Measuring Gap in Patient Perception and Services Expectation of Hospital Services: A Study of PD Hinduja Hospital and Medical Research Centre

By

Ravisha Bharati

Dissertation submitted in partial fulfillment of the requirements of the degree

MBA Hospital and Health Management

Academic year, 2017-2019

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IIHMR UNIVERSITY

TO WHOMSOVER IT MAY CONCERN

This is to certify that, Dr.Ravisha Bharati, student of MBA Hospital and Health Management, The IIHMR University, Jaipur has undergone internship training at P D Hinduja Hospital and Medical Research Centre, Mumbai from 4th February to 3rd May 2019.

The candidate has successfully carried out the study designated to him during Internship Training and his approach to the study has been sincere, scientific and analytical.

The internship is on fulfilment of the course requirement.

I wish him all success in all her endeavours

Col. (Dr.) Ashok Kaushik
Dean (Academics and Student Affairs)
The IIHMR University, Jaipur

16 May 2019

Col. (Dr.) Ashok Kaushik
Dean(Academics and student Affair)
The IIHMR University,Jaipur

P. D. HINDUJA NATIONAL HOSPITAL
& MEDICAL RESEARCH CENTRE
(Established and managed by the National Health & Education Society)

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03rd May 2019

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Ravisha Bharati** a student of Master in Business Administration –Hospital and Health Management from the Indian Institute of Health Management and Research University, Jaipur did her project in our Hospital from 04th Feb 2019 to 3rd May 2019.

During this period her assignment was as follows:

- Measuring gap in patient perception and service expectation of hospital service: A study of PD Hinduja Hospital and Medical Research Centre
- Study to understand the quantum of use of external medicine in the hospital and any related effect at PD Hinduja Hospital and Medical Research Centre, Mumbai

I wish her all the success in future endeavours.

Mr. Joy Chakraborty
Chief Operating Officer

Dr. Preeti Goraksha
Senior Manager
Clinical Care Units and
Accreditation & Compliance

THE IIHMR UNIVERSITY, JAIPUR
CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled Measuring gap in patient perception and service expectation of Hospital services: A study of P D Hinduja Hospital and Medical Research Centre and Study to understand the quantum of use of external medicine in the hospital and any related effect at PD Hinduja Hospital and Medical Research Centre, Mumbai and Submitted by Dr Ravisha Bharati , Enrolment No. IIHMR-U/01/2017-19/ 642 under the supervision of Col. (Dr.) Ashok Kaushik for award of MBA in Hospital and Health Management of the hospital of the University carried out during the period from 4th February 2019 to 3rd May 2019 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other institute or other similar institution of higher learning.

Ravisha Bharati

Signature

Title- Measuring the Gap Between Patient Perception and Service Expectation in Hospital Services: A Study of P D Hinduja Hospital and Medical Research Centre.

Name of Author- Dr**.** Ravisha Bharati

Background-Service Marketing is growing as experience for the patient is the core of Hospital marketing. People, Physical evidence and Process play a major role in influencing patients next buying decision and behaviour. Due to intensifying competition it is not only important to attract new patients through recommendations and positive word of mouth but also to retain the patients through superior service quality. The concept of service quality was given by Parasuraman who called it SERVQUALand also developed the standardized scoring form used in this study. The adaptive research study focused on highlighting the gap between the patient perception and service expectation in the context of hospital Services. The Hospital is where we work with a resource restrain and understanding what is important to customer satisfaction as well as the gaps is important for profitability.

Objectives-To determine what constitutes service quality in the context of the hospital, To measure the difference between expectation and perception among the patients visiting P D Hinduja National Hospital and medical research centre and to give relevant recommendations corresponding to the gaps and closing them, prioritisation and remedial action (Marketing and Quality)

Methodology-The study is based predominantly on primary data collected through a already developed SERQUAL Questionnaire. A total of 100 Inpatient were involved in the study. The population selected were those who were admitted in the Inpatient ward since the last 2 days since they have a better understanding of the services provided to them. The method of purposive sampling was selected whereby the patients had to fill the set of questions on the basis of determinant. Confidentiality of the response was maintained and no part of the survey was modified. Tools used was Paired sample t test to find the statistical significance through IBM SPSS Version 22.

Results-The results showed major gaps in the dimensions, Tangibility under the parameters of accessibility, visual appeal and usefulness of the brochures, signs and signage's and Responsiveness under the parameter of promptness of service. Positive gap score was seen in empathy. Special attention was given to the Interrupted network in pagers being used which is leading to delayed responsiveness and increased patient anxiety.

Conclusion-Recommendations were given in order to bridge the gap by revising the technology being used for patient- staff interaction. To conclude there are many possible ways to disappoint patients through service quality failures in high-contact situations on determining the gaps between the expectation and the perception in the organisation we will be able to bridge the gap, redesign, better its service design and communication channels.

Keywords- Service Quality, SERVQUAL Gap Model, Functional Quality, Extended Marketing Mix, Tangibles, Responsiveness.

ACKNOWLEDGEMENT

The dissertation at P.D. Hinduja Hospitaland Medical Research Centre, Mumbai has helped me by providing me with a learning experience of the daily functionalities of a hospital.

Firstly, I would like to thank Mr. Joy Chakra borty COO (Chief Operating Officer)for providing me an opportunity to do my internship at P.D. Hinduja Hospital, Mumbai

I extend my sincere thanks to my mentor Dr. Preeti Goraksha, Senior Manager Clinical Services, Quality and Accreditations for her constant help and support and invaluable time-to-time guidance in completion of this project.

I also want to extend my thanks to Dr. S.D Gupta, Director-IIHMR for incorporating right attitude towards learning and Col.(Dr.) Ashok Kaushik, Dean-Academic and Students Affairs, IIHMR, for helping and supporting me to reach my goals and endeavours.

Finally, I acknowledge my indebtedness to the staff of the Hospital and my respected mentor of The IIHMR University Col.(Dr) Ashok Kaushik for providing constant support by guiding me throughout my training period.I would also like to thank all those who have directly or indirectly supported me towards the completion of this Internship.

