

TOTAL QUALITY MANAGEMENT
AT
CHEEMA MEDICAL COMPLEX,
PHASE 2, MOHALI

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE AWARD OF
POSTGRADUATE DIPLOMA IN HOSPITAL AND HEALTH MANAGEMENT,

UNDER THE GUIDANCE OF
PROF. PRAGYA TIWARI

-Submitted by-

Dr. Swati Puri



INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH , NEW DELHI

NEW DELHI -110075

1 JAN – 1 APRIL,2013

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CHEEMA MEDICAL COMPLEX

Phase IV, Near Telephone Exchange, Mohali

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CERTIFICATE OF INTERNSHIP COMPLETION

DATE – 1 APRIL, 2013

TO WHOM IT MAY CONCERN

This is to certify that **Dr. Swati Puri** has completed her 3 months internship in our organization from Jan 1 , 2013 to April 1 , 2013 . During this intern she has worked on “**TOTAL QUALITY MANAGEMENT**” , “**ANALYSIS OF ATTRITION RATE IN HOSPITAL**” under the guidance of me and my team at **CHEEMA MEDICAL COMPLEX, PHASE 2 , MOHALI**. She is hard working candidate and has worked here with full dedication.

We wish her good luck for her future assignments.

(signature) *A. Cheema*

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Date 1/4/2013.....

CERTIFICATE OF APPROVAL

The following dissertation titled "TOTAL QUALITY MANAGEMENT", "ANALYSIS OF ATTRITION RATE IN HOSPITAL" is hereby approved as a certified study in management carried out and presented in a manner satisfactory to warrant its acceptance as prerequisite for the award of **POST GRADUATE DIPLOMA IN HEALTH AND HOSPITAL MANAGEMENT** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

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This is to certify that **Dr. Swati Puri**, a graduate student of the **Post- Graduate Diploma in Health and Hospital Management**, has worked under our guidance and supervision. She is submitting this dissertation titled "**A study on Quality Process of the Functional Areas at Cheema Medical Hospital, Mohali**" in partial fulfillment of the requirements for the award of the **Post- Graduate Diploma in Health and Hospital Management**.

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.

Faculty Mentor

IIHMR

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DATE-

Dr. A. K. KHOKHAR
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DISSERTATION ORGANIZATION – Cheema Medical Complex

AREA OF DISSERTATION - Administrative Development (Quality)

ATTENDANCE – 100%

OBJECTIVES ACHIEVED - Assessment of the consequence of errors upon operations, reports, service delivery, etc. and formulating their remedial measures.

DELIVERABLES - The diligence and dedication demonstrated by you have been mentioned by your supervisors and your colleagues. We have all noticed the enthusiasm put in by you. We are implementing your recommendations and hope that it will help you to maintain the same excellent performance.

STRENGTHS - Creativity , Leadership , Takes challenges well

SUGGESTIONS FOR IMPROVEMENT – N.A.

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DATE – 1 April, 2013

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DECLARATION BY CANDIDATE

This is to certify that this project entitled **“TOTAL QUALITY MANAGEMENT AT CHEEMA MEDICAL COMPLEX, ANALYSIS OF ATTRITION RATE IN HOSPITAL”** for partial fulfillment of the requirements for the award of **POSTGRADUATE DIPLOMA IN HOSPITAL AND HEALTH MANAGEMENT** is my bonafide work and has not been copied from any other source. The data included in this work is genuine.

Signature of candidate

Date:

Place:

ACKNOWLEDGEMENT

It is my privilege to acknowledge with gratitude, the invaluable guidance by PROF. PRAGYA TIWARI , for her continuous encouragement and friendly advice throughout and providing me with all the resources. I am extremely indebted to her.

I would also like to record my gratitude to:

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- All the staff of the CMC, Mohali who became part of my research and participated, helping me to make this work possible.
- All my colleagues and friends for their support.

Finally I would like to thank my parents for their love and support.

Thank you for everything

ABSTRACT

Total quality management (TQM) is an integrated organizational effort designed to improve quality at every level. TQM is about meeting quality expectations as defined by the customer; this is called **customer-defined quality**. Patient satisfaction depends up on many factors such as: Quality of clinical services provided, behavior of doctors and other health staff, cost of services, hospital infrastructure, physical comfort, emotional support, and respect for patient preferences.

Mismatch between patient expectation and the service received is related to decreased satisfaction. Therefore, assessing patient perspectives gives them a voice, which can make public health services more responsive to people's needs and expectations.

All leading organizations involved in delivering high quality of service excellence, work on the belief that the small things make a big difference. For CMC, to ensure that it has a continued commitment to service excellence, each individual must ensure that he does his part, no matter how small it may appear.

TQM can be an important part of hospitals competitive strategy in quality of healthcare system. Hospitals in competitive markets are more likely to attempt to differentiate themselves from their competitors on the basic of greater service quality. Thus, TQM which places a heavy emphasis on improvement in Customer satisfaction index that offers the prospect of grater combines internal quality measures with value analysis and conformance to specifications. Acceptable quality services not only include direct medical services such as diagnoses, medicines, surgery and treatment but indirect operations such as administration and purchasing whose costs are reflected in what the buyer pays.

TQM can be an important part of hospitals competitive strategy in quality of healthcare system. Hospitals in competitive markets are more likely to attempt to differentiate themselves from their competitors on the basic of greater service quality. Thus, TQM which places a heavy emphasis on improvement in Customer satisfaction index that offers the prospect of grater combines internal quality measures with value analysis and conformance to specifications. Acceptable quality services not only include direct medical

services such as diagnoses, medicines, surgery and treatment but indirect operations such as administration and purchasing whose costs are reflected in what the buyer pays. It may also include Total Quality of performance that is directly related to healthcare safety, security, attitude of nursing and ward boy, role of doctors in terms of

‘Time’ includes appointment, delay time, service time, timing with regards to medical treatment and surgery.

People define quality in many ways. Some think of quality as superiority of excellence, others see it as a lack of patient care and service defects

TABLE OF CONTENTS	PAGE NO.
ACKNOWLEDGEMENT	6
ABSTRACT	7
LIST OF FIGURES	10
LIST OF TABLES	11
LIST OF APPENDICES	12
LIST OF ABBREVIATIONS	13
MAIN TEXT	
SECTION 1 : INTRODUCTION	14
SECTION 2 : METHOD AND DATA	20
SECTION 3 : HOSPITAL PROFILE	21
SECTION 4: GENERAL FINDINGS	24
SECTION 5: CONCLUSION	47
REFERENCES	48
ANNEXURE	
ANNEXURE 1 :	49
ANNEXURE 2 :	59
CASE STUDY	62

LIST OF FIGURES -:	Pg. no.
FIGURE 1 Main Entrance	27
FIGURE 2 Front desk, Registration area	28
FIGURE 3 Reception area	29
FIGURE 4 Waiting area	30
FIGURE 5 Public amenities	31
FIGURE 6 Phlebotomy area	32
FIGURE 7 Diagnostic room	33
FIGURE 8 Pantry	34
FIGURE 9 Consultation room	35
FIGURE 10 Emergency room	36
FIGURE 11 Feedback form	37
FIGURE 12 Feedback form doctors	38
FIGURE NO. 13 Dustbins cleared regularly	39
FIGURE NO. 14 Public amenities	40

LIST OF TABLES -:	Pg.no.
TABLE 1 Main Entrance	27
TABLE 2 Front desk, Registration area	28
TABLE 3 Reception area	29
TABLE 4 Waiting area	30
TABLE 5 Public amenities	31
TABLE 6 Phlebotomy area	32
TABLE 7 Diagnostic room	33
TABLE 8 Pantry	34
TABLE 9 Consultation room	35
TABLE 10 Emergency room	36
TABLE 11 Feedback form	37
TABLE 12 Feedback form doctors	38
TABLE NO. 13 Dustbins cleared regularly	39
TABLE NO. 14 Public amenities	40

LIST OF APPENDICES	PAGE NO.
APPENDIX 2	1
APPENDIX 3	2
APPENDIX 4	3
APPENDIX 5	4
APPENDIX 6	5
APPENDIX 7	7
APPENDIX 8	9
APPENDIX 9	10
APPENDIX 10	11
APPENDIX 11	12
APPENDIX 12	13
APPENDIX 13	48

LIST OF ABBREVIATIONS -:

TQM - Total Quality Management

CSI - Customer Satisfaction Index

ANSI - American National Standards Institute

ASQ - American Society Quality

TVS - Trans-Vaginal Sonography

TRUS - Trans Rectal Ultra Sonography RCD (Renal Color Doppler)

CCD - Carotid Color Doppler

SCACD - Sub-Clavian Artery Color Doppler

HSG - Hystero- Salpingography

PCR - Polymerase Chain Reaction)

FNAC - Fine Needle Aspiration Cytology

MAIN TEXT :-

CHAPTER 1 –: INTRODUCTION

Total quality management (TQM) is an integrated organizational effort designed to improve quality at every level. TQM is about meeting quality expectations as defined by the customer; this is called **customer-defined quality**. TQM can be an important part of hospitals competitive strategy in quality of healthcare system. Hospitals in competitive markets are more likely to attempt to differentiate themselves from their competitors on the basis of greater service quality. Thus, TQM places a heavy emphasis on improvement in **Customer satisfaction** index.

