A STUDY ON PATIENTS' EXPECTATIONS TOWARD SERVICE QUALITY AT A SUPER SPECIALITY HOSPITAL

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in

Hospital and Health Management

By

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Under the Supervision and Guidance of

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2024

SRI KANCHI KAMAKOTI MEDICAL TRUST
SANKARA EYE FOUNDATION, INDIA

INTERNSHIP COMPLETION CERTIFICATE

The certificate is awarded to

Mr Koushik Roy

In recognition of having successfully completed him
Internship in the department of

BUSINESS DEVELOPMENT

and has successfully completed his Project on

A Study on Patient's Expectations toward Service Quality at an Eye Care Hospital

18th March 2024 to 19th June 2024

Organization: SANKARA EYE HOSPITAL, COIMBATORE

He comes across as a committed, sincere & diligent person who has
a strong drive and zeal for learning

We wish him all the best for future endeavours

Mr Vasanth Kumar S
Manager-Business Development

Ms Srini Karthikeyan
Chief People Officer

Mr Bharath Balasubramanian
President - Operations

DECLARATION BY STUDENT

I hereby declare that this dissertation titled "A STUDY ON PATIENTS' EXPECTATIONS TOWARD SERVICE QUALITY AT A SUPER SPECIALITY HOSPITAL" is the Bonafede record of my original research work. I declare that it has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.

Koushik Roy

(Signature)

Koushik Roy

Date: 02/07/2024

IIHMR UNIVERSITY

CERTIFICATE

This is to certify that dissertation titled **"A STUDY ON PATIENTS' EXPECTATIONS TOWARD SERVICE QUALITY AT A SUPER SPECIALITY HOSPITAL"** is a record of the research work undertaken by **Koushik Roy** in partial fulfillment of the requirements for the award of the degree of MBA (Hospital and Health Management) from the IIHMR University, Jaipur under my guidance and supervision and his approach to the research study has been sincere, scientific, and analytical.

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ABSTRACT

Objectives: The objective of this research study is to assess the patient expectations towards service quality across different units of hospital and compares patient satisfaction levels accordingly. This study mainly assesses whether there are variations in patient satisfaction based on the patient's experiences at specific unit and this study also helps to identify gaps and the areas of improvement in service delivery based on the comparative analysis. This study also assesses the patient's experience in all units during the hospital visit or hospital stay and assesses the gaps in service dimensions which is used to assess the gaps between the patient's expectation or benchmark and the delivered service in hospital. Apart from that, the study will analysis the average gap between service quality standard and actual delivered service quality to the patients in overall hospital.

Methodology: This cross-sectional study utilizes the gap analysis method (SERVQUAL) by calculating the mean score of ratings, employing a 5-point LIKERT Scale to measure gaps between organization standards and service quality received by patients. The gap analysis model will also be applied to find out the gaps between average patient's experience and benchmark and after that SERVQUAL model will be applied for addressing the gaps in overall hospital. The hospital has already decided proactively its high benchmark for service quality and the benchmark is higher than patient expectations. A sample of 1218 participants was included with this study through convenience sampling during sample collection which is most relevant to this study and the data is much appropriate for this research study. Data collection was conducted between April and May 2024. Through the analysis, areas of concern were discovered based on negative and average scores within the comparative analysis. For the data collection, the set of questions were prepared for OPD as well as IPD and a survey was conducted for data collection, this survey was mainly conducted through online mode with the help of google form and it was also based on interview process and for this purpose a form link and bar code were generated and circulated to each unit.

Result:

The result shows that most of the patients were satisfied with the service quality which was delivered by hospital. The maximum patients were very happy to get treatment and service from OPD as well as IPD. At the end of this research study, the result was about

satisfaction score or patient experience score in OPD and IPD, the satisfaction score or patient experience score in OPD was 4.62 and 4.89 was in IPD, these were the average scores of all units. This score was generated with the help of Comparative Analysis (Mean Score) model. Apart from that, few gaps were discovered in different units at the end of this research study.

Conclusion:

The overall patient's satisfaction is excellent in all units and all units have met the patient's expectation towards services quality. But few gaps were discovered after analysing the patient's experience unit wise. This study concludes with providing the recommendations which were made according to gaps in service dimensions in different unts. These recommendations were made to improve the service quality and fulfilment of gaps between patient's expectations and patient's experience.

Key Words:

Patient Experience, Patient Feedback, Patient satisfaction, Patient expectation, Service Quality, Out-Patient Department, In-Patient Department, Surgery Patients, Hospital Staffs, Doctors, Nurses, Registration, Refraction, Base Hospital, Units.

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Koushik Roy

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Abbreviations

Sl. No.	Abbreviations	Full Form
1.	SEF	Sankara Eye Foundation
2.	BH	Base Hospital
3.	OPD	Out-Patient Department
4.	IPD	In-Patient Department
5.	BD	Business Development
6.	AND	Anand Unit
7.	BNG	Bangalore Unit
8.	CCH	Coimbatore City Hospital
9.	CBH	Coimbatore Base Hospital
10.	GNT	Guntur Unit
11.	HYD	Hyderabad Unit
12.	IND	Indore Unit
13.	JAI	Jaipur Unit
14.	KAN	Kanpur Unit
15.	KKL	Krishnankoil Unit
16.	LDH	Ludhiana Unit
17.	PVL	Panvel Unit
18.	SMG	Shimoga Unit

Chapter 1

Introduction

The present scenario of eye care service is undergoing a significant transformation. As public awareness regarding the eye health grows up, coupled with an aging population, the demand for high-quality eye care services is steadily on the rise. Patients are no longer solely focused on receiving competent medical treatment; their expectations extend to the entire service experience. This study will explore patient experience during hospital visit and their satisfaction level across various service dimensions in a hospital. This includes aspects of service quality in OPD as well as IPD, such as waiting time at registration, clearly information given by staff, staff courtesy behaviour, a welcoming environment, cleanliness in hospital premises, query solving, doctor's attentiveness and the overall level of empathy and attentiveness demonstrated by healthcare professionals. By identifying these key areas of patient focus, the study aims to contribute valuable insights for eye care hospitals to refine their service delivery strategies and create a patient-centric environment. Ultimately, this research seeks to bridge the gap between evolving patient expectations and the service quality offered by eye care hospitals, fostering a more positive and successful patient experience.

The hospitals, which are once primarily concerned with the particular medical expertise, now face the challenge of delivering exceptional service quality along with the superior clinical care. This research study involves into the specific service quality expectations held by patients visiting eye care hospitals. By understanding these expectations, eye care facilities can bridge the gap between what patients desire and what they currently experience. The landscape of healthcare is rapidly evolving, and patients are increasingly demanding exceptional service quality along with excellent medical care. In this context, the hospitals face a crucial challenge like exceeding patient expectations by delivering service quality that surpasses even pre-determined benchmarks.

