Summer Training at
Max Super Specialty Hospital,
Saket, New Delhi

- **Comparative Study on Effective Communication of East and West Wing, at Max Hospital, Saket**
- **Study on Compliance of Informed Consent of All the ICUS's of Max Super Speciality Hospital, Saket**
- **Study on Surgical Bed Utilization in Economy Ward in East Block at Max Hospital, Saket**
- **Study on the Compliance of Rapid Response Team**
- **Study on the Patient Identification at Max Saket, Hospital**

By
Kirti Aggarwal

Under the guidance of
Brig (Dr.) S.K. Puri

MBA Hospital and Health Management
2015-2017

The IIHMR University, Jaipur
2016

INSTITUTE OF HEALTH
MANAGEMENT RESEARCH
(WHO Collaborating Centre for District Health System Based on Primary Health Care)

IIHMR UNIVERSITY

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Dr. Kirti Aggarwal,** student of MBA-Hospital and Health Management from The IIHMR University, Jaipur has undergone Summer Training Project at **Max Super Specialty Hospital, Saket, Delhi** from **1st April to 31St May, 2016.**

The candidate has successfully carried out the study designated to her during summer training and her approach to the study has been sincere, scientific and analytical. This training is in fulfillment of the course requirements.

I wish her success in all the future endeavors.

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

Brig. (Dr.) S.K.Puri
Advisor (Academic &Student Affairs)
The IIHMR University, Jaipur

1, Prabhu Dayal Marg, Near Sanganer Airport, Jaipur-302029, Rajasthan, India.
Ph.: 0141-3924700, 2791431- 32, Fax:0141-3924738,E-mail: iihmr@iihmr.edu.in,Web: www.iihmr.edu.in

MAX HEALTHCARE
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CERTIFICATE OF COMPLETION

MAX INSTITUTE OF MEDICAL EXCELLENCE

This is to certify that

Dr. Kirti Aggarwal

has been associated as an

INTERN

with the department of

MEDICAL ADMINISTRATION

for a period of

1st April 2016 to 31st May 2016

at

Max Super Specialty Hospital,
Saket

"The Internship/Observership course is a Max certified course not affiliated to any National/International society".

Head of the Department

Dr. Shubnum Singh
Dean - Nursing, Allied Health, & Wellness Programs
Max Healthcare, New Delhi

B. Wüthrich
Ms. Brigitte Wuethrich
General Manager
Max Institute of Medical Exellence
Max Healthcare

Acknowledgement

A summer project is a golden opportunity for learning and self development.

I consider myself fortunate for having been provided an opportunity to undergo summer training at Max Super Specialty Hospital, Saket, New Delhi.

I have had the privilege to get to know many people that generously shared their experiences and knowledge with me. I am highly grateful to Ms Shikha Sharma (Program Manager, Neuro) and Ms Deepika (Team Leader, Economy Ward, Ground floor) and all of the supporting staff who helped me to complete my project. I would like to take this opportunity to express my gratitude to all of them.

I wish to express my deep gratitude and regard to my mentor Dr. Sandeep Mor, DMS (Deputy Medical Superintendent) at Max Super Specialty Hospital, Saket, New Delhi, who in spite of being extraordinarily busy with his duties, took time to hear, guide and keep me focused by giving helpful advice, constructive comments and encouragement throughout the project. His valuable inputs made this project possible. I am also very thankful to all the staff of the Max for their attention towards my work and helping me which greatly added to my project. and also Dr. Himanshi Chhabra, my batch mate cum friend for being always present by my side during my study.

The Administrative staff of the hospital has been very helpful to me and would like to express deep gratification to all.

Further I express my gratitude to my mentor at IIHMR Jaipur Brig. (Dr.) S.K. Puri, Advisor (Academic and Student Affairs) for his valuable suggestions, motivation and encouragement.

Dr. Kirti Aggarwal

Dr. Sandeep Mor

DMS (Deputy Medical Superintendent)

Max Super Speciality Hospital, Saket

New Delhi.

Table of Contents

ABBREVIATIONS

S.No.	Abbreviation	Meaning
1.	AAMI	Association for the Advancement of Medical Instrumentation
2.	IPD	Inpatient Department
3.	OPD	Out Patient Department
4.	TPA	Third Party Assurance
5.	ALOS	Average Length of Stay
6.	ACLS	Advanced Cardiac Life Support
7.	BCLS	Basic Cardiac Life Support
8.	TSSU	Theatrical Sterile Supply Unit
9.	COW	Computer on Wheels
10.	CPRS	Computerised Patient Record System
11.	CSSD	Central Sterile Services Department
12.	CTVS	Cardiac Thoracic Vascular Surgery
13.	GDA	Ground Duty Assistant
14.	HAI's	Hospital Acquired Infections
15.	HIS	Hospital Information System
16.	IPSG	International Patient Safety Goals
17.	IPS	International Patient Services
18.	LAMA	Leave Against Medical Advice
19.	LASA	Look alike Sound alike
20.	MLC	Medico Legal Case
21.	MSSH	Max Super Specialty Hospital
22.	NABH	National Accreditation Board for Hospitals & Healthcare

		Providers
23.	ISMP	Institute for Safe Medication Practices
24.	CAHO	Consortium of Accredited Healthcare Organizations
25.	BOR	Bed Occupancy Rate
26.	BTI	Bed Turnover Interval
27.	NHS	National Health Services
28.	EMO	Emergency Medical Officer
29.	ICD	Intra Cardiac Defibrillation
30.	TAT	Turn Around Time

OBSERVATIONAL LEARNING

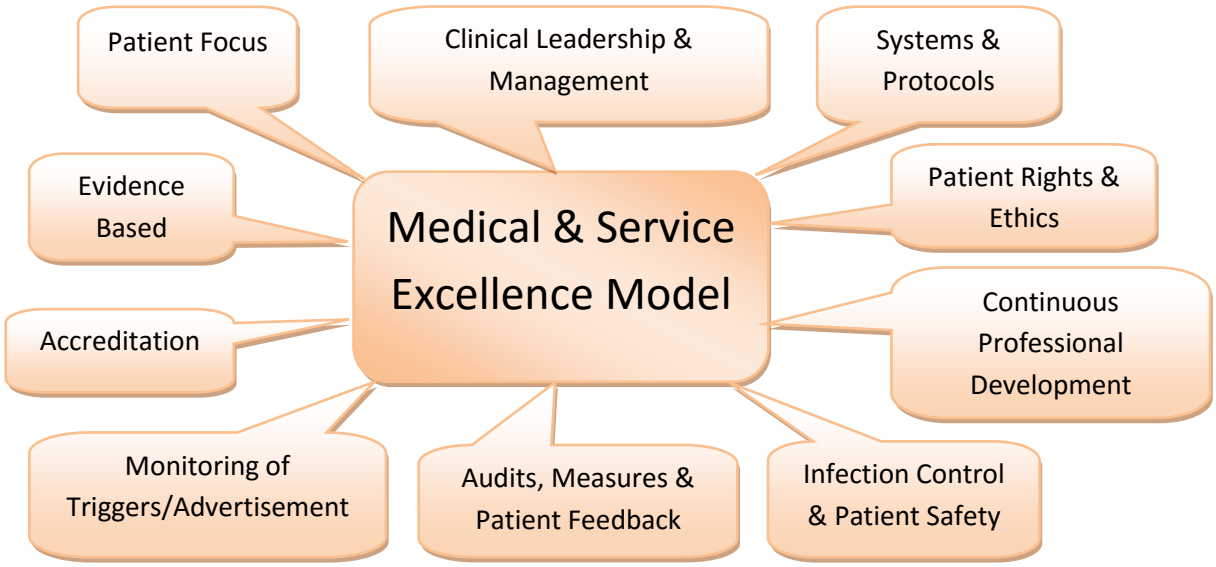
INTRODUCTION

Max Healthcare is the country's leading comprehensive provider of standardized, seamless and international class healthcare services. It is committed to the highest standards of medical and service excellence, patient care, scientific knowledge and medical education. Max Healthcare has 14 facilities in North India, offering services in over 39 medical disciplines. Of this,11 facilities are located in Delhi and NCR and the others in Mohali,Bathinda and Dehradun.The Max Healthcare network includes state-of –the-art tertiary care hospitals in Saket,Patparganj, Shalimar Bagh, Bathinda and Dehradun,secondary care hospitals in Gurgaon,Pitampura and Noida and a speciality centre at Panchsheel Park .The 14 hospitals together have over 2600 beds.

Max Healthcare is a pioneer in the introduction of technology to provide patients with the highest standards in medical care. Examples are the first Brain Suite in Asia at Max Saket and the Electronic Health Record System in use across Max Hospitals. The hospitals are equipped with the advanced medical equipment like state-of-the-art Cath labs,Robotics,OTs with HEPA, Nuclear Medicine, Gama Camera, LINAC for Radiotherapy and MRI and CT scan machines .Max Healthcare has over 2300 leading doctors,3300 nurses,3100 trained staff and has treated over 22,00,000 patients from over 80 countries.

The organization serves as a role model in several areas of clinical care and is sought after by aspiring doctors, nurses and paramedical staff as high quality organization to work for. Reaching here has not been an easy task but has been achieved by the unflinching commitment and support given by leadership team. The leadership has provided consistent strategic guidance, oversight, and has inspired the organization to meet and exceed world class benchmarks. At the hospitals, all this has only been achieved by the passion and preserving efforts put by the Max staff. And most importantly, the trust reposed in us by the patients and their families is testimony of sincerity, devotion and commitment. Our motto at Max Healthcare is "Eager to get patient home".

Max Healthcare follows a core of 'Patient Centered Care'. Widely acknowledged nationally and internationally for its quality patient care, Max has successfully implemented the "Medical Excellence Model" through its clinical team of expert physicians and nurses who work together in an integrated manner, assessing patient needs, ordering tests, planning treatments, scheduling surgeries, monitoring progress and planning for early discharge to home.



The pillars of this model include:

- Clinical governance
- Credentialing and clinical privileging of physicians & nurses
- Use of standardized, evidence based protocols
- Patient and staff safety
- Infection control
- A culture of audit and continuous professional development

Every department of the hospital was observed carefully for its working, staff, hierarchy, physical set up and major challenges faced by them and suggestions were made to overcome those challenges.

The hospital has four key areas of specialties:

- Institute of Cardiac Vascular Surgery.
- Institute of Bariatric & Metabolic Surgery.
- Institute of Oncology.
- Institute of Nephrology.

MODE OF DATA COLLECTION

Data collection involved discussions with the HODs on the managerial issues and talking to the other staff and going through the records.

Sources of Data

- **Primary**

- By interacting with the HODs, executives, Doctors and other employees of the hospital.
- By interacting with the patients and their attendants.
- Through direct observations.

- **Secondary**

- Through registered records
- Through website of the hospital
- Literature available about the hospital like magazines, pamphlets, brochures, CDs, written documents

GENERAL FINDINGS

FRONT OFFICE

- **First contact point** between the patients / their attendants coming to the facility.
- Gives directions to them about the locations of various departments.
- Helps in planning timely discharge a day before by inquiring about the same from the concerned consultants.
- Performs in patient and out- patient registration.
- Does appointment scheduling of the patients.
- Makes doctors' available summary.
- Insurance management.
- Does registration and scheduling of preventive health check-ups.

Challenges

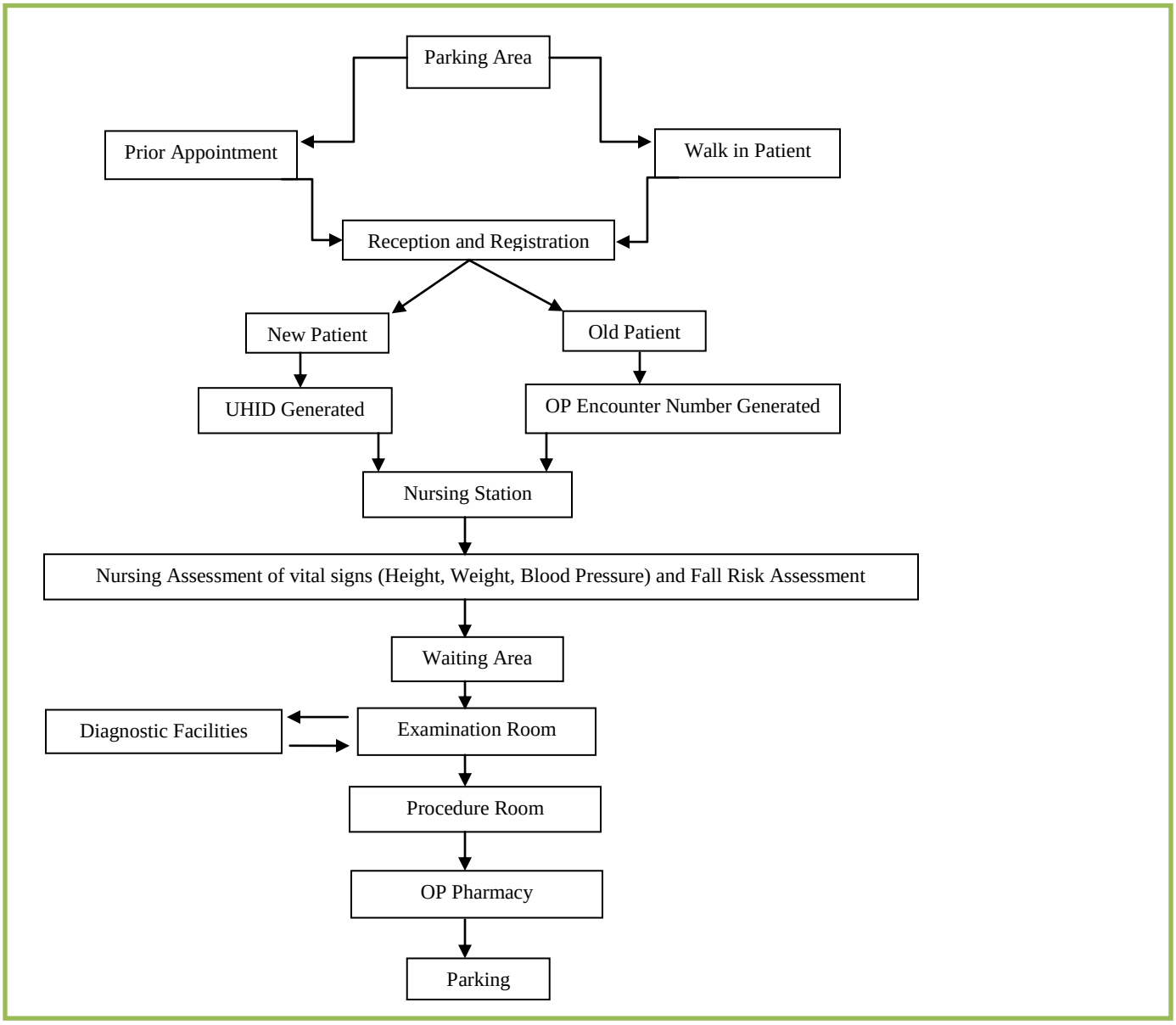
- Shortage of staff
- Huge rush during peak hours such as morning.

OUT-PATIENT DEPARTMENT

- Each **Institute** of Max Saket hospital has its own OPD area as well as IPD area / day-care area wherever applicable with doctor's chambers and procedure rooms.
- Every OPD has a procedure room and its own Front Desk.
- Appointments are centralized and are recorded on the Hospital Information Management System. As soon as appointments are fixed, a text message is sent to the patient confirming the appointment, and a reminder message is sent on the day before the appointment. No walk-in patient is turned away, and the staffs try to accommodate these patients between the appointments already scheduled for the day.
- Each OPD waiting area has the capacity to handle 70-100 patients waiting.
- In case of a new patient, registration is done which is valid pan-Max and for life time of the patient and a UHID is created which becomes a unique identification for all his health related information.

- For Chairpersons and senior doctors, a junior doctor does the initial assessment of the patient, which not only reduces the workload of the senior doctors (whose slots are always overbooked), but it also gives the junior doctors an opportunity to learn from the best brains in the industry

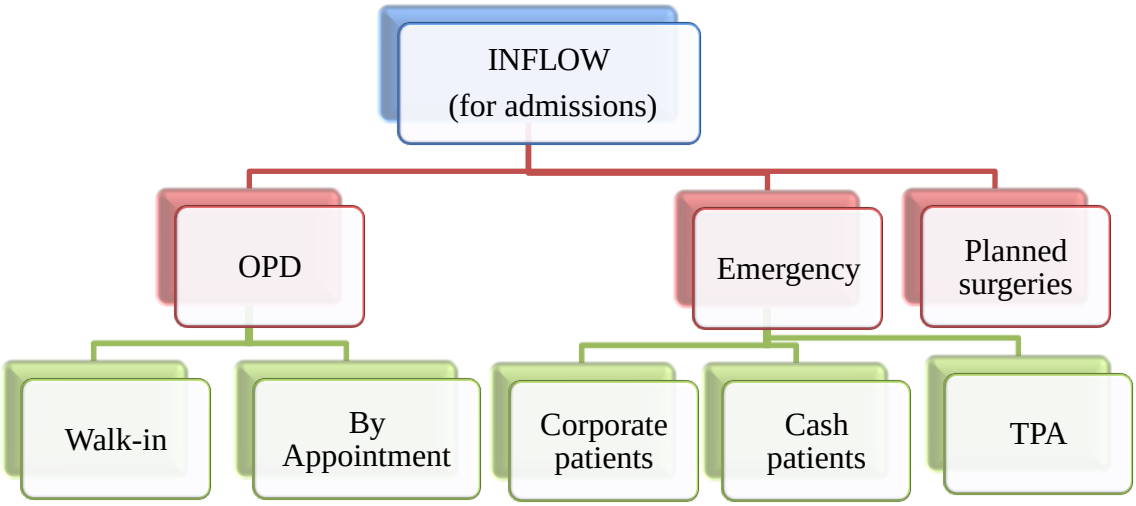
. The general process flow that is followed in all the OPDs is as follows:



ADMISSIONS DESK

- If the patient has to be admitted to the hospital , he/she first reports to the admissions desk wherein all the paperwork is completed , do's and don'ts as well as patient's rights and duties are explained to him. An initial token amount is deposited here by the patient which is according to his preference of the room (be it economy , single , twin sharing or suite)
- In case of TPA patients, the admission has to be reported to the insurance company within 24 hours.
- STAFF – 70-80; work in shifts with TPA staff working only from 5-5.

  ISSUES- Huge departmentalisation which causes co-ordination problems



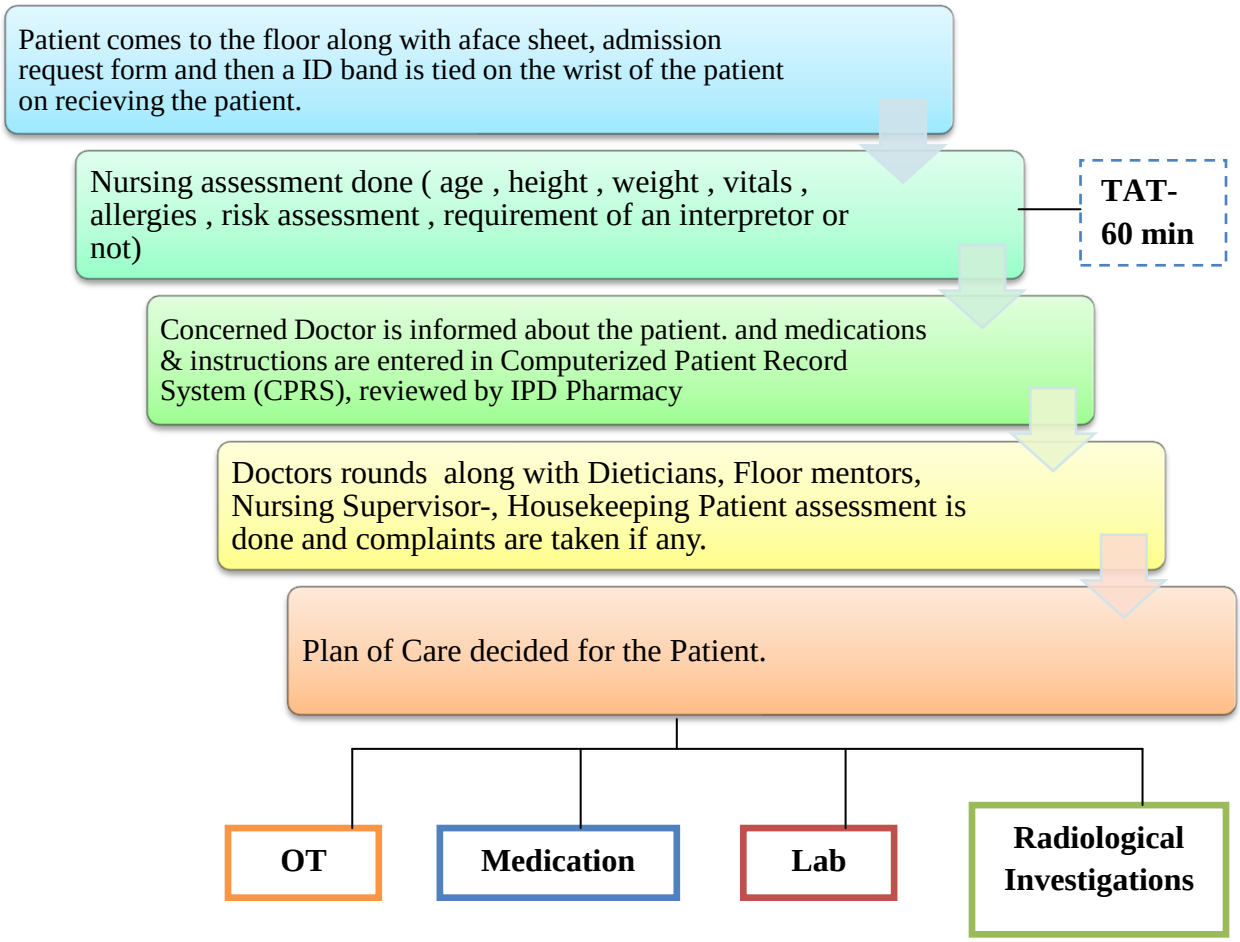
IN-PATIENT DEPARTMENT (IPD)

IPD is distributed over four floors (3^{rd}-6^{th}) in the East wing and over five floors (2^{nd}-6^{th}) of Max hospital including a total number of beds.

- Every bedside has:
  - Details of Consultant, Nurse and Mentor written at the top of every bed
  - Room equipment checklist – side rails, Oxygen, Suction
  - Important Instructions

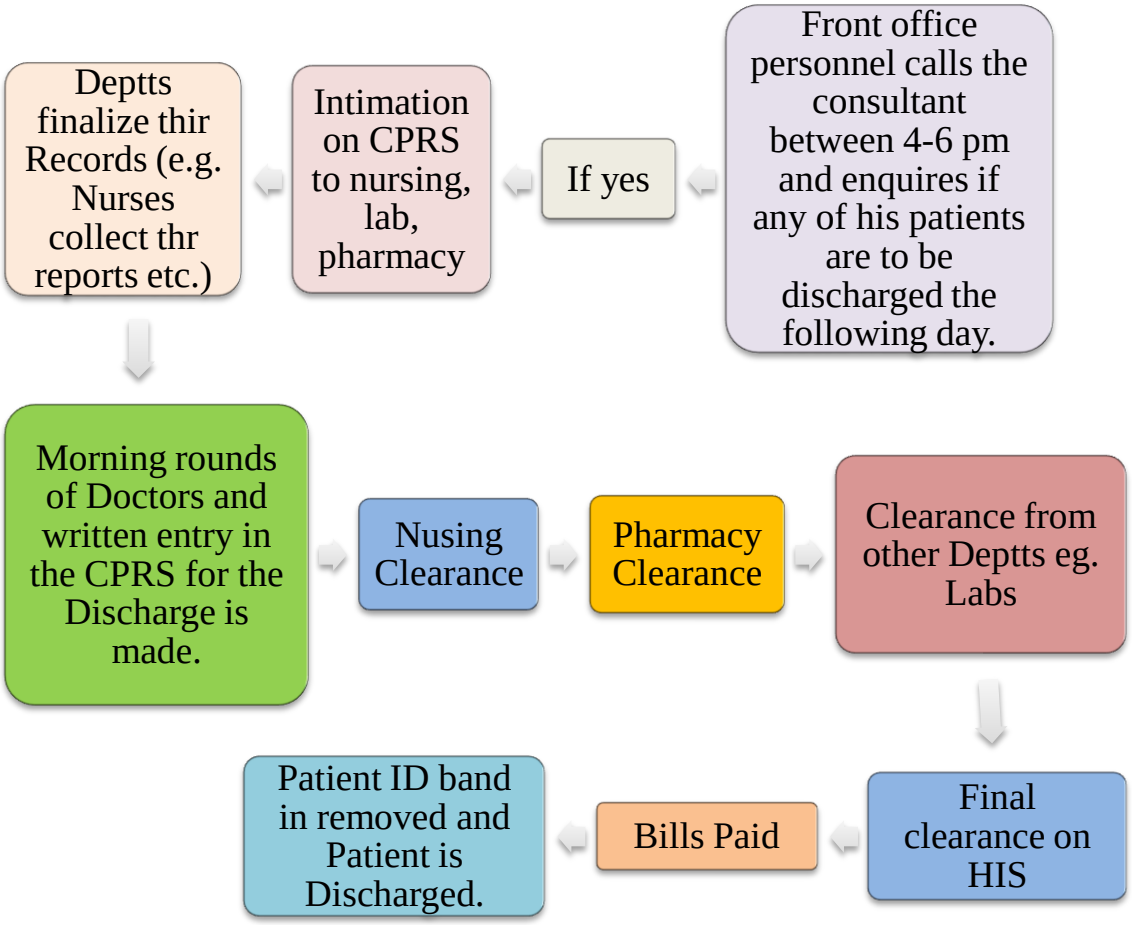
- The rooms available in IPD have the following structure of beds per room:
    - Economy room – 4 beds per room.
    - Twin Sharing – 2 beds per room
    - Single Deluxe
    - VIP suite
- Every floor has a central nursing station with
    - Information Board covering:
        - Designation & Contact numbers of
            - Duty doctor
            - Administration Staff
            - Floor Mentor
            - Support Staff
            - Ward Secretary
            - Bed Manager
        - Nurses names with shift timing and designation(8-10 nurses per shift)
    - Crash Cart parked next to the nursing station
    - Computer on wheels (COW) - 4
    - Cupboards with forms- down time form, investigation track sheet, blood request form, PAC sheet, informed consent, inventory files and registers.
    - Records room
    - Biomedical Waste Disposal
    - Medication rooms – 2 ; Pantry – 1
- Nurse to bed ratio = 1:5 or 1:6 in wards
- General Duty Assistants (GDAs) = 2-3 in every shift
- Average Length of Stay (ALOS) for normal Laparoscopic surgeries = 2-3 days
- Quality Indicators are: Patient Fall, Hypoglycaemia, Needle stick Injury, Medication error

- Quality Indicators are: Patient Fall, Hypoglycaemia, Needle stick Injury
- **Process of admission of new patient to IPD**



- **BARRIER NURSING-**
  Isolation of the patient in case the blood or urine culture of the patient has been tested positive for any infection so that the infection doesn't spread to others.
- **REVERSE BARRIER NURSING-**
  Done in cases where patient is immuno compromised so that infection doesn't travel to him from others.

Process of Discharge of patient from IPD



EMERGENCY DEPARTMENT

Due to the unplanned nature of patient attendance, this department provides initial treatment for a broad spectrum of illnesses and injuries, some of which may be life-threatening and require immediate attention, **except for major burns**. It is located at the ground floor with its own dedicated entrance and operates for 24 hours a day.

Ambulance - 2 ACLS (with CCTV camera for telemedicine, Suction Cardiac Monitor, Defibrillator, Oxygen Pump) and 2 BCLS (Ferno Stretcher, Oxygen Pump)

Patients are either transferred to other departments or are discharged within 4 hours. Max Super Specialty Hospital, Saket had made a world record for management of MI patient in emergency department from entrance to the balloon time in cath lab, in less than 35 minutes.