The goal of the health care team is to provide the best quality of health care and service to the patient. It is now a worldwide trend in the healthcare system to include subjective user satisfaction into the evaluation of quality of medical service provided. Unfortunately, this trend is still very much at infancy level in our country.

Patient satisfaction depends up on many factors such as: Quality of clinical services provided, behavior of doctors and other health staff, cost of services, hospital infrastructure, physical comfort, emotional support, and respect for patient preferences.

Mismatch between patient expectation and the service received is related to decreased satisfaction. Therefore, assessing patient perspectives gives them a voice, which can make public health services more responsive to people's needs and expectations.¹

All leading organizations involved in delivering high quality of service excellence, work on the belief that the small things make a big difference. For CMC, to ensure that it has a continued commitment to service excellence, each individual must ensure that he does his part, no matter how small it may appear.

The most important factor for success of the hospital business is a continuous focus on delivery of high quality of services, to retain the customer, thereby ensuring continued growth in the business. To be able to achieve service quality on a sustained basis, we need to set up the parameters defining service quality, a mechanism for its measurement, and the ability to take continuous corrective actions.

The Service Quality Checklist and the feedback forms filled by the patients were used during the project to evaluate and analyze the quality of services provided to the patients and to evaluate the patient satisfaction. The Service Quality Checklist is a tool designed to allow the hospital to understand basic parameters required for service quality and to measure them continuously. This checklist deals with the non-clinical Service Quality aspects are equally important, they will be dealt with separately.

The focus on quality is always a top-down approach- the top management of the hospital must believe in the spirit to serve, and ensure that the hospital staff shares the same belief. The hospital can, at its own initiative, set the agenda for excellence in service quality. The Quality Checklist has been devised to enable the hospitals to achieve that.²

Principle of Total Quality Management:³

The basic principle of TQM should be carried out using the 8 TQM principles otherwise the resultant system will not satisfy the intent of the quality standards in the healthcare management system.

TQM Principles:

1	Customer focused organization	Organizations depend on their customers and therefore should understand current and future customer needs, should meet customer requirements and strive to exceed customer expectations
2	Leadership	Leaders establish unity of purpose and direction. They should create and maintain the internal environment in which people can become fully involved in achieving the organization's objectives
3	Involvement of people	People at all levels are the essence of an organization and their full involvement enables their abilities to be used for the organization's benefit.
4	Process approach	A desired result is achieved more efficiently when activities and related resources are managed as a process.
5	System approach to management	Identifying, understanding and managing a system of interrelated processes as a system contributes to the organization's effectiveness and efficiency in achieving its objectives.
6	Continual improvement	Continual improvement of the organization's overall performance should be a permanent objective of the organization.
7	Factual approach to decision making	Effective decisions are based on the analysis of data and information.
8	Mutually beneficial supplier relationships	An organization and its suppliers are interdependent and a mutually beneficial relationship enhances the ability of both to create value.

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CHAPTER 2 -: RATIONALE OF STUDY :

The rationale behind this project was to study and evaluate the levels of quality in every aspect of the services provided to the patients at CMC, Mohali.. In order to further improve its quality care and for the continuous quality services in future also and to check the quality this study was done. The goal of the health care team is to provide the best quality of health care and service to the patient. It is now a worldwide trend in the healthcare system to include subjective user satisfaction into the evaluation of quality of medical service provided.

Patient satisfaction depends up on many factors such as: Quality of clinical services provided, behavior of doctors and other health staff, cost of services, hospital infrastructure, physical comfort, emotional support, and respect for patient preferences.

Mismatch between patient expectation and the service received is related to decreased satisfaction, which may happen because of a plenty of reasons. Patients' feedback is necessary to identify problems that need to be resolved in improving the health services.

CHAPTER 3-: REVIEW OF LITERATURE

Now a day, Healthcare systems are of fundamental interests to all level of Hospitals in our societies. Eventually, increasing importance and reliance are placed on total quality management in healthcare systems. Due to this rising importance that is also reflected in the increasing percentage of national and international resources for both private and public sector to allocated in hospital management systems. Hospitals and other healthcare organization across the globe have been progressively implementing TQM to reduce costs, improve efficiency and provide high quality patient care. Contrary to popular belief, the TQM movements were not the start of concerns about quality in healthcare.

Florence Nightingale Crimean War(1854-1856)-The roots of quality assurance initiatives in healthcare extends at least as far back as the time of Florence Nightingale's work during the **Crimean War(1854-1856)**,when the introduction of nutrition, sanitation and infection control initiatives in war hospitals contributed to reduction in the death rate from 43% to 10%. TQM can be an important part of hospitals' competitive strategy. Thus, TQM, which places on improved customer satisfaction, offers the prospect of great market share and profitability.⁴

Crosby - According to Crosby, quality is 'conformance to requirements'. (Zero defects). Today most managers agree that the main reason to purse quality is to satisfy the customers.⁶

American National Standards Institute (ANSI) -The American National Standards Institute (ANSI) and American Society Quality (ASQ) define quality as “The totality of features and

characterizes of a care or service that bears on its ability to satisfy given needs”. The view of quality as the satisfaction of customer needs is often called fitness for use.

Health services include a wide variety of quality aspects, all of which are important. In case of medical services, the seller is doctors, hospitals, nursing homes, clinics, etc. because they offer health services for sale as stipulated prices. Their buyer is the client or patient who buys these health services at the stipulated prices. It may also include quality of performance that is directly connected and closely related to healthcare such as food, housing, safety, security, attitude of employees, and other factors that arise in connection with hospitals and nursing homes.⁵

CHAPTER 4 -: OBJECTIVES

4.1. General objective:

To study and evaluate the levels of quality in every aspect of the services provided to the patients at Cheema Medical Complex, Mohali.

4.2. Specific Objectives:

1. To assess the standards of quality in every aspect of the services and infrastructure at CMC.
2. To evaluate and analyze the quality of services provided to the patients (i.e. from the time a patient enters the clinic till the time patient leaves the clinic after availing the services at the clinic).
3. To evaluate the patient satisfaction and record the patient feedback with the help of patient feedback forms.
4. To suggest and recommend measures, if any, to improve the services for providing the continuously improved best quality services to the patients.

SECTION 2-: METHOD AND DATA

SETTING- The study was conducted in CMC, Mohali with the prior approval of the hospital.. The research allowed to assess the functional areas, like the Entrance to the hospital, the Front office and enquiry desks, public areas within the Clinic like waiting areas, toilets, pantry etc., and service areas like the consultation chambers, treatment room, phlebotomy area, X- Ray room, Ultrasound room, ECG, and TMT rooms, Emergency room.

PARTICIPANTS -: A total of 50 patients were followed up for the research by filling up of feedback forms and total of 60 service quality checklists were analysed through observation.

DATA COLLECTION -: The study was conducted for a period of 3 months in the hospital. The data was collected only primarily through observation and questionnaires.

DATA ANALYSIS -: After data were collected from all the participants the temporary suspension of observations was discarded. In data analysis made on the basis of

feedback forms around 90-95% patients were satisfied with the services provided . Data from all participants were pooled together to generate the final results

SECTION 3 -: HOSPITAL PROFILE

1. INTRODUCTION TO THE HOSPITAL

CHEEMA MEDICAL COMPLEX, MOHALI is a centrally air-conditioned multi-specialty hospital established in . It is committed to provide superior quality health care services to address the day-to-day health care needs. For more convenience and comfort to the patients, CHEEMA MEDICAL COMPLEX has integrated facilities for Specialist Consultation, Diagnostics, Preventive Health Checks and 24-hour Emergency services under one roof. ⁷

The CMC Advanced Diagnostics is fully equipped with latest facilities like:

1. 3-D Ultrasound
 - TVS (Trans-Vaginal Sonography)
 - U/S Obstetrics
 - OBS level I & II
 - TRUS (Trans Rectal Ultra Sonography)
 - Thyroscan
 - U/S Chest
 - Abdomen

- Pelvis
2. Color Doppler/ Vascular Doppler of any part of body
 - RCD (Renal Color Doppler)
 - CCD (Carotid Color Doppler)
 - SCACD (Sub-Clavian Artery Color Doppler)
 - Peripheral Color/ Vascular Doppler of each limb
 - Iliac & Femoral (Arterial & Venous Color Doppler)
 3. Sono-Mammography
 4. Echo-Cardiography
 5. EEG
 6. Spirometry (Pulmonary Function Test)
 7. TMT/ Stress Test
 8. 12 Channel ECG
 9. X-Ray including:
 - IVP
 - Barium Meal
 - Barium Meal Follow Thru
 - HSG (Hystero- Salpingography)
 - Barium Enema
 - MCU
 - RGU

- Dental X-Ray

10. UGI Endoscopy/ Colonoscopy/ Proctoscopy/ Sigmoidoscopy

11. Computerized Lab:

- Hematology
- Cytology
- Histo-Pathology

- Bio-Chemistry
- Thyroid Test
- PSA
- HbA1c
- Serology Test of any kind
- Test for Dengue Fever & Swine Flu
- Hormones Test, Elisa Test,
- PCR (Polymerase Chain Reaction)
- Blood Allergy Test for Food and Inhalants
- FNAC (Fine Needle Aspiration Cytology)
- Biopsy

12. Synoscopy

13. Cystoscopy

14. Foetal Echo-Cardiography

15. Foetal Monitoring

16. Arthroscopy

17. Dental facilities

CMC has well equipped OPERATION THEATRE with facilities for Laparoscopic Surgery and Total Laparoscopic Hysterectomy. CMC believes in patient safety and hence has done everything to deliver best care with safety.