This research study delves into critical area of patient expectations toward service quality within an eye care hospital setting. In this research, The hospital has proactively established its own high benchmarks for service quality. This study aims to conduct a comparative analysis or gap analysis between these established benchmarks and the actual delivered service quality or actual service quality experienced by patients.

1.1 Purpose of Research:

The main purpose of research is identify the gaps in all units and this research also aligns with gap analysis (SERVQUAL) model, which is based on mean score and which focuses on understanding the gaps between patient actual experiences and the quality standards with healthcare services. The aims to identify what patients consider to be high-quality service in a healthcare setting. It might involve surveys, focus group or interviews to gather information about waiting time at registration, staff courtesy, clear communication, cleanliness in hospital and many more. This research might assess how important each service attribute is to patients. This research mainly assessing the patient experience. By comparing patient expectations with their actual experience, the research aims to identify areas where there is a gap, these gaps represent opportunities for improvement in service delivery.

1.2 Research Questions:

How does the perceived service quality at our hospital compare to service quality standards? What factors contribute to any gap identified between benchmark of service quality and the actual delivered service quality? Which unit is doing well in terms of proving service quality to patients? What strategies can be bridging the identified gaps and improve overall service quality?

1.3 Objectives of the Study:

(i) To evaluate unit wise service quality.

(ii) To find out the gaps in service quality standards.

(iii) To compare the performance of all units in terms of service quality.

(iv) To identify areas of improvement in service delivery based on the comparative analysis.

1.4 Implication of Research:

- By addressing gaps between patient expectations and delivered service quality, the hospital can create a more positive patient experience, leading to higher satisfaction scores.

- Better treatment plan adherence and better overall patient outcomes can result from a positive patient experience.

- By emphasizing service quality, the hospital can be differentiated the itself from competitors. By exceeding patient expectations, the hospital can attract new patients and also retain existing patients.
- The allocation of resources can be aided by the results of research. In order to most effectively meet patient needs, the hospital can prioritize investments in staff training, technology upgrades, or facility enhancements by concentrating on the areas that require improvement.
- Developing targeted training programs based on identified gaps.
- The research findings can be used to shift towards a more patient-centred care mode.
- This will also involve tailoring services and communication to meet individual patient needs and preferences.

1.5 Hospital / Organization Profile:

Hospital Name: Sankara Eye Hospital

Sankara Eye Foundation, India (a unit of Sri Kanchi Kamakoti Medical Trust), was Founded by the year of 1977 by Dr. R.V. Ramani, is a social enterprise with a 47-year legacy. They provide cost-effective eye care services to underprivileged communities across India. Sankara has grown with the network of 14 hospitals with state-of-the-art facilities, world-class treatment and infrastructure, serving both rural and urban populations in 10 Indian states. Their unique and replicable Community Outreach Model has transformed over ten million lives since its inception. "Gift of Vision" is the flagship program of Sankara Eye Foundation, offering free eye care services to those in need. Sankara Eye Foundation is one of India's largest community eye care providers. Notably, they treat 80% of their patients completely free of charge, subsidizing these costs with revenue from the remaining 20% who can afford to pay. Sankara's success stems from effective financial planning, strong partnerships, innovative ideas, and a structured training process. These elements allow them to deliver large-scale vision restoration programs across India.

Vision

“To work towards freedom from preventable and curable blindness”

Mission

"To provide unmatched eye care through a strong service-oriented team"

Units – Anand, Bangalore, Coimbatore, Coimbatore City, Guntur, Hyderabad, Indore, Jaipur, Kanpur, Krishnankoil, Ludhiana, Panvel, Shimoga.

Chapter: 2

Literature Review

- **Aliasghar Nadi, Jalil Shojaee, Ghassem Abedi, Hasan Siamian, Ehsan Abedini, and Farideh Rostami,** conducted a research study which was on the topic of "Patients' Expectations and Perceptions of Service Quality in the Selected Hospitals" at Vali Asr hospital, Ghaemshahr, Imam Khomeini & Shafa Hospitals in Sari, Iran and the sample size, which was taken for this study was 600 patients, was appropriate for this study. The objective of this study was to assess patient perceptions & expectations regarding service quality at four hospitals in Iran. The SERVQUAL model was applied in this research study and this model measures service quality across five dimensions which were tangibles, reliability, responsiveness, assurance, and empathy. After analysing, the result showed that Patients had high expectations in all five dimensions of service quality in those hospitals. Overall patient perceptions toward service quality were lower than their expectations. This indicates a gap between what patients desired and what they experienced. The greatest gap was discovered in the "assurance" dimension, followed by empathy, responsiveness, reliability, and tangibles. This indicates patients felt a lack of trust in the hospitals' ability to deliver quality care and identify their needs effectively. The gap between patients expectations and perceptions were found after studying on the four hospitals. This research highlights the importance of understanding patient expectations and perceptions to improve service quality in hospitals. By identifying the gaps, hospitals can focus and enhance patient satisfaction and trust.
- **Nguyen Duc Thanh, Bui Thi My Anh, corresponding author, Chu Huyen Xiem, Pham Quynh Anh, Pham Hung Tien, Nguyen Thi Phuong Thanh, Cao Huu Quang, Vu Thu Ha, and Phung Thanh Hung**, conducted a research study with the topic of "Patient Satisfaction With Healthcare Service Quality and Its Associated Factors at One Polyclinic in Hanoi, Vietnam" in One polyclinic in Hanoi, Vietnam with the sample size of 301 Out-Patients. The aim of the study was to assess the validity and reliability of patient satisfaction measurement tool, and identify factors influencing patients satisfaction level. As a result of this research study, the patient satisfaction level was

53.5%, which is moderate satisfaction level. This result also included with five factors emerged through exploratory factor analysis- facilities, service provision results, information transparency & procedures, accessibility, and staff interaction and communication. The result of this research study also indicated that patients were most satisfied with “Facilities” and “Service Provision Results” and apart from that only insurance status significantly influenced satisfaction; insured patients were 3.5 times more likely to be satisfied. So, overall this study highlights the importance of measuring and understanding patient satisfaction for quality improvement in healthcare. The adapted tool offers a valuable approach for Vietnamese polyclinics to assess patient experiences and identify areas for enhancement.