Sincerely,

Dr. Ravisha Bharati

MBA-HM (2017-2019), Roll No - 0642

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LIST OF SYMBOLS AND ABBREVIATIONS

OPD- Out Patient Department

IPD- In-Patient Department

ALOS- Average Length of Stay

AKD- Artificial Kidney Department

PFT- Pulmonary Function Test

ICU- Intensive Care Unit

CSSD- Central Sterile Supply Department

PICU- Paediatric Intensive Care Unit

NICU- Neonatal Intensive Care Unit

OT- Operation Theatre

SSSU- Short Stay Service Unit

A & E- Accidents and Emergencies

HLA – Human Leucocyte Antigen

MR – Medical Record

MRD- Medical Records Department

MRI – Magnetic Resonance Imaging

EPA-Error Prone Abbreviation

LIST OF APPENDICES

PROJECT 1

MEASURING GAP IN PATIENT PERCEPTION AND SERVICE EXPECTION OF HOSPITAL SERVICES: A STUDY OF PD HINDUJA HOSPITAL AND MEDICAL RESEARCH CENTRE

5.1. INTRODUCTION

Service marketers and marketing managers have a real need for instruments for measuring service quality, in order to identify the characteristics and determinants of service quality.

The SERVQUAL model is an empiric model by Zeithaml Parasuraman and Berry to compare service quality performance and customer service quality needs. It is based on attribute approach to service quality, and describes five basic determinants of service quality: tangibles, reliability, responsiveness, assurance and empathy.

Competition in the contemporary service business is intensifying, and it is now increasingly important for service e companies to understand service quality as a factor of marketing competitiveness. Therefore, service quality should be viewed as a distinctive approach to service competition. Competitive service strategies may be different, but they should be based on service quality, considering variance in servicing customers' needs, purchasing behaviour and consumption patterns.

Healthcare managers are under increasing pressure to demonstrate that their services are customer-focused and directed towards providing best possible medical care to the clientele hospital. Taking into consideration the resource constraints under which service hospitals must function, it has become essential for hospital managers to understand and measure consumer perspectives, so that any perceived gap in delivery of service is identified and suitably addressed.

Healthcare quality has two distinct facets, namely technical quality and functional quality.1,2 Technical quality refers to the accuracy of medical diagnosis and procedures, and is generally comprehensible to the professional community but not to the patients. Patients essentially perceive functional quality as the manner in which the services are being delivered. Service quality largely determines consumer satisfaction. A popular definition of service quality is conformance to consumerexpectations.4 The important role played by expectations in consumer's evaluation of services has been widely acknowledged in the service quality literature.5,6 Researchers have generally agreed that expectations serve as reference points in consumer's assessment of service performance.

The Marketing mix consist of Product, Price, Promotion and Place. 3 important components of the extended marketing mix are **People, Physical evidence and Process**. Hence the human actors and stake holders play an important role. Service quality has an apparent relationship with **cost, profitability, patient satisfaction and Stakeholder retention in a business to business model like ours.**