SECTION 4-: GENERAL FINDINGS

With the comfort and needs of patients and their family members a priority, CMC, Mohali has provided various facilities

Medical Facilities

- **Cardiac Cath Lab**
- **Multi - Speciality OT's**
- **Specialist Emergency Care**
- **Sample Collection**
- **Pulmonary Lab**
- **Blood Bank**
- **Dietetics**
- **Pathology**
- **Urology Lab**
- **Audiometric Tests**
- **Physiotherapy**

Non-Medical Facilities

- **24 hour Chemist Shop**
- **Prayer Room**
- **Banks and ATMs**
- **Kid's Corner**

- **Patient Welfare Department**

METHODOLOGY

STUDY DESIGN: Observational and Prospective

STUDY AREA: The study was conducted at Cheema Medical Complex, Mohali.

STUDY DURATION: 1st Jan to 30th March 2013

STUDY TOOL: -

- A standardized **Service Quality Checklist** prepared by **CMC** was used as the data collection technique. This Checklist is designed across various functional areas, like the Entrance to the hospital, the Front office and enquiry desks, public areas within the Clinic like waiting areas, toilets, pantry etc., and service areas like the consultation chambers, treatment room, phlebotomy area, X- Ray room, Ultrasound room, ECG, and TMT rooms, Emergency room.

For each of the areas mentioned above, the Service Quality Checklist includes the following questions related to:

People

Process

Infrastructure

- In addition to the checklist the **feedback forms (50)** filled by patients was also used for the data collection.
- **TECHNIQUE:** a. Giving close ended question
b. interview
c. observation

STUDY FINDING-:

RESULTS AND ANALYSIS

Analysis was done with the help of Service Quality Checklist prepared by **CMC** and the feedback forms filled by the patients.

The checklist is designed across various functional areas, like the entrance to the clinic, the Front Office and enquiry desks, public areas within the hospital like waiting areas, toilets, pantry, etc, service areas like the Consultation chambers, treatment room, phlebotomy area, X-ray room, Ultrasound room, ECG and TMT rooms.

For each of the areas mentioned above, the Service Quality Checklist includes the following:

- **People Related:** the parameters assessed as people related are the skills and attitudinal elements of functioning and general approaches of staff.

- **Process Related:** The parameters assessed include the overall efficiency of the system in terms of adherence to optimal and efficient procedures to reduce process jerks to the customers.
- **Infrastructure Related:** The parameters assessed are the overall quality of infrastructure provided for smooth and seamless operations. These include the level of cleanliness and functioning of fitments.

A total of **60 Service Quality Checklists** were being checked by me during the project.

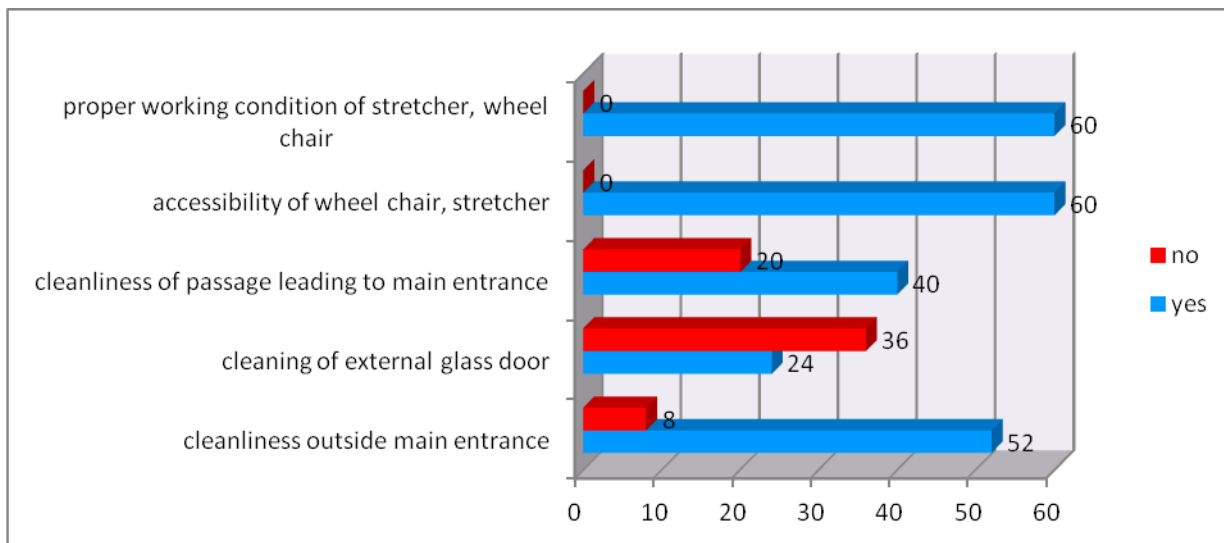
STAFF RELATED -:

1. Main Entrance -:

TABLE NO.1-:

MAIN ENTRANCE	YES	NO
Proper working condition of stretcher,wheel chair	60	0
Accessibility of wheel chair,stretcher	60	0
Cleanliness of passage leading to main entrance	40	20
Cleaning of external glass door	24	36
Cleanliness outside main entrance	52	8

FIGURE NO.1-:



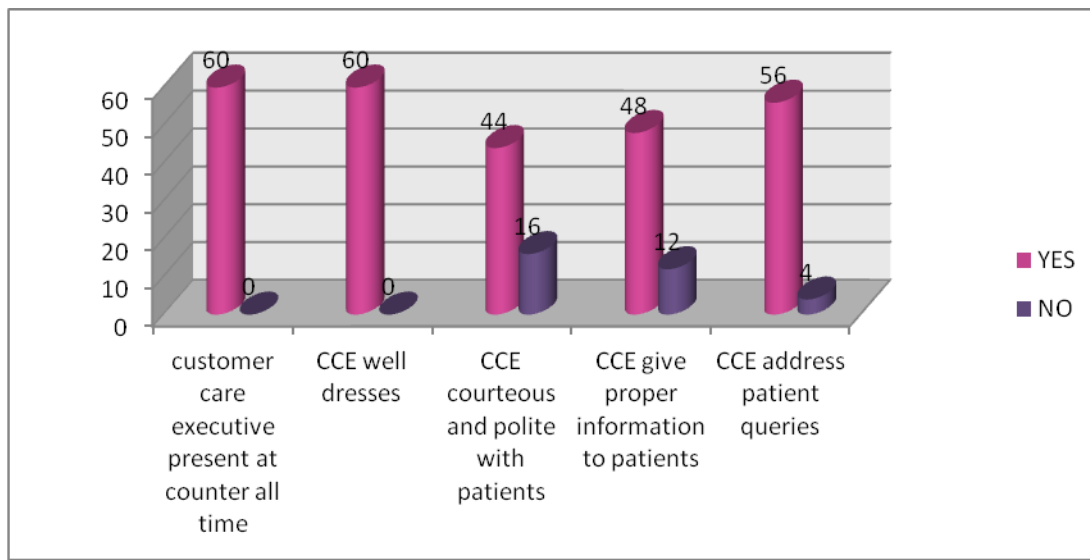
The above graph suggests that 33% times there was inadequacy in cleanliness of passage leading to main entrance, 60% times there in inefficiency in cleaning of external glass door and 13% times cleanliness was lacking outside main entrance.

2. Front desk, Registration area -:

TABLE NO.2 -:

FRONT DESK ,REGISTRATION AREA	YES	NO
customer care executive present at counter all time	60	0
CCE well dresses	60	0
CCE courteous and polite with patients	44	16
CCE give proper information to patients	48	12
CCE address patient queries	56	4

FIGURE NO.2-:

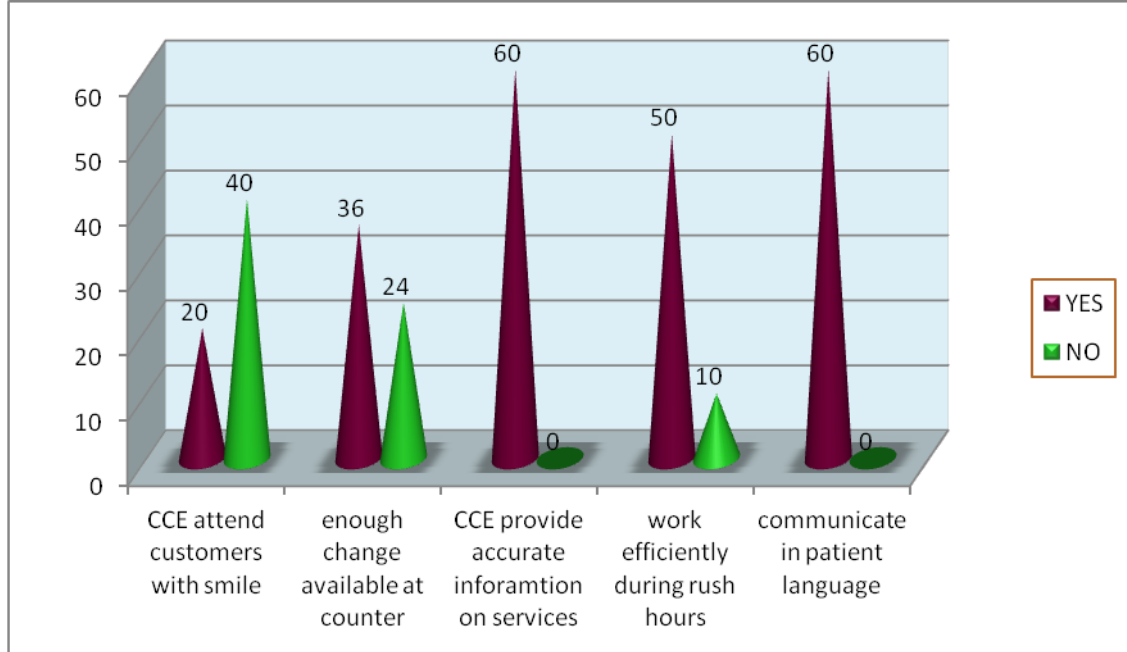


The above figure suggests that 26% of the customer care executives are not courteous and polite with patients , 25% of customer care executives do not give proper information to patients and 7% of CCE do not adequately address patient queries.