- **Ashraf A'aqoulah, Ahmed Bawa Kuyini, Samir Albalas,** year, conducted a cross-sectional study which was involving the quantitative methods of data collection with sample size of 415 patients in Jordanian Hospitals with the study topic “Exploring the Gap Between Patients' Expectations and Perceptions of Healthcare Service Quality” and the objective of this study was to find out the gap between patient’s expectations and their perceptions of healthcare quality in Jordanian hospitals with the help of the SERVQUAL model. Patients had high expectations for service quality across all aspects measured by SERVQUAL. According to this study, the patients had high expectation for hospital services across all measured domains. Overall the mean score for all domains was 4.38. When looking at the individual domains, Tangible had the highest score, which was 4.45, while the Empathy had the lowest score which was 4.32. Within the Tangible domain, patients had the highest expectation for “Hospital cleanliness and hygiene should be excellent” (4.69) and the lowest expectation for “Hospital staff should be pleasant when dealing with patients” (4.33).
- **Aleksandra Jonkisz, Piotr Karniej, Dorota Maria Krasowska,** year, conducted a research study which was on “Meeting Patient Expectations: Assessing Medical Service and Quality of Care Using the SERVQUAL Model in Dermatology Patients at a Single Center in Poland” with the sample technique of Prospective Observational Study in A single medical center in Poland (the Independent Public Teaching Hospital in Lublin, Poland) and this study was done with the sample size of 413 patient and the study investigated how well the dermatology clinic met patient expectations for service quality. Researchers used a model called SERVQUAL to assess five aspects of service quality: reliability, assurance, tangibility, empathy and responsiveness. They found that overall, patients had high expectations that were not always met by the clinic. Patients wanted improvement in the areas of tangibility (modern facilities and equipment) and

responsiveness (timely service). These expectations differed somewhat between inpatients and outpatients. The study also discovered several factors that influenced patient expectations including – Older patients tended to have lower expectations, Women had higher expectations for tangibles, Patients from larger cities had higher expectations for tangibles. Working patients had higher expectations for tangibles and responsiveness. Patient with low quality of life had higher expectations for tangibles and reliability. Patients under age 36 had higher expectations for responsiveness, assurance and empathy. Patients with more money had higher expectations overall (except for assurance).

CHAPTER - 3

METHODOLOGY

3.1 Study Area – All units of Sankara Eye Hospital.

3.2 Study Population – All Patients (OPD & IPD)

Inclusion – All Paying Patients, Patients visiting the Outpatient Departments (OPD), Patients who are admitted to the hospital (IPD), Patients with all age groups and all genders, Patients who are willing to participate in the study by providing feedback on their experience.

Exclusion – Non-Paying Patients, Patients who are unable or unwilling to provide feedback or participate in this research, Patients who have already previously participated in this study to avoid duplication of responses.

3.3 Duration of Study – 3 months

3.4 Research Approach – In this research study, mixed approach was done during survey, which are quantitative data collection and qualitative data collection. So, quantitative data collection was done through rating system which was just select rating numbers like 1 to 5 in Likert Scale. And comments were taken from patients, which was mainly qualitative data. Apart from that, the research was conducted through google form.

3.5 Research Design – This research study followed a cross-sectional method and the survey was conducted by random sampling and there was no biasness during selection of samples for this research.

3.6 Sample Size – 1218

3.7 Sampling Techniques – Convenience sampling has been used to select patients. Convenience sampling was chosen for this study because it has been ensured that every patient from OPD and IPD got equal opportunity to be selected.

3.8 Data Collection Procedure –

- **Primary Data Collection –**
  - **Feedback Form –** Primary data was collected through primary survey. For this purpose, a questionary was prepared and a barcode was generated and circulated to all units. It was a type of feedback form which collected the patient satisfaction rate from OPD and IPD both.
  - **Personal Interview –** Per interview was also conducted to each patient and for this purpose, the feedback was filled by staff after taking interview of each patient. But this method was for only those patients who was unable to fill the form through their mobile or who was not having their own mobile.

3.9 Classification of Data – The feedback was divided into two parts like OPD and IPD. OPD Feedback Form was for collecting data from Out-patients and IPD Feedback form was for collecting data form In-patients. The patients who came for only consultation, diagnosis, only check up and follow-up were eligible to fill the OPD Feedback Form. The patients who came for surgery and who came for hospital stay, they were eligible to fill the IPD Feedback Form.

The OPD Survey Form was included with various questions which were from various departments in OPD. So, Classification of OPD Feedback Form –

- Registration
- Staff Courtesy
- Equipment Sanitation
- Query Solving
- Doctor's Attentiveness
- Clear Instructions
- Counselling Process
- Laboratory Services
- Pharmacy Services
- Cost of OP Services
- Cleanliness of Hospital

- Canteen Services
- Parking Facilities
- Overall Experience
- Patient's Comments

The IPD Survey For was included with various questions which were from various segments in IPD. So, Classification of IPD Feedback Form

- Surgery Plan
- Cleanliness in Patient's Room
- Nursing Care
- Treatment/Surgery
- Cost of IP Services
- Query Solving
- Staff assistance regarding Insurance process
- Instructions upon Discharge regarding Medications and Follow-up
- Food and Beverage quality and services
- Overall Experience
- Patient's Comments

3.10 Data Analysis Plan – The collected data was been analysed by using software MS-Excel. For this purpose Pivot table, data visualization, excel formulas and graphs were used to analysis the collected data.

3.11 Method of Calculation – The feedback was taken in the form of rating and for this purpose 5-point Likert Scale was used. The lowest rating was 1, 3 was average and highest rating was 5 which indicates the high satisfaction. The benchmark or standards in service quality was 4 which was already decided by organization. So, the mean score for each point –

Interval – (Highest Rating – Lowest Rating) / Highest Rating = (5 – 4) / 5 = 0.80

So, the interval was 0.80

Rating	Range
1	1.00 - 1.80
2	1.81 - 2.60
3	2.61 - 3.40
4	3.41 - 4.20
5	4.21 - 5.00

So, the benchmark score or organization standards in service quality is 4.00. So, every unit should score in each service dimension at least 4.00.

Mean Score:

[{(Total No. of 5 Ratings * 5) + (Total No. of 4 Ratings * 4) + (Total No. of 3 Ratings * 3) + (Total No. of 2 Ratings * 2) + (Total No. of 1 Ratings * 1)} / Total Responses]

3.12 Report Writing

In this research report, total six chapters are included with this report in which introduction is covered in the first chapter and literature review is under the second chapter. The methodology and approach are included with third chapter and results is covered with last chapter of the research study.

3.13 Operational Definitions

The operational definitions are the related terms which are generally used in this research study. These terms are frequently used in the research report.

Patient Experience – Patient experience is a term which indicates the experience after visiting hospital or after getting treatment from hospital or after getting service from hospital. Patient generally gives their rating according their experience and it is indicated by satisfaction.

Patient Expectations – Patient expectations are generally depending on hospital's reputation and cost of treatment etc. So, patient expectations are mainly included with few parameters which are high quality treatment, hospitality from staffs, proper nursing care and other services.

Patient Satisfaction – Patient satisfaction depends on patient experience after visiting hospital or getting service from hospital.

Service Quality – Service quality indicates the quality of perceived service. For this purpose, a benchmark is decided by each organization to measure the delivering service like whether the delivering service is up to mark or not. So, always the delivering service is compared with the decided benchmark.

Waiting Time – Waiting time generally indicates the time span for registration and how much time has been spent by patient for registration, consultation, diagnosis and results etc.