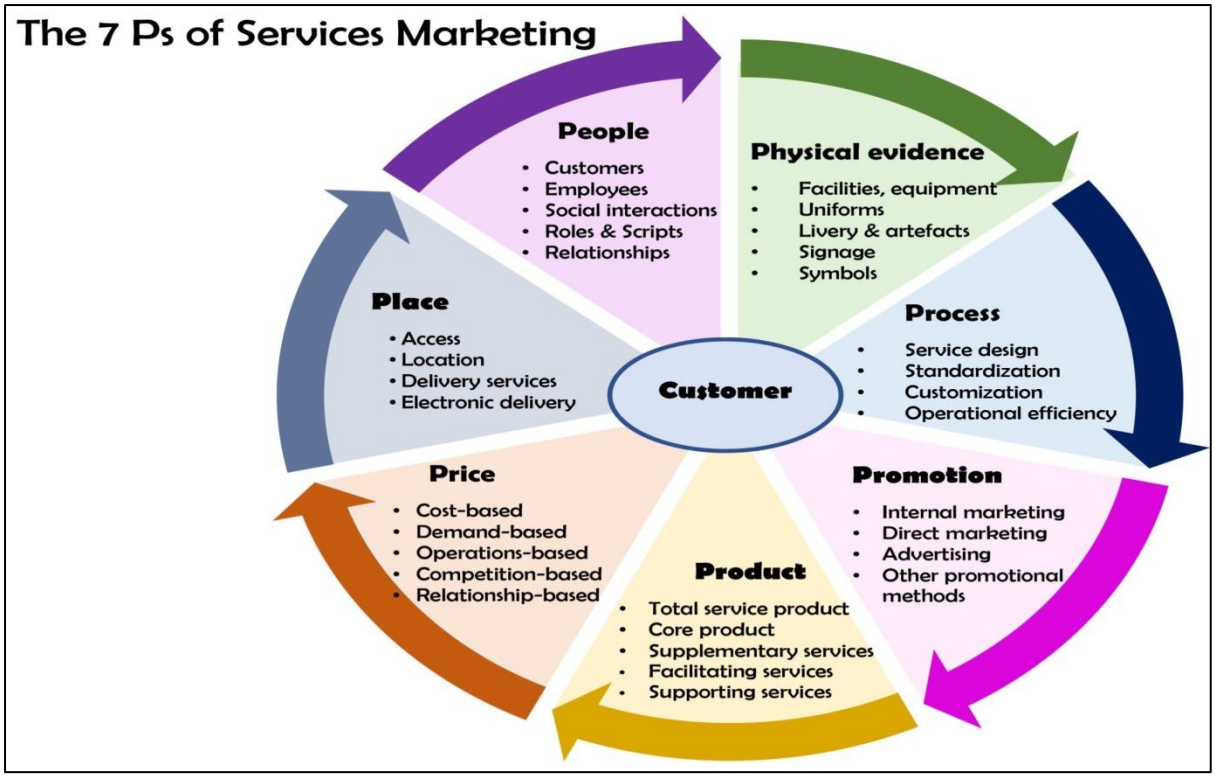

Fig 5.1- Extended Marketing mix

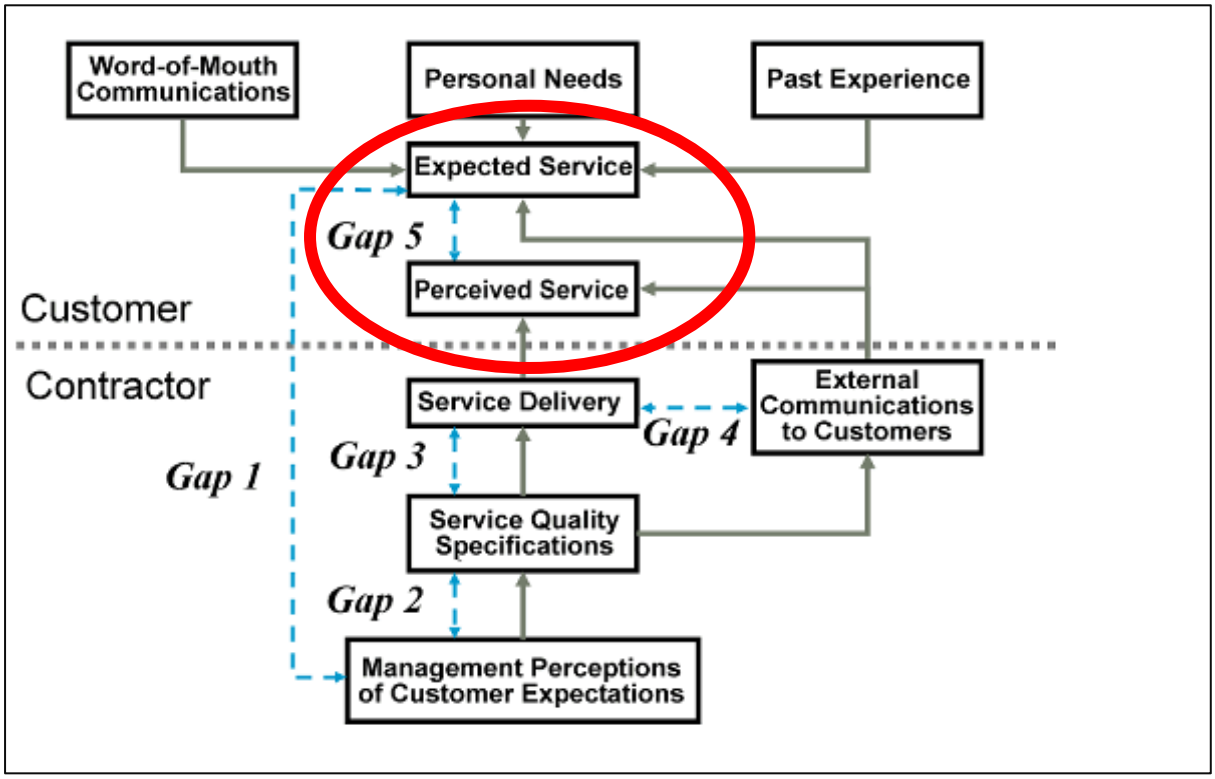

Fig 5.2- SERVQUAL GAP MODEL- Gap Number 5

5.2. AIM

The aim of the project is to identify the level of service quality in the hospital by measuring consumer perception and expectation during service encounter towards various parameters of service quality that can be used as a competitive advantage .The paper also attempts to formulate a strategic vision to enable the hospital to deliver higher levels of patient satisfaction

5.3 LITERATURE REVIEW

S no.	Author and year	Study location	Sample size	Salient Features
1	2011 Col Abhijeet Chakorborty	AFMC	200	• Gap in the OPD services were addressed • Service quality gaps were identified to exist across all the five dimensions of the survey instrument, with statistically significant gaps across the dimensions of 'tangibles' and 'responsiveness.' The quality gaps were further validated by a total un weighted SERVQUAL score
2	2012 Arun Kumar Dr S J Manjunath Chethan KC	Apollo Hospital, Mysore	185	• Four dimensions were positively related to patient loyalty • P value of tangibles was less than 0.001 which shows positive relation to customer satisfaction. • The Apollo hospital has maintained the best services with the patients and therefore it has lead to customer loyalty.
3	2015 Dr Abhijit Pandit	Top 15 Private Hospitals of Kolkata	150	• Calculation of service quality gap for each hospital in a category was done, the service quality gap for the category itself was calculated by taking an average of the sum of the

				gaps for five hospitals in a category • Significant difference in the three categories of empathy the difference in the SERVQUAL score for the three categories of hospitals is not significant • No significant difference was found in other dimensions..
4	2017 Dr Rula Al Damen	Al- Bashir Hospital, Dubai (Largest government hospital in the Middle east)	200	• Reliability has most impact on the patient satisfaction • A survey was conducted to collect data with a total of 448 outpatient participants. Statistical techniques such as descriptive and inferential statistical techniques were employed to test the hypotheses. Results show that there is an impact of perceived health care service quality on overall patient satisfaction
5	2018 M . Ranjith Kumar	Top 5 Private Hospitals in Tamil Nadu	300	• Quality inputs can deliver quality outputs. • From the above analysis and data collected from people it's clearly knew that government hospitals staffs are negligent in their work taking this an advantage private hospitals enter into medical fields and changed medical fields to revenues generator.

Table 5.1 Literature Review

5.4. OBJECTIVES

1) To determine what constitutes service quality in the context of the hospital.

2) To measure the difference between expectation and perception among the patients visiting P D Hinduja National Hospital and medical research centre

3) To give relevant recommendations corresponding to the gaps and closing them, prioritisation and remedial action (Marketing and Quality)

5.5. METHODOLOGY

5.5.1. KEY RESERCH QUESTION- What is the gap that exists between the Perception and expectation of the patients getting admitted to IPD services at PD Hinduja Hospital and Medical research?

5.5.2. RESERCH DESIGN- Descriptive Analytical Research Design

5.5.3. SETTING- P D Hinduja Hospital and Medical Research centre, Mumbai

5.5.4. **STUDY POPULATION**- Inclusion criteria- Patients who have been hospitalized in the Hospital for at least 2 days..