TABLE NO.3-:

RECEPTION AREA	YES	NO
CCE attend customers with smile	20	40
enough change available at counter	36	24
CCE provide accurate inforamtion on services	60	0
work efficiently during rush hours	50	10
communicate in patient language	60	0

FIGURE NO.3 -:



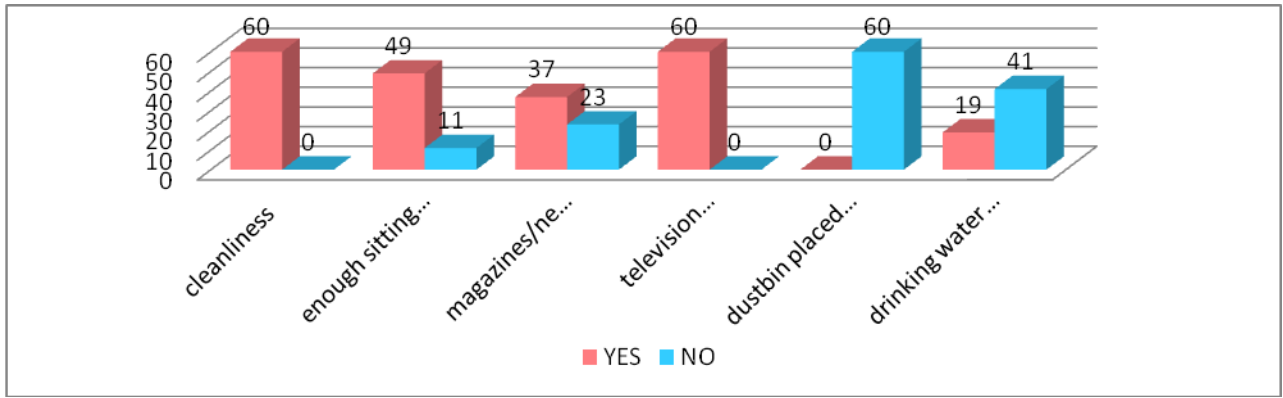
The above graph suggests that 67% of the customer care executives do not attend customers with smile, 40% of the CCE do not have enough change available at the counter , 17% of the CCE do not work efficiently during rush hours.

3. Waiting area :-

TABLE NO.4-:

WAITING AREA	YES	NO
cleanliness	60	0
enough sitting to accommodate all at a time	49	11
magazines/newspaper arranged properly in magazine stand	37	23
television working properly	60	0
dustbin placed at right place and cleared regularly	0	60
drinking water available all time	19	41

FIGURE NO.4 :-



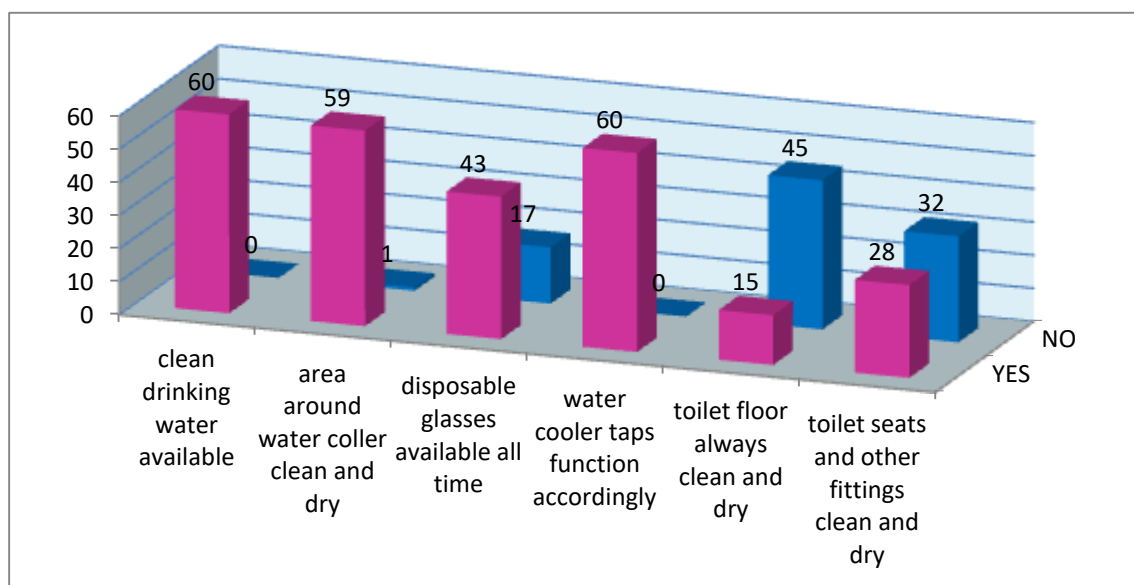
The above graph shows that few times there wasn't enough sitting to accommodate all at a time i.e almost 18% , out of 60 occasions 23 times the magazines were not arranged properly in stand i.e almost 38%, out of 60 occasions 41 times the drinking water was not available i.e. almost 68%

4. Public amenities:-

TABLE NO.5:-

PUBLIC AMENITIES	YES	NO
clean drinking water available	60	0
area around water coller clean and dry	59	1
disposable glasses available all time	43	17
water cooler taps function accordingly	60	0
toilet floor always clean and dry	15	45
toilet seats and other fittings clean and dry	28	32

FIGURE NO.5 :-

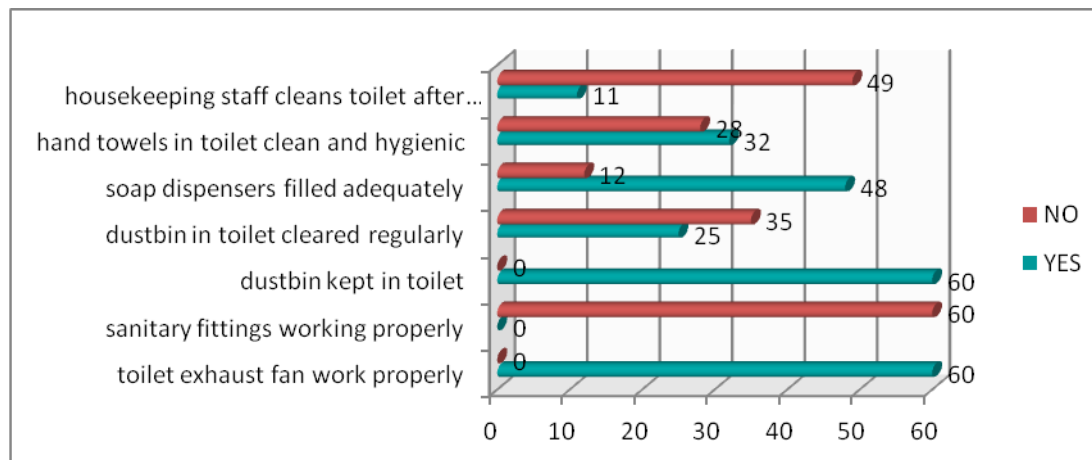


The above figure shows that out of 60 occasions only 1 time the area around water cooler was not clean and dry i.e. almost 1.6% , out of 60 occasions 17 times the disposable glasses were not available i.e. almost 28% , out of occasions 45 times the toilet floor was not clean and dry i.e. 75% , out of 60 occasions 32 times the toilet seat and other fittings were not clean and dry i.e. almost 53%

TABLE NO.6 :-

PUBLIC AMENITIES	YES	NO
toilet exhaust fan work properly	60	0
sanitary fittings working properly	0	60
dustbin kept in toilet	60	0
dustbin in toilet cleared regularly	25	35
soap dispensers filled adequately	48	12
hand towels in toilet clean and hygienic	32	28
housekeeping staff cleans toilet after every use	11	49