Staff Courtesy – Staff courtesy indicate the staff behaviour during delivering the service to each patient. So, each patient may have different experience regarding of staff courtesy.

Query Solving – It indicates how quickly and proper way a patient can get expected answer of their question to staffs. Patients may have various query regarding treatment or any other service of hospital but how quickly they can get proper answer of their question – it indicates query solving.

SERVQUAL Model – The SERVQUAL Model is a framework which is used to assess the difference between patient's expectations towards service quality and the delivered service quality by a hospital or healthcare organization. There are mainly five dimensions of this model which are called service dimensions – Tangibles, Reliability, Responsiveness, Assurance and Empathy. This model actually helps to find out the gaps between patient's expectations or patient's experience and the benchmark or standards of service quality by organization.

3.14 Limitations and Problems Faced

- The questionaries were so lengthy, so it was hard to approach the patient or patient party to ask for filling the lengthy questions.
- The sample size was taken little bit high for this research, so it was so challenging to achieve the target at least above 1000 samples.
- The patient expectations were taken through comment section, so it was totally descriptive and because of that, it was more time taken for analysis the patient expectations.
- This survey was conducted by digitally, so few of the patients were uncomfortable to participate in this survey.
- It was also faced during survey that few of the patients were not having trust to scan bar code for the survey requirement.

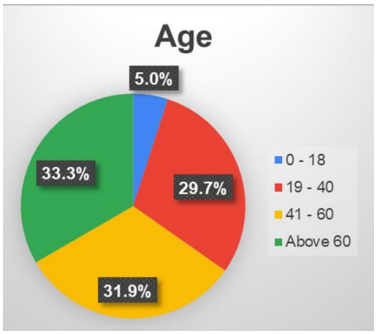
3.15 Ethical Considerations – This study was conducted in this way in which direct interaction with patients and asked them for rating according their experience. During

this survey, the total data which was collected is only primary data. And during the survey, consent was taken from patients but it was only verbal consent.

CHAPTER 4

Result

A total 1218 sample size was collected during 3 months through simple random sampling. The participants were mainly patient own and patient party or the relatives of patients. The participants were from different age group – 61 participants from 0 to 18 age group which was around 5.01% of total sample size, 362 participants from age group of 19 to 40 which was around 29.72% of total sample size, 389 participants were from age group of 41 to 60 which was around 31.94% and 406 participants were from age group of above 60 which was around 33.33% population of total sample size.



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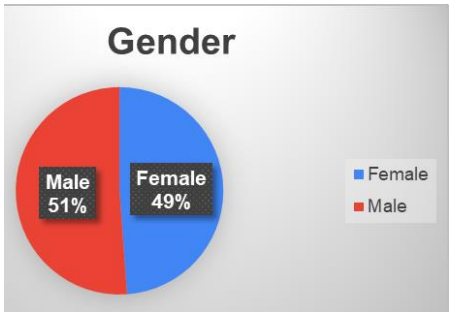

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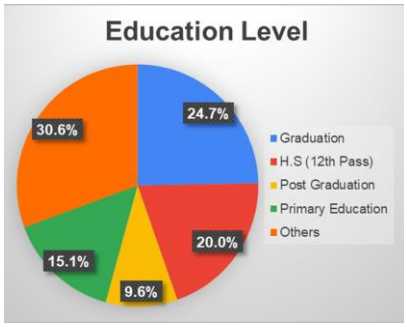

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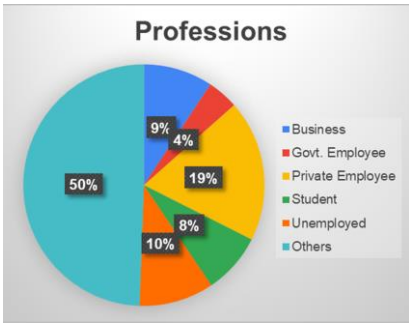

Figure: 4.4

According to study, the total percentage of male population was 51.15% (623 male participants) who did participate in this survey and female participants were around 48.85% (595 female participants). Now coming to educational profile, 301 participants were graduate which was around 24.71% of total sample population, 243 population

were H.S background which was around 19.95%, 117 population was from Post-Graduate background which was around 9.61%, 184 population was from Primary Education background which was around 15.11% of total population and 117 participants did not share their educational background. This survey also collected the data regarding professions of participants – 99 participants were student which was around 8.13%, 231 participants were private employee which was around 18.97%, 51 participants were Govt. employee which was around 4.19%, 113 participants were from Business background which were around 9.28%, 122 participants were unemployed or depended category which was around 10.02% and 602 participants selected others category which was around 49.43%.

Gap Analysis

1. **Anand Unit:**

The result of the research study shows patients were highly satisfied with the cleanliness of hospital and washroom, and canteen services (4.88), and parking facilities (5.00). Patients also rated staff behaviour (5.00) and doctor attentiveness (5.00) very highly. In all of the categories listed, the patients' average score met or exceeded the benchmark score. This suggests that the Anand unit (OPD) is meeting or exceeding patient expectations in these areas and no gap was found in OPD after end of this research.

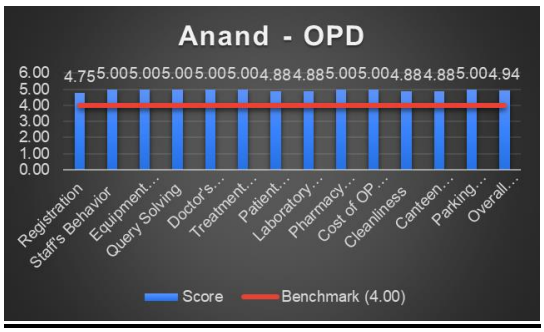

Figure: 4.5

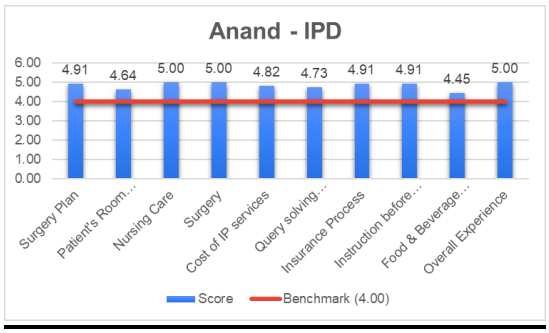

Figure: 4.6

According to the research study, the result indicates no gap was found in IPD at Anand unit and overall patients were satisfied with their expectation at the IPD in Anand unit. Patients were highly satisfied with surgery (5.00) and nursing care (5.00). Apart from that, Patients also provided the high rate to surgery plan, insurance process, and instruction given before discharge. In all of the categories listed, the patients' average score met or exceeded the benchmark score. This suggests that the Anand unit (IPD) is meeting or exceeding patient expectations in these areas very well.