Exclusion Criteria- OPD patients who have never been hospitalised

5.5.5. RESEARCH PROCEDURES APPLIED-

For capturing responses of various consumer towards service quality in the hospital a **22 question SERVQUAL scale** measuring 5 basic dimensions will be used like

a) Tangibles- Appearance of the physical facility, equipment, communication material and personnel

b) Reliability- Ability to perform promised service dependably and accurately

c) Responsiveness-The willingness to help customers and to provide prompt service

d) Assurance-The knowledge and courtesy of employees and their ability to inspire trust and confidence in the customers

e) Empathy-The caring individualized attention a hospital provides its customers

Primary data will be collected using the self-administered questionnaire on-site. Patients were assured full confidentiality and anonymity.

Respondents had to mark their expectation and perception on a scale of 1 to 7 .Each item was rated on a seven-point Likert scale anchored at the numeral 1 with the verbal statement ‘‘Strongly Disagree’’ and at the numeral 7 with the verbal statement ‘‘Strongly Agree”

5.5.6. DURATION OF THE STUDY- 4th Feb to 3rd May 2019

5.5.7. SAMPLE SIZE-150 patients

5.5.8. SAMPLINGTECHNIQUE- Purposive sampling

5.5.9. RESEARCH INSTRUMENT - The questionnaire containing all the 22 numbers of statements of SERVQUAL instrument developed by Parasuraman e for primary data survey was administered keeping the broad parameters in mind.

SERVQUAL is a service quality tool.

The SERVQUAL instrument has been empirically evaluated in the hospital environment and has been shown as reliable and valid instrument in that setting.

Instrument in supplementary

5.5.10. STATISTICAL METHODS APPLIED

By using the SERVQUAL instrument, expectation (E) and perception (P) of each respondent was assessed across each of the 22 items of the instrument and the service quality gap evaluated by measuring the gap score (P–E) across the same 22 items.

The Paired t test was used to find the statistical Significance of each Parameter

The Paired Sample t Test is a Parametric test.

- The paired sample t test is a statistical procedure and a type of hypothesis test which allows to compare means that are from the same related units,. The purpose is to determine whether there is statistical evidence for the observation to be true.
- This statistical analysis was done on IBM SPSS version 22.
- A P value (calculated probability) more than 0.05 is said to be statistically significant.

5.5.11. ETHICAL CONSIDERATION-Verbal Consent will be taken from the participants before administrating the questionnaire. Any information received from any individual confidentially without disclosing the respondent's identity. No part of the literature that has contributed in any way to the research will be modified.

5.6. RESULTS

Parameters	Expectation	Perception	Service Gap Score(P-E)	P value	Significance
Tangibles					
T1 -	6.74	5.24	-1.5	<0.001	Statistically significant
T2-	6.5	6.04	-0.46	<0.001	Statistically significant
T3 -	6.68	6.38	-0.3	<0.001	Statistically significant
T4	6.66	6.3	-0.36	0.004	Statistically significant
T5	6.5	6.34	-0.16	0.015	
T6	6.4	6.7	-0.3	0.229	
Reliability					
R1	6.52	6.62	-0.3	0.08	
R2	6.24	6.24	0	0.09	
R3	6.72	6.52	0.12	0.07	
R4	6	6	0	0.019	
Responsiveness					
RS1-	6.64	5.5	-1.14	<0.001	Statistically Significant
RS2	6.64	6.34	-0.3	0.08	
RS3-	6.96	6.02	-0.94	<0.001	Statistically Significant
Assurance					
A1	6.46	6.2	-0.26	1.12	
A2	6.58	6.28	-0.3	0.9	
A3	6.74	6.53	-0.22	1.03	
A4	6.58	6.24	-0.34	0.045	
Empathy					
E1	6.56	6.84	0.28	0.299	
E2	5.76	5.96	0.2	0.004	

E3	**6.18**	**5.88**	**-0.3**	**0.009**	
E4	**6.72**	**6.52**	**-0.2**	**0.015**	

Table 5.2- Results of data analysis

5.7. DISCUSSION

- Statistically significant Service quality gap across the dimension of '**tangibles'** was observed to be statistically significant at < 0.001

  The major issue related to tangibles being parking and traffic outside of the hospital which makes it difficult for the patients and relatives to reach the hospital

- Statistically significant service quality gap was also observed across the dimension of **'responsiveness'**, with wide gaps between expectation and perception observed against the necessity of prompt service and prompt response by IPD staff

  It may also be interpreted as

  i) **Inadequate staffing** at the IPD
  ii) An issue with the **communication channel** being used for the communication between the staff patient and the attendant.
  iii) **Alarm fatigue** experienced by the attendants and the nurses

The dependable and helpful IPD staff as observed through the study is not being able to deliver prompt service, though willing to do so.

- It was comforting to observe reasonable convergence in E/P scores across the dimension of **'Empathy'**.

Further Discussion-

- As the hospital is adjacent to a school which makes parking space negligible as well as a number of abandoned cars parked on the adjacent lane.
- Parking within the hospital premises is being practiced which is against the national building code rules.
- The manpower for the general floors have been examined and was found to be 1: 9 on an average for the general wards which is more than the standard which is 1:6
- Currently **Unidirectional pagers** are being used by the attendants and the nursing staff which have issues related to **network** and battery life.
-
- There have been issues of network loss on the **peripheral areas of the wards, 9th and 12th.**
- Persistent complaints from these areas.

- The display that is currently being used on the computer is complex and has multiple fields which makes it difficult to keep a track and might result in the nurses missing out on the calls from the patient.

5.8.CONCLUSION

- There are many possible ways to disappoint customers through service quality failures in high-contact situations

- Consumers are becoming increasingly knowledgeable, discriminating and demanding of healthcare service, with their access to the internet opening up the realm of consumer medical knowledge. The high expectations scores, where the mean scores across majority of the items of the survey instrument are **above six in a seven-point scale** possibly reflect the new paradigm of **increasing consumer expectations** and demand for high quality care by the consumers of service hospitals

- The quality image of a healthcare organisation is made of a set of expectations that will serve as a standard for comparing the perceived performance of the service provider, once the need for a service encounter arises. The result of a service encounter is a satisfaction or dissatisfaction judgment, the judgment being the outcome of the patient's comparison of perceived service performance with the expectations brought by the consumer to the hospital

5.9. IMPLICATIONS

On determining the gaps between the expectation and the perception the organisation will be able to bridge the gap and redesign and better its service design and communication channels.