Response time:

- EMO response time <1 min
- Consultant response time <60 min
- Code blue response time<3min
- Ambulance response time<10 min

Infrastructure:

Total 24 bedded and 2 triage beds

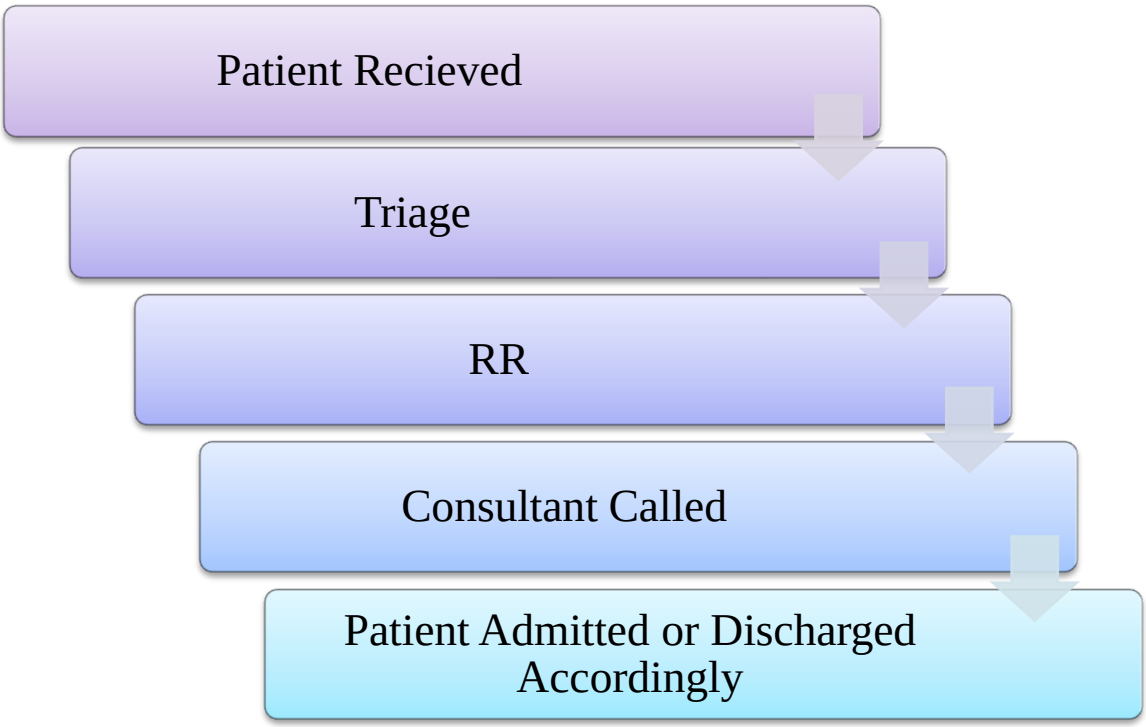
- Resuscitation suite – 2 beds
- Urgent care area – 9 beds
- Observation area - 12 beds

  Doctors work station-is located in the centre of the urgent care area
- Store room- is located behind the reception. Medications are filled twice a day and stock of two days is kept in advance for Sunday. Narcotics are also available and kept in double lock and key system.
- Hospital information system(HIS) and CPRS
- COWS(computer on wheels)
- Waiting area for patient's attendants is outside the department.

Staffing:

1. Senior consultant (Emergency medical officer)
2. 4 doctors
3. Team leader
4. Emergency physicians - 3
5. Nurses : 32 (8 nurses per shift)
6. 2 personnel at reception
7. Paramedical staff for ambulance
8. 4 GDA per shift
9. Outsourced staff: security personnel.

Process Flow of Emergency department:



OPERATION THEATRE COMPLEX

Operation theatre complex of East wing is located on first and second floor. Operation theatre complex has 11 operation theatre assigned to various departments. Cardiac, oncology, bariatric laparoscopic, gynaecology, ENT and plastic surgeries are performed in these operation theatres. Operation theatre complex of west wing is located on first floor. It has 7 operation theatres for various departments. Orthopaedic, neurology and general surgeries are performed here.

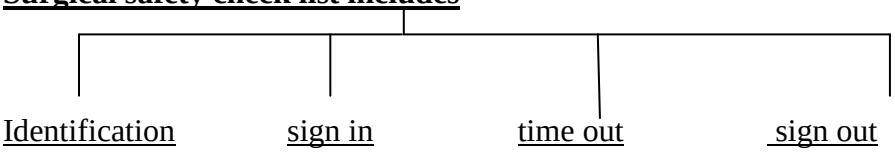
Organization of staff: The staffs of Operation Theatre are organized into four groups: Anaesthetist and surgeon, nursing staff, technician, supportive staff.

- Average number of cases done per day – 20-25 in each wing
- Temperature - 21 approx
- Humidity – 50-55
- Light – 2000 lux in the centre of OT table and decreases on moving farther

- OT booking is done through online. 2 types of surgeries are performed – **elective*e*:** surgeon gets PAC done and gives an appointment; **add on***:* manual booking of OT in case there is cancellation of the scheduled cases due to any reason.
- Each OT complex has a separate material store and a TSSU (Theatrical Sterile Supply Unit).
- Staffing ratio- Nurses : patients – 4:1(pre-op) ; 2:1(post-op)

  Technicians: patients- 1:1
- OT Utilisation – average is 70%
- Max super speciality hospital recently got a GREEN OT certificate which signifies minimal amount of pollution caused by OT gases and acceptable standards of practices being followed here.
- Sterilisation is done by ETO (12 hrs); autoclave. Fumigation is done twice a day in the morning and evening.
- Bio medical waste disposal is done every 2 hours.
- No. of pre-op beds -4
- No. of post-op beds -4

- **Surgical safety check list includes**



- Quality indicators: wrong patient , wrong surgeon , wrong surgery , return to OT(within 7 days) , waiting time for OT

INTENSIVE CARE UNIT (ICU)

Max Saket has a total of 13 Intensive Care Units in the Hospital:

EAST WING:

1. Respiratory ICU – 8 Bedded
2. CTVS Paediatric – 11 Bedded

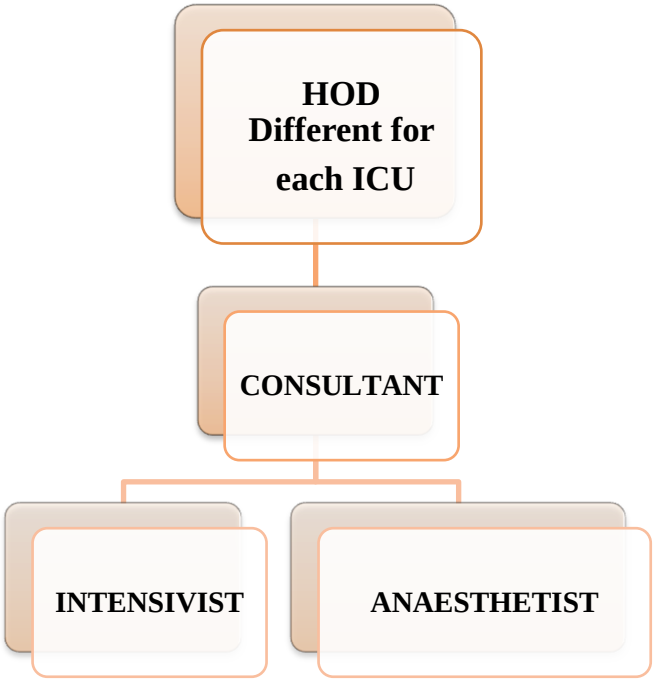
3. CTVS Adult - 17 Bedded
4. Apex Coronary Care -16 Bedded
5. Oncosurgical ICU – 9 Bedded
6. Oncomedical ICU – 12 Bedded

WEST WING:

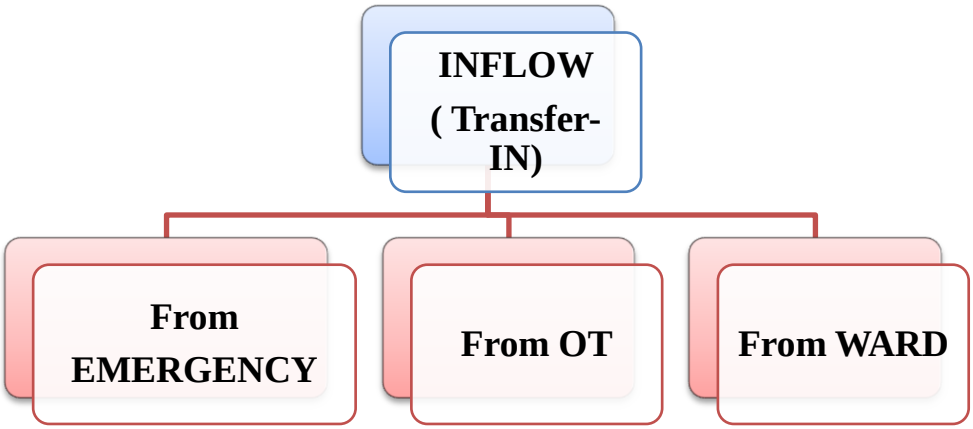
7. Medical ICU – 8 Bedded
8. Neonatal ICU – 8 Bedded
9. Stroke and Neuro Medical ICU - Bedded
10. Neurosurgical ICU – 8 Bedded
11. Surgical ICU – 11 Bedded
12. Interventional Stroke Care Unit(ISCU) – 4 Bedded
13. Paediatric ICU – 8 Bedded

All Intensive Care Units have a 24 hour service of Intensivist and an Anaesthesit.

Hierarchy



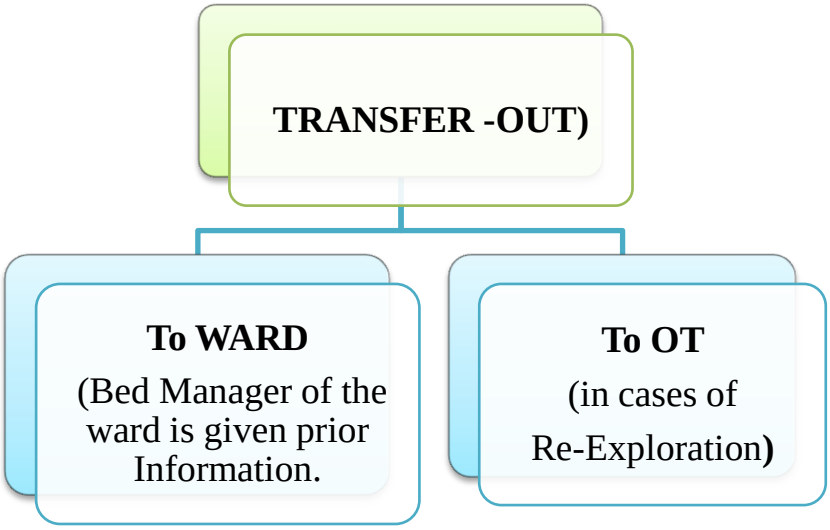
Patient Flow



Before hand information is given on call to the ICU for **transfer-in** of the patient.

- Patient: nurse – 1:1(for all patients)
- Patient counselling – done throughout the day; Relative counselling – done twice a day by the Intensivist.
- Protocol for infected patients –
    - Isolation
    - Visitor's policy- no visitor allowed inside the isolation room
    - Aseptic policy
    - Full PPA
    - Separate linen disposal in separate bags
    - Separate dressing trolley
    - Separate housekeeping material- dusters, mops etc
- Quality indicators-
    - Patient falls
    - Bed sores
    - Medication error
    - Nosocomial infections

    All the Quality indicators are duly noted in "Quality Flash" and it is audited time to time and measures are taken to reduce the number of incidents.



CATH LAB

Catheterization laboratory or cath lab is an examination room with diagnostic imaging equipment used to visualize the arteries of the heart and the chambers of the heart and treat any stenosis or abnormality found.

Diagnostic procedures performed here are:

- Angiography
- Electrophysiology study(EPS)
- Cath study

Out of these 3 angiography, angioplasty and cath study is done in cath lab 1 and EPS is done in cath lab 2.

Other procedures are:

- Percutaneous Transluminal Coronary Angioplasty(PTCA)
- Peripheral Transluminal Angioplasty(PTA)
- Radio Frequency Ablation(RFA)
- Permanent Pacemaker Implantation(PPI)

- Intra Cardiac Defibrillation(ICD)
- Cardiac Resynchronisation Therapy Defibrillator Device
- Cardiac Resynchronisation Therapy Pacemaker
- Left and right sided pressure studies
- Closure of some congenital heart defect

Slots are booked for everyday as per the doctors' and patients' convenience. About 70% of the slots booked are treated everyday

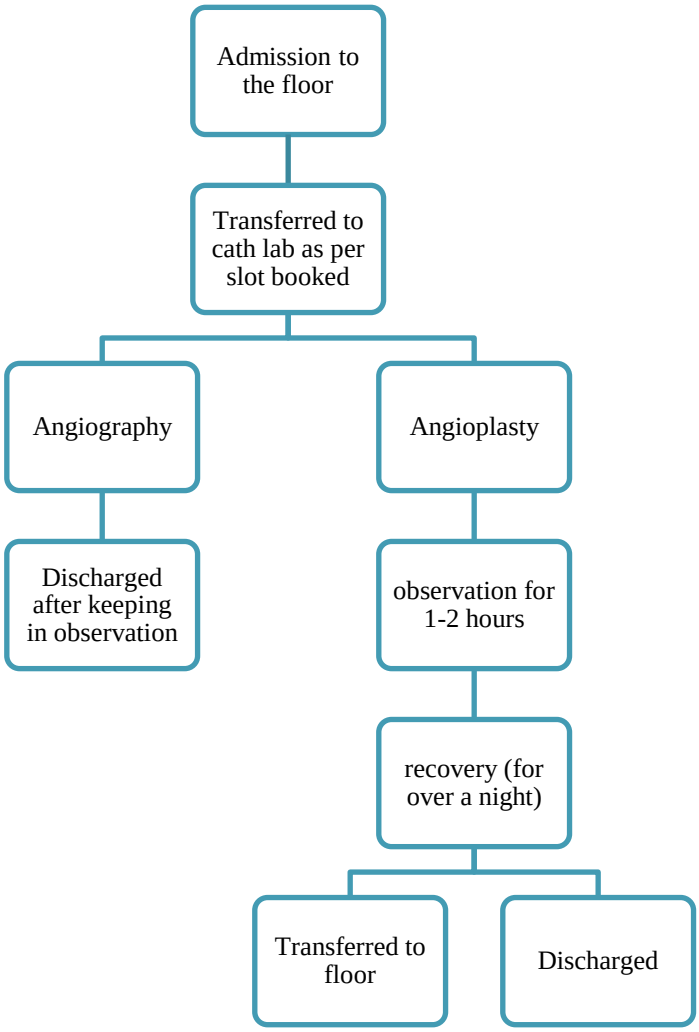
Units of cath lab:

1. Cath lab 1
2. Cath lab 2
3. Technical room
4. Observation area
5. Technician room
6. Store room and utility room
7. Observation area-7 Beds
8. Instrument washroom

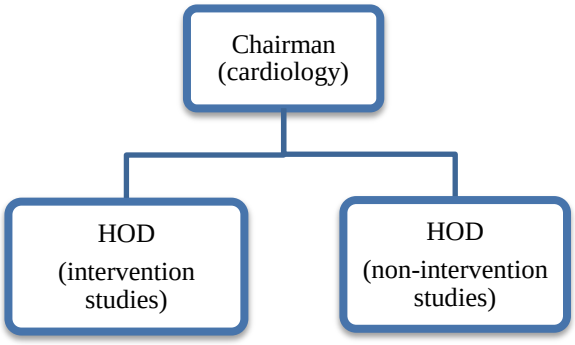
Location: Cath lab is located on the first floor with the vicinity areas as

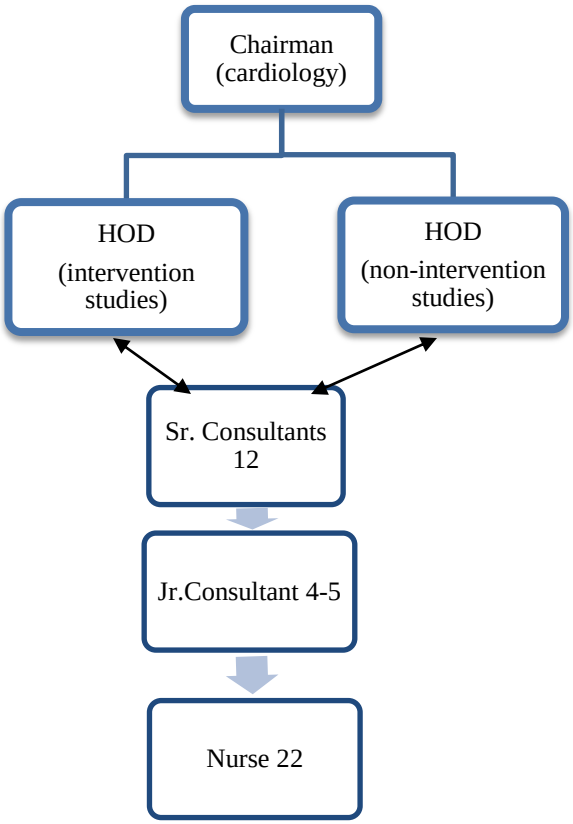
- Emergency department
- Operation theatre
- Cath recovery-14 Beds
- Coronary care
- CTVS OT
- SICU
- PICU
- MICU

PROCESS FLOW OF CATH LAB:



STAFF OF CATH LAB





DEPARTMENT OF LAB SERVICES

INTRODUCTION-

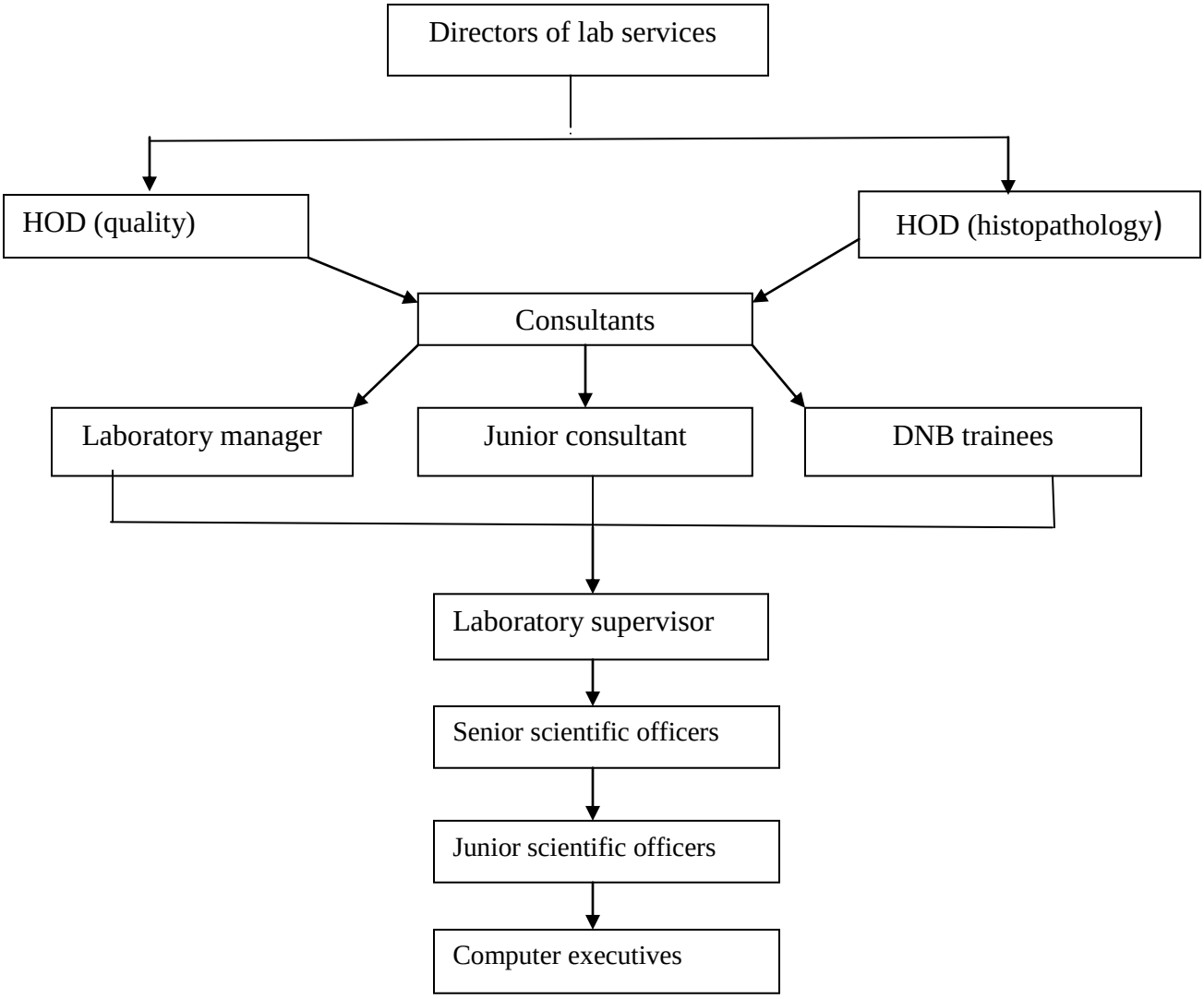
An ISO 9001:200 certified lab, it is open 24 hrs a day. It's a high-tech lab with fully automated instrument which are directly interfaced with ***hospital information system*** and ***laboratory information system***. Facility of stat tests (emergency) and sample collection from home is also available.

LABORATORY COMPRISES OF THE FOLLOWING DEPARTMENTS-

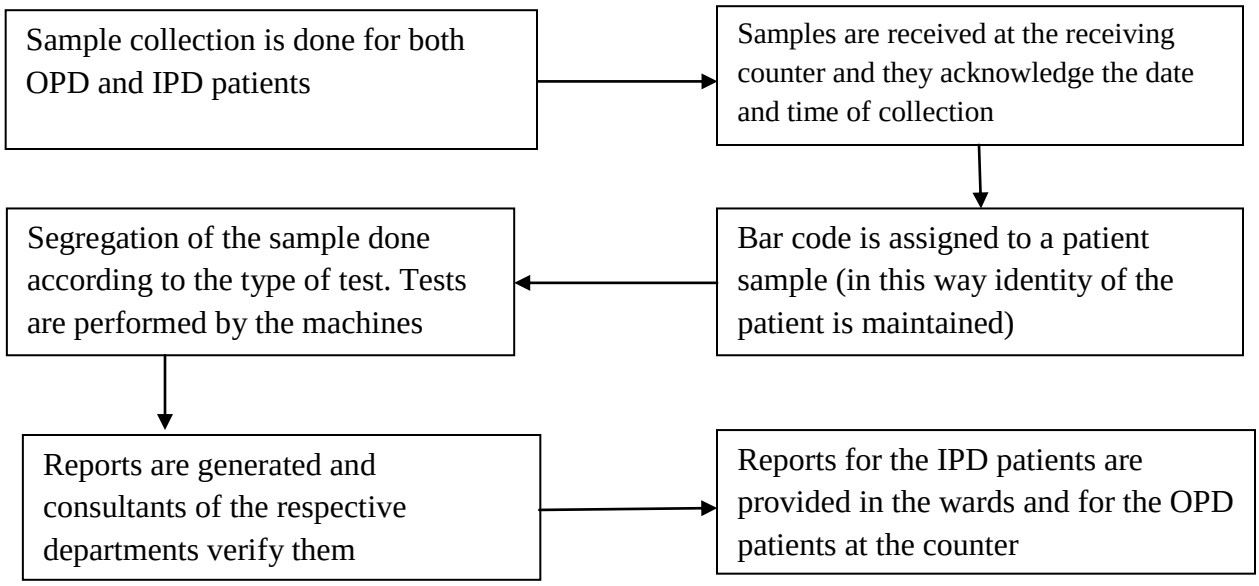
- Biochemistry
- Haematology
- Immunoassay
- Histopathology
- Clinical pathology
- Serology
- Microbiology

HIERARCHY- The Department of Lab Is Broadly Divided In Two Departments

- Lab medicine
- Histopathology



PROCESS FLOW-



LABORATORY INFORMATION SYSTEM-It is connected with hospital information system

- Sample received-red colour
- Samples acknowledged-yellow colour
- Test done-blue colour
- Result verified-green colour
- Billing done-pink colour

RADIOLOGY DEPARTMENT:-

Situated at the ground floor of the west wing of the hospital.

The total staffs working in the Radiology Department are 60.

Procedures done in the department:-

(1) Routine X-Ray studies

(a) Plain - e.g. chest, spine, etc

(b) Routine fluoroscopic procedures e.g. Barium studies

(2) Routine ultrasound studies

(a) Ultrasonography - e.g. Abdomen, Pelvis

(b) Doppler studies peripheral (B/W & color) e.g. 2 D echo, vascular studies, etc

3) Mammography

4) Dexascan (Bone densitometry)

5) Special imaging techniques

(a) CT Scan (Computerized Axial Tomography)

(b) MRI (Magnetic Resonance Imaging)

Divided into two parts:-

1) For Ultrasonography, mammography, Dexascan

2) For CT scan, MRI, X-ray, fluoroscopy

Consist of:-

1) Reception:-Counter for appointment and billing

2) Waiting room with general facilities like toilets, drinking water, air conditioning

3) Diagnostic room

4) Counseling room

5) Changing room

6) Film processing room

7) Radiologist office

8) Report collection room

There are two MRI and one CT scan machine in the department.

Timings for OPD patients:-8am to 8pm

In between this IPD and Emergency patients are also taken.

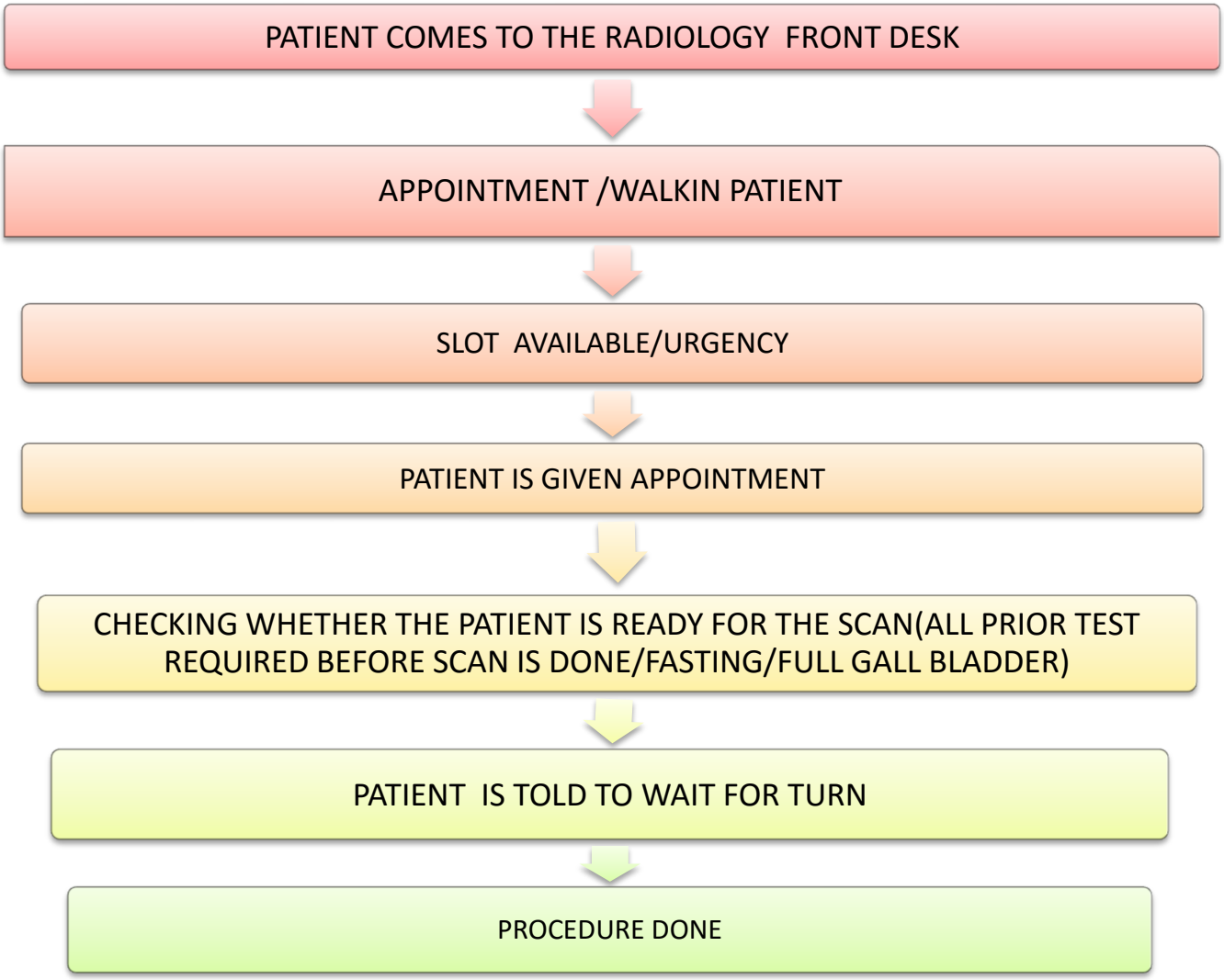
Main OPD hours: - 8am to 6pm and after 8pm only IPD and Emergency patients are taken

Report collection: - If the scan is done before 2pm, reports are ready by the evening and can be collected in the same evening. And if done after 2pm, report will be delivered next day.