2. **Bangalore Unit:**

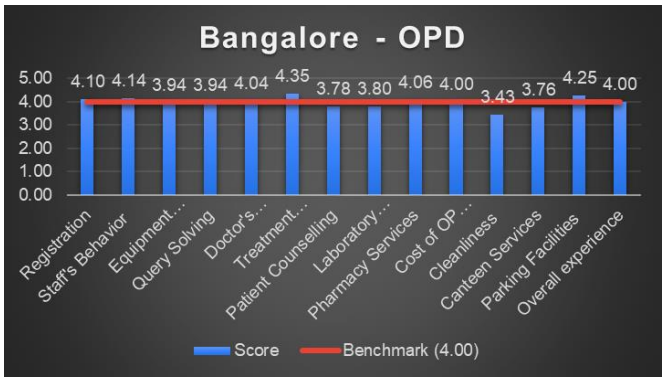

Figure: 4.7

In Bangalore unit (OPD), patients were highly satisfied with the treatment (4.35) and Patients were also satisfied with other service dimensions as well. But, six gaps were found in OPD like equipment sanitation before using for patients, query solving, patient counselling, laboratory services, cleanliness, and canteen services. So, it means patients were not fully satisfied with these six services.

3. **Coimbatore Unit:**

The result shows patients were highly satisfied in all service dimensions at Coimbatore unit OPD. Patients also gave high rating in doctor's attentiveness to patient's query (4.87) and treatment instructions (4.85). In all of the categories listed, the patients' average score met or exceeded the benchmark score. This suggests that the Coimbatore unit (OPD) is meeting or exceeding patient expectations in these areas and no gap was found in OPD at end of this research.

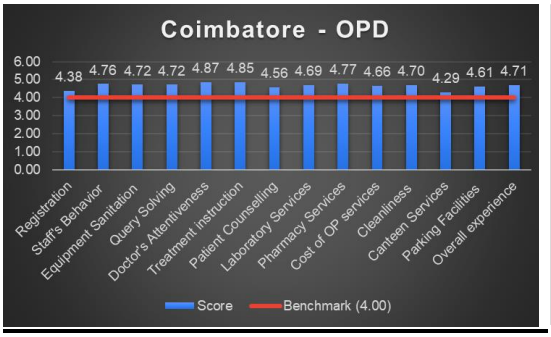

Figure: 4.8

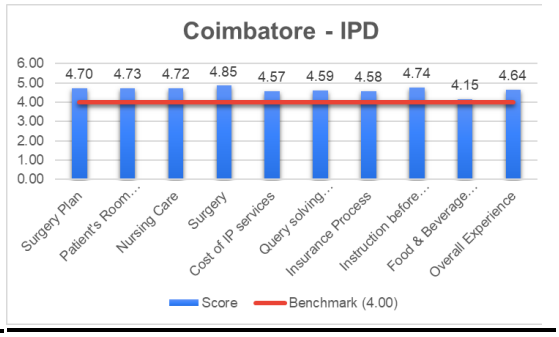

Figure: 4.9

According to study, this no gap was found in IPD at Coimbatore Unit. They have met the patient expectation towards service quality in all service dimensions. The patients

provided high satisfaction rate in surgery (4.85) and patients were also satisfied with instruction given before discharge (4.74).

4. **Coimbatore City Unit:**

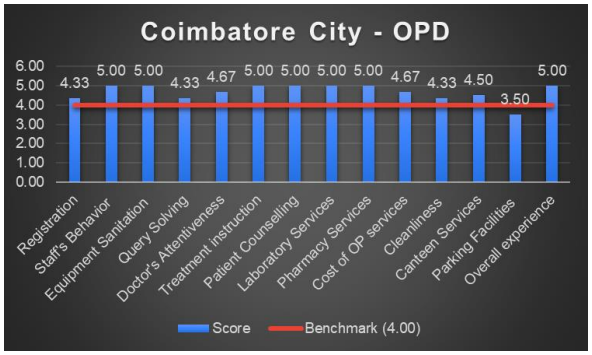

Figure: 4.10

According to study, this one gap was detected in OPD at Coimbatore City Unit, the gap was in parking facilities (3.50). In Coimbatore City Unit, the highest score was achieved by staff behaviour (5.00), equipment sanitation before using for patients (5.00), treatment instructions (5.00), patient counselling (5.00), laboratory services (5.00), pharmacy service (5.00).

5. **Guntur Unit:**

According to the research result, the patients were highly satisfied in delivered service quality in OPD. Patients rated in doctor's attentiveness (4.72) and treatment instruction (4.72) highly among all services. In all of the categories listed, the patients' average score met or exceeded the benchmark score. This suggests that the Guntur unit (OPD) is meeting or exceeding patient expectations in these areas and there was no gap in OPD in terms of service quality.

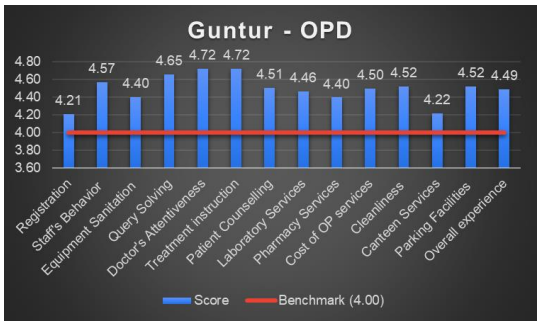

Figure: 4.11

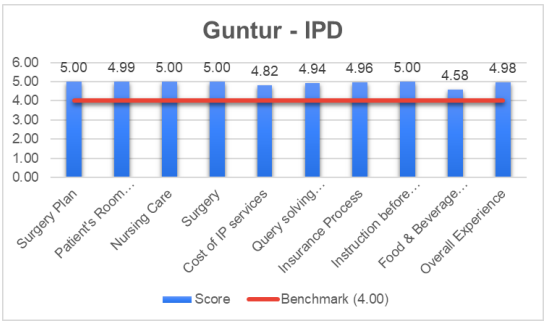

Figure: 4.12

According to study, this no gap was found in IPD. So, the score of each service dimension was above benchmark in IPD. Patients rated surgery plan (5.00), nursing care (5.00), surgery provided (5.00), and instruction given before discharge (5.00) very

highly. In all of the categories listed, the patients' average score met or exceeded the benchmark score.

6. **Hyderabad Unit:**

The result shows patients were highly satisfied with the staff behaviour (4.58) and parking facilities (4.71) among all services. But, three gaps were found in OPD at the end of this research which were equipment sanitation before using for patient (3.53), pharmacy services (3.83), and cleanliness (3.95).