The implications of using this model in assessing service quality and customer satisfaction from the consumer's perspective include knowing about customers' perceptions on service quality, trying to meet and manage customers' expectations, improving quality management by identifying areas that have weaknesses in terms of satisfying the customer s needs

5.10. RECOMMENDATIONS

Sno	Issue	Recommendation
1)	Gap in Tangibles Gap in T1	• Proposal to acquire new vertical parking space in the vicinity of the Hospital and exclusion of abandoned cars.

	Gap in T2	• Better lighting and walls painted with contrasting colours to eliminate dull appearance
	Gap in T3	• Information about e brochures should be communicated • Signage's near lifts
2)	Gap in Responsiveness (R1 and R3)	• The perfect method of communication would be -Easily accessible, -Allow for rapid message transmission -Require minimal network usage - Be immune to network failure. • Installation of network booster on the peripheral wings 9th and 12 th of floor and network mapping. • Revise Nursing Alert System in the hospital. • Ascom, Seimens AG and Azure Healthcare are leading players in new innovative nursing alert Systems which fulfils the mentioned criteria.

Table 5.3- Recommendation for the gaps

11) SUPPLEMANTARY

1) Appendix 1:STUDY INSTRUMENT - SERVQUAL SCALE

CODE	PARAMETERS	SCORE						
	TANGIBLES							
T1	Extent to which the location of the hospital is convenient and accessible	1	2	3	4	5	6	7
T2	Physical facilities and the infrastructure in hospital are visually appealing	1	2	3	4	5	6	7
T3	Neat Appearance of staff and doctors	1	2	3	4	5	6	7
T4	Level of availability of the medical equipment and there working condition	1	2	3	4	5	6	7
T5	Usefulness of signs, signages,brochures and flyers provided in the hospital	1	2	3	4	5	6	7
T6	Clean and hygienic environment/Housekeeping	1	2	3	4	5	6	7
T7	Reasonable waiting time	1	2	3	4	5	6	7
	RELIABILITY							
R1	Sympathetic attendance to patients	1	2	3	4	5	6	7
R2	Dependable IPD services	1	2	3	4	5	6	7
R3	Punctuality of IPD staff	1	2	3	4	5	6	7
R4	Accurate IPD records	1	2	3	4	5	6	7
	RESPONSIVENESS							
RS1	Staff always willing to help	1	2	3	4	5	6	7
RS2	Extent to which the hospital staff address your needs	1	2	3	4	5	6	7
RS3	Promptness of service	1	2	3	4	5	6	7
	ASSURANCE							
A1	Can trust the IPD staff	1	2	3	4	5	6	7
A2	Adequate staff available on service	1	2	3	4	5	6	7
A3	Feeling of safety and security while in the hospital	1	2	3	4	5	6	7
A4	Courtesy and politeness of the staff	1	2	3	4	5	6	7
	EMPATHY							
E1	Individual attention given to you	1	2	3	4	5	6	7
E2	Positive attitude on receiving feedback/complaint	1	2	3	4	5	6	7
E3	Attendants were treated properly	1	2	3	4	5	6	7
E4	Food served was hygienic	1	2	3	4	5	6	7

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PROJECT NO. 2

STUDY TO UNDERSTAND QUANTUM OF USE OF EXTERNAL MEDICINES IN THE HOSPITAL AND ANY RELATED EFFECT AT PD HINDUJA HOSPITAL AND MEDICAL RESERCH CENTRE, MUMBAI

6.1.INTRODUCTION

The drugs that are administered to the patients are purchased through the Inhouse pharmacy or are bought by outside by the patients. The medicines are ordered from the Inhouse warehouse and those brought by the patients are either purchased by the patient directly from the vendor or from the contact provided by the doctor at the hospital.

Due to increasing demands and variable source of drug entry there is heavy work load, time delays and related effects in the working of the pharmacy lab and clinical areas of the department therefore pharmacy services have been given special attention.

In the past drug reactions have been observed which requires protocols and documentation so that they an be kept a track on for future reference.

6.2 AIM

The aim of the study to measure the quantum of the in-house and outhouse drugs used in the hospital along with streamlining and standardizing documentation for the same.

6.3.OBJECTIVES

- To measure the quantum of outhouse purchases in the hospital and related effects.
- To recommend changes in the existing documentation

6.4. METHODOLOGY

- **Study Design:** Cross-sectional Analytical
- **Sampling Technique:** Purposive Sampling.
- **Sample Size**200 patients
- **Study Area- O**ncology daycare unit in the S1 building, Dialysisunit, Floors namely 16^{th},14^{th},13^{th},11^{th} ,9^{th}, 8^{th} and 7^{th} in the IPD building of the hospital
- **Place of study:** P.D. Hinduja Hospital and Medical Research Centre
- **Duration of study** :30 days
- **Statistical Procedure used-** The percentage of outhouse drugs were calculated for the 4 major departments.
- **Ethical considerations-** The condition and the medicine used by the patient after being asked by the sister was kept confidential and was purely used for the purpose of the stud

6.6. RESULTS- QUANTUM OF THE MEDICATION AT VARIOUS AREAS

1) **Quantum observed in the Oncology Day-care unit-**

Out of a total of 70 patients who were studied at the oncology Day-care unit the finding were as follows-