FIGURE NO.6 :-



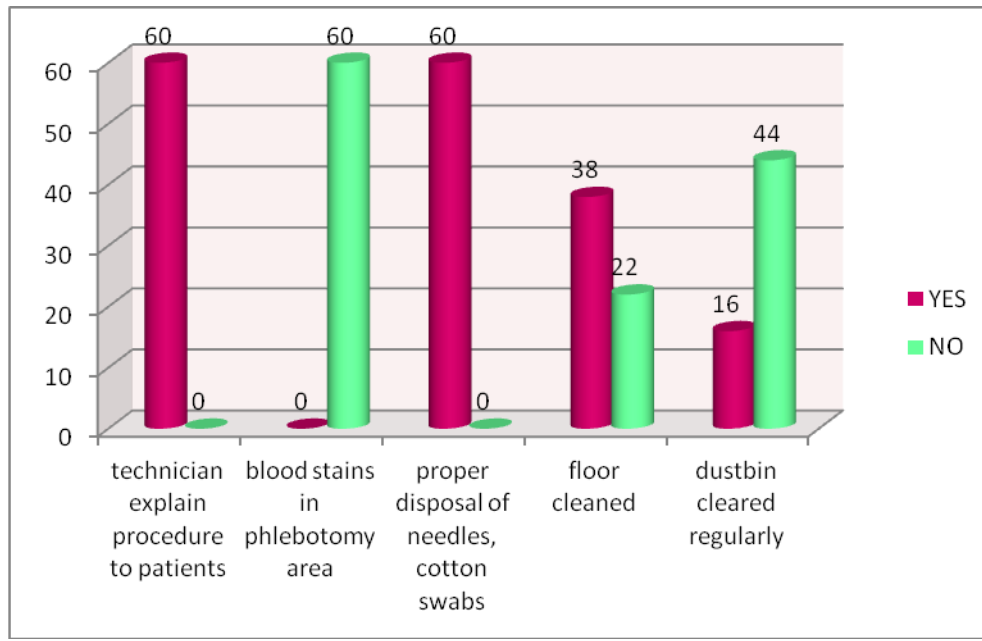
The above figure shows that out of 60 occasions 49 times the housekeeping staff do not clean toilets after every use accounting to 81.6% , 28 times the hand towels in toilet were not clean and hygienic i.e. 46.6% , 12 times the soap dispensers were not filled adequately i.e. 20%, 35 times the dustbins in toilet were not cleared i.e. 58% .

5. Phlebotomy area

TABLE NO.6 :-

PHLEBOTOMY AREA	YES	NO
technician explain procedure to patients	60	0
blood stains in phlebotomy area	0	60
proper disposal of needles, cotton swabs	60	0
floor cleaned	38	22
dustbin cleared regularly	16	44

FIGURE NO .6



The above figure shows that out of 60 occasions 22 times the floor of the phlebotomy room was not cleaned i.e. almost 36.6% and 44 times the dustbins were not cleared regularly accounting to 73%

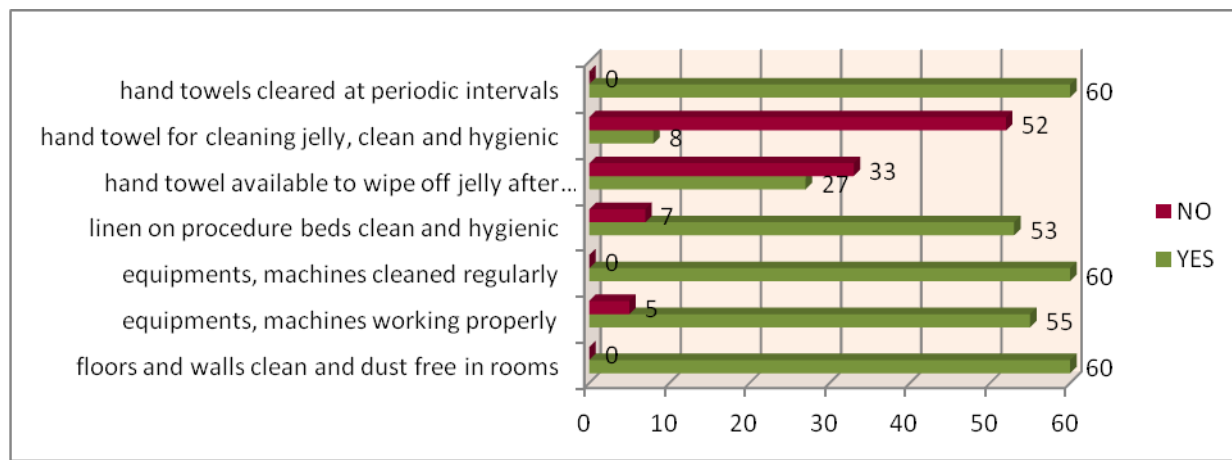
6. Diagnostic room -:

TABLE NO.7 -:

DIAGNOSTIC ROOM	YES	NO
floors and walls clean and dust free in rooms	60	0
equipments, machines working properly	55	5
equipments, machines cleaned regularly	60	0
linen on procedure beds clean and hygienic	53	7
hand towel available to wipe off jelly after procedure	27	33
hand towel for cleaning jelly, clean and hygienic	8	52

hand towels cleared at periodic intervals	60	0
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FIGURE NO.7 :-



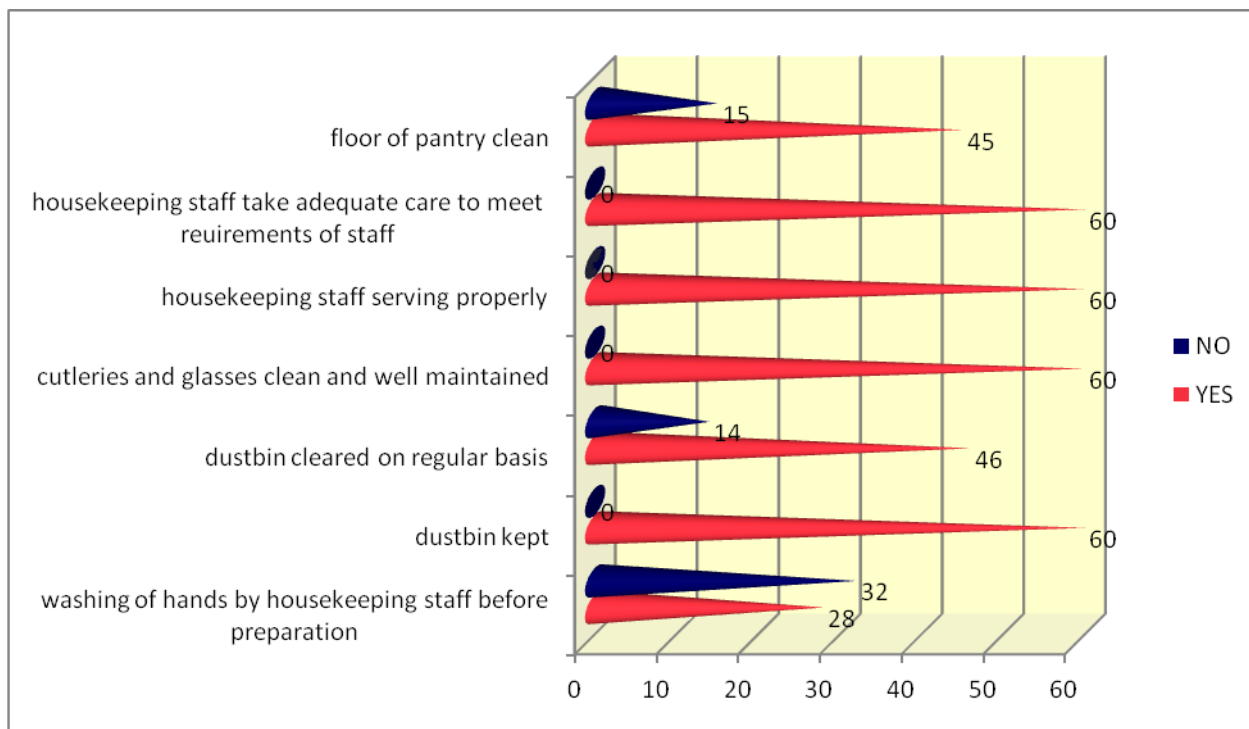
The above figure shows that out of 60 occasions 52 times the hand towels for cleaning jelly were not clean and hygienic i.e. almost 87%, 33 times the hand towels were not available to wipe off jelly after procedure i.e. 55% , 53 times the linen on procedure beds were not clean and hygienic

7. **Pantry:-**

TABLE NO.8:-

PANTRY	YES	NO
washing of hands by housekeeping staff before preparation	28	32
dustbin kept	60	0
dustbin cleared on regular basis	46	14
cutleries and glasses clean and well maintained	60	0
housekeeping staff serving properly	60	0
housekeeping staff take adequate care to meet reuirements of staff	60	0
floor of pantry clean	45	15

FIGURE NO.8 :-



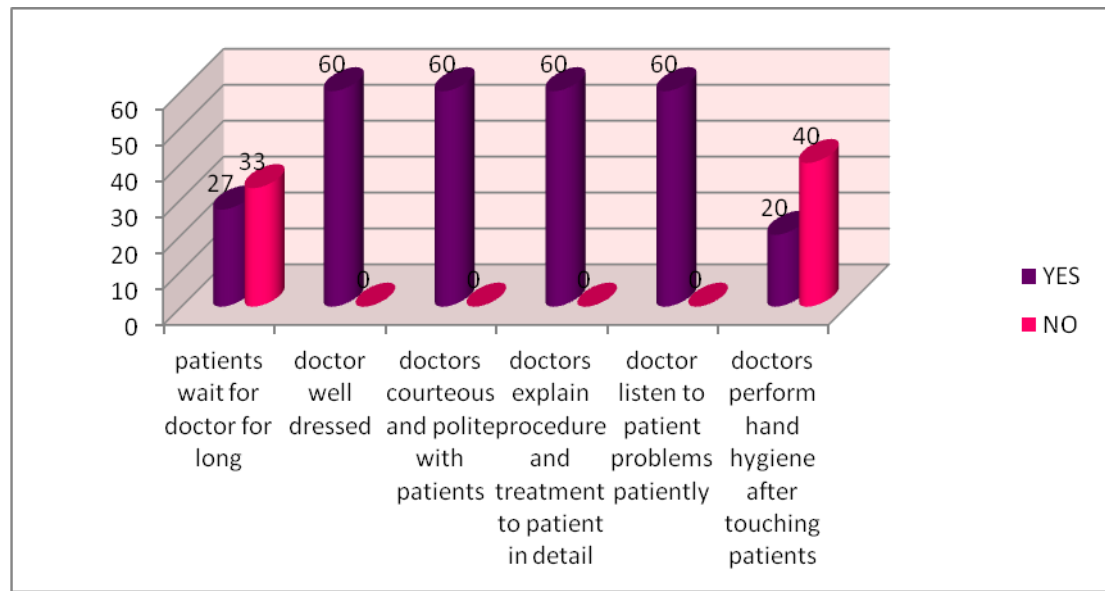
The above graph shows that out of 60 occasions 15 times the floor of the pantry was not clean i.e. 25% , 14 times the dust bin was not cleared i.e. 23 % , 32 times the house keeping staff didn't wash their hand before preparation i.e. 53%.