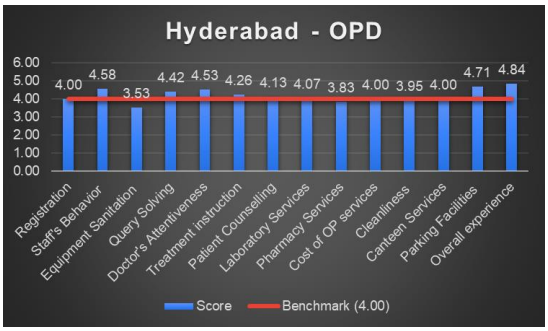

Figure: 4.13

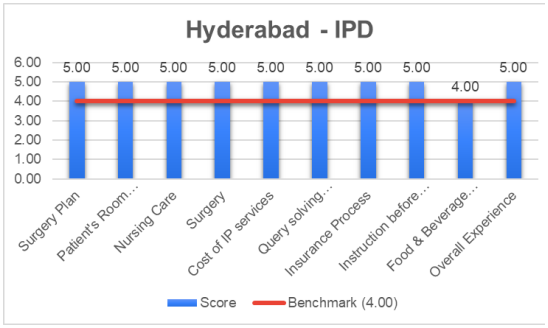

Figure: 4.14

According to study, no gap was found in IPD at Hyderabad Unit and they have met the patient expectation towards service quality. In Hyderabad Unit, the highest score was 4.71 and it was achieved by Parking Facilities. The second highest score was achieved by Staff Behaviour (4.58).

7. **Indore Unit:**

The result of this research study shows patients were highly satisfied with the staff behaviour (5.00), patient counselling (5.00), cost of OP services (5.00), and parking facilities (5.00). No gap was found after analysing and all service dimensions met the patient's expectation and exceed the benchmark of service quality.

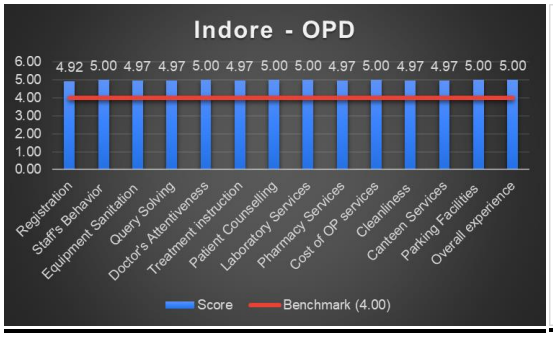

Figure: 4.15

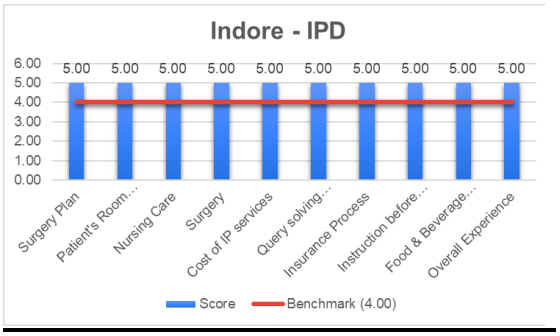

Figure: 4.16

According to study, this no gap was found in IPD and patients were very highly satisfied with all services. So, it indicates that Indore unit is meeting patient's expectation very well.

8. **Jaipur Unit:**

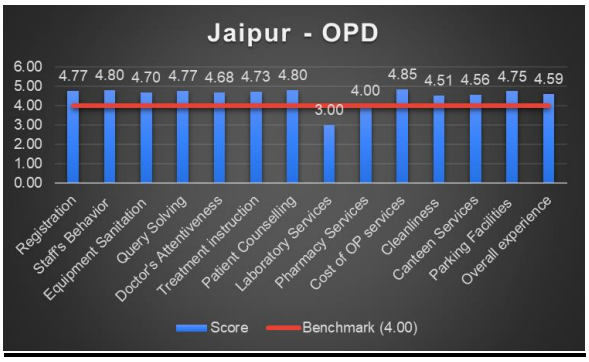

Figure: 4.17

According to study, one gap was found in OPD at Jaipur Unit, which was in Laboratory service (3.00). Apart from that, patients were satisfied very highly with cost of OP services (4.85), staff behaviour (4.80), and patient counselling (4.80). Patients were also satisfied with other services and it shows that Jaipur unit successfully met patient expectations in all service dimensions except laboratory services.

9. **Kanpur Unit:**

The research found two gaps in OPD at Kanpur Unit, which were in equipment sanitation before using for patients (2.50) and parking facilities (3.50). Except these, all services met patient expectation towards service quality. Patient rated in waiting time at registration (5.00), and patient counselling (5.00) very highly.

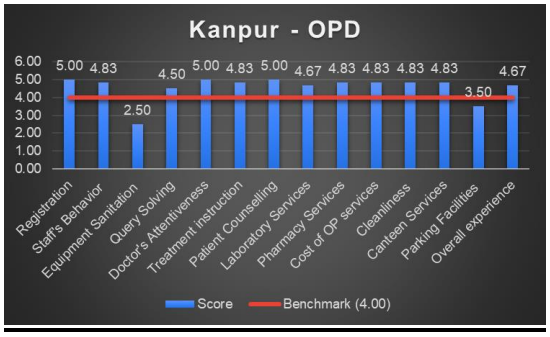

Figure: 4.18

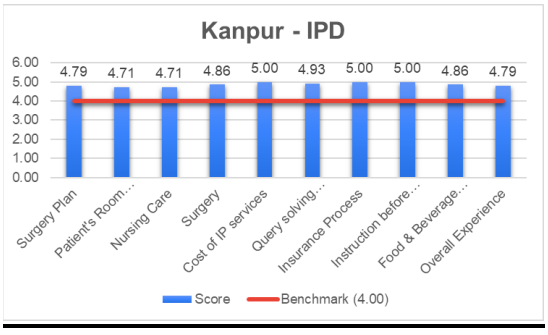

Figure: 4.19

According to study, patients were highly satisfied with cost of IP services (5.00), insurance process (5.00), and instruction before discharge (5.00). Patients also rated in

surgery (4.86), food & beverage quality (4.86), and surgery plan (4.79) highly. So, this unit met patient's expectations and exceeding benchmark very well.

10. <u>Krishnankoil Unit:</u>

According to study, no gap was found in OPD at Krishnankoil Unit. Patients rated highly in staff behaviour (5.00), and patient counselling (5.00). This unit met the patient's expectation highly and the scores which were achieved by all services were exceeded the benchmark.