Patient who comes in the radiology department either walks in or takes the appointment.

Appointment patients are given preference whereas walk in patients have to wait. Emergency, doctor's referred patients or ICU patients scan is done as soon as possible.

Process flow in radiology department (OPD)



Process flow in radiology department for outpatients.

Firstly, the patient comes to the radiology front desk after been prescribed by doctor for the scan; patient is either taken prior appointment or walk in patient. The availability of the slot required is then checked for the walk in patient by the front desk. Once the slot is checked, the requirements for the scan i.e. condition of the patient required to undergo the scan is checked. (E.g. proper creatinine level for renal patients).After that the patient is been provided the appointment and been told to wait for his turn. Finally the procedure is been performed.

- Emergency patients especially with a critical diagnosis – highlighted in the register and the consultant is immediately informed about the findings.
- Procedures wherein contrast is to be given, for example MRI, consent of the patient is taken prior to the procedure.

BLOOD BANK

Max super specialty hospital has its own blood bank. All blood groups are available. But it is preferred that patient arranges blood through his relatives or any friend and should give replacement.

Blood bank consist of

1. Sample collection area / reception area: In reception area a form is given to the attendant of the patient regarding their details before he/ she donates the blood.
2. Aphaeresis area: blood has several components including red blood cells platelets and Plasma.
   Donor aphaeresis is a special type of blood donation in which a specific component platelet, plasma is withdrawn from donor.
3. Component room: In component room the whole blood is separated into packed cells FFP and platelets.
4. TTI room: It is to diagnose transfusion transmitted infections. If donor is detected positive for TTI status it means donor have the potential to transmit the infection to their partner and children.
5. Issue room: This room is to issue the screened blood bags.

Staff of blood bank consists of 1 HOD, 2 blood bank officer, 1 technician supervisor, 16 technicians, 2 staff nurse, 2 computer executives, 4 GDA.

- The Department is headed by Dr.Sangeeta Pathak and the technical manager is Ms. Ruchi.

- The blood donation timings are from 9am to 5pm and approximately one volunteer comes for donating blood. Blood can be donated after every 3 months.
- The PRBC are stored for 45 days at 2-6 degree Celsius.
- The Platelets are stored for 5 days at room temperature 22± Celsius.
- The FFP (Fresh Frozen Plasma) are stored for 1 year at -80 degree Celsius.

CENTRAL STERLIZATION SERVICE DEPARTMENT

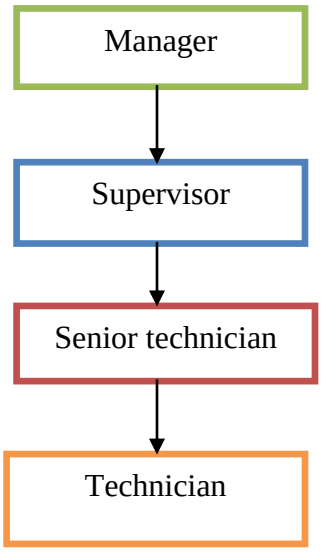
INTRODUCTION-

CSSD is the heart of the hospital infection control and the most important unit of the clinical support services. CSSD role lies in receiving, cleaning, packing, disinfecting, sterilizing, storing and disinfecting instruments as per well-delineated protocols and standardized procedures.

CSSD department in max healthcare, Saket is a centralized department and the location of the department is in the basement

The main aim of the CSSD department is to reduce the level of micro-organisms from 10^{6} to 10^{-6}.

HIERARCHY OF THE DEPARTMENT-



The Department is headed by Dr. Sanjeev Bhatia.

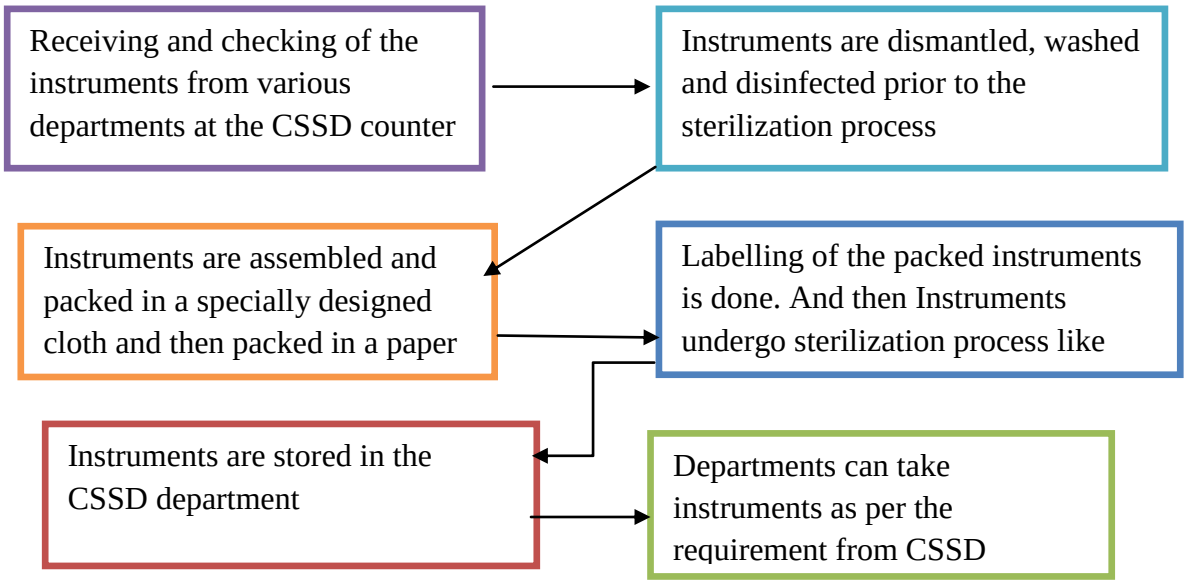
ZONES PRESENT-

- Decontamination
- Clean
- Sterile

Color coding for the following zones -

- Decontamination area-red colour
- Clean area-blue colour
- Sterile area-green colour

PROCESS FLOW-



- At the time of receiving the instrument at the CSSD department, the instruments are counted, checked for any damage, segregated according to the method of sterilization required for the instrument.
- Instruments used for the washing of the instruments are fully automated and according to the European standards.
- For packing of the instruments medical grade paper and cloths are used which are specifically designed for the purpose(they have a zig -zag pattern)

- Once sterilized and packed instrument can be used within 6 months.

EQUIPMENT LIST-

- Washer-
- Autoclave -
- Plasma sterilizer-
- ETO sterilizers-
- Dryers-
  - Air-guns-
  - Water-guns-
  - Ultrasonic cleaners-

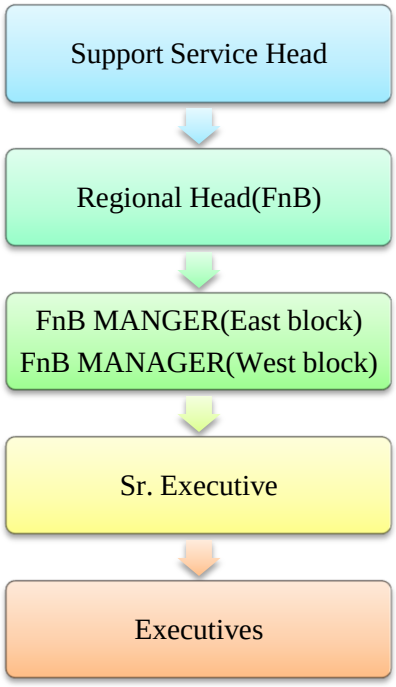
QUALITY INDICATORS-

Various quality indicators used in CSSD are-

- ***Batch monitoring strip-*** a yellow colored strip which is attached to every lot which on exposure to right temperature and pressure turns black.

FOOD & BEVERAGES

- Food & Beverage department is responsible for the supply of food to the in-patients and sometimes their attendants (if required) and also for arranging food during various meetings and conferences in the hospital.
- The department has been outsourced to sodexo pvt, ltd., however, the management and supervisory staff is in-house.
- Staff- 230 (outsourced) ; 11 (Max in house)
- Hierarchy



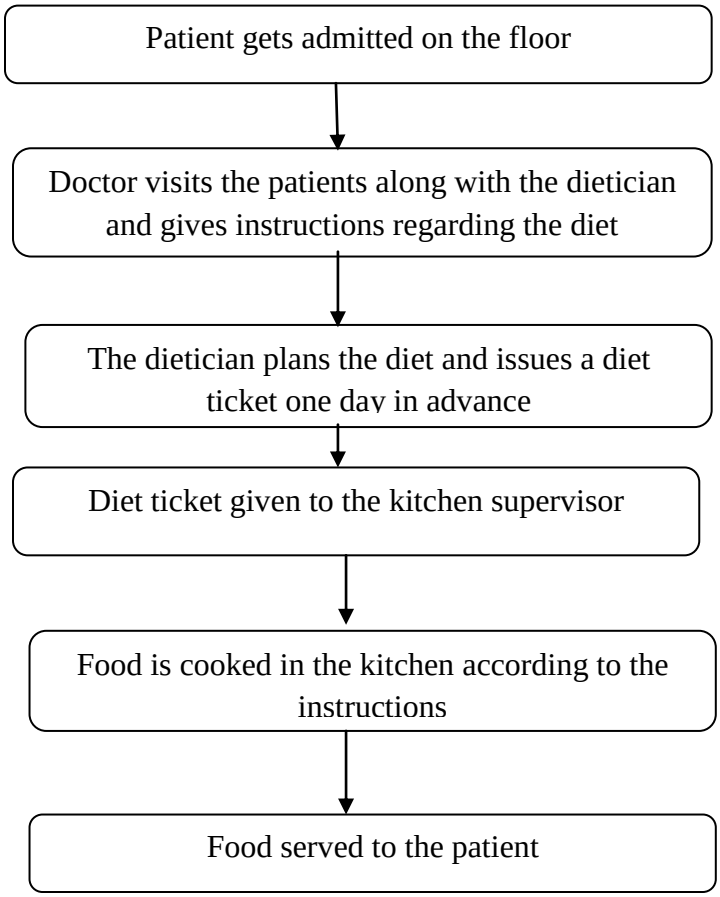
Time table for the diet of the patient

7-8AM	Breakfast
10:30-11:30AM	Soup/Beverages
1-2PM	Lunch
4-5PM	Evening tea
6-7PM	Soup
8-9PM	Dinner

- Dinner of the same day, breakfast and lunch of the next day are decided prior in the evening and diet tickets are issued by the dietician and given to the chef.
- Apart from these if patients wants to have something extra, those can be provided to the patient after consulting dietician and no extra charges are taken from the patient.

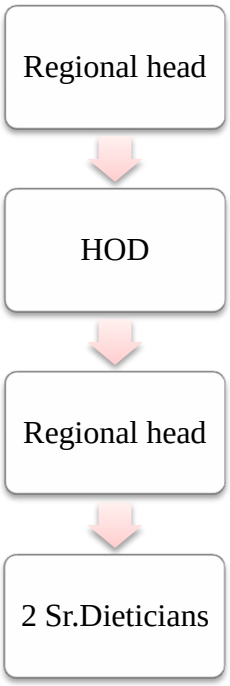
- Different menus offered are:
  - Continental
  - Afghani – for middle east patients
  - No onion and garlic – for middle east patients
  - Indian

- **Process flow** of the department



DIETETICS

- The department plans diet for all IPD patients in accordance with the primary consultant's opinion on the same.
- Staff- 13 in total.
- Hierarchy

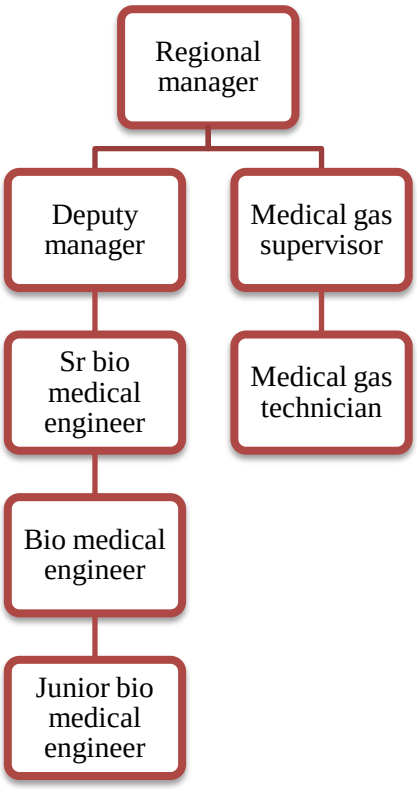


- Dietician: patient – 1:50
- Assessment of each patient to be done within 24 hours of admission and thereafter every 8th day after initial assessment.
- For enteral nutrition, all commercial supplements for each disease are available.

BIOMEDICAL ENGINEERING

- This department deals with purchase, installation and commissioning, training on operating, handling and maintenance of medical equipment in all departments of the hospital.
- Looks after running equipment and new equipment.
- For Running equipment
  - Preventive maintenance is done – to prevent breakdown, maintenance is done.
  - Calibration is done – i.e. to check how accurate an equipment is functioning
  - Breakdown call is checked for
  - Depreciation is measured
- For new equipment
  - Installation and commissioning is done.
- AMC and CMC records are maintained.
- CAPEX (Capital Expenditure) and OPEX (Operating Expenditure) registers are maintained.

- Equipment Incident report is made in case of any physical damage – it is filled mentioning how the damage did happened. Thereafter replacement or repair whatever is required is done.
- Organisational chart



- Gas manifolds are also handled by this department and Max is awarded green OT certificate because of the efficient dispersion of OT gases.

PHARMACY

Max pharmacy is self-owned with Central Pharmacy situated at corporate office, Okhla. There are 2 In-patient pharmacy stores and 2 Out-patient stores in the hospital and 1 for economic weaker sections (EWS).

PURCHASE

Auto purchase requisition is given to central purchasing team which is forwarded to vendor (outsourced). For purchasing the items ABC method is followed. Weekly requisition is done and vendors take minimum 3 days for delivery of drugs to hospital.

STORING OF DRUGS

Medicines are arranged according to VISTA (e-care) in Client patient record system via generic name in alphabetic order in racks, shelves, cupboards and drawers. Oral,

parenteral and topical items are stored separately. Near expiry (expiry within 3 months) is stored in separate designated area to expedite the consumptions.

INDENT AND DISPENSE OF MEDICATIONS.

In patient pharmacy-

In CPRS, Medication orders posted by the clinicians is verified by pharmacist on PUTTY System labelled with (patient info, SSN no., drug name,) then the medications are dispatched after Billing via HIS (Hospital information system) and finally handover to GDA to dispense medicines. The Stat orders required immediately are dispensed within 30 minutes. The normal order is dispensed within 1 hour and routine order is delivered by 1 round per day.

NARCOTICS DRUGS

They are in kept in double lock and key system. Documentation of narcotic drugs is appropriately maintained.

Narcotics drugs under statutory regulation being used in max hospitals includes: injection and transdermal patch of Fentanyl and injection and tab. of Morphine.

LOOK ALIKE AND SOUND ALIKE DRUGS

Look alike and sound alike medications have high medication error due to similarities in nomenclature and packaging.

In the main pharmacy stores, (SALA Medications) are stored separately in 2 adjacent racks with blue colored sound alike and pink colored look alike medications warning stickers to avoid confusion while dispensing.

Medication Recall: If a drug is found to be defective, it is reported to the Okhla office where the records for that particular series of drugs dispensed is checked and verified for medication recall.

Licences acquired by Max hospital pharmacy -

1) Pharmacist License
2) Narcotics License

INVENTORY MANAGEMENT PARAMETERS

I. ABC Class
   - A Items: 7 days
   - B Items: 10 days
   - C Items: 15 days

II. EOQ - (economic order quantity)

III. LEAD TIME – Time from ordering to delivery of drugs

IV. VED – Vital Essential Desirable (According To move of drugs)

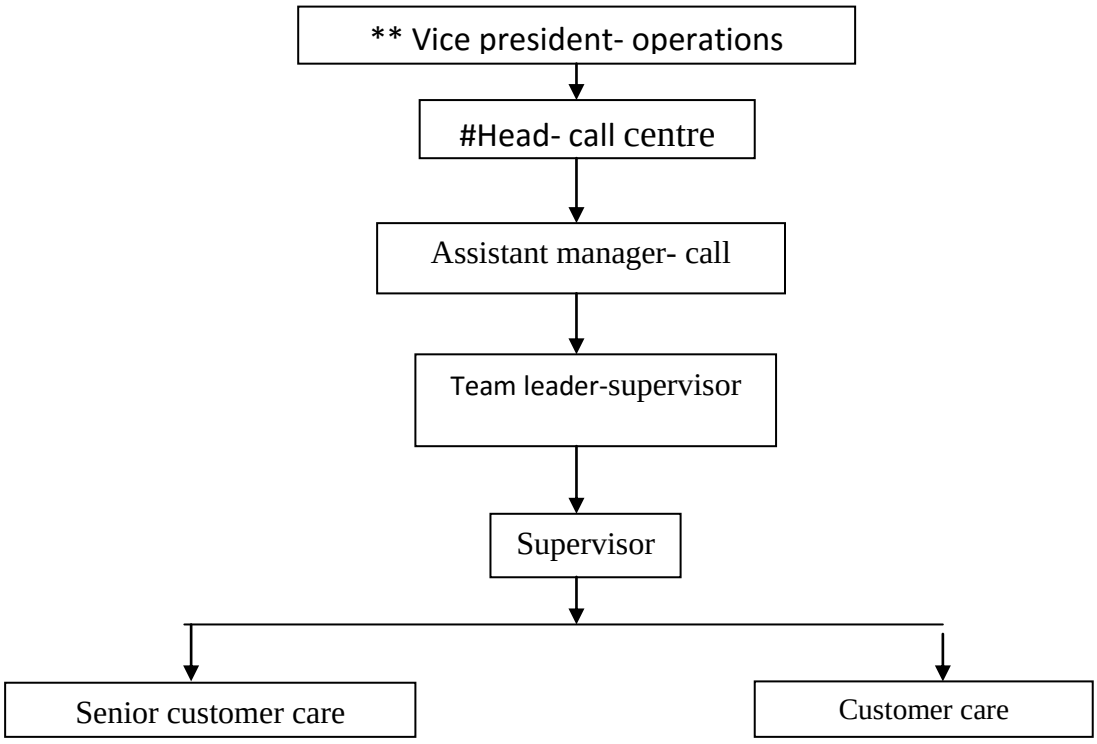
CALL CENTRE

Call centre of Max hospital, Saket operates at 24*7. It is centralized patient contact centre for Saket. It can be used as an information centre for all customers.

Call centre deals with:

- Doctor's appointment
- Health check ups
- Radiology and diagnostic appointments
- Patient's information
- Doctor's information
- Employee's information
- Speciality information
- Other department information
- It handles internal emergency e.g. Blue code
  Main board line number is: 26515050

Organization chart:



SECURITY DEPARTMENT

The security department is an **eye** and **ear** of every organization acting as a liaison between management and staff. The control room of Security Department is located on B1 (basement) of East Wing, Max Saket.

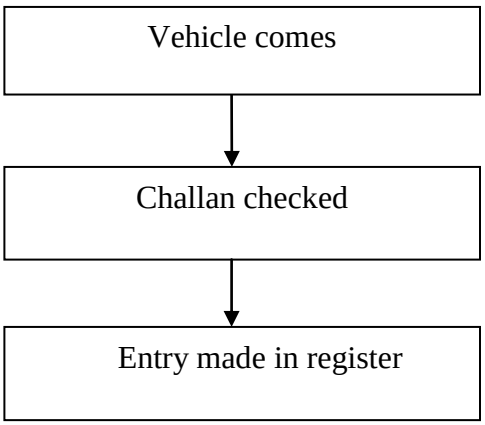
Functions of Security Department:-

1. Security management:-

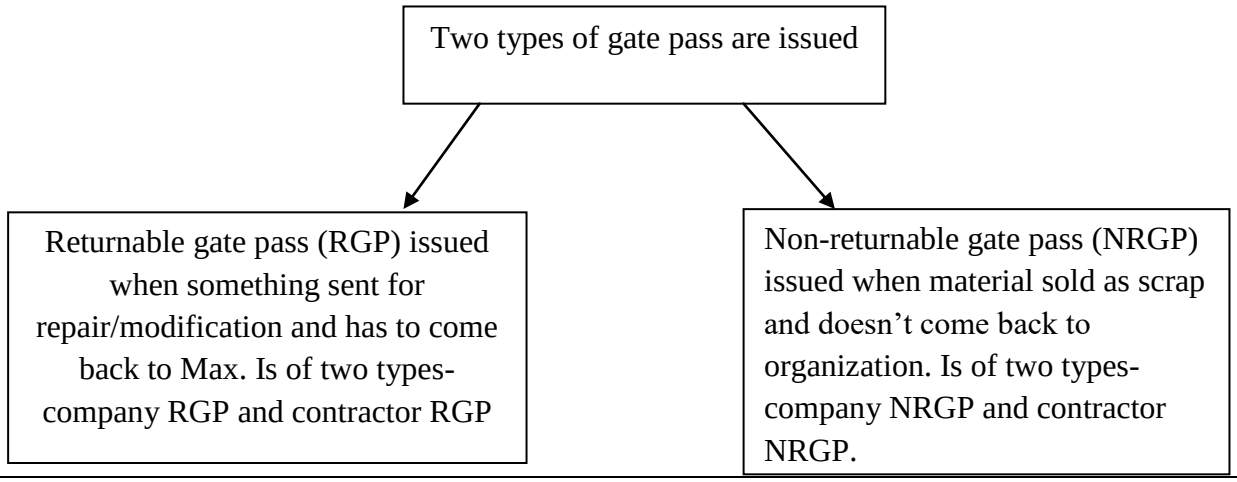
- Selection of people(guards and supervisors)
- Deploying of security staff to different floors and departments
- Checking of people entering hospital
- Turnout and grooming of security staff
- Training of security staff
- MLC handling
- Dispute handling

2. Material management:-It includes management of both incoming and outgoing materials.

a. Flow for incoming materials:-The incoming materials are received either from a company or a contractor to Max. The process flow is as under:-



b. Flow for outgoing materials



3. Disaster management:-

There are six emergency codes:-

1. Red- Fire
2. Black- Bomb threat
3. Blue-Cardiac arrest
4. Yellow- External disaster like earthquake
5. Violet-Violent patient
6. Pink- Missing patient

The SOP's and disaster management plans are prepared by the Security Department. Fire management system includes smoke detectors, sprinklers fitted on ceiling and fire shafts in all corridors.

Walkie talkies are an important source of communication.

Other disasters include floods, water logging, terrorist attacks.

4. Valet management:-

- Helps to optimally utilize the parking space.
- Within a time frame of maximum 7 minutes, vehicle is handed over to customer when asked for in porch.

HUMAN RESOURCE MANAGEMENT

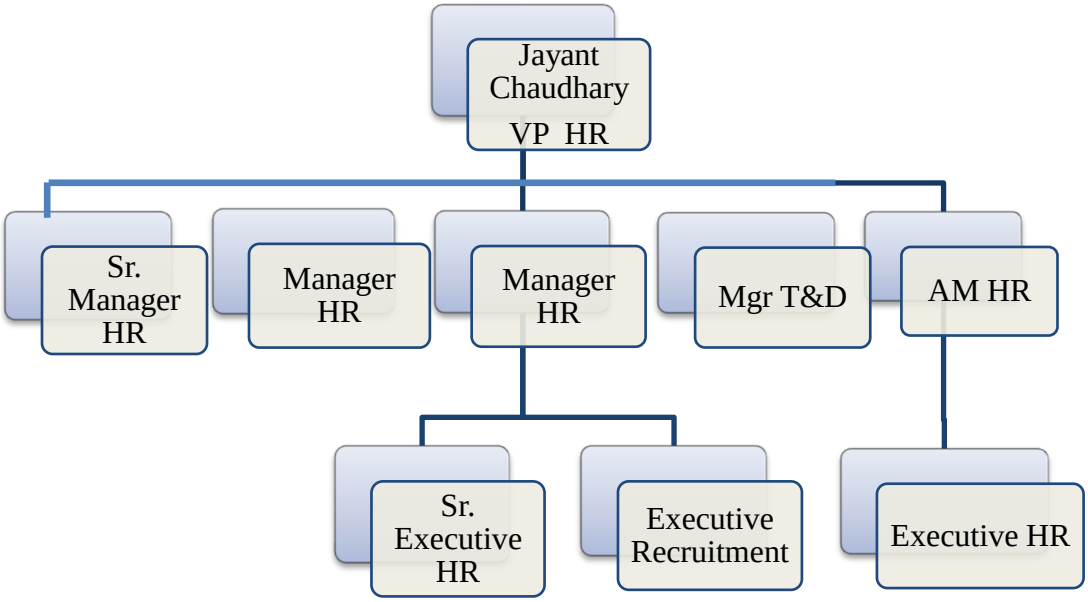
Human resource management (**HRM** or simply **HR**) is a function in designed to maximize employee performance in service of their employer's strategic objectives. HR is primarily concerned with how people are managed within organizations, focusing on policies and systems.

Following are the policies undertaken by the Human Resource Management Department:-

- Human Resource Planning Policy.

- Job Profile Format.
- Recruitment policy.
- Training and development policy.
- Induction and Orientation policy.
- Performance appraisal Policy.
- Complaint & Grievances Redresses Policy.
- Disciplinary Policy.
- Medical Discount Policy.
- Annual Medical Check-up Policy.
- Clinical credentialing and privileging Policy.
- Nursing Credentialing and Privileging Policy.

HR Structure



INTERNATIONAL PATIENT SERVICES (IPS) DEPARTMENT

It takes a lot to be a world-class health care services provider and as per patient registration data, over 11 Lakh overseas patients have been helped to get back to their normal lifestyle. This department, situated in East wing, is exclusively dedicated for the services of international patients.

Contact Procedure:

- Patient sends a query and/or reports
- IPS Team consults the relevant consultant and provides diagnosis, proposed treatment and estimate
- If required, a telephonic meeting may also be arranged
- Patient confirms if he wants to have treatment at Max Healthcare to provide Visa Facilitation Letter
- Patient confirms the arrival date and time
- IPS Team, in the meantime, books room, OT etc. for the patient
- Patient is received at the Airport and then, brought to the Hospital/Guest House/Hotel

Also, another contact procedure is as follows:

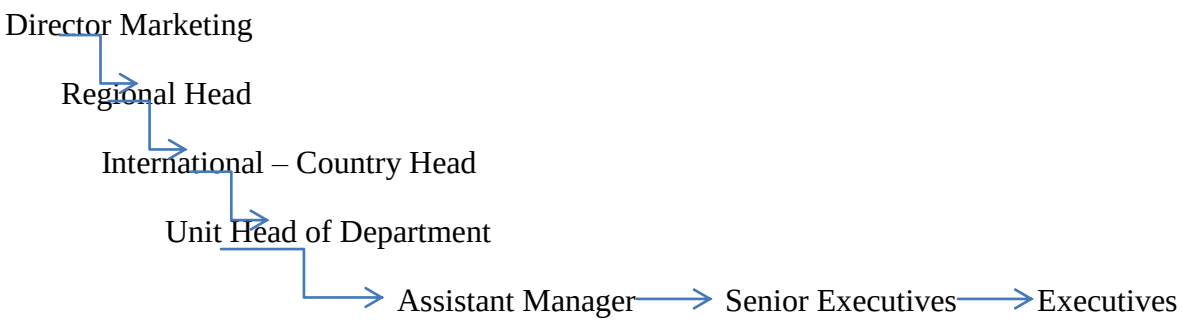
- Max hospital conducts free outreach OPDs in other countries, at least 1-2 per year
- Max hospital also has tie ups with different hospitals in these countries

International patients avail treatment in India mainly because these facilities or treatments are not available in their respective countries, and are available at a much cheaper price in India than other countries such as US, UK or European countries. The countries from where patients come to seek treatment most commonly are Iraq, African countries (Nigeria, Congo), Oman, Uzbekistan, Afghanistan, Nepal, and Bangladesh.