PURCHASE	PERCENTAGE
INHOUSE	27.1%
OUTHOUSE	72.9%

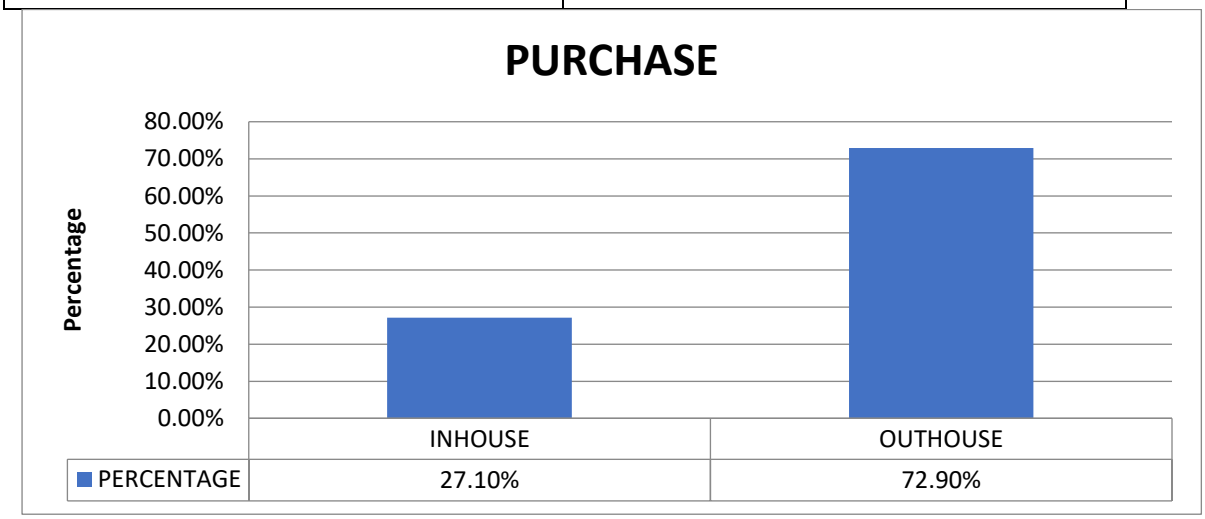


Fig 6.1- Bar Chart- Quantum of drugs-Oncology Day Care

2)**Quantum observed in the short stay Service**

Out of a sample of 400 patients at the short stay unit, the findings for the purchase were as follows .

PURCHASE	PERCENTAGE
INHOUSE	42%
OUTHOUSE	58%

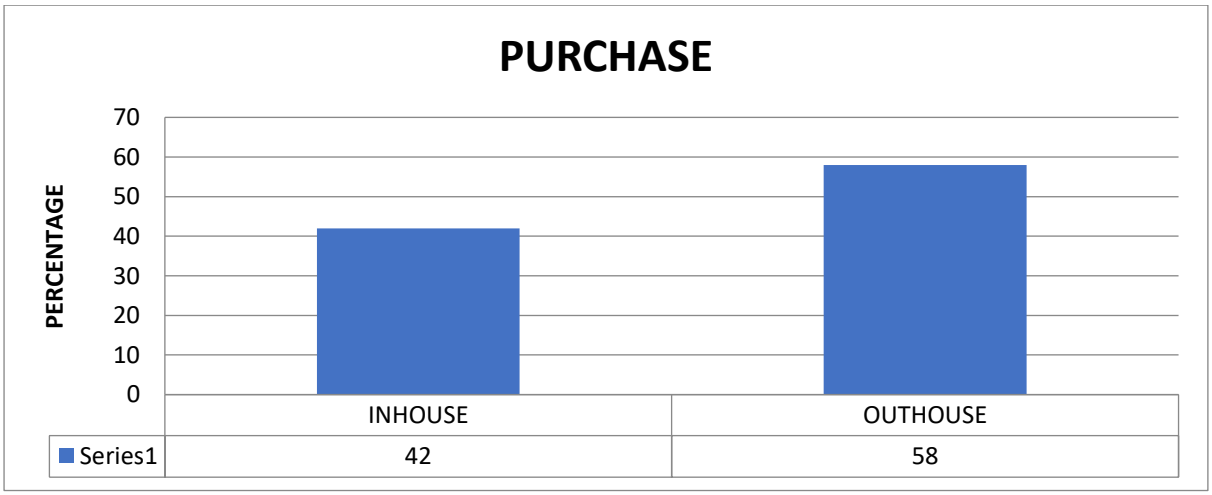


Fig 6.2- Bar Chart- Quantum of drugs-Short Stay Servic

1) **Quantum observed in Dialysis Unit**

Out of 1500 IPD and OPD patient secondary data reviewed the findings for the purchase were as follows

PURCHASE	PERCENTAGE
INHOUSE	33.3%
OUTHOUSE	66.6%

Fig 6.2- Bar Chart- Quantum of drugs-Dialysis

2) **Quantum Observed at the Floors**

Out of 100 patients at the floors the findings for the purchase are as follows.