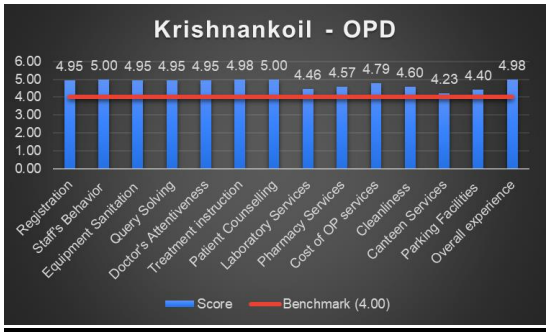

Figure: 4.20

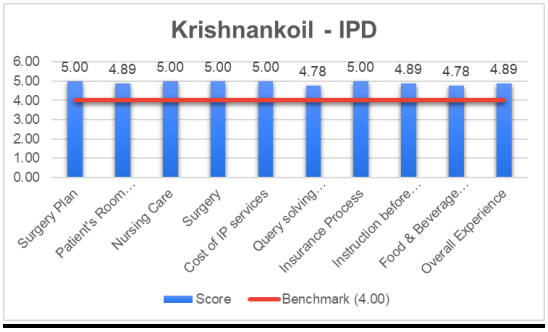

Figure: 4.21

This research study shows there is no gap in IPD at Krishnankoil Unit. So, Patients were fully satisfied with surgery plan (5.00), nursing care (5.00), surgery (5.00), cost of IP services (5.00), and insurance process (5.00). this unit met successfully patient's expectations.

11. <u>Ludhiana Unit:</u>

According to study, this no gap in OPD at Ludhiana Unit. Patients were highly satisfied with staff's behaviour (5.00), equipment sanitation before using for patients (5.00), query solving (5.00), doctor's attentiveness (5.00), treatment instructions (5.00), patent counselling (5.00), laboratory services (5.00), pharmacy services (5.00), cleanliness (5.00), and parking facilities (5.00).

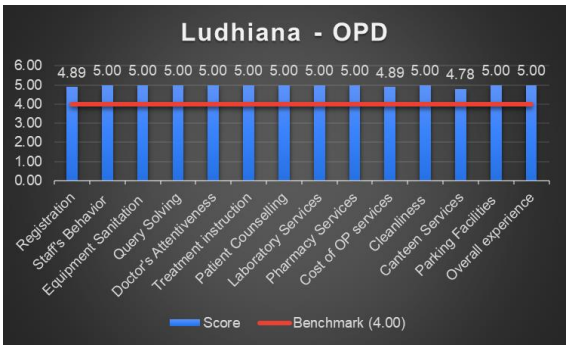

Figure: 4.22

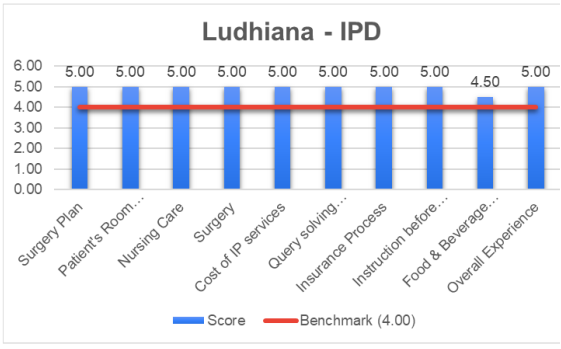

Figure: 4.23

12. Panvel Unit:

The result of this research shows that the patients putted high rating in patient counselling (4.98) and patients were also satisfied with equipment sanitation before using for patients (4.95), query solving (4.95), and treatment instructions (4.95). So, no gap was found in OPD during research study.

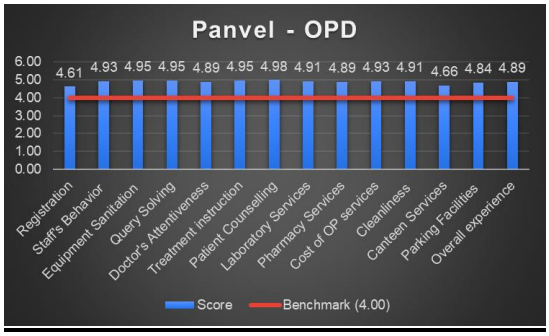

Figure: 4.24

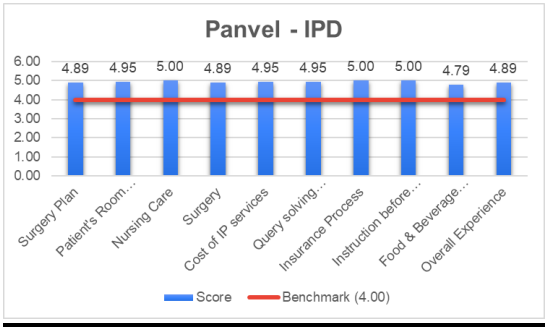

Figure: 4.25

According to study, there is no gap in IPD at Panvel Unit and patients were highly satisfied with nursing care (5.00), insurance process (5.00), and instruction given before discharge (5.00). So, they met successfully patient's expectations and the achieved score by this unit were exceeded the benchmark.

13. Shimoga Unit:

The research study shows there are two gaps in OPD at Shimoga Unit. The gaps were in registration (3.92) and canteen services (3.72) in OPD. Apart from that, the patients rated in staff's behaviour (4.66) and query solving (4.66) highly.

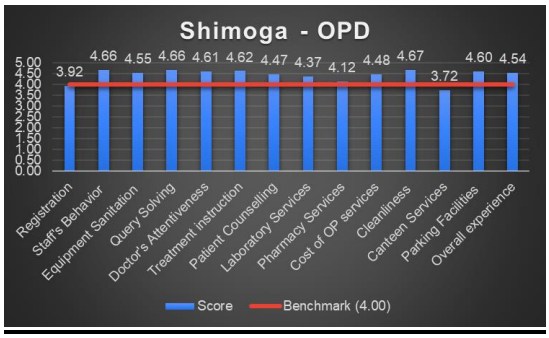

Figure: 4.26

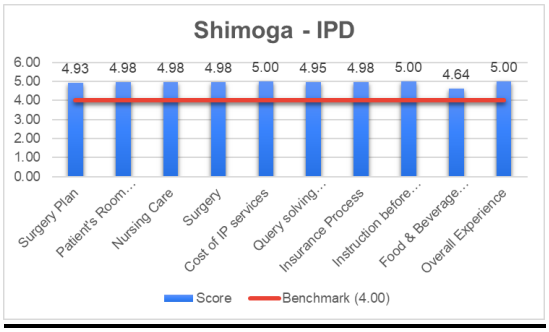

Figure: 4.27

According to study, no gap was found in IPD. Patients were highly satisfied with cost of IP services (5.00) and instructions given before discharge (5.00). So, Shimoga unit met patient's expectation in all service dimensions (IPD).