The hospital provides:

- Various Regional Translators such as Arabic, Persian, Iraqi, Bangladeshi and Russian (In house interpreter).
- Assistance in ground transportation such as finding a shuttle, hiring a car or choosing any other mode of transportation within the city.
- Relationship Managers, who closely work with over 50 Diplomatic Missions and numerous Expat bodies to ensure that international patients have a comfortable and memorable stay in India.

Staffing:



A COMPARATIVE STUDY ON EFFECTIVE COMMUNICATION BETWEEEN EAST AND WEST BLOCK

AT

MAX SUPERSPECIALITY HOSPITAL, SAKET

Institute of Health Management Research, Jaipur

DECLARATION

I do hereby declare that I am a student of 1st year, MBA in Hospital and Healthcare Management, IIHMR University, Jaipur, Rajasthan session 2015-2017.

I would like to state that I have carried out my Internship on the topic "A comparative study on effective communication between East and West block" under the guidance of Dr. Sandeep Mor (Deputy Medical Superintendent) at Max Super Specialty Hospital, Saket, New Delhi for the partial fulfillment for the degree of MBA in Hospital and Healthcare Administration.

This project work is my own and has not been submitted to any of the other Institute or University for the purpose of award of any degree or diploma.

Dr. Kirti Aggarwal

IIHMR University

(2015-2017)

TABLE OF CONTENT

INTRODUCTION

Information is the lifeblood of healthcare and communication systems are the heart that pumps it.

Communication is the act of conveying intended meaning to another entity through the use of mutually understood signs and semiotic rules. The basic steps of communication are the forming of communicative intent, message composition, message encoding, and transmission of signal, reception of signal, message decoding and finally interpretation of the message by the recipient.

International Patient Safety Goals (IPSG) address specific areas of concern in some of the most problematic areas of patient safety.

Goal 1: Identify patients correctly

Goal 2: Improve effective communication

Goal 3: Improve the safety of high-alert medications

Goal 4: Ensure correct-site, correct-procedure, correct-patient surgery

Goal 5: Reduce the risk of health care-associated infections

Goal 6: Reduce the risk of patient harm resulting from falls

Communication systems are the formal or informal structures organizations use to support their communication needs. A communication system involves people, the messages they wish to convey, the technologies that mediate conversations, and the organizational structures that define and constrain the conversations that are allowed to occur. Elements of communication systems include:

- **Communication channel:** The message is conveyed through the channel and there are a wide variety of different communication channels available like face-to-face conversation, telephone or e-mail and written. When two parties exchange messages across a channel at the same time, this is known as **synchronous communication.** Telephones are one of the commonest two-way synchronous channels.

Synchronous communication is interruptive, and these interruptions may have a negative impact on individuals who have high cognitive loads**.** For example, a busy clinician may forget to carry out a clinical task because they have been interrupted while they are busy. In contrast, when individuals can be separated in time, they may use an **asynchronou***s* channel to support their interaction**.**

- **Types of message***:* **Informal messages** include voice and e-mail messages**.** **Structured or formal messages** include hospital discharge summaries, computer-generated alerts and laboratory results.
- **Communication policies***:* A hospital may have many different policies that shape their communication system performance. For example, it might be a policy to prohibit general practitioners to obtain a medical record directly from the records department without the permission of a hospital clinician.
- **Agents***:* Agents in the communication system help to minimize the interruption to the clinical staff .Agents have attributes like their understanding of specific tasks and language..
- **Security protocol***:* In health care, patient privacy is very important so that unauthorised individuals do not access clinical records. This can be done by "encoding "the messages. For example, reports of medical investigations sent by e-mail. The choice of security protocol used will reflect the degree of risk associated with unauthorised access to message content.

Information and communication technology offer powerful means for restructuring many health service processes, and there currently are an increasing array of communication channels, media, and devices from which communication services can be constructed. In health care, where we are constantly reminded of the need to make pragmatic improvements to the outcomes of health care delivery, empirical evidence is needed to guide the use of new technologies, and there is a now thankfully a growing literature on the value of communication systems in health service delivery. Nevertheless there remains a substantial imbalance in the attention that is given to communication support, compared to that paid to traditional information systems. Yet communication enhancements seem to be one of the cheapest and most cost effective

interventions we have available to improve the quality and safety of clinical services, and deserve much greater attention than they currently receive.

REVIEW OF LITERATURE

Impact of Communication in patient care and safety

"Extensive research has shown that no matter how knowledgeable a clinician might be, if he or she is not able to open good communication with the patient, he or she may be of no help."

There are strong positive relationships between a healthcare team member's communication skills and a patient's capacity to follow through with medical recommendations, self-manage a chronic medical condition, and adopt preventive health behaviors. Studies conducted during the past three decades show that the clinician's ability to explain, listen and empathize can have a profound effect on biological and functional health outcomes as well as patient satisfaction and experience of care.

Patients' perceptions of the quality of the healthcare they received are highly dependent on the quality of their interactions with their healthcare clinician and team. There is a wealth of research data that supports the benefits of effective communication and health outcomes for patients and healthcare teams. The connection that a patient feels with his or her clinician can ultimately improve their health mediated through participation in their care, adherence to treatment, and patient self-management.

Diagnostic Accuracy

- Most diagnostic decisions come from the history-taking component of the interview. Yet, studies of clinician-patient visits reveal that patients are often not provided the opportunity or time to tell their story / history, often due to interruptions, which compromise diagnostic accuracy. Incomplete stories /history leads to incomplete data upon which clinical decisions are made.
- When interruptions occur, the patient may perceive that what they are saying is not important and leads to patients being reticent to offer additional information.

- The bottom line is that when patients are interrupted, it is a deterrent to collecting essential information and it hinders the relationship.

Communication among healthcare providers:

- Communication among healthcare team members influences the quality of working relationships, job satisfaction and profound impacts patient safety.
- When communication about tasks and responsibilities are done well, research evidence has shown significant reduction in nurse turnover and improved job satisfaction because it facilitates a culture of mutual support.
- Larson and Yao found a direct relationship between clinicians' level of satisfaction and their ability to build rapport and express care and warmth with patients.

The sheer scale and complexity of these interactions within the healthcare system puts a heavy burden on the process of communication, and miscommunication can have terrible consequences. Not only is the communication space huge in terms of the total information transactions and clinician time, it is also a source of significant morbidity and mortality. Communication failures are a large contributor to adverse clinical events and outcomes. In a retrospective review of 14,000 in-hospital deaths, communication errors were found to be the lead cause, twice as frequent as errors due to inadequate clinical skill. At the administrative level, the poor communication of information can have substantial economic consequences .The healthcare system suffers enormous inefficiencies because of the poor quality of communication systems that are often in place.

Effective communication among health care professionals is challenging due to a number of interrelated dynamics:

• Health care is complex and unpredictable, with professionals from a variety of disciplines involved in providing care at various times throughout the day, often dispersed over several locations, creating spatial gaps with limited opportunities for regular synchronous interaction

• Care providers often have their own disciplinary view of what the patient needs, with each provider prioritizing the activities in which he or she acts independently.

- Health care facilities have historically had a hierarchical organizational structure, with significant power distances between physicians and other health care professionals. This frequently leads to a culture of inhibition and restraint in communication, rather than a sense of open, safe communication (psychological safety).
- Differences in education and training among professions often result in different communication styles and methods that further complicate the scenario and render communications ineffective.
- Although teamwork and effective communication are crucial for safe patient care, the educational curricula for most health care professions focus primarily on individual technical skills, neglecting teamwork and communication between them.

The researchers found that communication problems were relatively straightforward and fell into four categories: (1) communications that were too late to be effective, (2) failure to communicate with all the relevant individuals on the team, (3) content that was not consistently complete and accurate, and (4) communications whose purposes were not achieved—i.e., issues were left unresolved until the point of Current research indicates that ineffective communication among health care professionals is one of the leading causes of medical errors and patient harm. A review of reports from the Joint Commission reveals that communication failures were implicated at the root of over 70 percent of sentinel events. When asked to select contributing factors to patient care errors, nurses cited communication issues with physicians as one of the two most highly contributing factors, according to the National Council of State Boards of Nursing reports. In a study of 2000 health care professionals, the Institute for Safe Medication Practices (ISMP) found intimidation as a root cause of medication error; half the respondents reported feeling pressured into giving a medication, for which they had questioned the safety but felt intimidated and unable to effectively communicate their concerns urgency.

Communication failures lead to increases in patient harm, length of stay, and resource use, as well as more intense caregiver dissatisfaction and more rapid turnover. In multisite studies of intensive care units (ICUs), poor collaborative communication among nurses and physicians, among other specific factors, contributed to as much as a 1.8-fold increase in patient risk-adjusted mortality and length of stay.

RATIONALE

This report is indented to find out the importance of communication among the Nurses and Doctors, Nurses and patients, Nurses and Nurses ,Doctors and patients, Doctors and Doctors, Doctors and Nurses in Max Saket Super Specialty Hospital, Saket as communication is one of the major contributing factor in patient diagnosis ,treatment and medication. This study also helps in find out the communication barriers and risks for miscommunication as poor communication can have substantial economic consequences.

Recommending specific measures to reduce the communication barriers in the hospital can significantly reduce the medication errors and increase patient satisfaction. Effective communication leads to increase in enhancing the hospital's image.

OBJECTIVES

1. To observe, analyze and compare the effectiveness of communication among the Nurses and Doctors, Nurses and patients, Nurses and Nurses, Doctors and patients, Doctors and Doctors, Doctors and Nurses at Max Super Specialty Hospital, Saket by:
    a. Finding out the importance of communication in a Hospital.
    b. Awareness regarding the International Patient Safety Goals.
    c. Knowing about the most effective channel for communication.
    d. Awareness regarding the hands on training for soft skill development.
    e. Awareness regarding the escalation matrix.
2. To find out the reasons for the communication barrier.
3. To find out the problems face by the staff due to miscommunication.
4. To give recommendations to resolve the problems of miscommunication and to overcome communication barriers.

METHODOLOGY

- **Type of study** *:* Anlaytical cross-sectional
- **Study population** : Doctors, Nurses at Max Super Speciality Hospital, Saket, Delhi
- **Study area** – East and West wing at Max Hospital, East & West wing, Saket, Delhi
- **Duration of Study** – 2 month

- **Type of Data** - Quantitative& Qualitative
- **Technique** – Direct Observation of Communication between Nurses and Doctors, Nurses and Patients, Nurses and Nurses, Doctor and Patient, Doctor and Doctor, Doctors and Nurses & Unstructured Questionnaire & Interviews
- **Tool** – Questionnaire
- **Sample size - 154**
- **Sampling technique**- Non probability sampling
- **Inclusion criteria**-
    - Doctor's & Nurses practising in East & West wing, at Max Hospital,Saket,Delhi

Exclusion criteria-Doctors and Nurses working in rest area of the Hospital

- **Data collection** - Primary and Quantitative (2 month)
- **Data entry**- Manually
- **Data Analysis**- Using bar charts, pie charts, line graphs.

OBSERVATIONS AND FINDINGS:

COMMUNICATION

1. The organization has policies reviewed and incorporated in manuals of respective departments. They are as follows**:**

For verbal orders –

a**.** the verbal orders are given only in-

- Life threatening situations
- Anti-diabetic drug orders
- Reporting of critical test results

b .the complete verbal orders are documented and read back by the receiver and confirmed by the individual giving the order within 24 hours.

c. the complete telephone order is documented and read back by the receiver and confirmed by the individual giving the order within 24 hours.

d. the complete test result is documented and read back by the receiver and confirmed by the individual giving the result within 24 hours

e. avoid giving verbal orders for chemotherapy drugs.

For handover communication-

a**.** standardized critical content is communicated between staff during handovers time.

b. standardized forms and methods are used for complete handover process.

c. data from handover communications are traced and improved.

For critical results-

a. the hospital has defined critical values for each type of diagnostic tests.

b. the hospital has identified by whom and to whom critical results of diagnostic tests are reported.

c. the hospital has identified what information is documented in the patient record :

- Name of test
- Critical results/values obtained
- Informed by- name, department
- Date and time of critical value received
- Received by- name, department
- Communicated further to whom
- Action started

TAT- for critical results is 15 minutes.

2**.** The organization organized widespread **trainings for soft skill development** and events to ensure effective implementation.

3. A two day workshop with national faculty was organized on “Communication skills”.50 participants consisting of a mix of doctors, nurses and hospital managers attended the program. This was organized in collaboration with the “**Consortium of Accredited Healthcare Organizations (CAHO).**

4. There is a structured and documented **handover sheet for the Doctors** that are to be filled by them during handover to the next shift Doctor.

5. There is a structured and documented handover sheet for the Nurses known as **Focus notes** that are to be filled by them during handover to the next shift nurse.

6. There is a structured and documented **Floor handover sheet** for the Nursing supervisor that is to be filled by her during handover to the next shift floor nurse.

7. At the time of admission, the nurses put all the details of the patients in CPRS called as **IP Assessment notes.**

8. After every shift, the nurses put the notes in CPRS called as **Progress notes**.

9. After every shift or round, Doctors also put notes in CPRS.

10. There is a **communication register** maintained at every floor in which daily briefing points are written and every Nurse has to sign that.

11. There is a **complaint register** maintained at every floor in which all the complaints of the patients are written.

DATA ANALYSIS NURSE ANALYSIS

WEST BLOCK

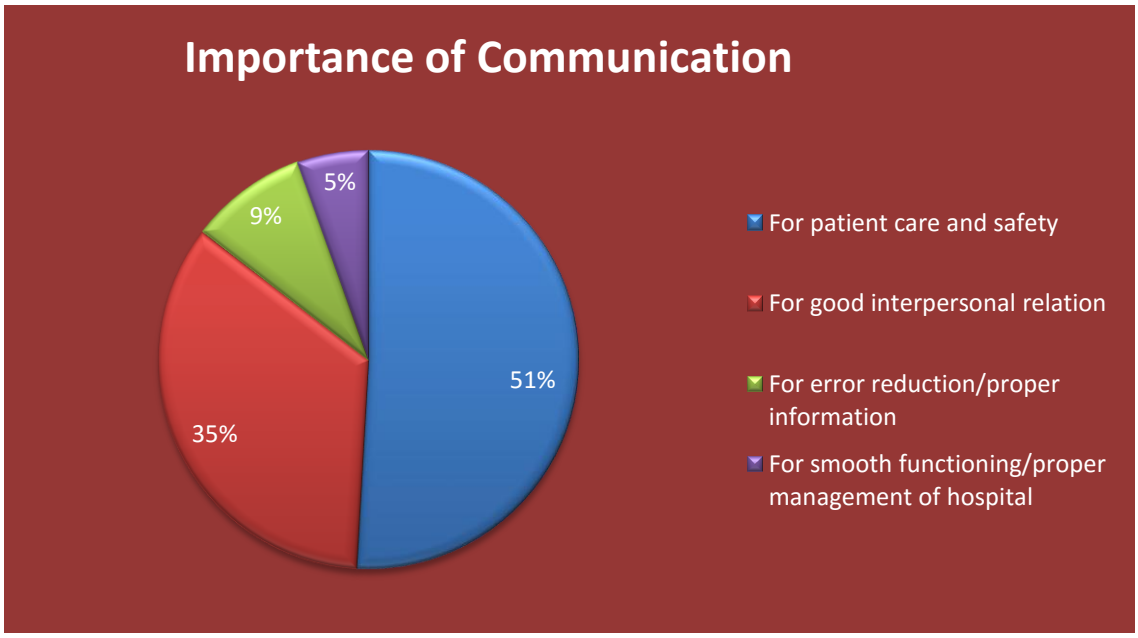


FIG 1

EAST BLOCK

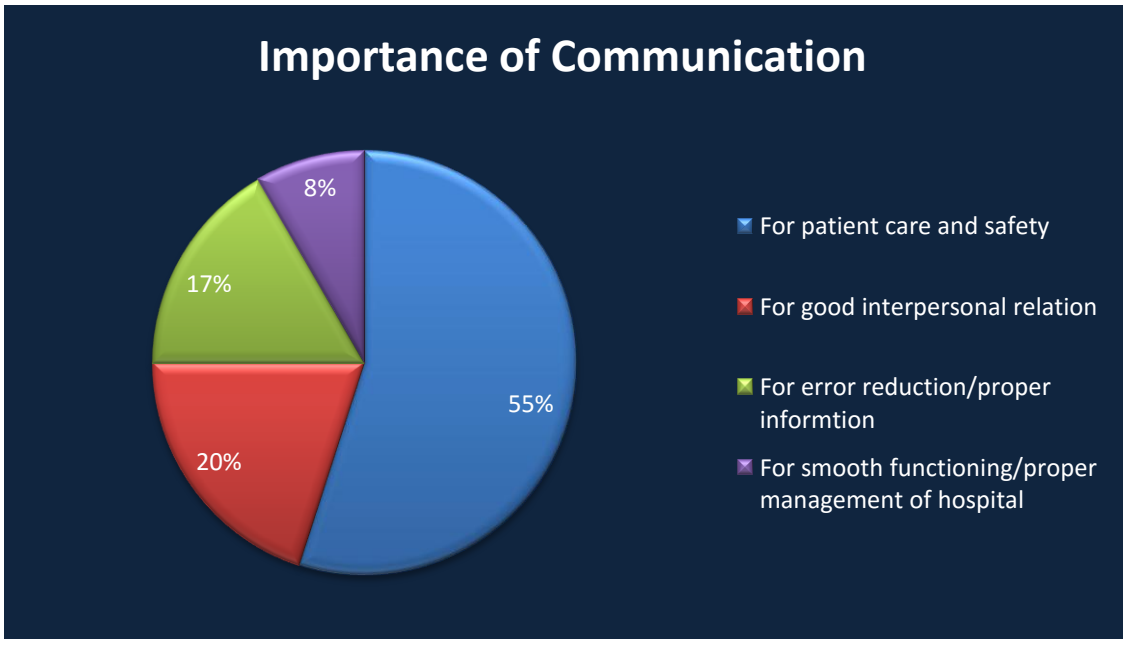


FIG 2

INTERPRETATION: **As per the analysis, the Nurses of both East and West wing said that communication is important for:**

For patient care and safety.

For good interpersonal relation.

For error reduction and to give proper information to the patient.

WEST BLOCK

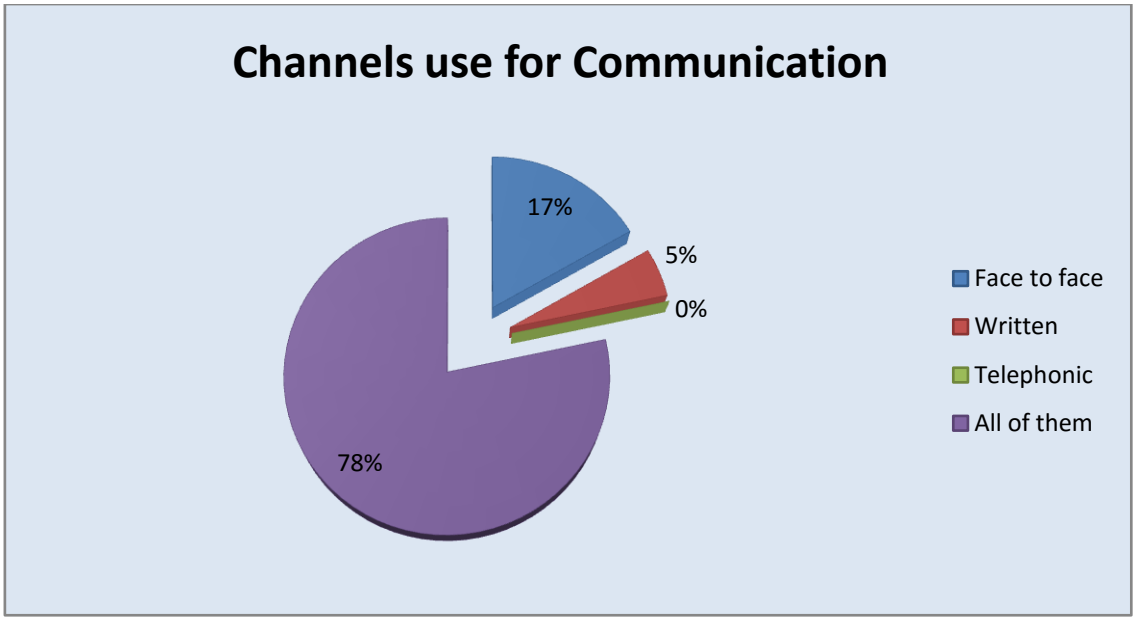


FIG 3

EAST BLOCK

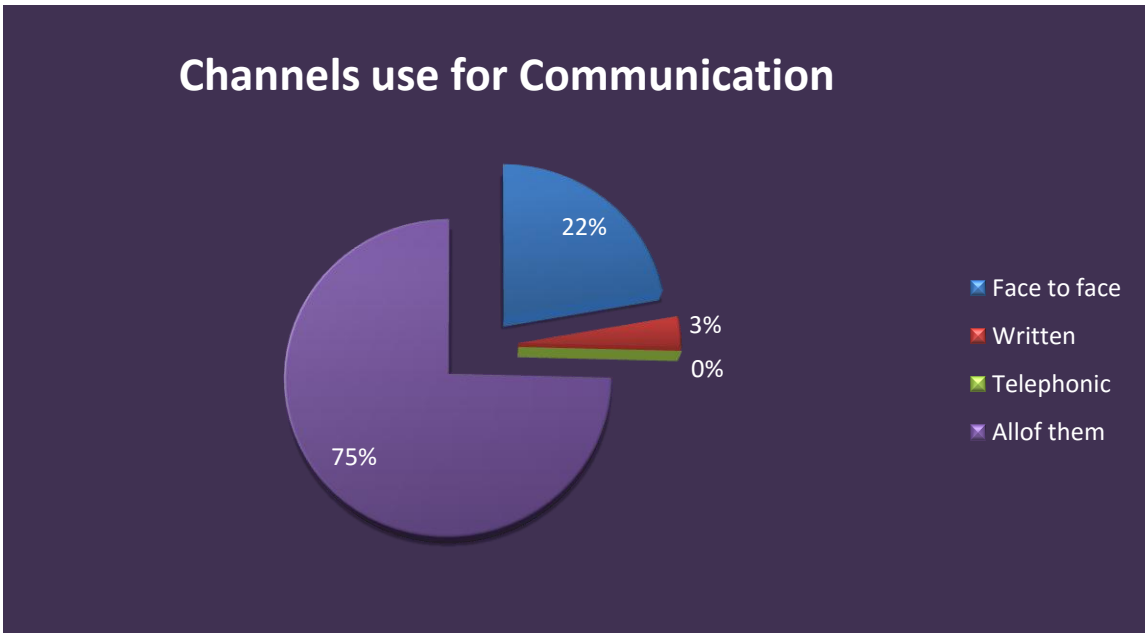


FIG 4

INTERPRETATION: **As per analysis, the Nurses of both East and West wing use all the three modes of communication:**

Face to face

Written

WEST BLOCK

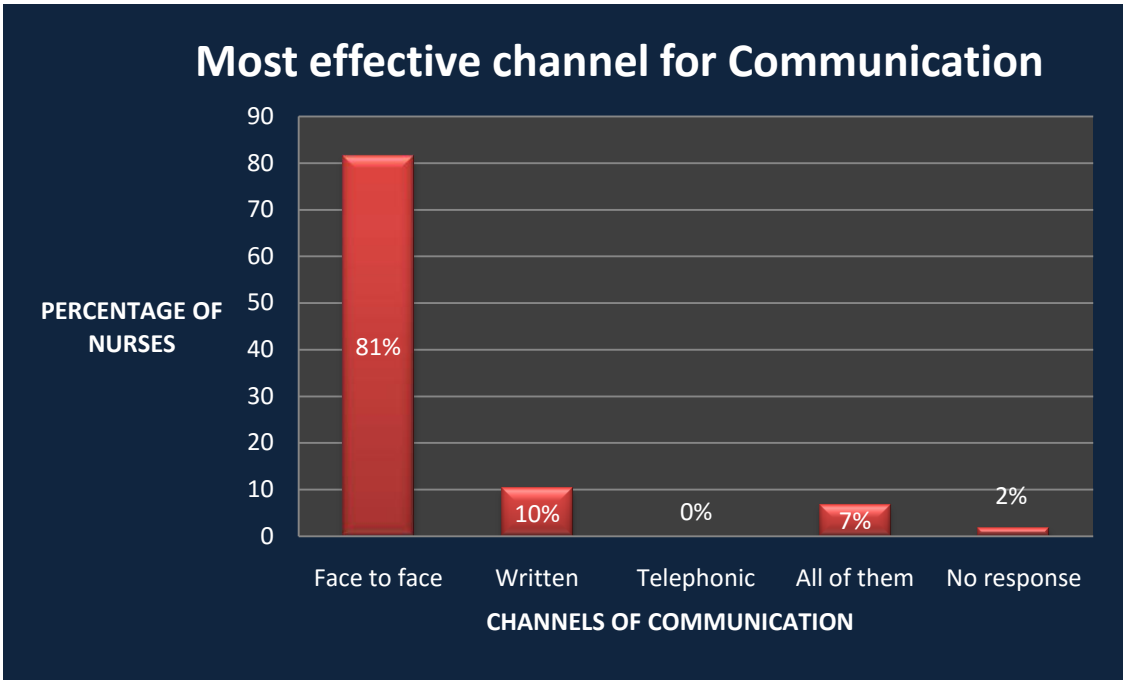


FIG 5

EAST BLOCK

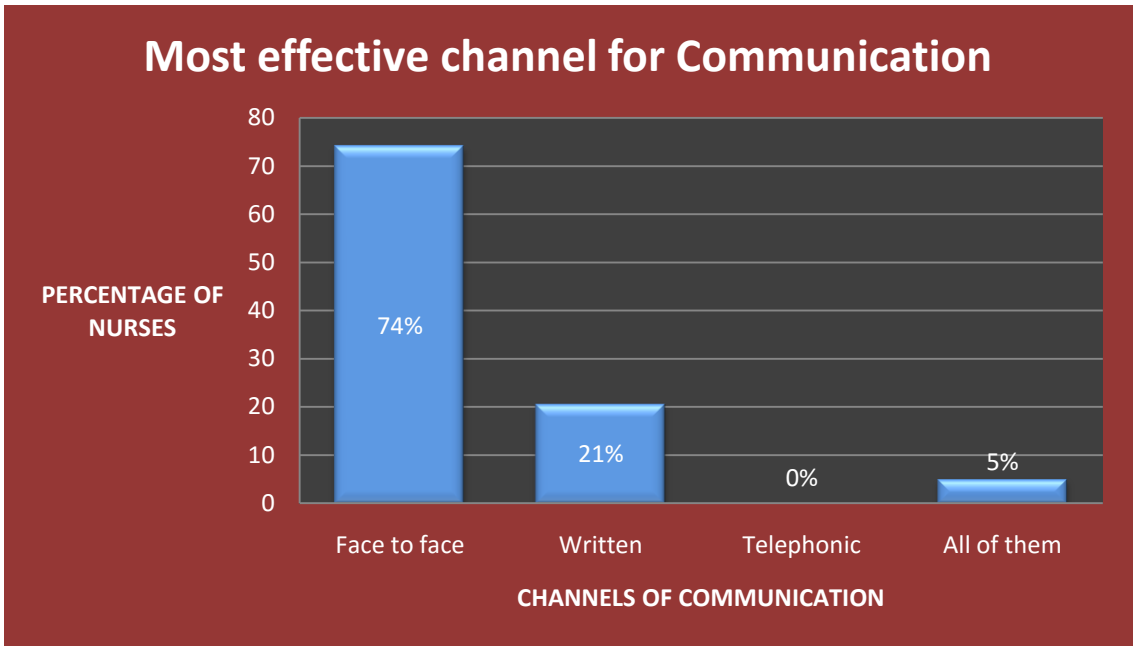


FIG 6

INTERPRETATION: **As per my analysis, 81% of the Nurses in the West block said that face to face is the most effective channel for communication.74% of the Nurses in the East block said that face to face is the most effective channel for communication.**

WEST BLOCK

FIG 7

EAST BLOCK

FIG 8

INTERPRETATION:**As per analysis,91% of the Nurses of the West block are aware about the International Patient Safety Goals.98% of the Nurses of the East wing are aware about the International Patient Safety Goals.**