PURCHASE	PERCENTAGE
INHOUSE	92.7%
OUTHOUSE	7.3%

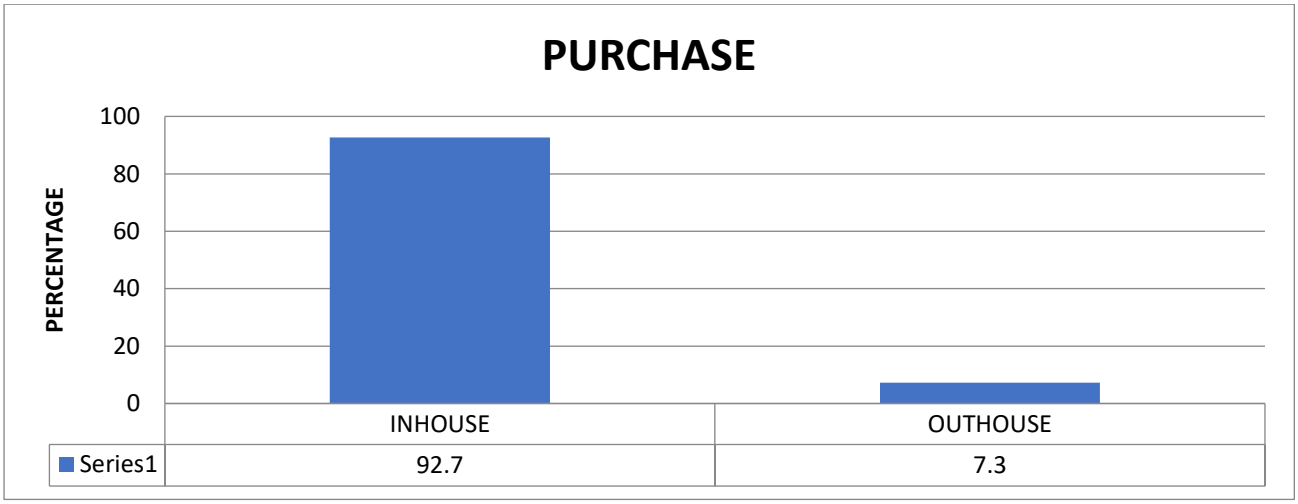


Fig 6.2- Bar Chart- Quantum of drugs- Floors

II) Results- List of outside medication at various areas

SNO.	ONCOLOGY DC	SSS	FLOORS
1	**Inj. Pemnet**	**Ukain**	**Retroviral drugs**
2	**InjFasloden**	**Transtozumab**	**Oncology drugs**
3	**InjZoladen**	**Canmab**	
4	**Inj X- giva**	**Nivolumax**	
5	**InjRetuximab**	**Bevacizumab**	
6		**Revolade**	
7		**Herolon**	
		Docetaxel	

Table 6.1- List of drugs purchased from outside

III) Results- Documentation followed at various departments

S.no	Department	Documentation/Consent
1	Oncology Day care	No Documentation/Consent
2	SSS	Documentation done by nurses- by manual entry in the Nursing Register as- Hospital/Own medication No consent
3	Dialysis	No Documentation/Consent
4	Floors	No Documentation/Consent

Table 6.2- Observation of Documentation

In the total of 200 patients examined, related effects were predominantly Vomiting and Nausea in the Oncology patient

No Adverse drug reaction was reported during the time frame when the study was undertaken

6.7.DISCUSSION

- The Oncology Day care, SSS and the Dialysis centre have majority of outhouse drugswhile on the floors most of the drugs administered are In house.
- No fixed protocol for documentation of outhouse drug in any department except for SSS.
- Verbal consent have been taken regarding the administration of out house drugs
- ADR was not observed in the time spam of the study but in the past cases have been reported.

a. **Oncology Day-care unit**

- It was found that Patients purchase drugs from outside more than they do from the in-house pharmacy.
- The drugs available at the pharmacy at sold at MRP
- Most of the patient ordering drugs from Inhouse are PRD patients
- There were certain patient who initially purchased medication but eventually shifted to Outhouse purchases(Reason can be assessed only after interviewing the)
- No documentation for the source of the medicine
- Common related effects were Vomiting and Nausea

b. Short stay service

- Documentation is done by entering in a registration book as 'Own medicine' or ' hospital medicine'
- Drugs coming from outside are mostly the oncology drugs
- Patients with insurance or PRD patients purchase their medication from in-house pharmacy
- Drugs coming from outside are the once purchased under an offer or discount
- Some of the drugs which are administered in combination, have one drug from in-house and the other from outside.'

c. Dialysis unit

- No documentation for recoding the source of the medicine
- The drugs purchased by the OPD patients on a daily are mostly from the inhouse pharmacy
- In case of the drug being unavailable at the IPD pharmacy, the doctor advises an alternative or else the patient purchases the medication from external services.

d.Floors-16th,14th ,13th,12th ,11th ,9th, 8th ,7th

- No documentation for the source of drugs
- It was found that majority drugs used for the patient during their stay here was from in house pharmacy.
- Drugs which were not available, were ordered and were made available at the pharmacy within a few hours.
- The 7% finding the study indicates only those drugs which were purchased from outside which were not available in the pharmacy or were required to be administered urgently as prescribed by the doctor
- There were few related affected observed by the drugs administered, those that occurred were promptly handled by the doctors and the nursing staff.
- The drugs used by the patient due to a pre-existing disease is purchased and brought by him to the hospital.
- Antiretroviral drugs which are to be continued post discharge are bought by the patient after the vendor contact given by the doctor.
- Any Adverse drug reaction caused due to in-house or outhouse drugs is reported to the pharmacovigilance.
- A record is maintained by the nurse where they keep a record of the previous drug reaction and possible drug reaction

6.8.CONCLUSION

- **C**urrently only the Short stay service keeps a written account of the source of the drugs used by the patients
- There is a need to standardise and streamline the protocols being followed by the nursing staff while documentation throughout the hospital.
- There have been cases of ADR, which increases the need of this as well as a written consent which will help in the future.
- This study will reveal the quantum of the outhouse and In-house drugs used in the various departments.

6.9.**RECOMMENDATIONS**

ISSUE	RECOMMENDATION
No documentation and record keeping for future reference in case of ADR	**<u>Modification in the existing documentation and avoid extra documentation</u>** **space on the upper right corner of the Admission sheet (where space is available) can mention – Outhouse/In-house or O/I** **This can be marked by the concerned nurse- Fig 6.4**
Verbal consent before administrating outhouse drugs	**<u>Introduction of Consent forms</u>** **Patients bringing outhouse drugs can be asked to mandatorily fill the HOME/OUTSIDE OVERSIGHT FORM- Fig 6.5**