Ranking of Unit (According to Performance)

OPD

Rank	Units	Mean	Benchmark	Gap
1	Indore	4.98	4.00	No Gap
2	Ludhiana	4.97	4.00	No Gap
3	Anand	4.94	4.00	No Gap
4	Panvel	4.88	4.00	No Gap
5	Krishnankoil	4.77	4.00	No Gap
6	Coimbatore City	4.67	4.00	No Gap
7	Coimbatore	4.66	4.00	No Gap
8	Kanpur	4.56	4.00	No Gap
9	Jaipur	4.54	4.00	No Gap
10	Guntur	4.49	4.00	No Gap
11	Shimoga	4.43	4.00	No Gap
12	Hyderabad	4.20	4.00	No Gap
13	Bangalore	3.97	4.00	0.03

Figure: 4.28

IPD

Rank	Units	Mean	Benchmark	Gap
1	Indore	5.000	4.00	No Gap
2	Ludhiana	4.950	4.00	No Gap
3	Shimoga	4.943	4.00	No Gap
4	Panvel	4.932	4.00	No Gap
5	Guntur	4.927	4.00	No Gap
6	Krishnankoil	4.922	4.00	No Gap
7	Hyderabad	4.900	4.00	No Gap
8	Kanpur	4.864	4.00	No Gap
9	Anand	4.836	4.00	No Gap
10	Coimbatore	4.627	4.00	No Gap
11	Bangalore	No Data	4.00	No Data
12	Coimbatore City	No Data	4.00	No Data
13	Jaipur	No Data	4.00	No Data

Figure: 4.29

DISCUSSION

This research was started with designing a survey process of patient feedback collection from Out-Patients and In-Patients with the sample size of 1218. After collecting feedback, the data was analysed with the help of analysing tool and a service dimension tool (SERVQUAL). So, based on the findings of the research study, few gaps were discovered in different service dimensions in six units of hospital – six gaps were found in Bangalore unit (equipment sanitation before using for patients, query solving, patient counselling, laboratory services, cleanliness in hospital & washrooms), one gap was found in Coimbatore City Unit (parking facilities), Three gaps were found in Hyderabad unit (equipment sanitation, pharmacy services, cleanliness in hospital & washrooms), one gap was found in Jaipur unit (laboratory services), two gaps were found in Kanpur unit (equipment sanitation before using for patients, parking facilities), and two gaps were found in Shimoga unit (waiting time at registration and canteen services). The average scores of OPD of all units were above the benchmark, but the average score of Bangalore unit was below the benchmark. So, all units met the patient's expectations towards service quality except Bangalore unit. In OPD, Indore unit achieved the first rank among all units and second rank was achieved by Ludhiana unit. Now coming to IPD, patients were highly satisfied with all services in all units and the first rank was achieved by Indore (5.00), and second rank was achieved by Ludhiana (4.950). Then the ranking of units was shown according to the performance in service quality in this research, so the top rank holder was Indore unit in terms of OPD as well as IPD. The

SERVQUAL model was also applied to analysis the gap between service quality standards and actual delivered service quality in hospital. So, no gap was found in hospital in OPD as well as IPD in overall hospital's delivered service quality. This result shows that all patients of the hospital were satisfied in all service dimensions and satisfied with all five dimensions in OPD like reliability (waiting time at registration), assurance (query solving and doctor's attentiveness), tangibles (cleanliness, equipment sanitation, cost of OP services and parking facilities), empathy (staff behaviour) and responsiveness (treatment instruction and patient counselling). Same as, patients were also satisfied in IPD service quality dimensions like reliability (scheduling of surgery plan), assurance (query solving regarding patient bill, and insurance process), tangibles (cleanliness of patient's room, cost of IP services and food quality), empathy (nursing care) and responsiveness (treatment provided).

RECOMMENDATIONS

1. Reducing waiting time at Registration – (SMG):
    i. The time slot of after lunch (after 2:00 pm) should be recommended for follow-up patients. At the time of discharge, it should be enhanced or it should be recommended to patients for visiting after lunch for follow-up. In this way, the waiting time can be reduced.

2. Equipment sanitation before using for patients – (BLR, HYD & KAN):
    i. Implement clear and standardized cleaning protocols for all equipment before using it for patients. Ensure staffs perform cleaning procedures in full view of patients whenever possible. This demonstrates a commitment to hygiene and builds trust.
    ii. Conduct regular audits of cleaning procedures to ensure staff are adhering to protocols and identify areas for improvement.

3. Improving Explanation of Examination performed and Response to Query and Patient Counselling – (BLR):
    i. Use clear and concise language that patients can understand. Avoid medical terms whenever possible. Break down complex information into smaller which will be easier to understand. Focus on explaining things from the patient's perspective.

ii. Encourage patients to ask questions and actively listen to their concerns. Don't rush through explanations. Always treat patients with empathy and respect. Acknowledge their anxiety or fear and show genuine concern for their well-being.

4. Improving Laboratory Services – (BLR):
    i. Provide clear information about report despatching of test and solving patient query regarding Tests. Focus on minimizing wait times for blood test and other procedures. This could involve appointment scheduling and having sufficient staff present during peak hours.
5. Improving Patient Counselling – (BLR):
    i. Provide clear information to patients about their treatment process and surgery, including cost of surgery and payment process and insurance process. This reduces anxiety and improves patient understanding.

6. Improving Canteen Service – (BLR & SMG):
    i. According to the research study, offering a diverse menu while maintaining nutritional balance can improve patient satisfaction and dietary adherence. Consider seasonal ingredients and cultural preferences.
    ii. Regularly review and improve recipes through taste testing with staff, patients, and dietitians. Attractive food presentation can also enhance the dining experience.

7. Parking Facilities – (CCH & KAN):
    i. Implement clear and concise signage that directs patients and visitors to available parking areas. This includes signs at the entrance, within the parking lot.

CONCLUSION

The research was started with the aims of identifying gaps in service quality across the units of hospital and find out the improvement opportunities and making the recommendations. A patient feedback survey was conducted for collecting the experience during hospital visit of Out-Patients as well as In-Patients. After analysing the patient's feedback, it was found that overall patient's satisfaction level was very high for each unit. Apart from that, few gaps were detected in few service dimensions in six units during analysis. This study was also included with showing the ranking of each unit according to performance in terms of service quality and this report was ended with recommendations.

REFERENCES

1. Understanding the Patient Experience: A Conceptual Framework - MercyOne Des Moines, Des Moines, IA, USA; Patrick Oben, 1111 6th Ave, Des Moines, IA 50314, USA; Website: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7786717/
2. The impact of service quality perception on patient satisfaction in Government Hospitals in Southern Saudi Arabia - Faris S. Alghamdi; Website: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4362118/
3. Benchmarking of patient satisfaction with physical rehabilitation services in various hospitals of Jeddah - Isabelle CN Devreux, Agnes Jacquerye, France Kittel, Enas Elsayed1, and Bahjat Al- Awa
4. Exploring the Gap Between Patients' Expectations and Perceptions of Healthcare Service Quality - Ashraf A'aqoulah, Ahmed Bawa Kuyini, Samir Albalas
5. Understanding Patient Expectations of Health Care: A Qualitative Study - Carlos El-Haddad, Iman Hegazi, Wendy Hu
6. Patient Satisfaction with Healthcare Services and the Techniques Used for its Assessment: A Systematic Literature Review and a Bibliometric Analysis - Diogo Cunha Ferreira, Inês Vieira, Maria Isabel Pedro, Paulo Caldas, and Miguel Varela