WEST BLOCK

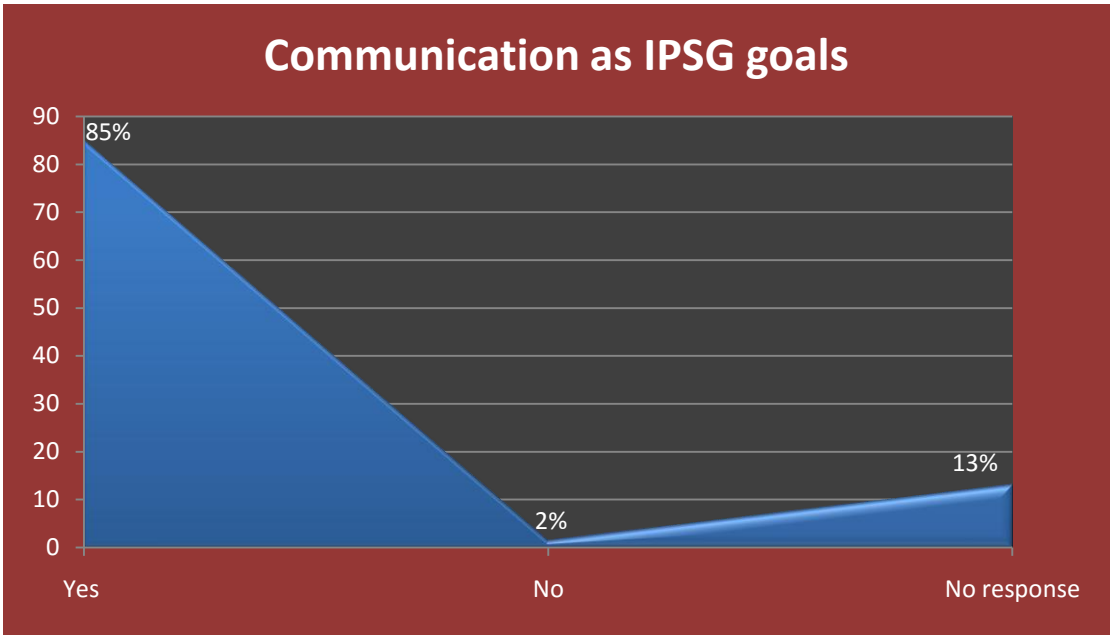


FIG 9

EAST BLOCK

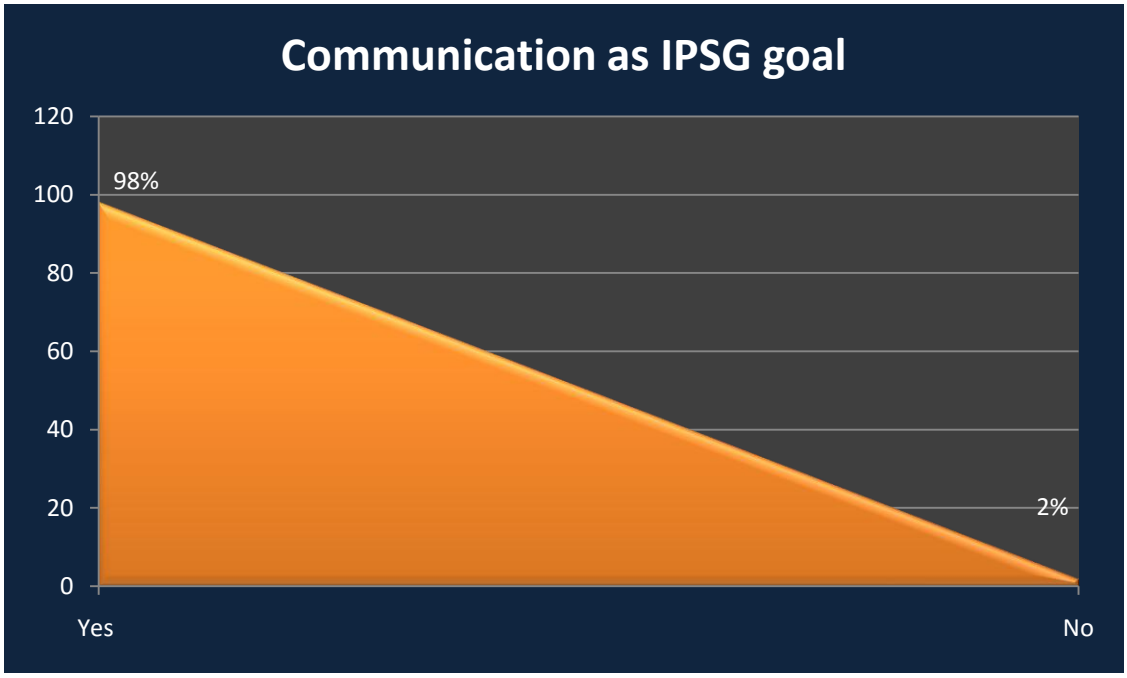


FIG 10

INTERPRETATION: **As per analysis, 85% of the Nurses in West wing are aware that communication is one of the goals of the International Patient Safety Goals. 98% of the Nurses in East wing are aware that communication is one of the goals of the International Patient Safety Goals.**

WEST BLOCK

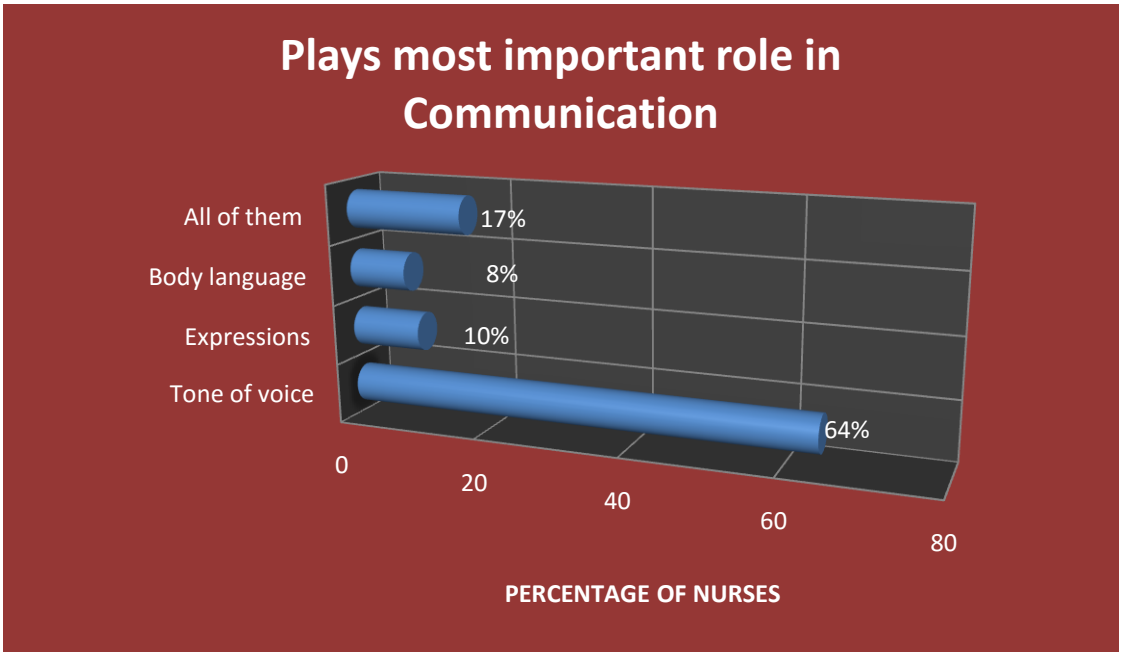


FIG 11

EAST BLOCK

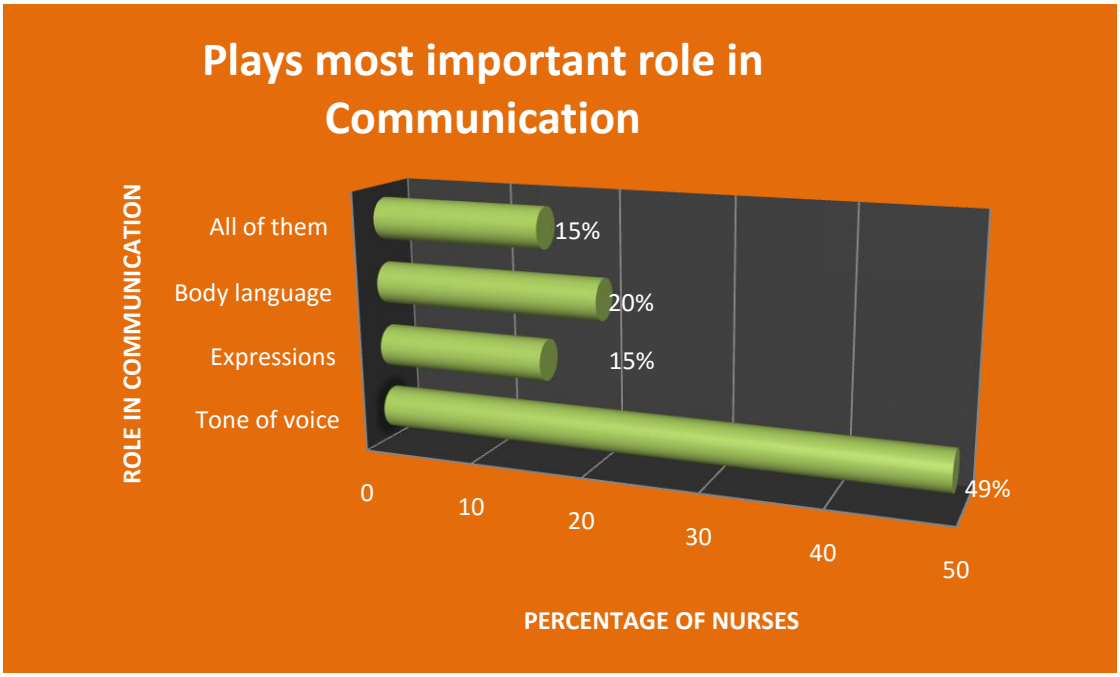


FIG 12

INTERPRETATION: **64%** **of the Nurses in the West wing said that tone of voice plays most important role in communication.49% of the Nurses in the East wing said that tone of voice plays most important role in the communication.**

WEST BLOCK

FIG 14

EAST BLOCK

FIG 15

INTERPRETATION: **As per my analysis, the 85% Nurses in the West wing said that they are given training for soft skill development.**

89% Nurses in the East wing said that they are given training for soft skill development.

WEST BLOCK

FIG 15

EAST BLOCK

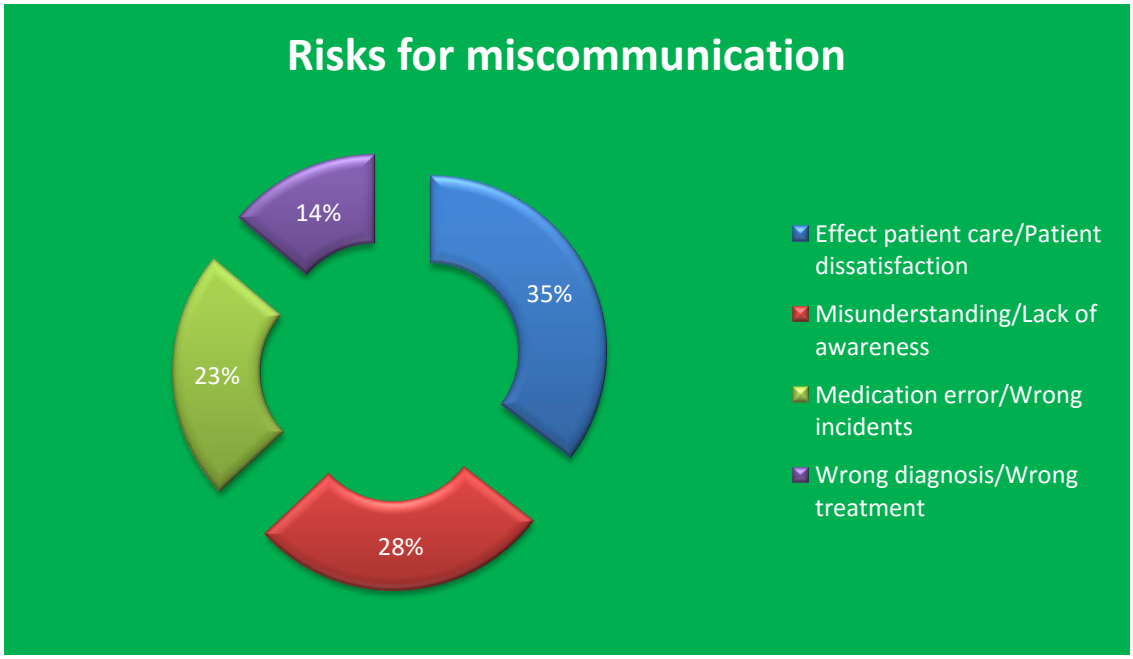


FIG 16

INTERPRETATION: **As per analysis, the Nurses of both the East and West wing said that the risks for miscommunication are:**

Misunderstanding and lack of awareness

Medication error/wrong incidents

Wrong diagnosis/wrong treatment

WEST BLOCK

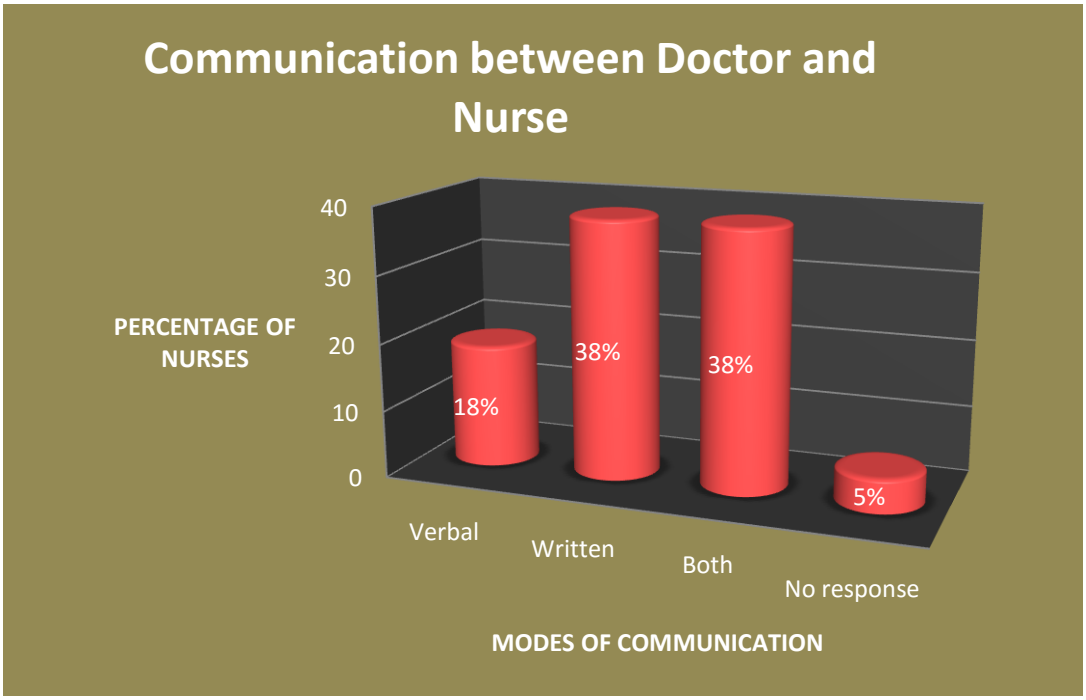


FIG 17

EAST BLOCK

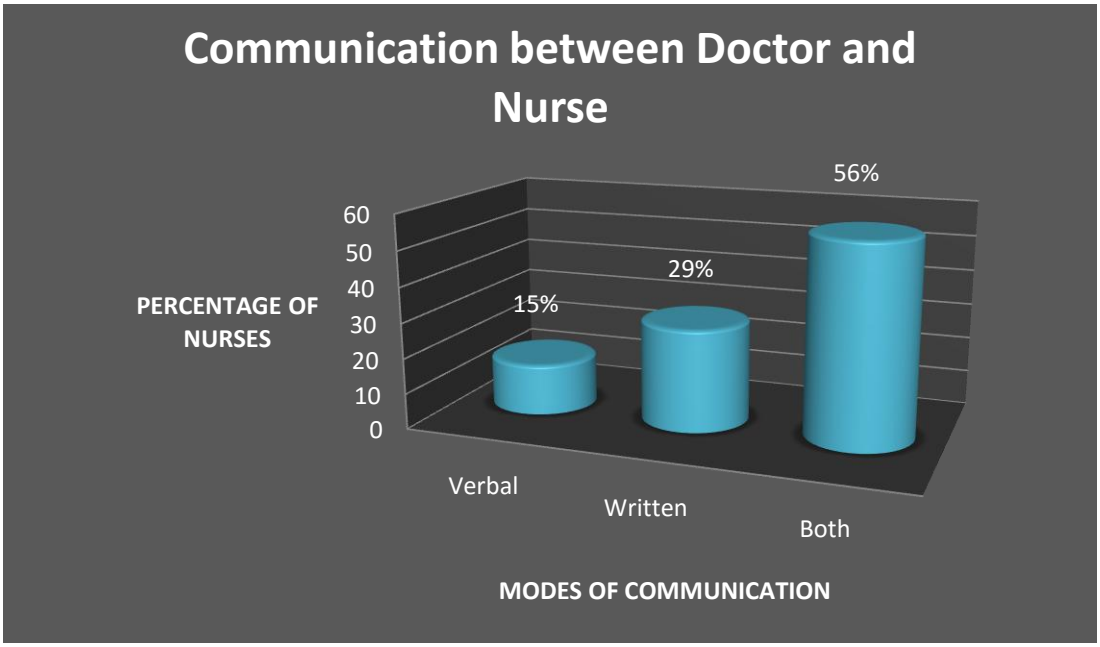


FIG 18

INTERPRETATION: **As per analysis, 38% of the Nurses of the West wing have written communication with Dr and 29%of the Nurses of the East wing have written communication with Dr.**

WEST BLOCK

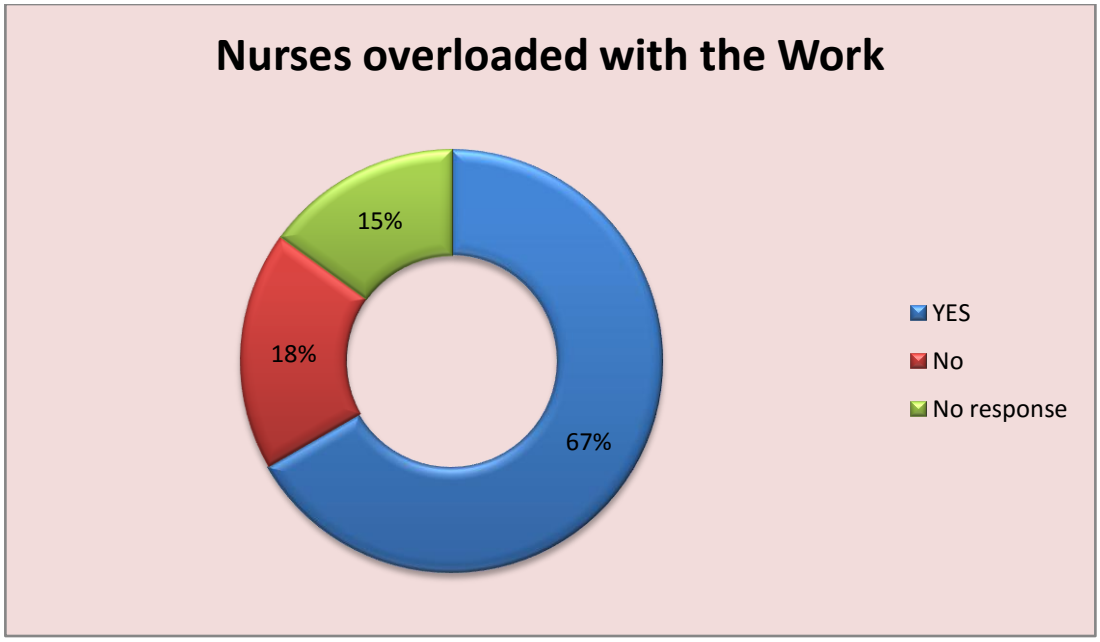


FIG 19

EAST BLOCK

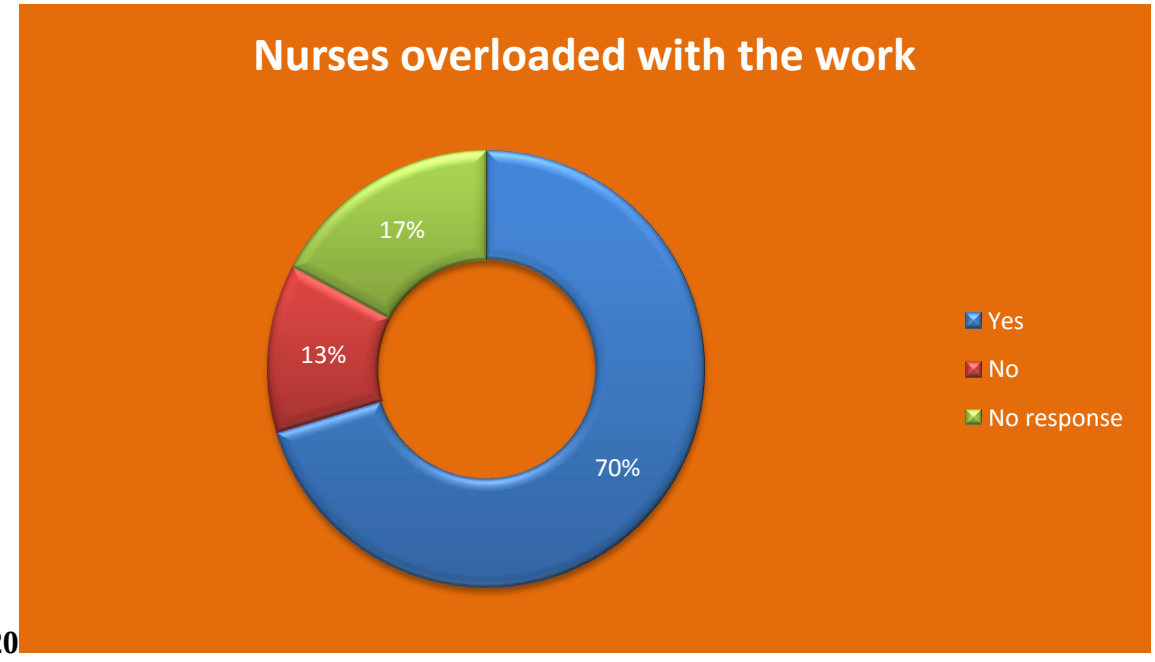


FIG 20

INTERPRETATION: **As per analysis, 67% of the Nurses in the West wing are overloaded with the work and 70% of the Nurses in the East wing are overloaded with the work.**

WEST BLOCK

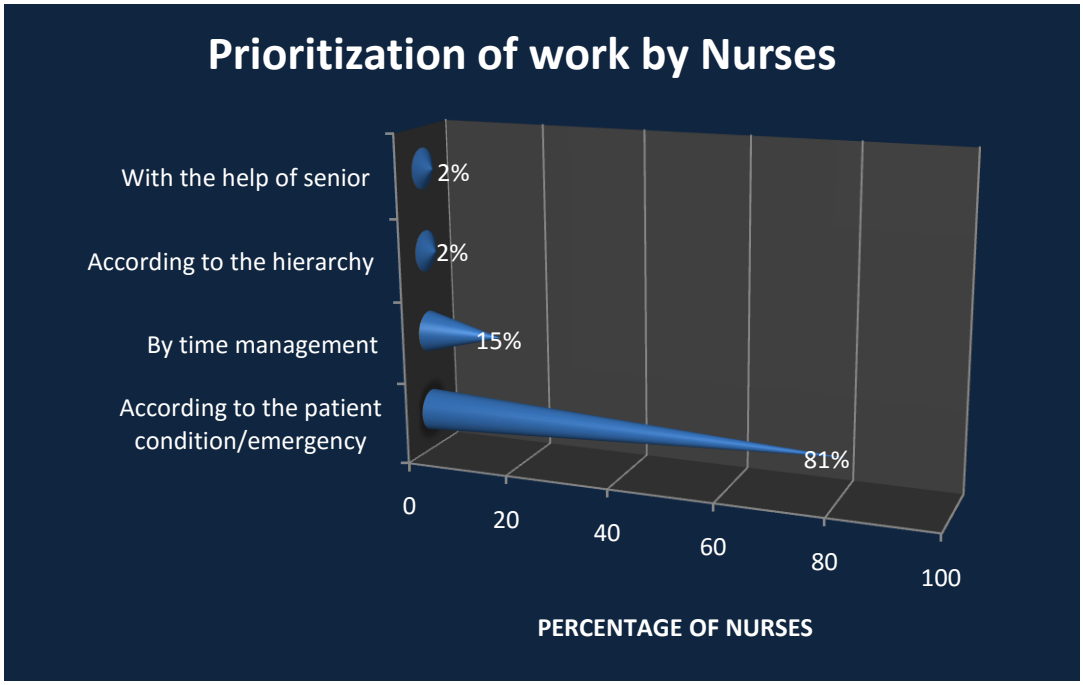


FIG 21

EAST BLOCK

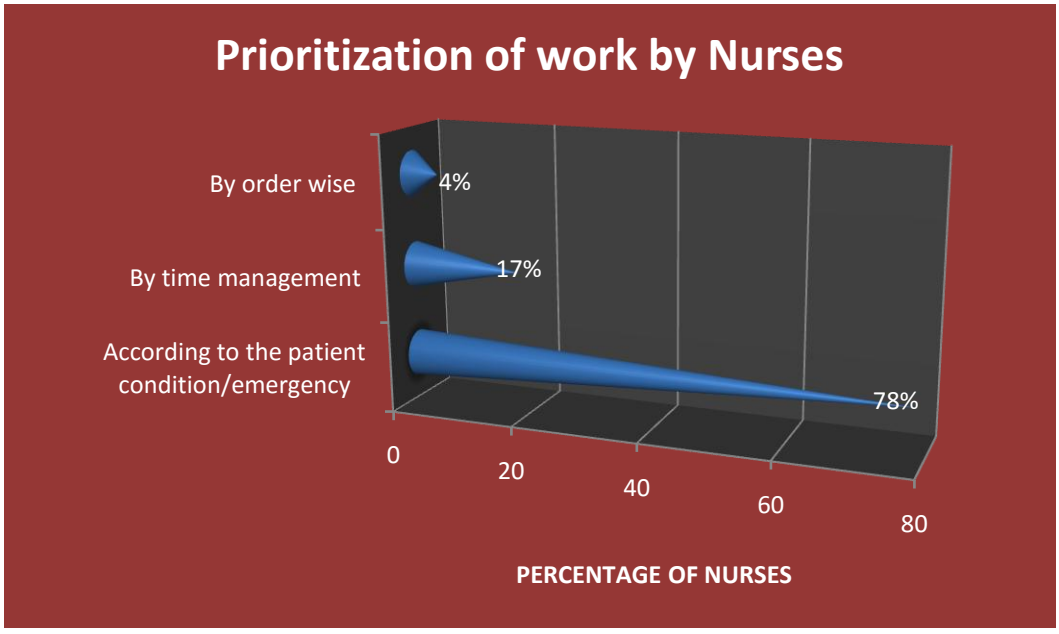


FIG 22

INTERPRETATION: **As per analysis, the Nurses of both the East and West wing prioritize their work by:**