8. Consultation room-:

TABLE NO.9 -:

CONSULTATION ROOM	YES	NO
patients wait for doctor for long	27	33
doctor well dressed	60	0
doctors courteous and polite with patients	60	0
doctors explain procedure and treatment to patient in detail	60	0
doctor listen to patient problems patiently	60	0
doctors perform hand hygiene after touching patients	20	40

FIGURE NO.9 -:



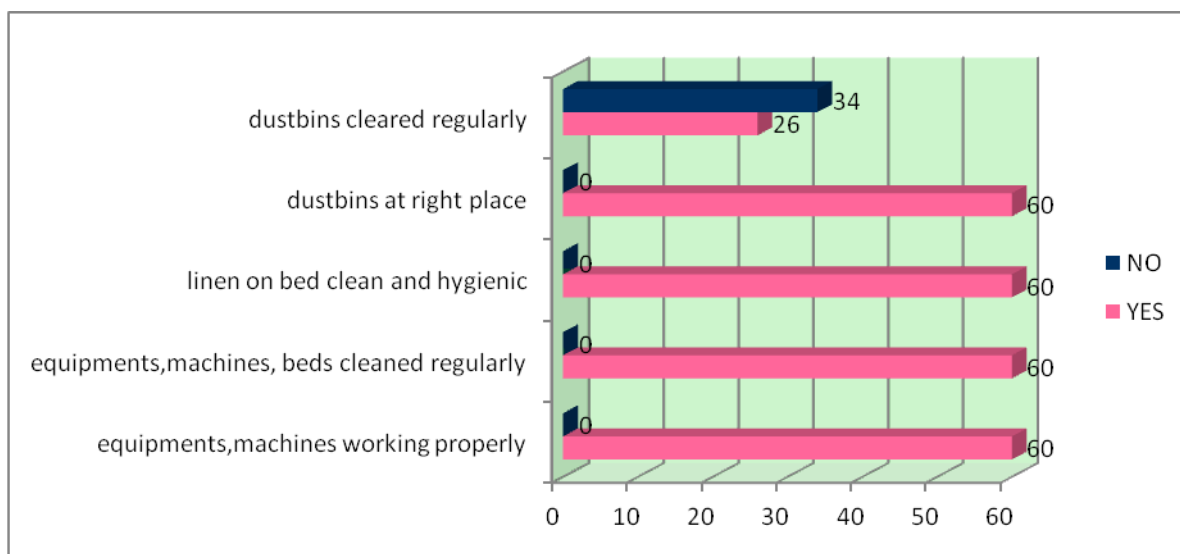
The above graph shows that out of 60 occasions 27 times patients wait for doctors for long i.e. 45% , 40 times the doctors do not perform hand hygiene after touching patients i.e. 67% in the consultation room.

9. Emergency room -:

TABLE NO.10 -:

EMERGENCY ROOM	YES	NO
equipments, machines working properly	60	0
equipments, machines, beds cleaned regularly	60	0
linen on bed clean and hygienic	60	0
dustbins at right place	60	0
dustbins cleared regularly	26	34

FIGURE NO.10 :-



The above graph shows that out of 60 occasions 34 times the dust bins were not cleared in the emergency room i.e. almost 57%.

PATIENT RELATED :-

10.Feedback form

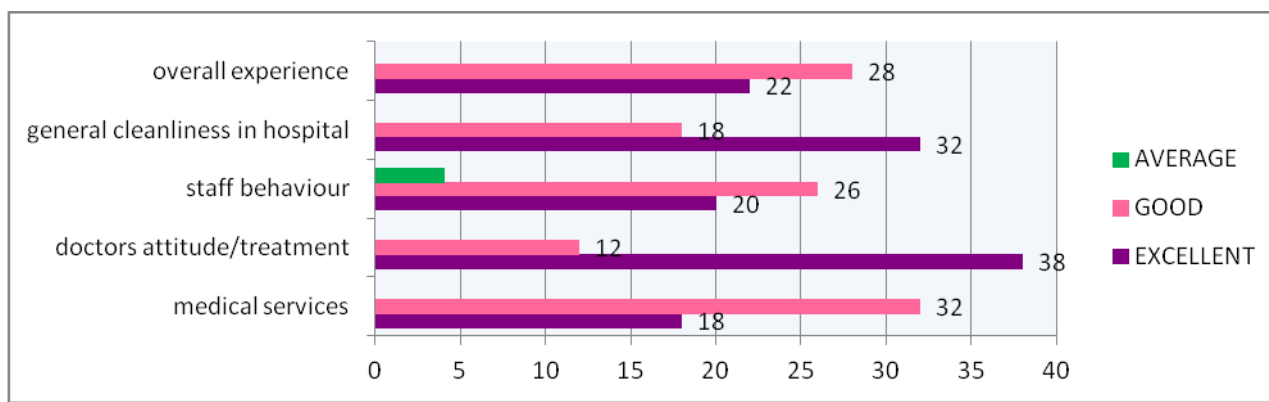
Analysis was done on the basis of 50 Feedback Forms filled by the patients. There were total 8 questions in the feedback forms.

TABLE NO.11 :-

FEEDBACK FORM	EXCELLENT	GOOD	AVERAGE
---------------	-----------	------	---------

medical services	18	32	0
doctors attitude/treatment	38	12	0
staff behaviour	20	26	4
general cleanliness in hospital	32	18	0
overall experience	22	28	0

FIGURE NO. 11 -:

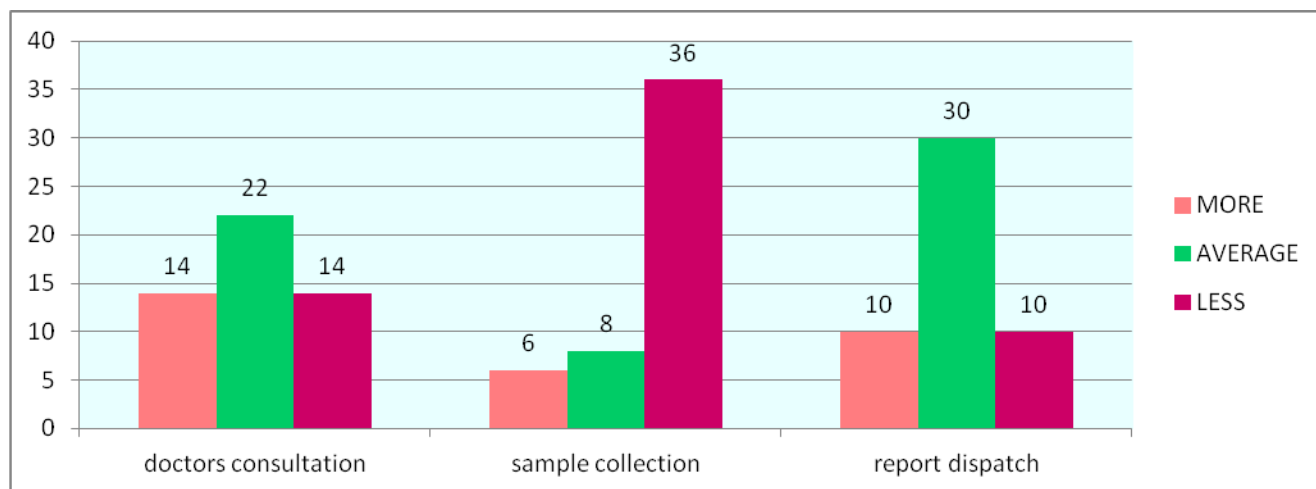


The above graph shows the 44% of the patients had excellent overall experience , 8 % of the patients feel that staff behavior was average ,76% of the patients feel the treatment given by doctors was excellent , 36 % of the patients feel that excellent medical services were provided to them.

TABLE NO.12 -:

FEEDBACK FORM	MORE	AVERAGE	LESS
doctors consultation	14	22	14
sample collection	6	8	36
report dispatch	10	30	10

FIGURE NO.12 -:



The above graph shows that 28 % patients had more waiting time for the doctor's consultation , 12% patients had more waiting time for sample collection and 20 % patients were dispatched the reports late.