Table 6.3- Recommendations

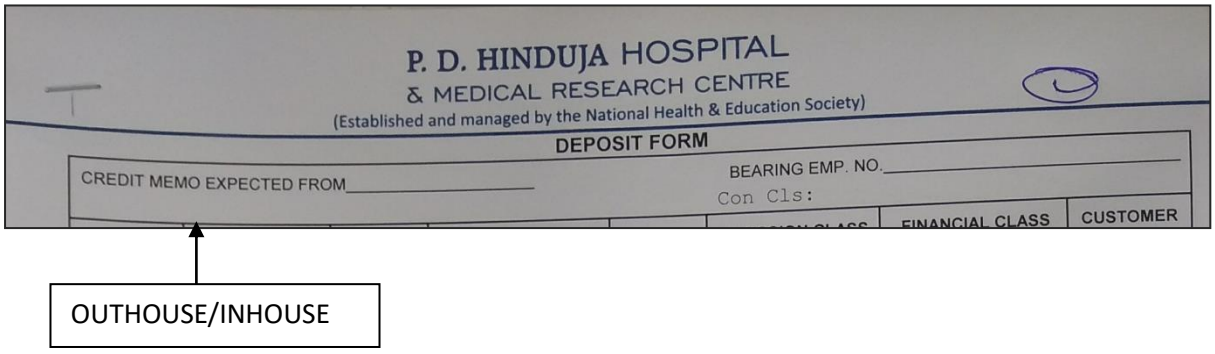
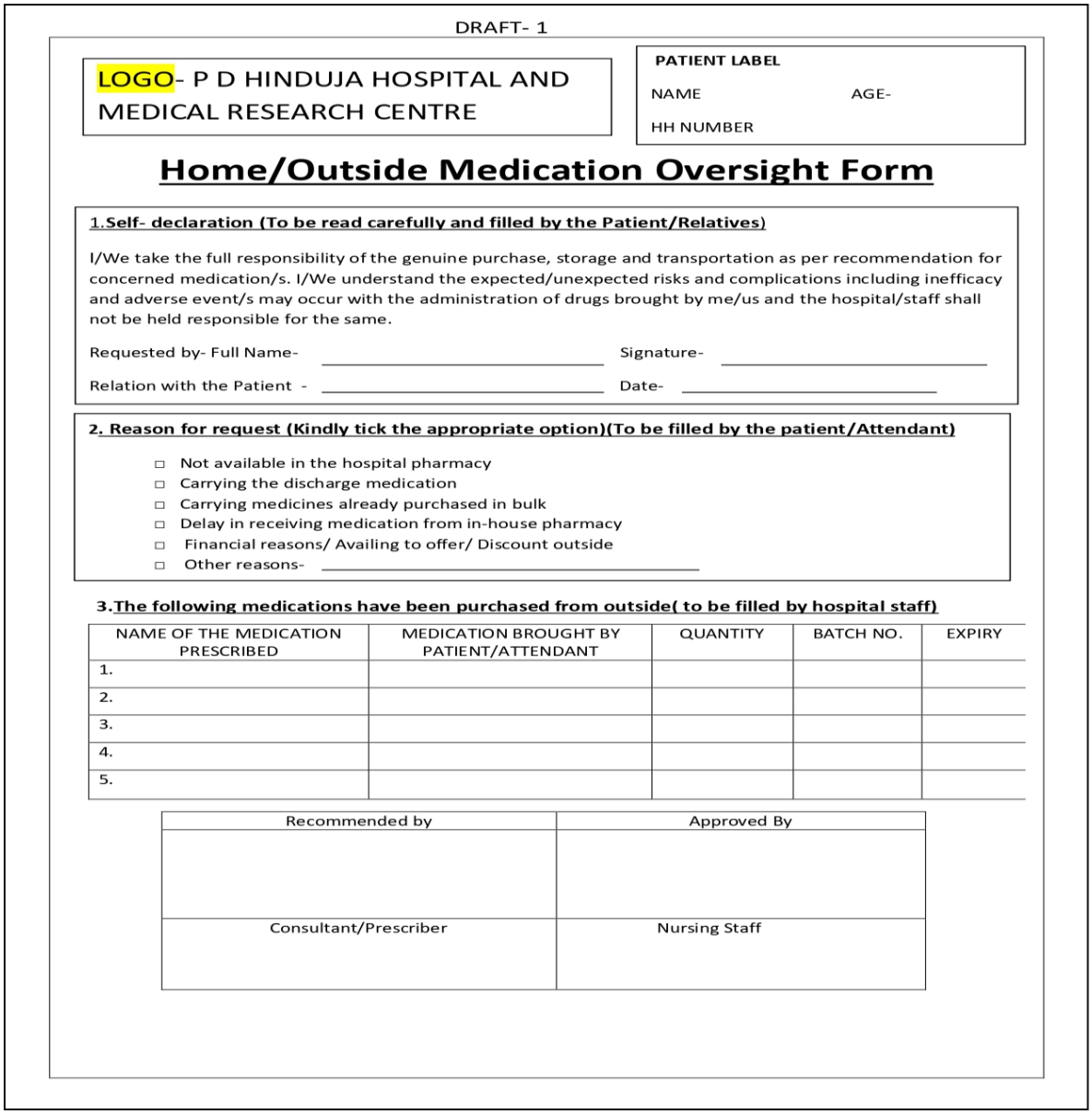


Fig 6.4- This is a scanned copy of the patient form, to minimize documentation for the nursing staff, I propose modification in the current documentation so that the staff can tick mark the relevant option without hassles.



DRAFT- 1

LOGO- P D HINDUJA HOSPITAL AND MEDICAL RESEARCH CENTRE

PATIENT LABEL

NAME AGE-

HH NUMBER

Home/Outside Medication Oversight Form

1.Self- declaration (To be read carefully and filled by the Patient/Relatives)

I/We take the full responsibility of the genuine purchase, storage and transportation as per recommendation for concerned medication/s. I/We understand the expected/unexpected risks and complications including inefficacy and adverse event/s may occur with the administration of drugs brought by me/us and the hospital/staff shall not be held responsible for the same.

Requested by- Full Name- _____ Signature- _____

Relation with the Patient - _____ Date- _____

2. Reason for request (Kindly tick the appropriate option)(To be filled by the patient/Attendant)

- □ Not available in the hospital pharmacy
- □ Carrying the discharge medication
- □ Carrying medicines already purchased in bulk
- □ Delay in receiving medication from in-house pharmacy
- □ Financial reasons/ Availing to offer/ Discount outside
- □ Other reasons- _____

3.The following medications have been purchased from outside(to be filled by hospital staff)

NAME OF THE MEDICATION PRESCRIBED	MEDICATION BROUGHT BY PATIENT/ATTENDANT	QUANTITY	BATCH NO.	EXPIRY
1.				
2.				
3.				
4.				
5.				

Recommended by	Approved By
Consultant/Prescriber	Nursing Staff

Fig 6.5- Scanned copy –Draft-Home/Outside Medication Oversight form