According to patient condition and emergency

With the help of senior

According to the hierarchy

WEST BLOCK

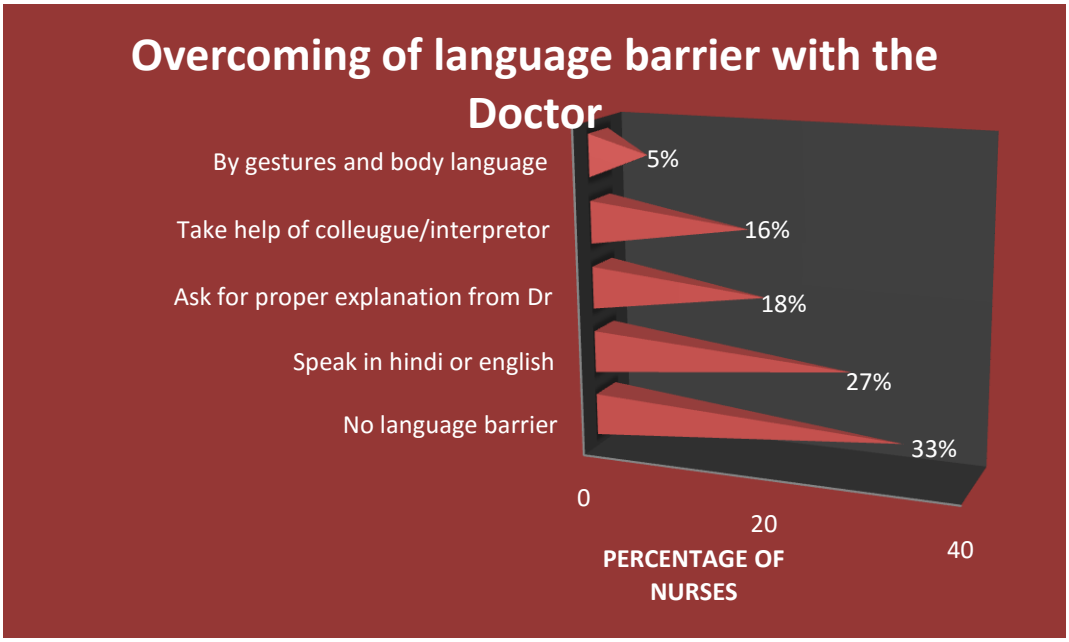


FIG 23

EAST BLOCK

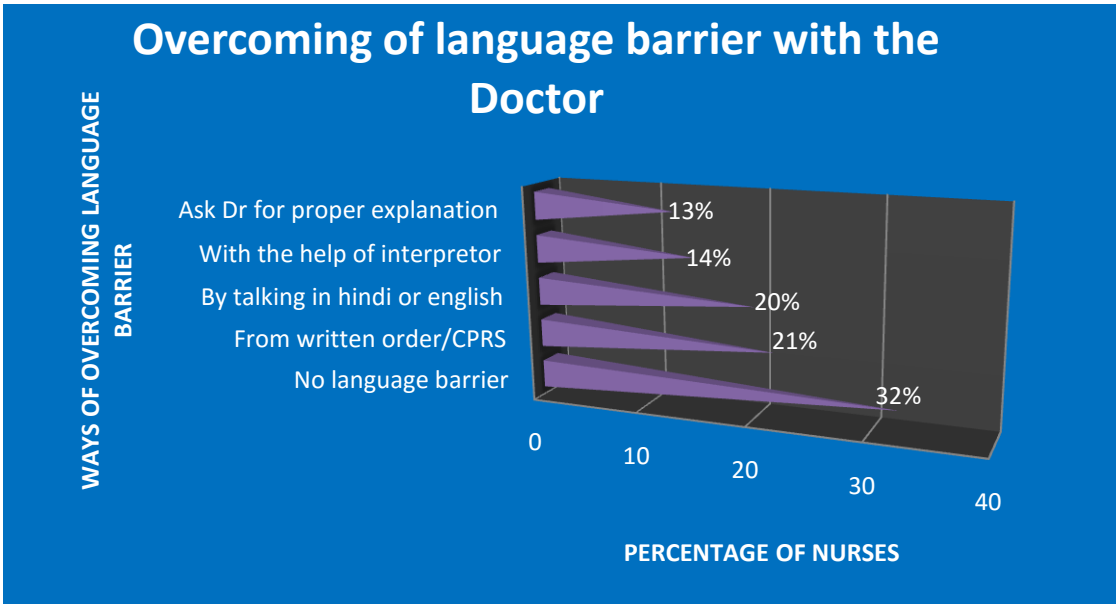


FIG 24

INTERPRETATION: **As per analysis, Nurses of both the wings overcome their language barrier:**

By talking in Hindi or English

By seeing written orders from CPRS

With the help of interpreter or senior

Ask for proper explanation from the Dr

WEST BLOCK

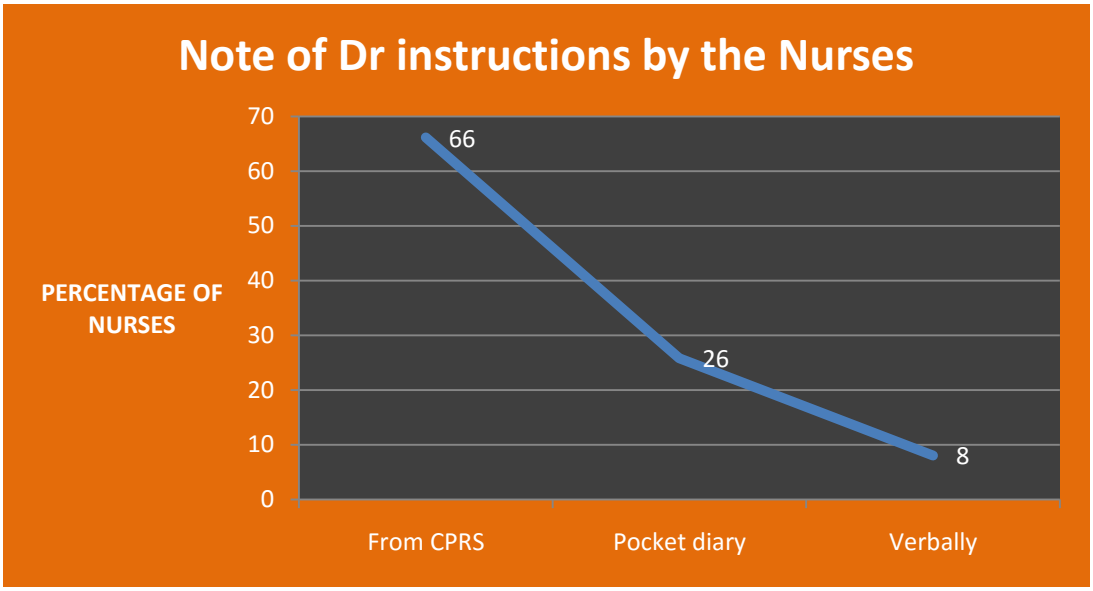


FIG 25

EAST BLOCK

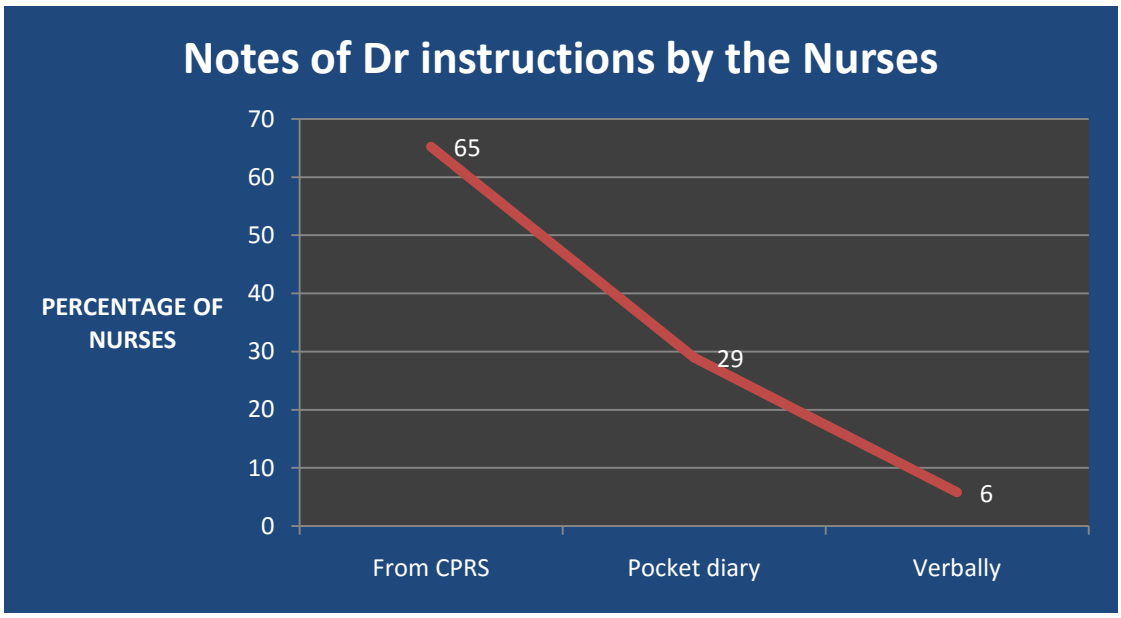
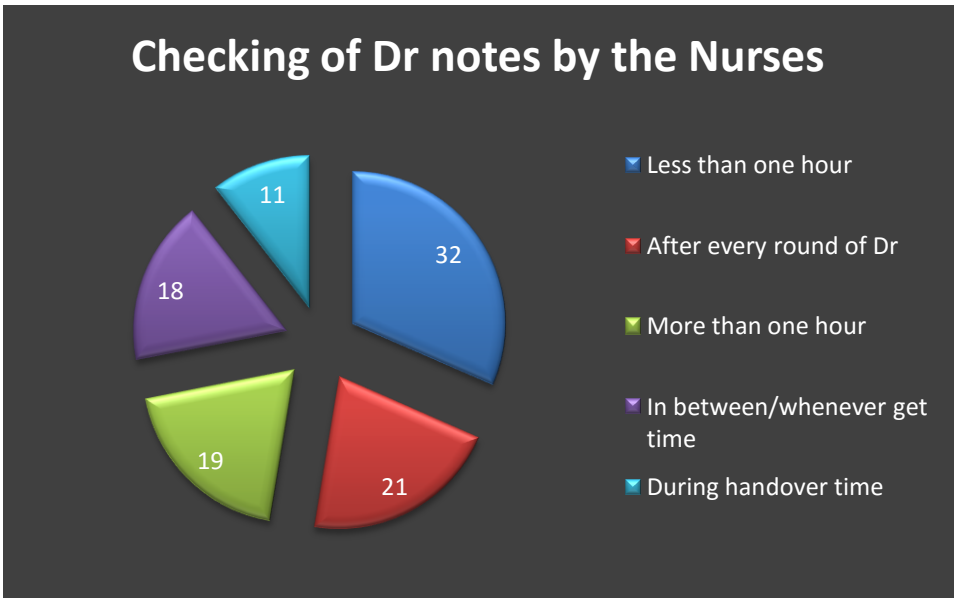


FIG 26

INTERPRETATION: **As per analysis, 66% OF THE Nurses in the West wing note the Dr Instructions from CPRS and 65% of the Nurses in the East wing note the Dr Instructions from CPRS.**

WEST BLOCK (FIG 27)



EAST BLOCK

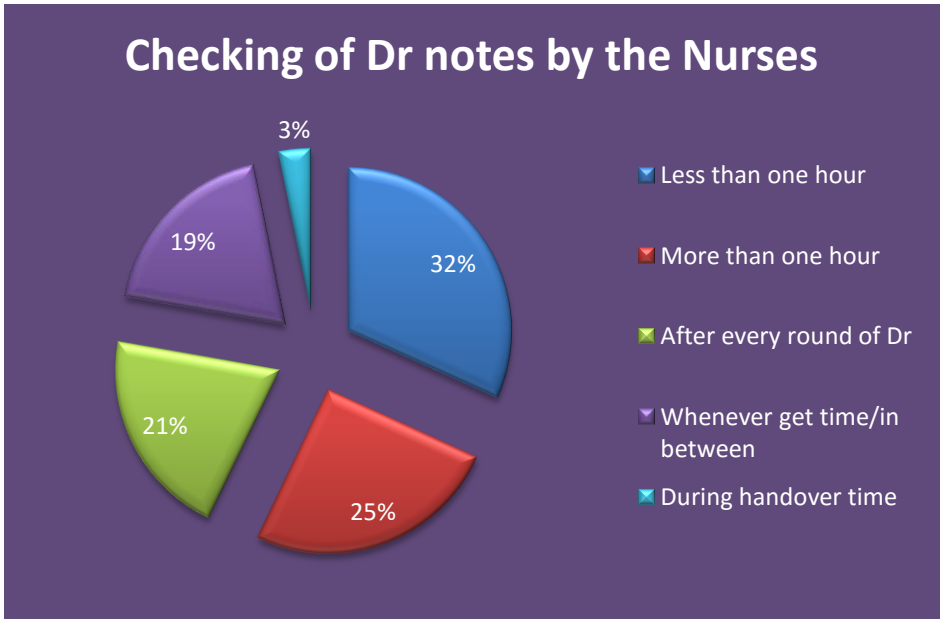


FIG 28

INTERPRETATION: **As per analysis, Nurses of both the wings check Dr Notes in:**

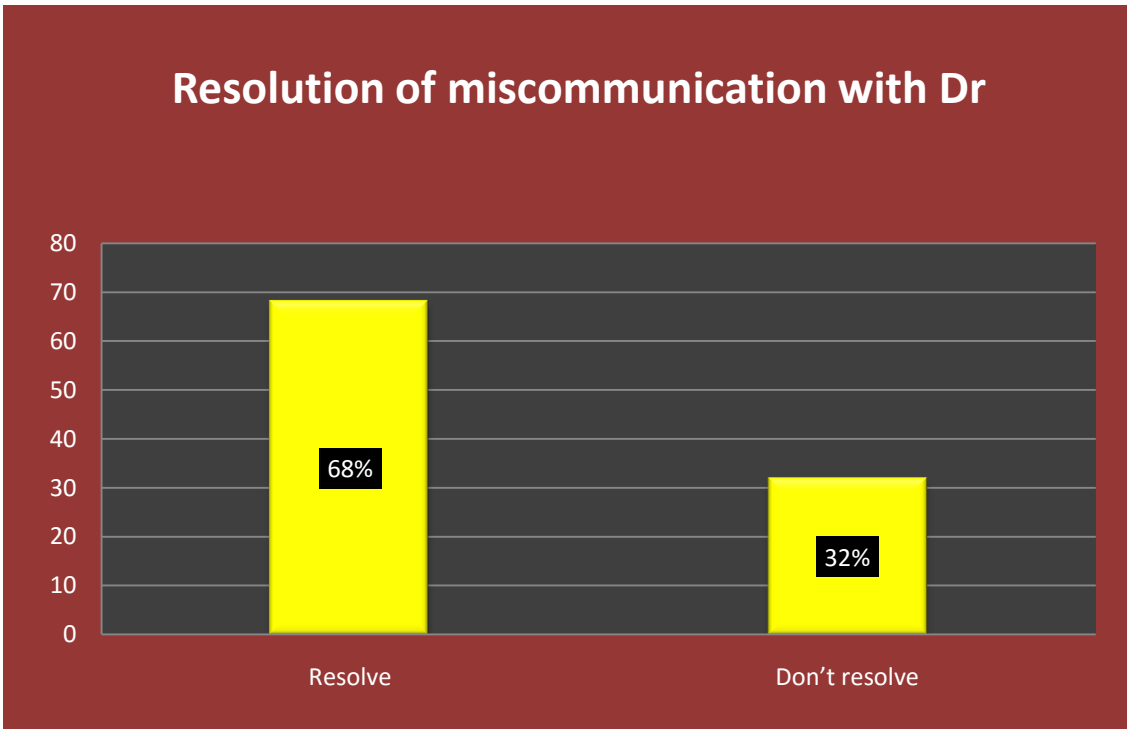
Less than one hour

More than one hour

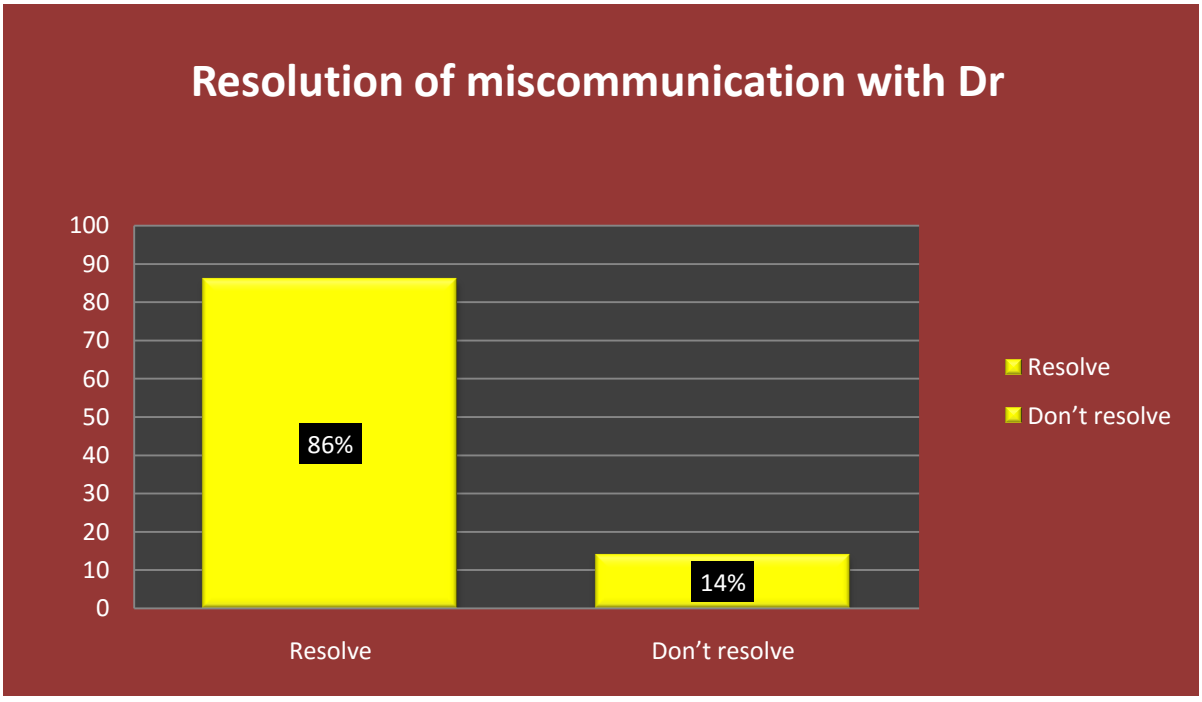
After every round of the Dr

During handover time or whenever they get time.

WEST BLOCK(FIG 29)



EAST BLOCK (FIG 30)



INTERPRETATION: **As per analysis, 68% Nurses in the West wing resolve miscommunication with Dr whereas the 86% Nurses in the East wing resolve miscommunication with the Dr.**

WEST BLOCK

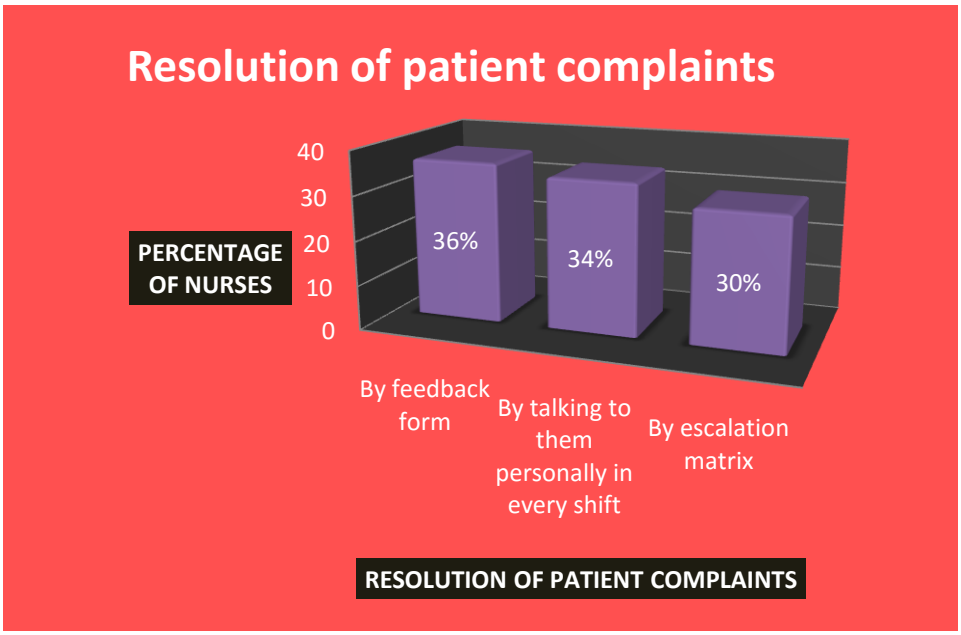


FIG 31

EAST BLOCK

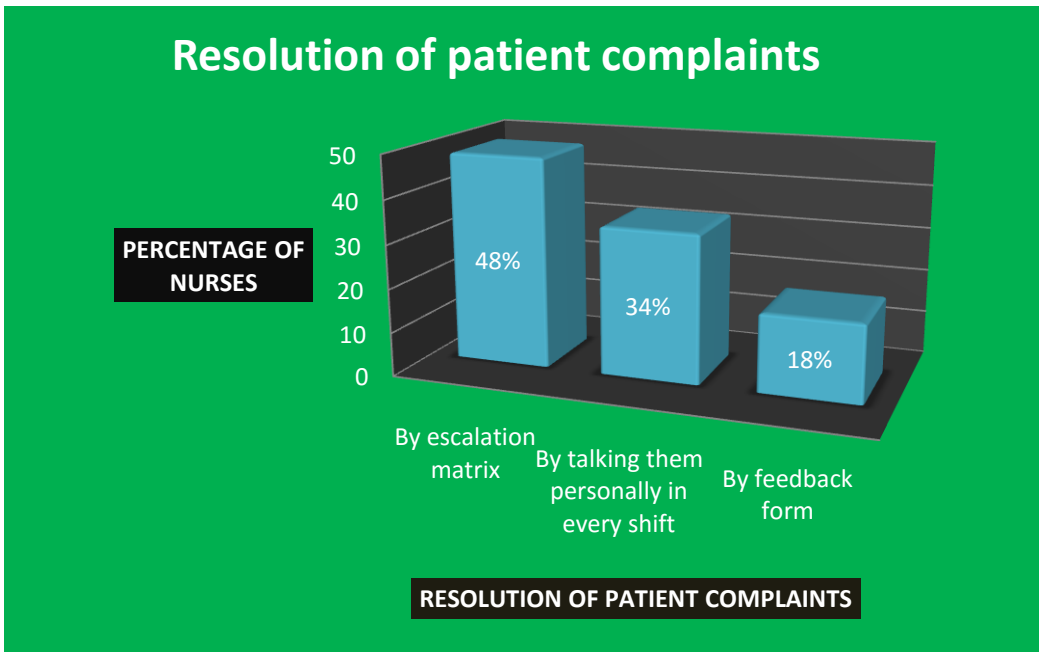


FIG 32

INTERPRETATION: **As per analysis, Nurses in both the wings resolve the patient's complaints**

By escalation matrix

By talking to the patient personally in every shift

WEST BLOCK

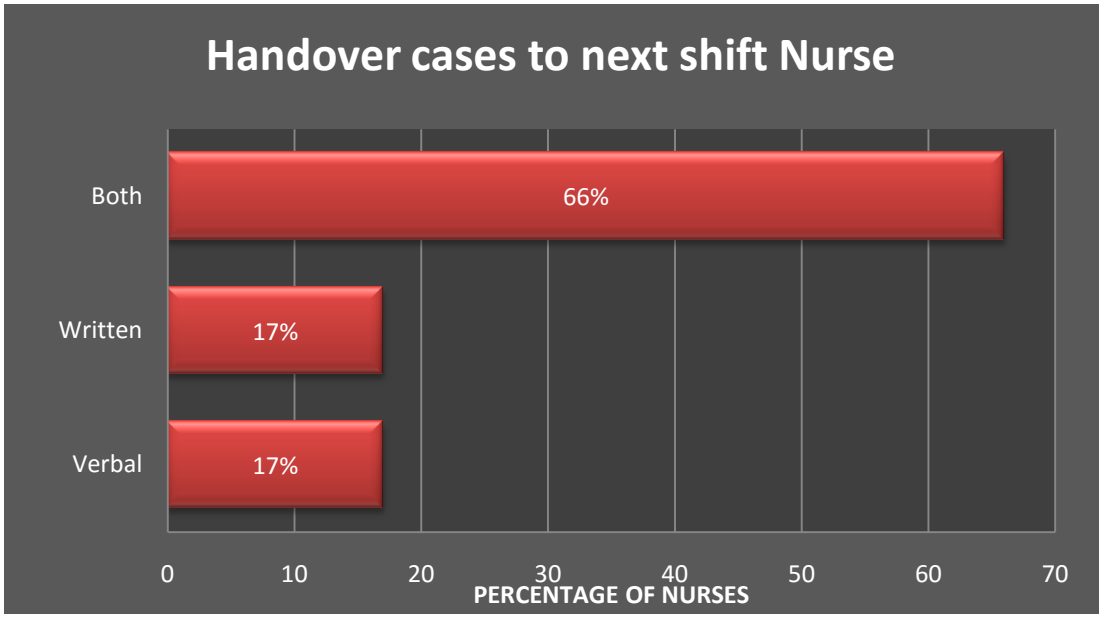


FIG 33

EAST BLOCK

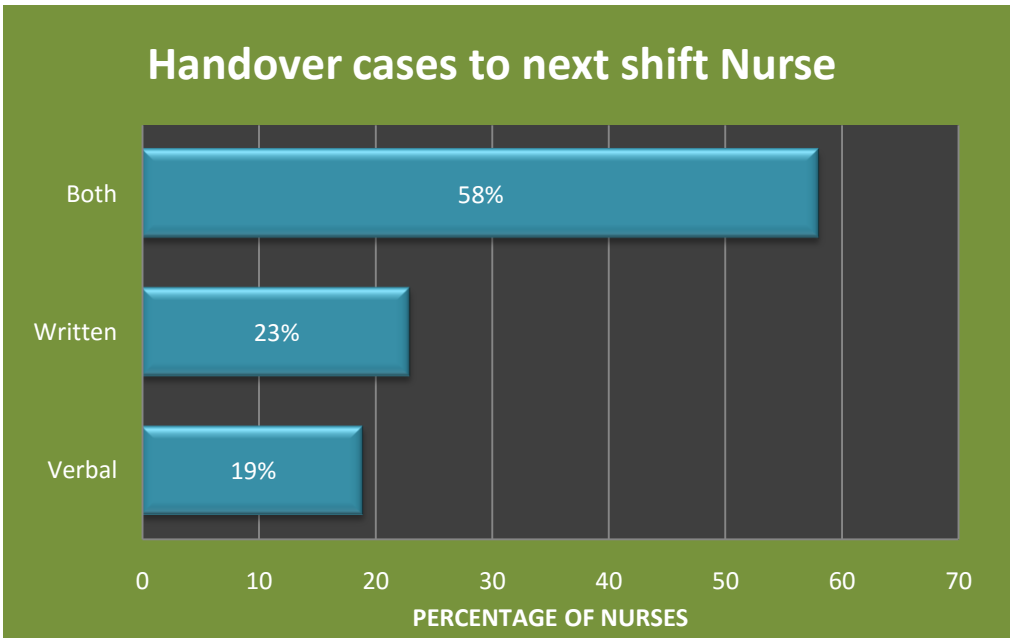


FIG 34

INTERPRETATION: **As per analysis, 17% of the Nurses in the West wing give written handover to the next shift nurse whereas 23% of the Nurses in the East wing give written handover to the next shift nurse.**

WEST BLOCK

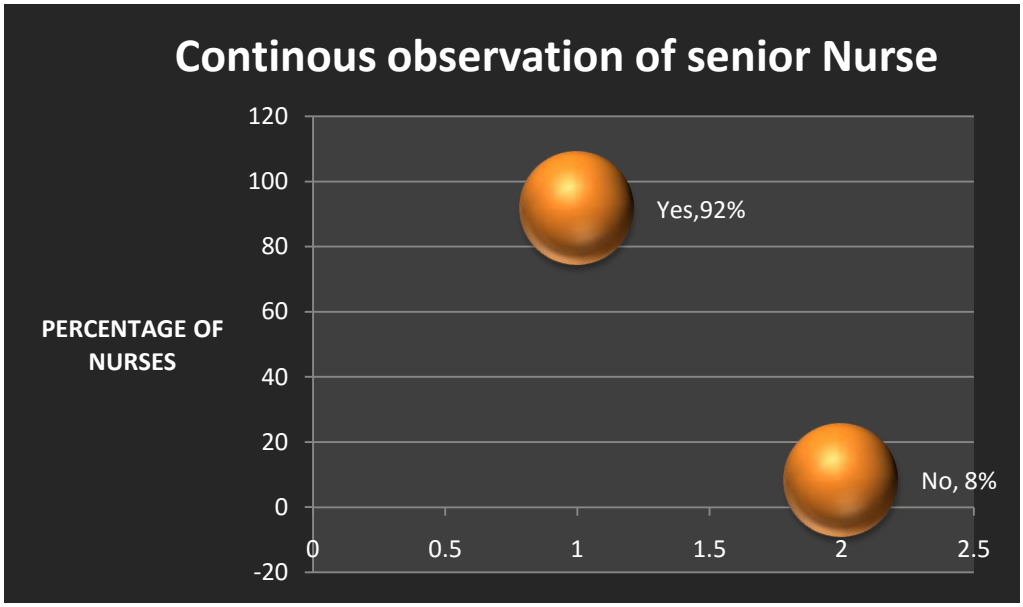


FIG 35

EAST BLOCK

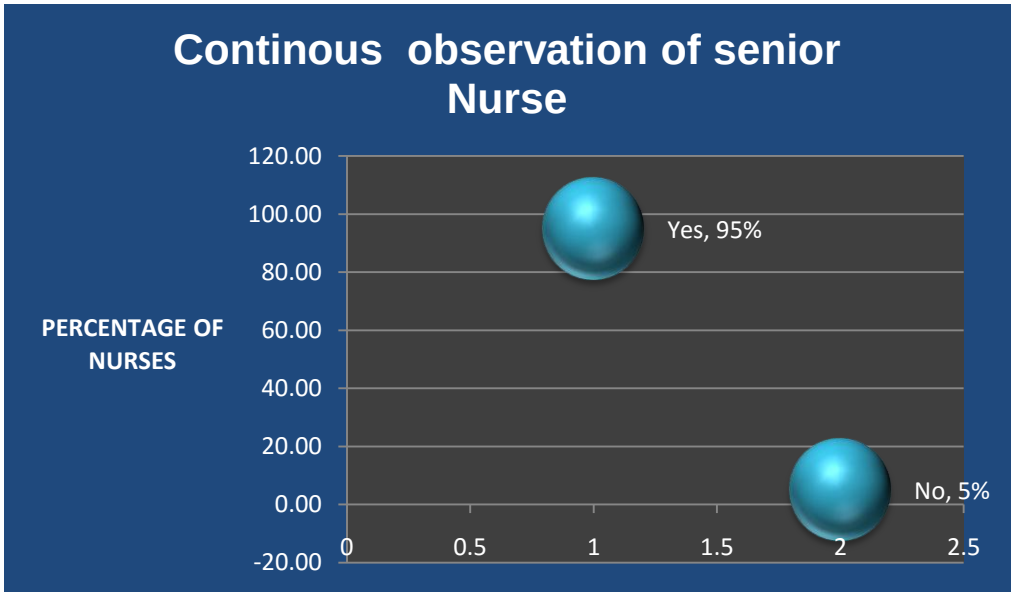


FIG 36

INTERPRETATION: **As per analysis, 92% of the Nurses in the West wing are in continuous observation of senior nurse whereas 95% of the Nurses in the East wing are in continues observation under senior nurse.**

PRIORITIZATION OF WORK:

INTERPRETATION: **As per analysis, nurses of both the wings prioritize their work equally**.