DISCUSSION-:

TABLE NO. 13 DUSTBINS CLEARED REGULARLY-:

DUSTBINS CLEARED REGULARLY	WAITING AREA	PUBLIC AMENITIES	PHLEBOTOMY	PANTRY	EMERGENCY ROOM
YES	60	25	16	46	26

NO	0	35	44	14	34
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FIGURE NO. 13 DUSTBINS CLEARED REGULARLY

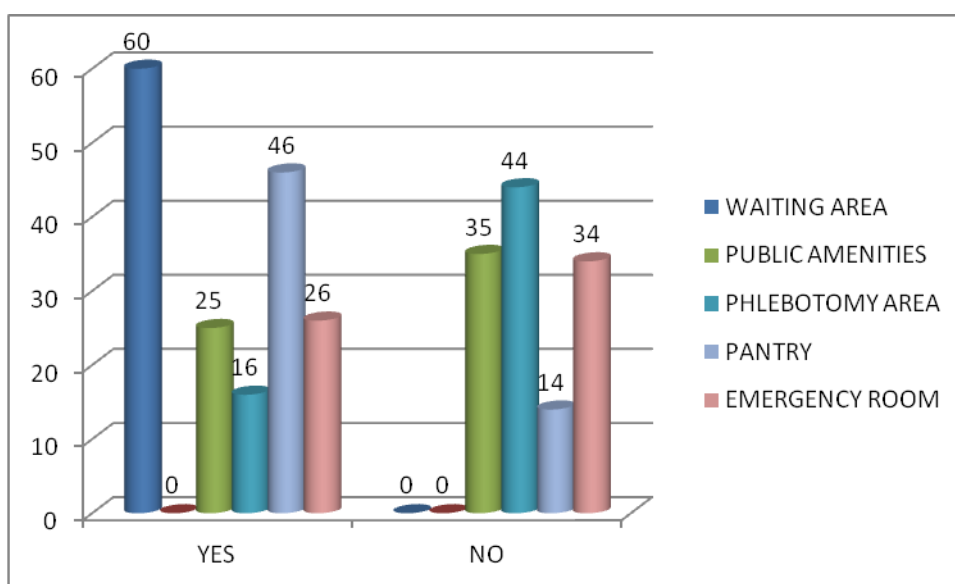


FIGURE NO. 14 PUBLIC AMENITIES

PUBLIC AMENITIES	YES	NO
toilet exhaust fan work properly	60	0
sanitary fittings working properly	0	60
dustbin kept in toilet	60	0
dustbin in toilet cleared regularly	25	35
soap dispensers filled adequately	48	12
hand towels in toilet clean and hygienic	32	28
housekeeping staff cleans toilet after every use	11	49

FIGURE NO. 14 PUBLIC AMENITIES

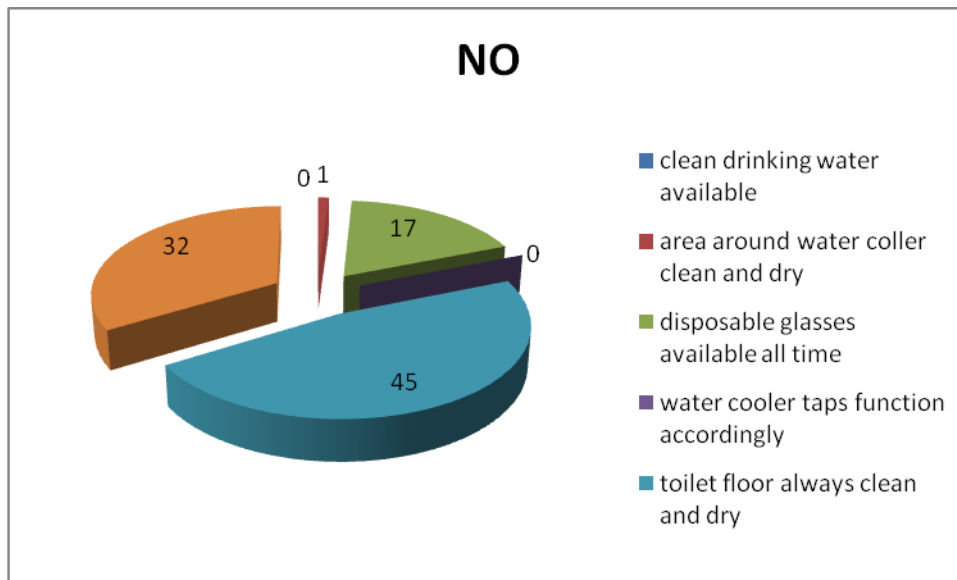
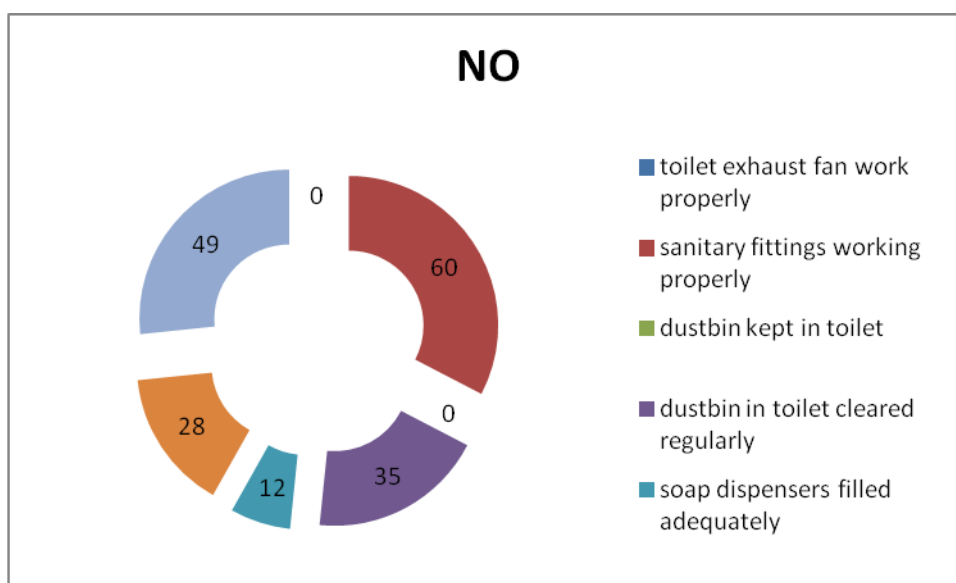


TABLE NO. 15 PUBLIC AMENITIES 2

PUBLIC AMENITIES	YES	NO
toilet exhaust fan work properly	60	0
sanitary fittings working properly	0	60
dustbin kept in toilet	60	0
dustbin in toilet cleared regularly	25	35
soap dispensers filled adequately	48	12
hand towels in toilet clean and hygienic	32	28
housekeeping staff cleans toilet after every use	11	49

FIGURE NO. 15 PUBLIC AMENITIES 2



FADE – Focus, Analyze, Develop, Execute cycle!

FOCUS – The major problem was that of cleanliness in various areas like reception, waiting area , emergency room, pantry and phlebotomy area .

ANALYZE - Toilet floors were not found clean for about 40% times and about 35% times in pantry but this percentage was decreased to a great extent after appointment. The dustbins were not cleared in various areas of emergency room(34%) , pantry(14), phlebotomy area (44) and public amenities (35%).

DEVELOP – So following set of plan in form of recommendations was developed

Regular cleaning and maintenance should be done for the toilets. A daily cleaning and maintenance chart should be made on which details of cleaning and maintenance should be noted and it should be signed by the concerned housekeeping staff member and countersigned by a supervisor.

1. Housekeeping staff should be instructed to clean the toilet every hour and should check if all the sanitary fittings are in working condition and the details should be mentioned on the chart along with their signature.
2. Signages should be put in the clinic for the convenience of patients.
3. Proper Waste disposal system should be followed. Color coded bags/dustbins should be placed wherever they are not placed. Staff should be educated about the proper waste disposal system.
4. Regular behavioral and motivational training should be given to all the staff members especially to the front office staff with more emphasis on the disciplinary skills so that they can handle customers in a better and more effective way thus helping in providing quality services to the customer.
5. Security guard should be appointed at the main entrance to provide convenience to patients for opening of the door.
6. Front desk staff is not fixed which creates miscoordination between the staff sometimes. So there should be fixed staff for handling the front desk in each shift.
7. More fans should be provided in the waiting area for patients ease.
8. Sign board in the waiting area should be updated with the consultant's names and their specialization.
9. Shelves should be made for the cutleries and glasses that keep on lying on the slab in the pantry.

10. Dustbin in the waiting area is placed behind a standing poster, which is not visible to patients properly. Either the poster in front of the dustbin should be removed or a signage indicating the dustbin should be placed.
11. Each bed in the emergency does not have a dustbin. So dustbin should be placed with each bed in the emergency room.
12. There are three shifts for housekeeping staff but each shift has only one housekeeping staff which looks after the hospital cleanliness and pantry. So more number of housekeeping staff should be appointed in each shift.

EXECUTION -:

The goal of the health care team is to provide the best quality of health care and service to the patient. TQM is about meeting quality expectations as defined by the customer; this is called customer-defined quality. It is now a worldwide trend in the healthcare system to include subjective user satisfaction into the evaluation of quality of medical service provided. This study was planned to evaluate the levels of quality in every aspect of the services provided to the patients at CMC and to improve the quality of care provided.

