals in Nagpur city.

Overall, the quality of service provided in the Nagpur city is above the expectation. There is a significant gap in the expectation and perception. There is a scope to improve few of the parameters such as tangibility and reliability in which services are dependent upon the physical infrastructure such as physical facilities, equipments, machines, hospital layout, convenient public areas.

As people are availing government schemes for treatment and schemes doesn't cover full treatment, as only IPD treatment is covered in current schemes, so in a certain way it impacted the reliability of a Hospital.

After implementing the given research one can improve the service quality of given hospital and can identify and minimise the gap in the said dimensions of service quality.

#### Conflict of interest statement

Authors declare that they do not have any conflict of interest.

#### REFERENCES

- 1. B. Burman, J.R. Evans retail Management PHI 2005
- 2. G.G. Vedmani Retail Management Jaico publishing 2009
- 3. Sujata nair Retail management Himalaya publishing 2011

4. Harjeet Singh – retail Management – S. Chand and company – 2011

- Swapna Pradhan Retail Management Tata Mcgraw Hill 2009
   V.S. Ramaswamy, S.namakumari marketing Management Macmillan India – 2002
- 7. Philip kotlar marketing Management PHI 2010
- 8. Ravi, Sunitha opening retail trade for FDI in India 2007

#### **Paper References:**

1. Haniyeh Nazem, HadiraeisAbdollahi, AbasatMirzaei – Investigation of the gap between patients perceptions and expectations of hospital service quality – Article in journal of client centered nursing care – May 2020

2. GirmachewWasihun, GirmaTaye, Awgichewkiflezemelak, Amanuel Yosef - Gap analysis of service quality and associated factors at the oncology center of TikurAnbessa Specialized Hospital, Addis Ababa, Ethiopia, 2022: a cross sectional study – article in BMJ open January 2024.

3. Suresh Chandra - Evaluation of Service Quality in Healthcare Services-A Study of Select Hospitals in Warangal District – Pratibimba, the journal of IMIS, a peer reviewed bi-annual journal, issue 2, July-December 2023.

4. Ashraf Aaqoulah, Ahmed BawaKuyini, Samir Albalas – Exploring the gap between patients' expectations and perceptions of healthcare service quality – Article in patient preference and adherence, May 2022.

5. Ashraf A'aqoulah, Raghib Abu Saris& Omar B. Da'ar- On the Agreement between Patients' Perceptions and Expectations about the Quality of Hospital Services - Global Journal of Health Science; Vol. 13, No. 9; 2021 ISSN 1916-9736 E-ISSN 1916-9744.

6. EhsanZarei , Ali Bagheri, Abbas Daneshkohan and SoheilaKhodakarim - Patients' views on service quality in selected Iranian hospitals: An Importance-performance analysis - Shiraz E-MedJ. 2020September;21(9):e97938 – published online, May 12, 2020.
7. ShamshudinTofik, MezgebuYitayal ,WubshetNegash, AyalDebie - Quality of healthcare services among adult outpatients at

two Public Hospitals in East Ethiopia: Using service quality (SERVQUAL) assessment mode – research square, March 24<sup>th</sup>, 2023.

8. Mohammad Reza Naqavi MSc, RahelehRefaiee MD, Mohammad Reza Baneshi PhD, NouzarNakhaee MD - Analysis of Gap in Service Quality in Drug Addiction Treatment Centers of Kerman, Iran, Using

SERVQUAL Model - Article in Addiction and Health · May 2015, researchgate.

9. Digant Gupta – cancer treatment centers of America – patient satisfaction with service quality in an oncology setting : implications for prognosis in non-small cell lung cancer.

#### Database:

1. EBSCOHOST: business source elite+J-gate: social and management sciencesResearch gate

nal For

asuaise

239 International Journal for Modern Trends in Science and Technology