COMMUNICATION WITH DOCTOR OF OPPOSITE SEX:

INTERPRETATION: **As per analysis, Nurses of both East and West wings don't hesitate to communicate with Dr of opposite sex.**

FIRST INTERACTION BETWEEN NURSE AND PATIENT:

INTERPRETATION**: As per analysis, the first interaction between patient and nurse occurs at the time of introduction and while greeting the patient.**

RECORD OF PATIENT DETAILS:

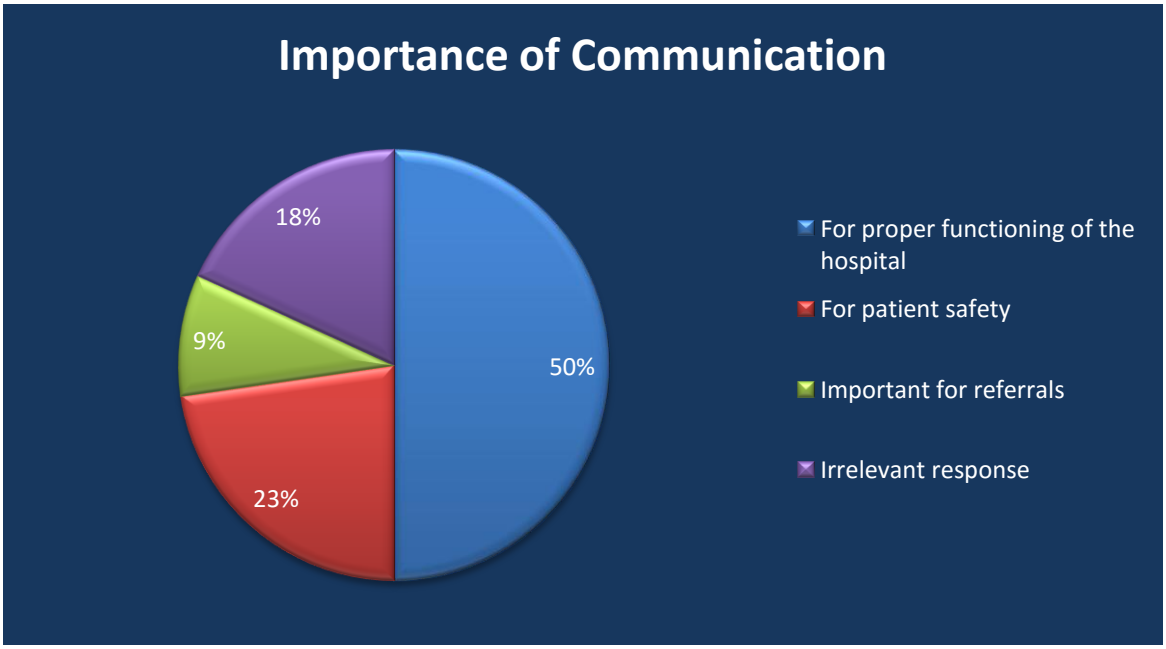
INTERPRETATION: Nurses **of both the wings record the patient details in CPRS.**

REPORTING OF NURSES:

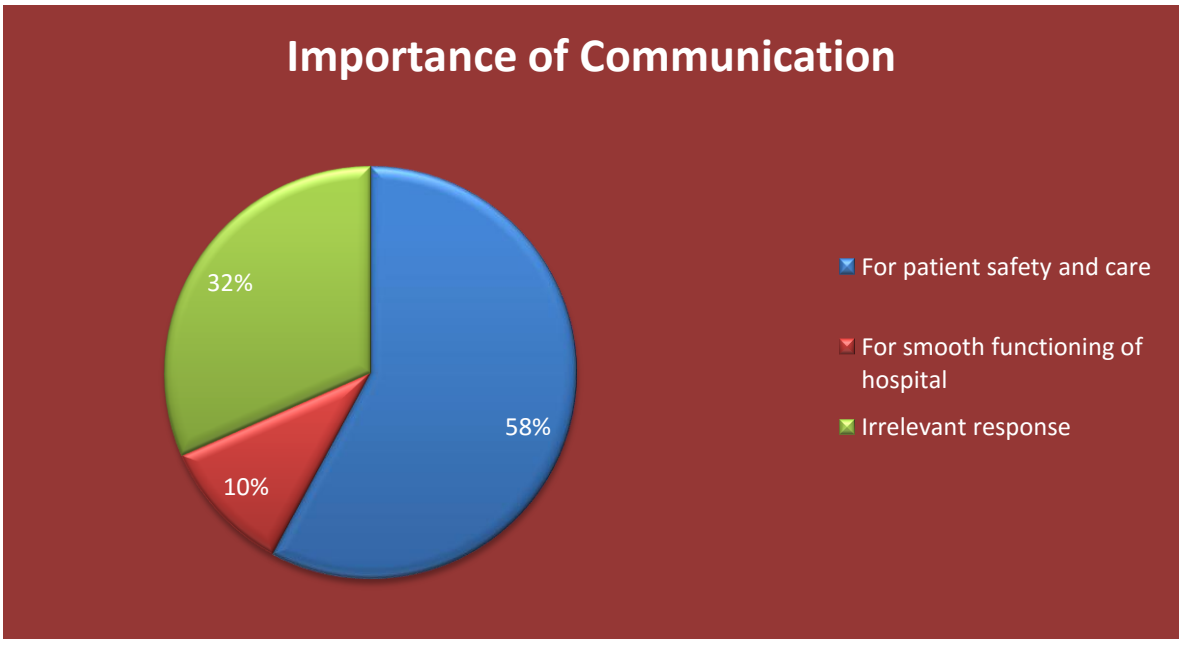
INTERPRETATION: **As per analysis, all the nurses of both the wings report to TL or supervisor.**

DOCTOR ANALYSIS

EAST BLOCK (Fig 37)



WEST BLOCK (Fig 38)

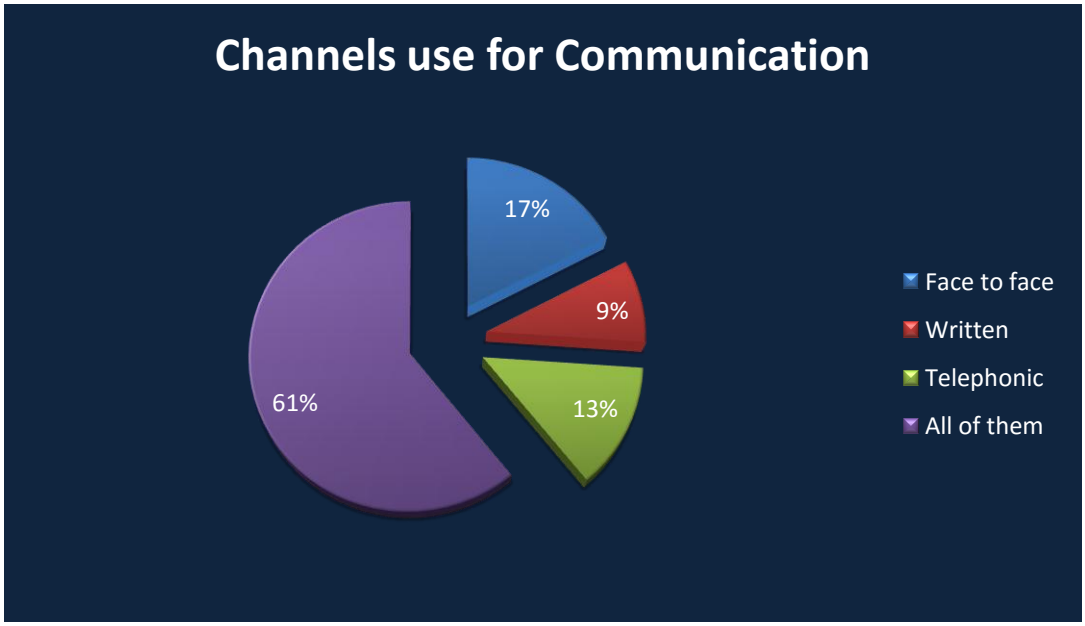


INTERPRETATION: **As per analysis, Doctors of both the East and West wing said that communication is important for:**

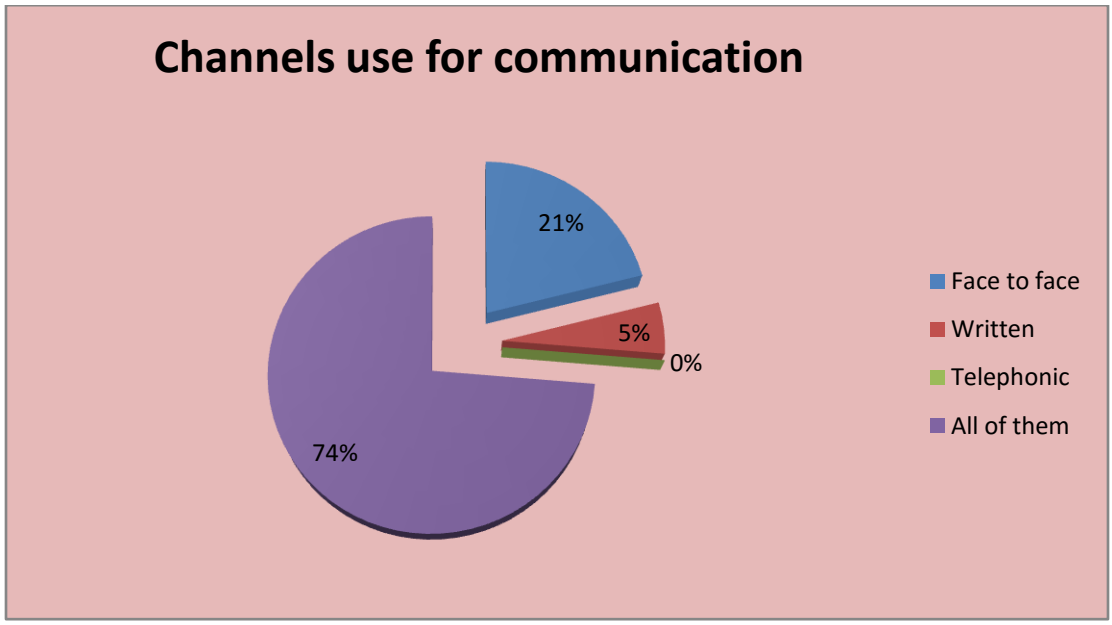
Patient care and safety

For smooth functioning of the hospital

EAST BLOCK (Fig 39)



WEST BLOCK (Fig 40)



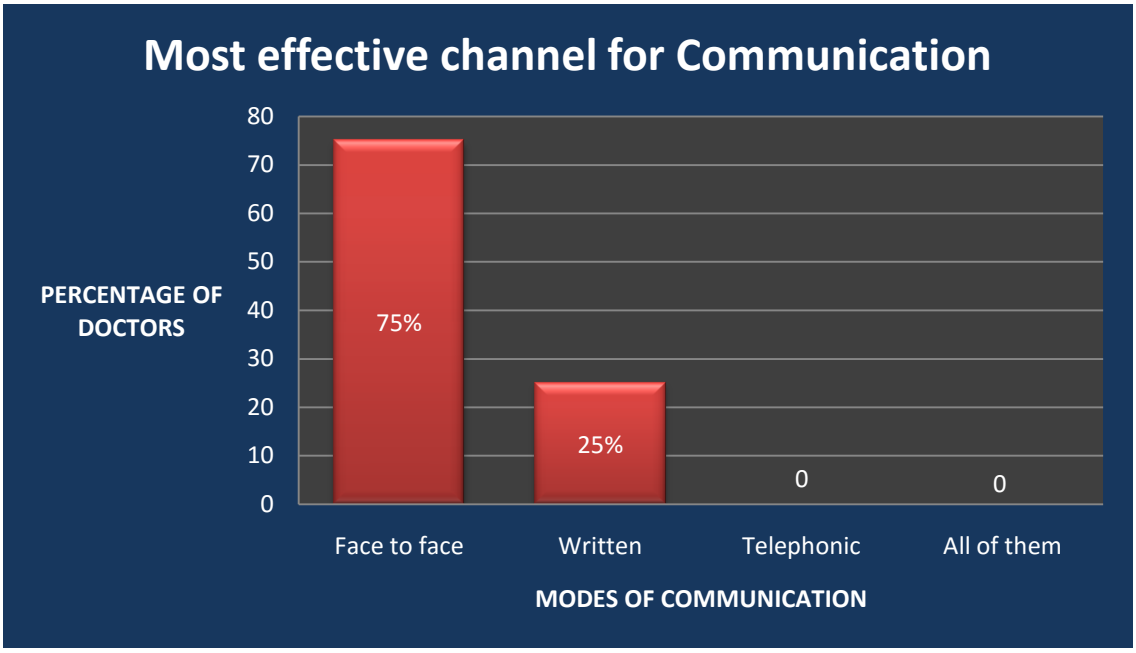
INTERPRETATION: **As per analysis, Doctors of both the blocks uses all the three modes of communication:**

Face to face

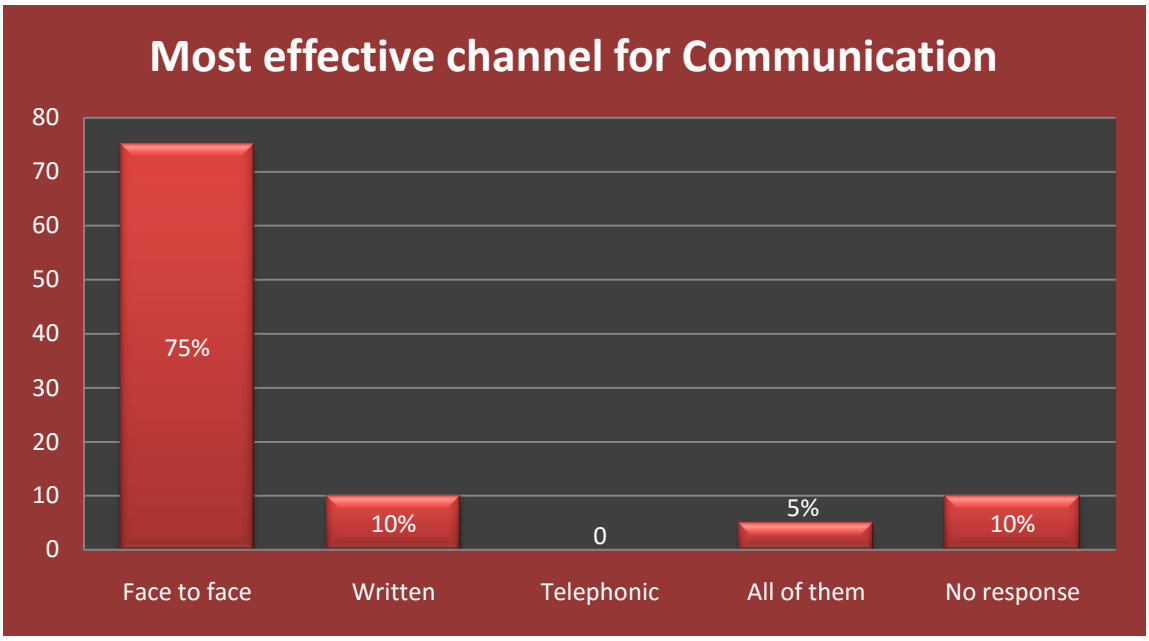
Written

Telephonic

EAST BLOCK (Fig 41)



WEST BLOCK (Fig 42)



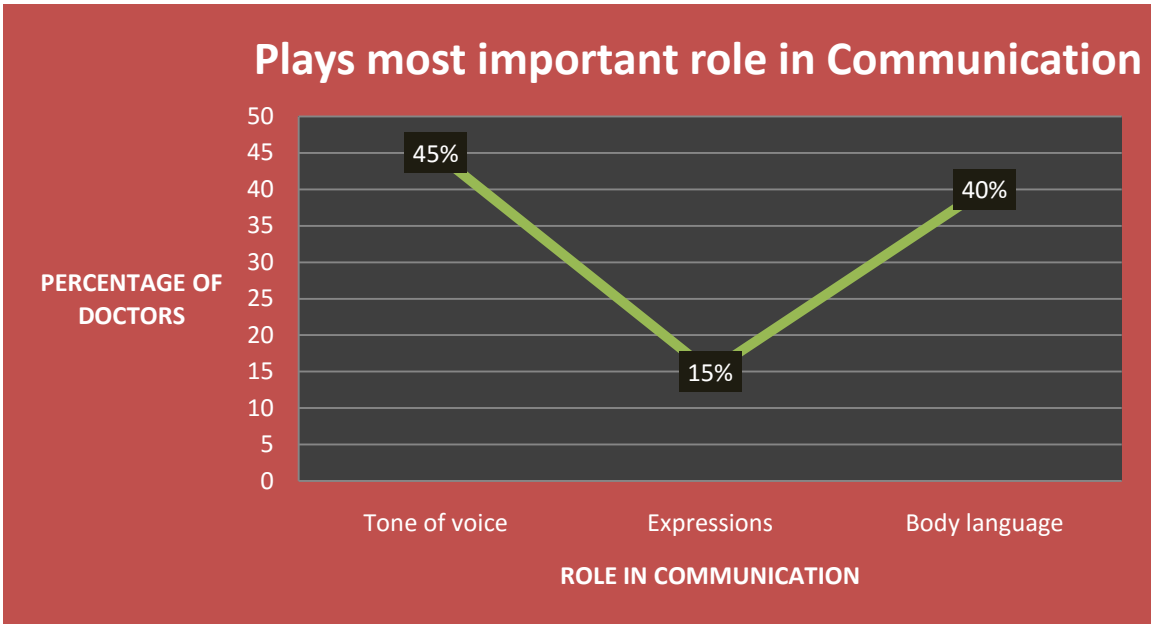
INTERPRETATION: **As per analysis, 75% of the Doctors of both the wings said that face to face is the most effective channel for communication.**

EAST BLOCK (Fig 43)

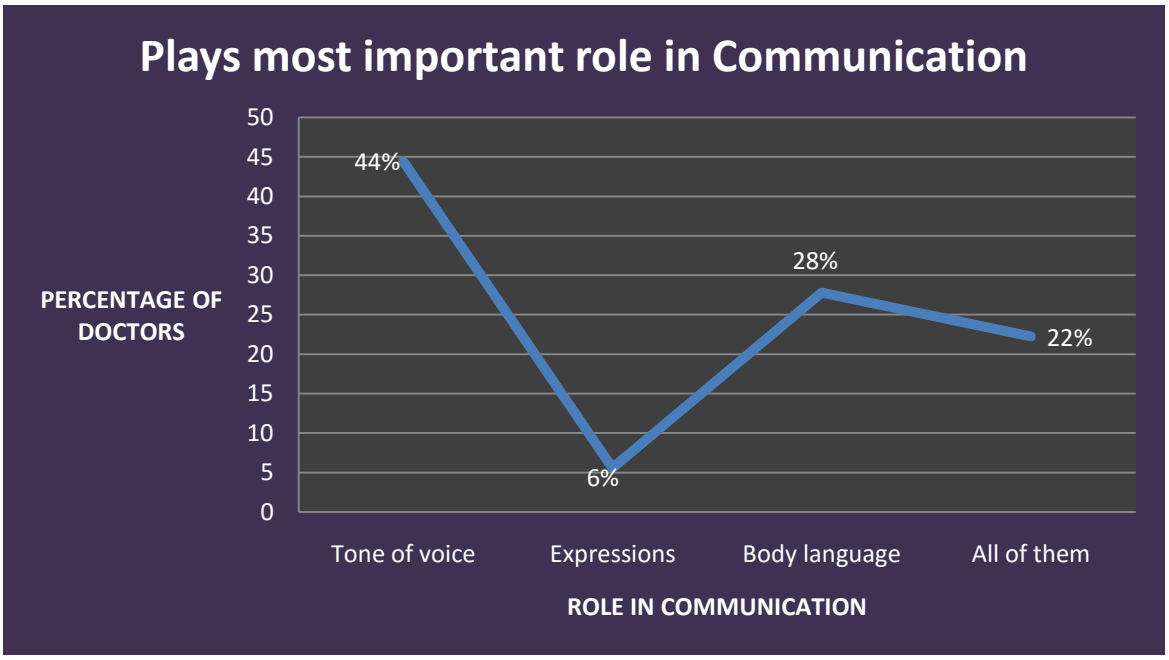
WEST BLOCK (Fig 44)

INTERPRETATION: As **per analysis, 60% of the Doctors in the East wing are aware about the International Patient Safety Goals whereas 75% of the Doctors in the West wing are aware about the International Patient Safety Goals.**

EAST BLOCK (Fig 45)

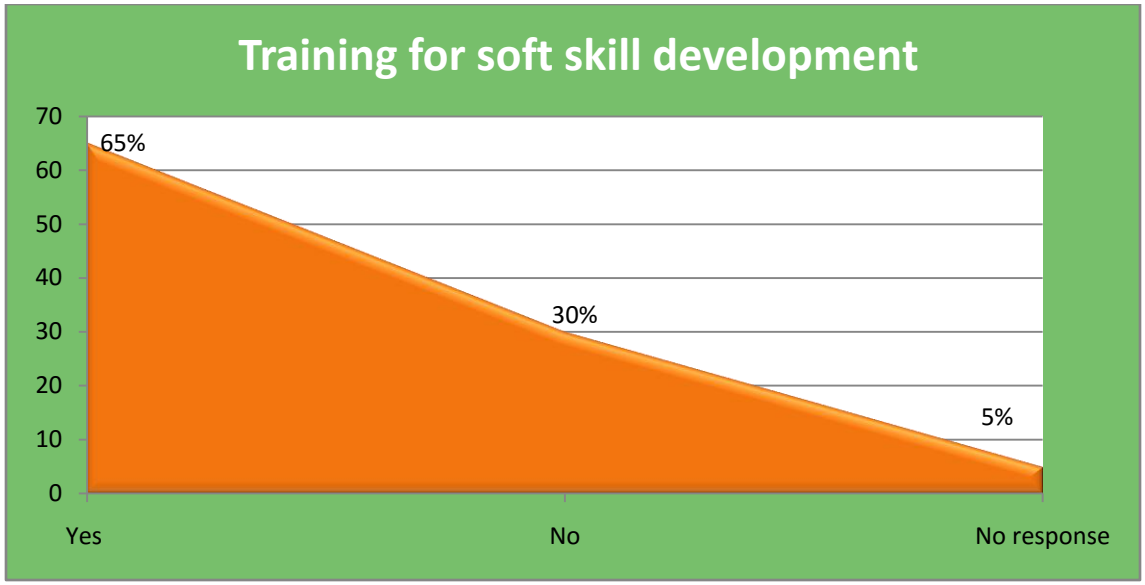


WEST BLOCK (Fig 46)

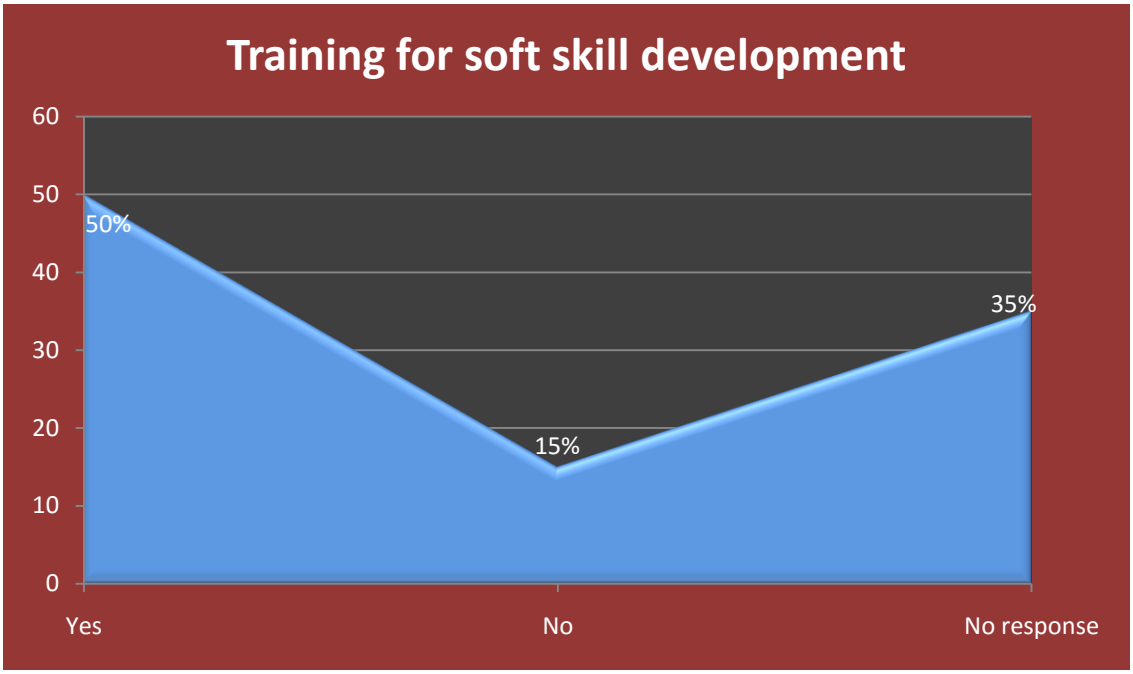


INTERPRETATION: **As per analysis, the Doctors of both the wings said that tone of voice plays most important role in communication**.