During the study it was observed that almost all the departments were functioning satisfactorily. The results in almost every department were found to be less than 10% negative in every aspect. The major problem was that of cleanliness. Toilet floors were not found clean for about 40% times and about 35% times in pantry but this percentage was decreased to a great extent after executing the following plan.

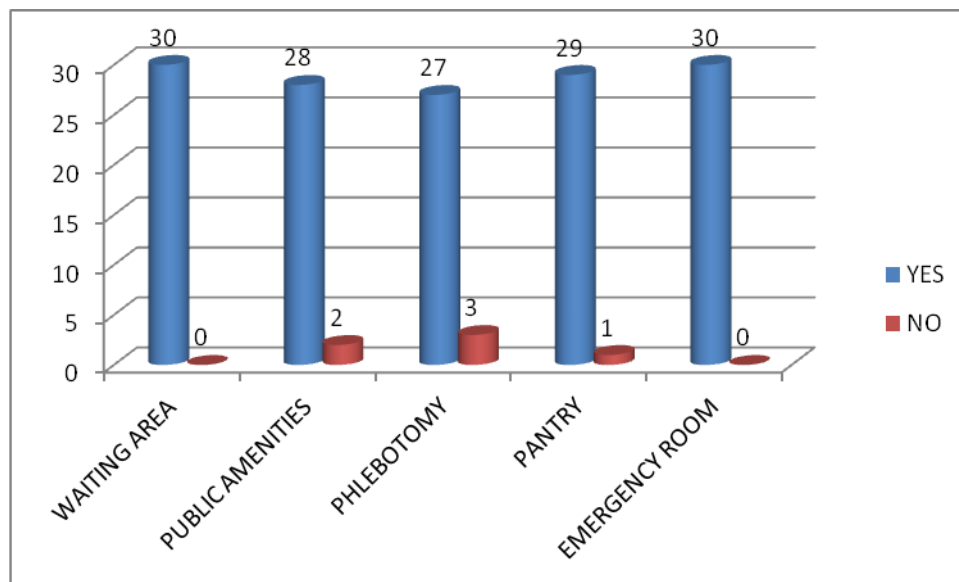
According to the analysis made on the basis of feedback forms around 90-95% patients were satisfied with the services provided

RESULTS -:

DUSTBINS CLEARED REGULARLY -:

DUSTBINS CLEARED REGULARLY	WAITING AREA	PUBLIC AMENITIES	PHLEBOTO MY	PANT RY	EMERGENCY ROOM
-------------------------------	-----------------	---------------------	----------------	------------	-------------------

YES	30	28	27	29	30
NO	0	2	3	1	0



The above graph shows 100% results for emergency and waiting area and less than 10% negative in areas of public amenities, phlebotomy and pantry.

LIMITATIONS:-

There are a number of limitations that flow from the sample size and research design.

1. The population interviewed consisted of a sample of only 50 some of the patterns identified may have been under or overestimated.
2. The calculations were based on reports provided by the QUESTIONNAIRES AND OBSERVATION, so there could be some biasness in the report.

3. Some of the patients in hurry , filled the questionnaire, due to which some patterns may be under or over estimated.
4. Due to time constraints and tremendous work load i could observe the departments not regularly for data collection and relied on the data provided to me due to which again some of the patterns may be under or overestimated

SECTION 6 - CONCLUSION -:

Healthcare systems are of fundamental interests to all level of Hospitals in our societies. Eventually, increasing importance and reliance are placed on total quality management in healthcare systems. Due to this rising importance that is also reflected in the increasing percentage of national and international resources for both private and public sector to allocated in hospital management systems. Hospitals and other healthcare organization across the globe have been progressively implementing TQM to reduce costs, improve efficiency and provide high quality patient care. Contrary to popular belief, the TQM movements were not the start of concerns about quality in healthcare. TQM can be an important part of hospitals competitive strategy in quality of healthcare system. Hospitals in competitive markets are more likely to attempt to differentiate themselves from their competitors on the basic of greater service quality.

Thus, TQM which places a heavy emphasis on improvement in Customer satisfaction index that offers the prospect of grater combines internal quality measures with value analysis and conformance to specifications.

SECTION 7 - REFERENCES

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ANNEXURE 1

CHEEMA MEDICAL COMPLEX

PHASE 2, MOHALI

QUALITY INDICATORS CHECKLIST

MAIN ENTRANCE

1. Is the area outside the main entrance of the hospital clean?
2. Is the external glass door regularly and properly cleaned?
3. Is the passage leading to main entrance clean?
4. Is wheel chair, stretcher easily accessible at the main entrance?
5. Is the wheel chair, stretcher in proper working condition?

FRONT DESK, REGISTRATION AREA

1. Is the Customer Care Executive staff present at the counter all the time?
2. Is CCE well dressed?
3. Is she/he courteous and polite with the patients?
4. Does she/he give proper information to the patients?
5. Does she/he address the patient queries properly?
6. Does she/he attend the customers with a smile?
7. Is enough change available at the counter?
8. Is she/he providing accurate information to the customers on various services being provided in the hospital?
9. Does the CCE staff work efficiently during the rush hours?
10. Does she/he communicate with the patient in the language which patient understands easily?

WAITING AREA

1. Is the waiting area clean?
2. Is there enough sitting arrangement to accommodate all the patients at a time?
3. Are the magazines/newspapers kept in magazine rack arranged properly?
4. Is the television working properly in the waiting area properly?
5. Is the dustbin kept in the waiting area at the right place and is it cleared regularly?
6. Is drinking water available in waiting area all the time?
7. Do sign boards in waiting area provide adequate information?

PUBLIC AMENITIES

1. Is clean drinking water available?
2. Is the area around the water cooler clean and dry?
3. Are disposable glasses available all the time?
4. Do the water cooler taps function accordingly?
5. Is the floor in the toilet always clean and dry?
6. Are the toilet seats and other fittings in the toilet clean and dry?
7. Does the toilet exhaust fan work properly?
8. Are all the sanitary fittings in the toilet in proper working condition?
9. Is there dustbin kept in the toilet?
10. Is the dustbin in the toilet cleared on regular basis?
11. Are soap dispensers adequately filled with liquid soap?
12. Are the hand towels kept in the toilet clean and hygienic?
13. Does the housekeeping staff clean the toilet after every time it is used?

PHLEBOTOMY AREA

1. Does the technician explain the procedure to the patients?
2. Are there any blood stains in the phlebotomy area?
3. Is there proper disposal of needles and cotton swabs?
4. Is the floor of the phlebotomy area clean?
5. Is dustbin in the area cleared regularly?

DIAGNOSTIC ROOMS

1. Are the floors and walls in the rooms clean and dust free?
2. Are all the equipments and machines in proper working condition?
3. Are all the equipments and machines cleaned regularly?
4. Is the linen on the procedure beds clean and hygienic?
5. Is hand towel made available to wipe off the jelly after the procedure?
6. Is hand towel used for cleaning jelly, clean and hygienic?
7. Are the hand towels cleared at periodic intervals?
8. Does the technician explain the procedure to the patient?

PANTRY

1. Does housekeeping staff wash hands before preparing something?
2. Is there dustbin kept in the pantry?
3. Is dustbin cleared on regular basis?
4. Are the various serving cutleries and glasses clean and well maintained?
5. Is housekeeping staff serving properly?
6. Is floor of pantry clean?
7. Does housekeeping staff taking adequate care to meet the requirements of the staff and the customers?

CONSULTATION ROOM

1. Does doctor makes patients wait for long?
2. Is doctor well dressed?
3. Is doctor courteous and polite with the patients?
4. Does doctor explains the patients regarding problem and treatment in detail?
5. Does doctor listens to patients problems patiently?
6. Does doctor wash hands or use hand disinfectants after touching patients?

EMERGENCY ROOM

1. Are equipments and machines in emergency room in working conditions?
2. Are equipments, machines, beds in emergency room cleaned regularly?
3. Is the linen on the emergency room bed clean and hygienic?
4. Are dustbins in emergency room placed at right places?
5. Are dustbins cleared regularly?

CHEEMA MEDICAL COMPLEX

(PHASE 2,MOHALI)

PATIENT FEEDBACK FORM

1. MEDICAL SERVICES

Excellent ☐ Good ☐ Average ☐ Poor ☐

2. DOCTORS ATTITUDE/ TREATMENT

Excellent ☐ Good ☐ Average ☐ Poor ☐

3. STAFFS BEHAVIOUR

Excellent ☐ Good ☐ Average ☐ Poor ☐

4. GENERAL CLEANLINESS IN HOSPITAL

Excellent ☐ Good ☐ Average ☐ Poor ☐

5. OVERALL EXPERIENCE IN THE HOSPITAL

Excellent ☐ Good ☐ Average ☐ Poor ☐

6. WAITING TIME

- | | | | |
|-----------------------------|-------------------------------|----------------------------------|-------------------------------|
| a. For Doctors consultation | more <input type="checkbox"/> | average <input type="checkbox"/> | less <input type="checkbox"/> |
| b. For sample collection | more <input type="checkbox"/> | average <input type="checkbox"/> | less <input type="checkbox"/> |
| c. For report dispatch | more <input type="checkbox"/> | average <input type="checkbox"/> | less <input type="checkbox"/> |

7. REFERRED BY

Self ☐ Relatives/ friends ☐ Advertisements ☐ Doctors ☐ Internet ☐

Others ☐

8. SUGGESTIONS