EAST BLOCK (Fig 47)

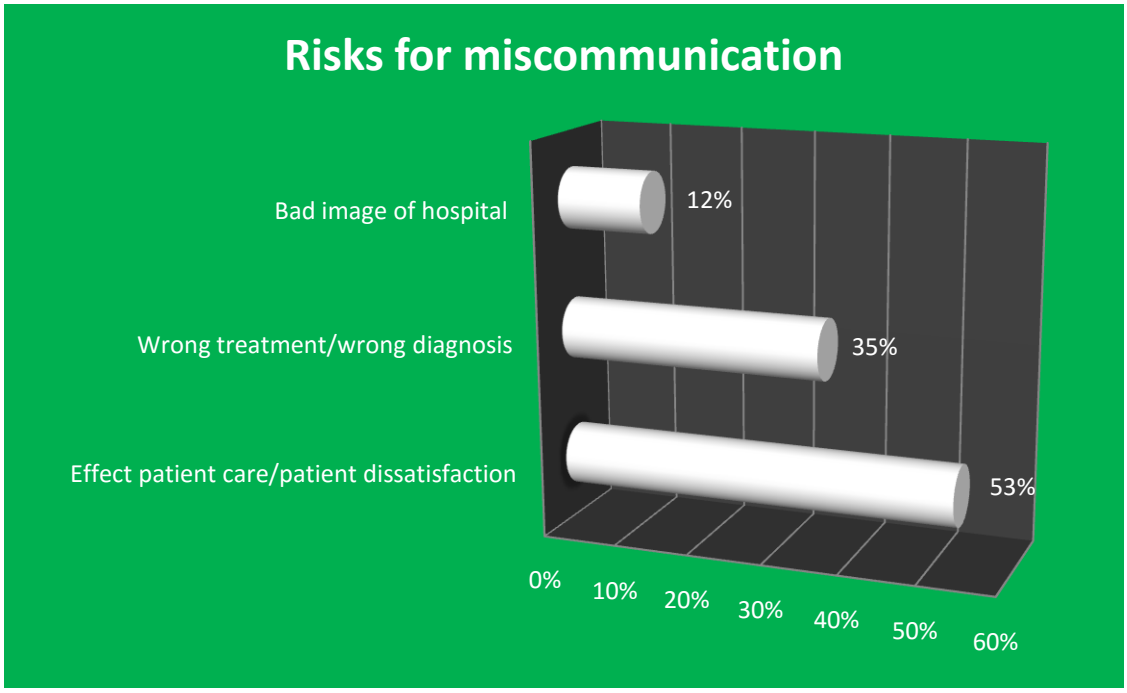


WEST BLOCK (Fig 48)

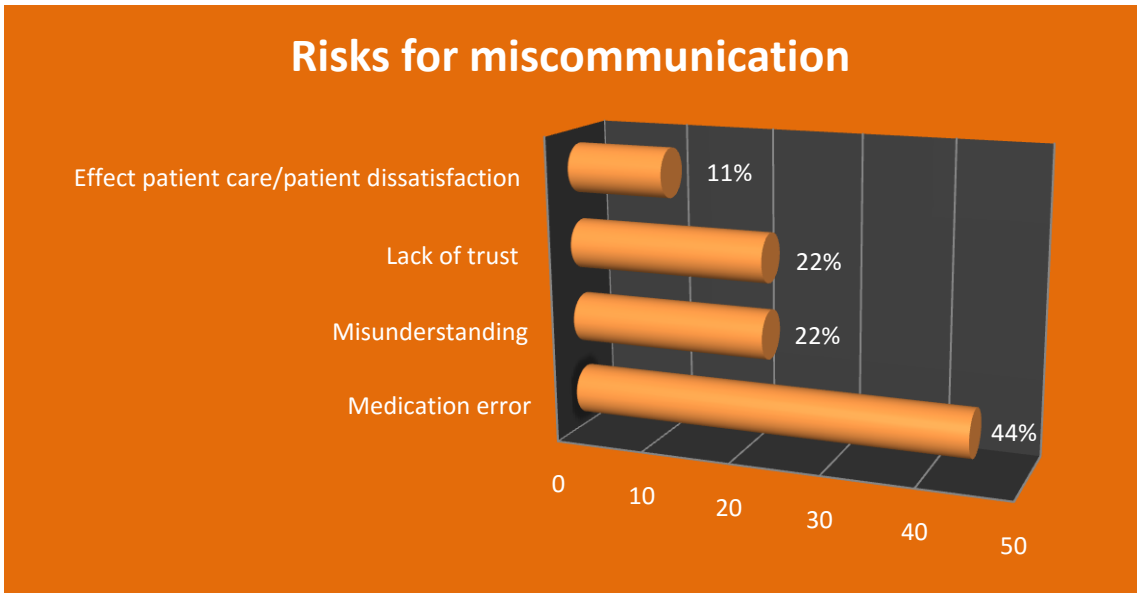


INTERPRETATION: As **per analysis, the 65% of Doctors of the East wing said that they are given training for soft skill development whereas 50% of the Doctors of the West wing said that they are given training for soft skill development.**

EAST BLOCK (Fig 49)



WEST BLOCK (Fig 50)



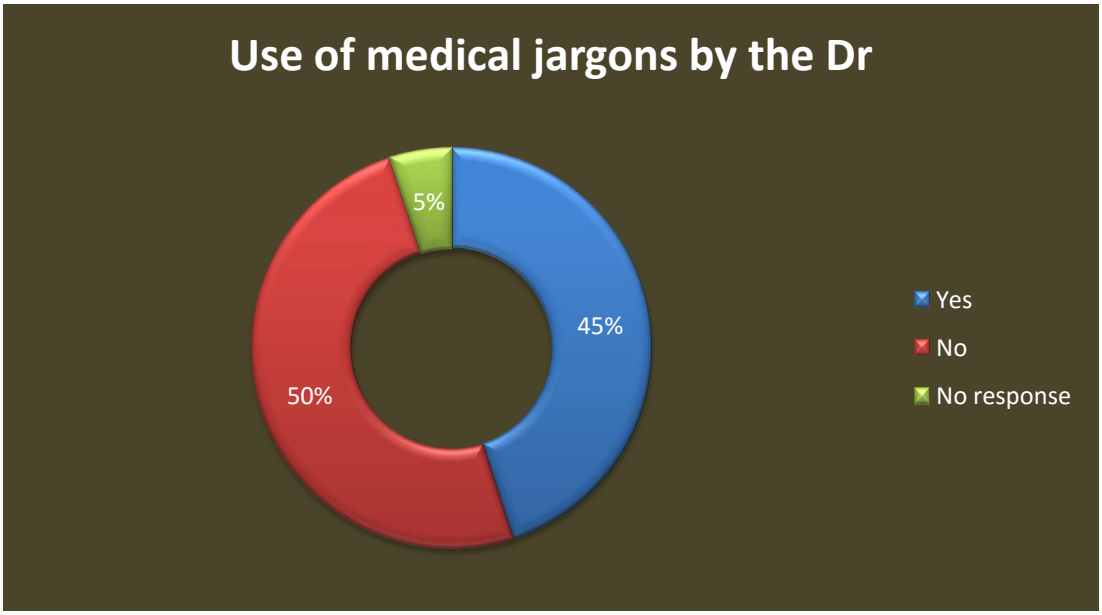
INTERPRETATION: **As per analysis, the Doctors of both the wings said that the risks for miscommunication are:**

Lack of trust and misunderstanding

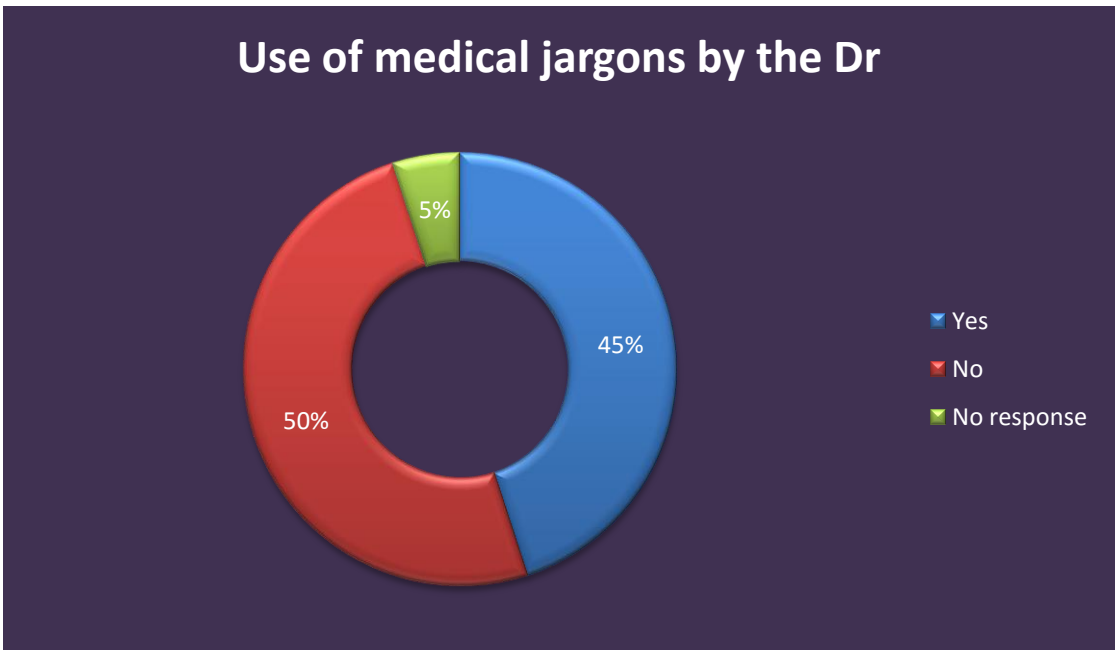
Medication error

Effect patient care and leads to patient dissatisfaction.

EAST BLOCK (Fig 51)

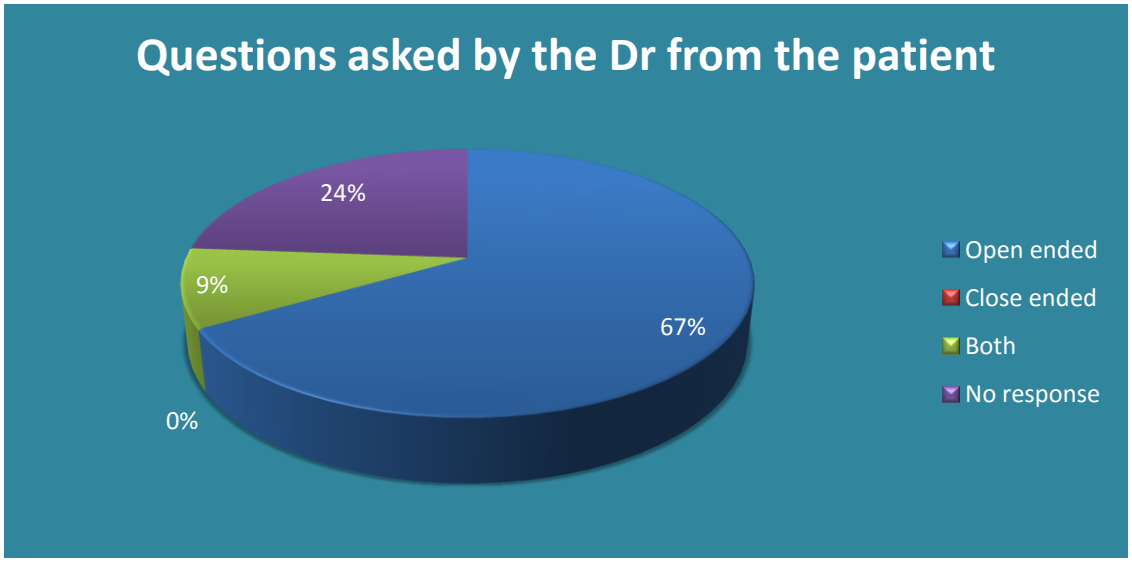


WEST BLOCK (Fig 52)

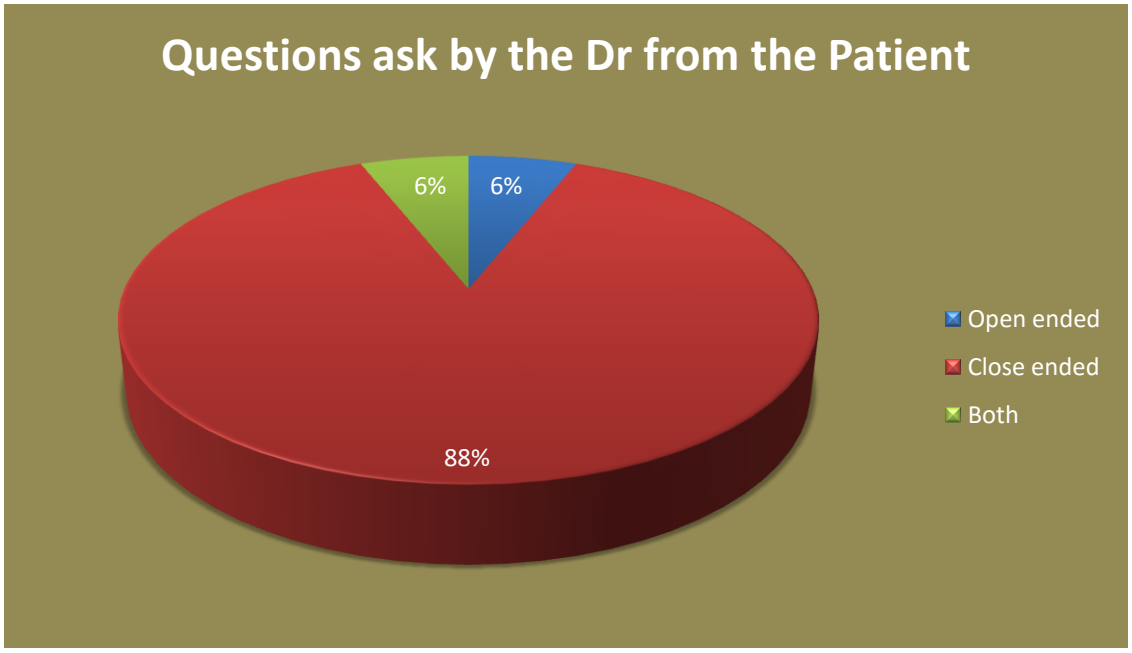


INTERPRETATION: **As per analysis, 45% of the Doctors of both the wings use medical jargons while explaining any procedure to the patient.**

EAST BLOCK (Fig 53)

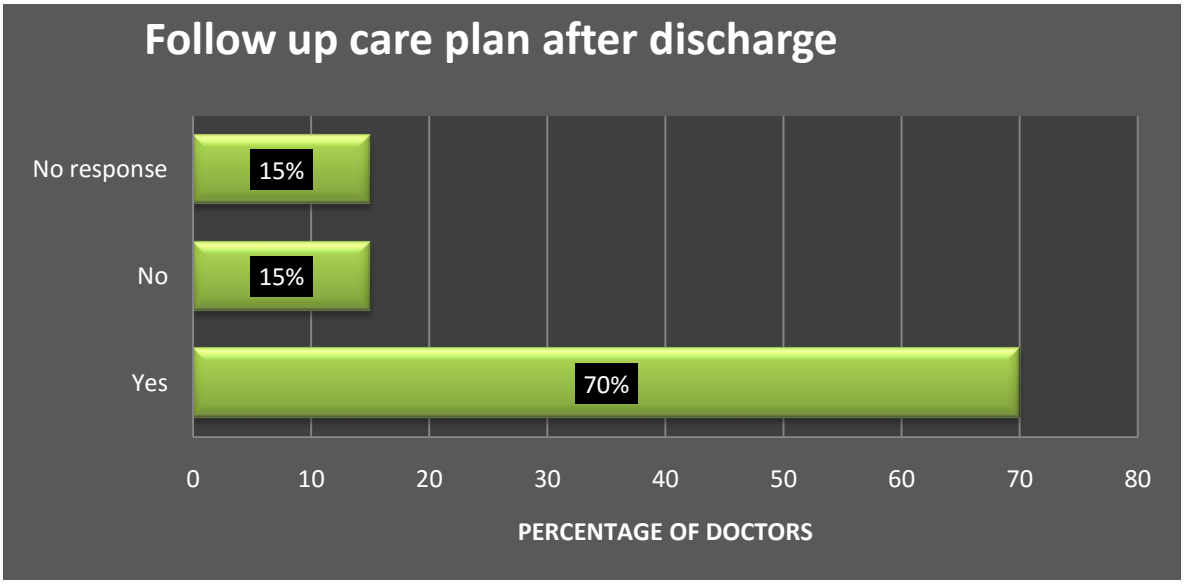


WEST BLOCK (Fig 54)

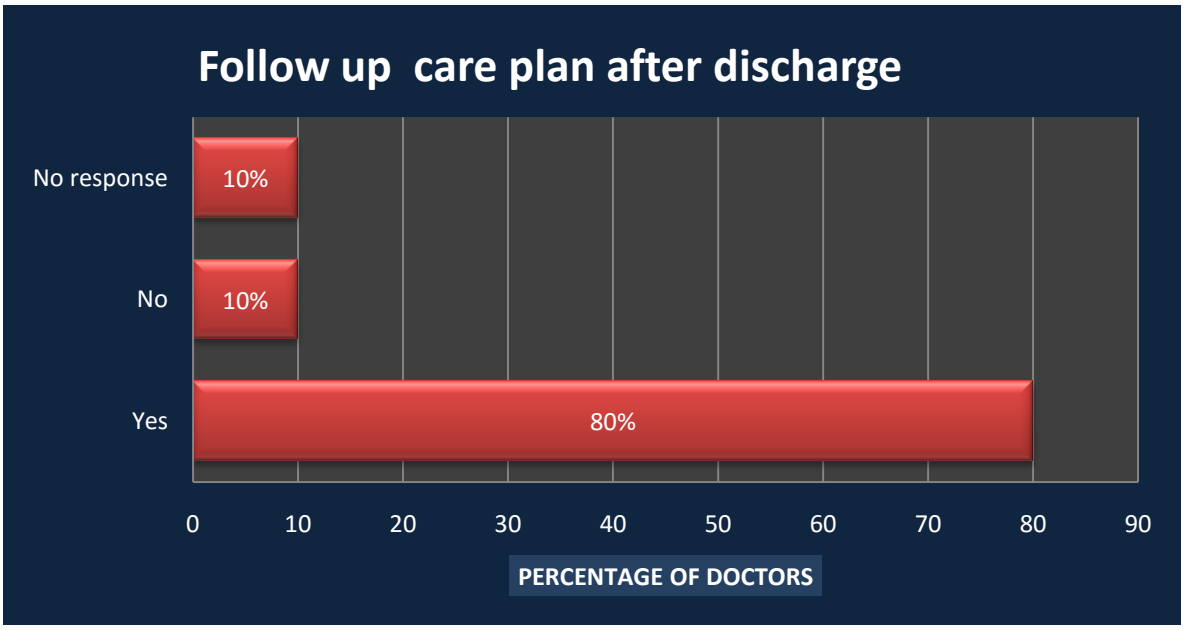


INTERPRETATION: **As per analysis, 67% of the Doctors of the East wing ask open ended question from the patient and 88% of the Doctors of the West wing ask open ended questions from the patient.**

EAST BLOCK (Fig 55)

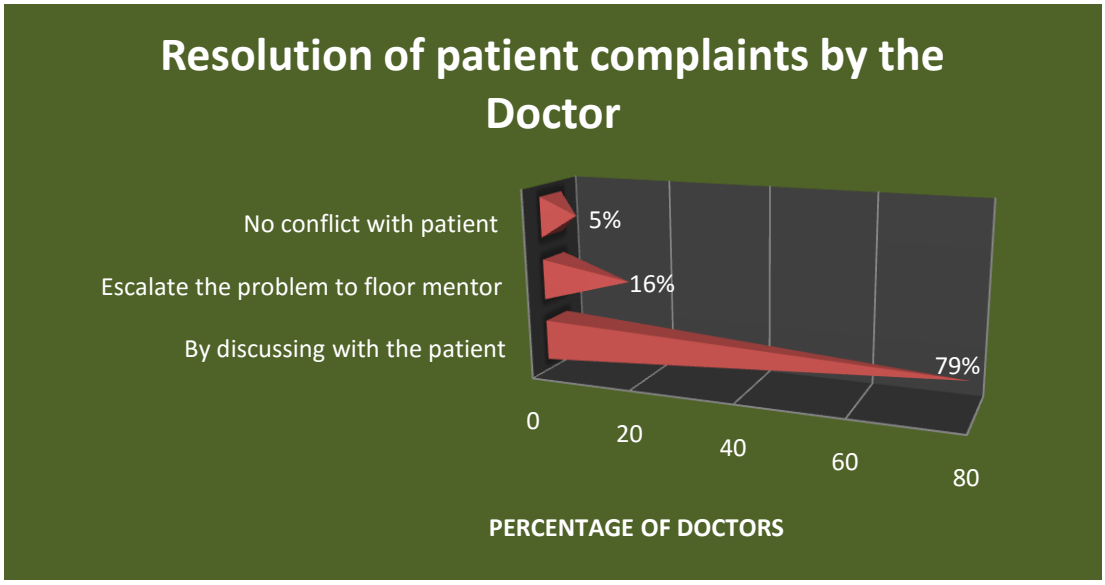


WEST BLOCK (Fig 56)

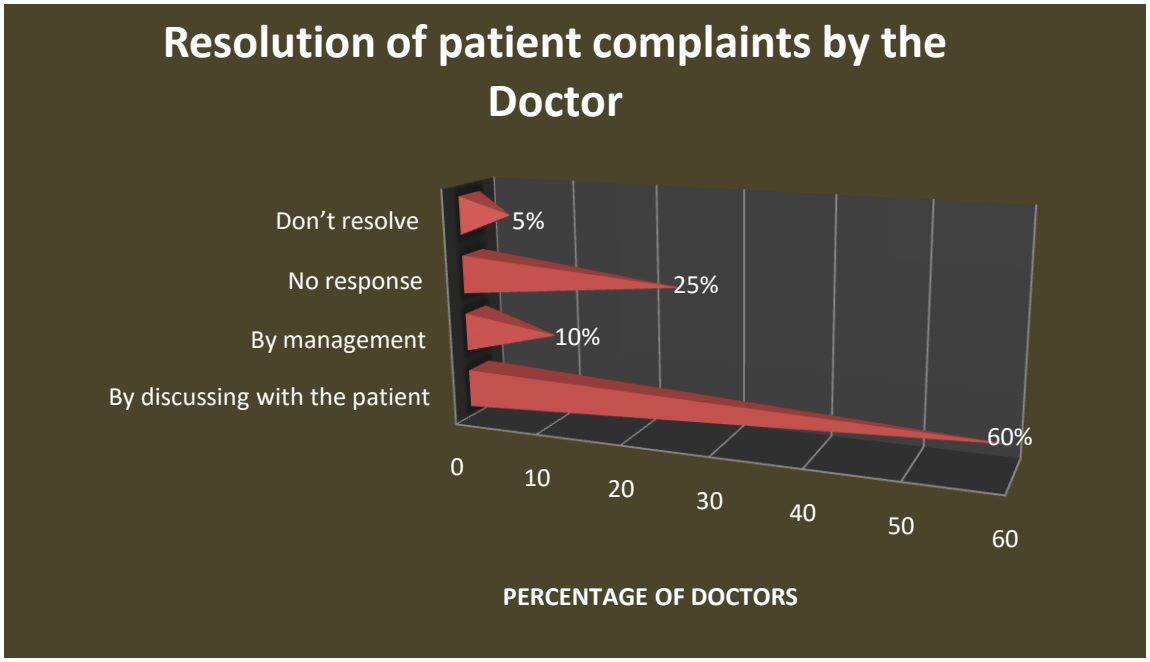


INTERPRETATION: **As per analysis, 70% of the Doctors of the East wing follow up care plan after discharge and 80% of the Doctors of the West wing follow up care plan after discharge.**

EAST BLOCK (Fig 57)



WEST BLOCK (Fig 58)



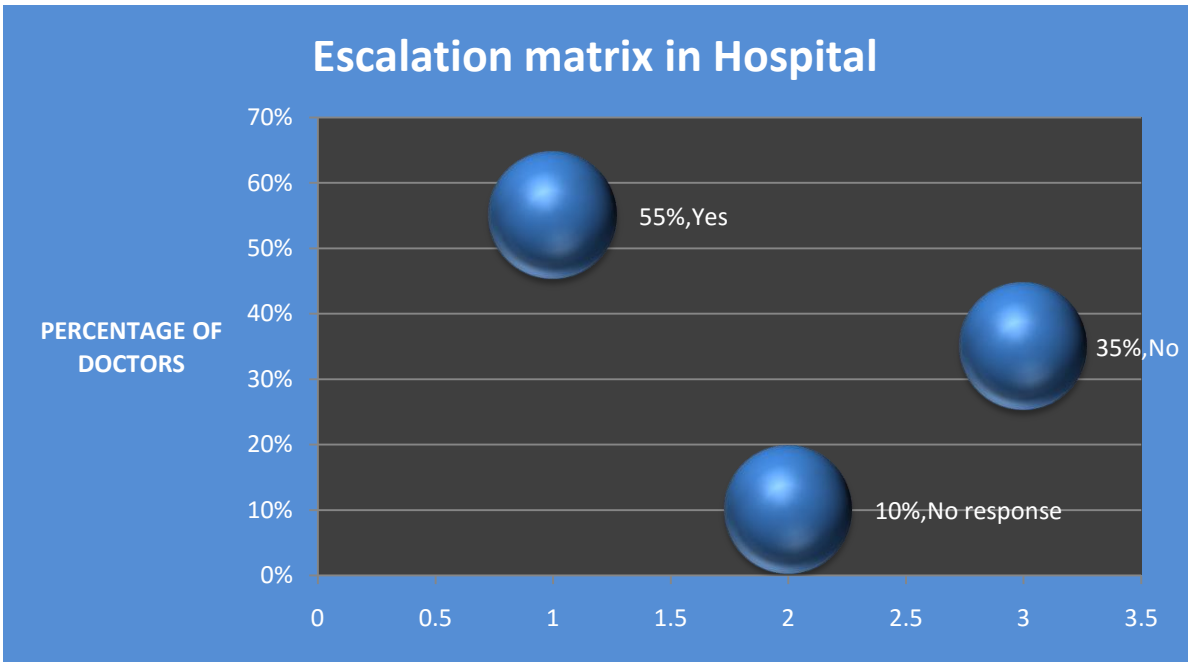
INTERPRETATION: **As per analysis, Doctors of both the blocks resolve the patient complaints:**

By management

By discussing with the patient.

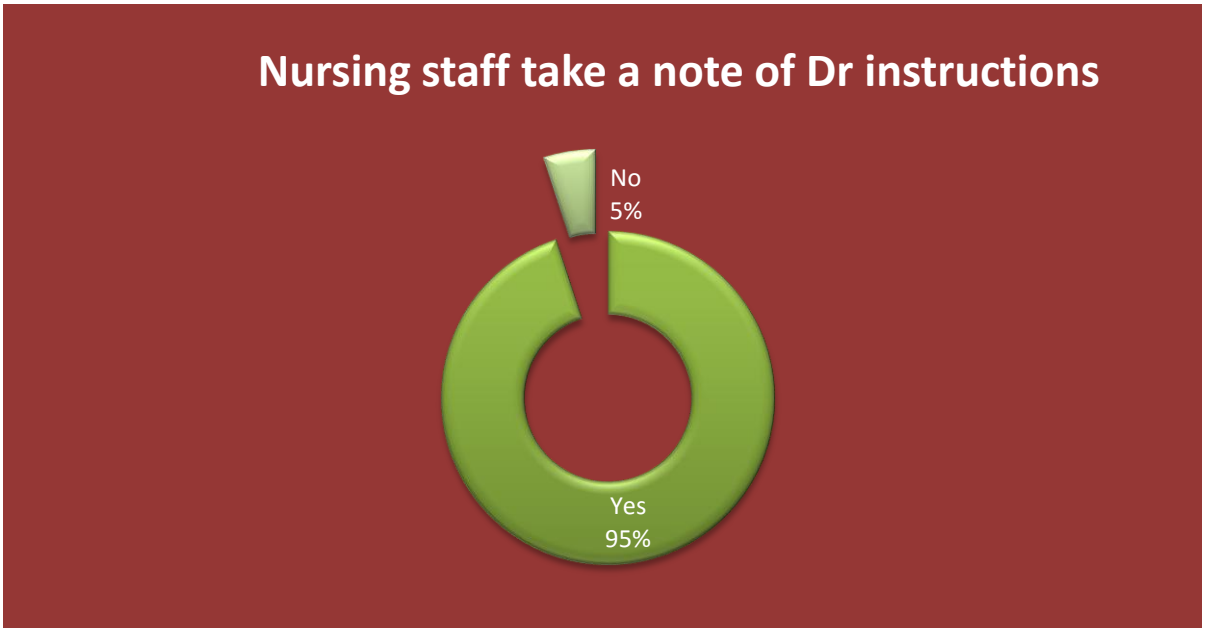
WEST BLOCK (Fig 59)

EAST BLOCK (Fig 60)

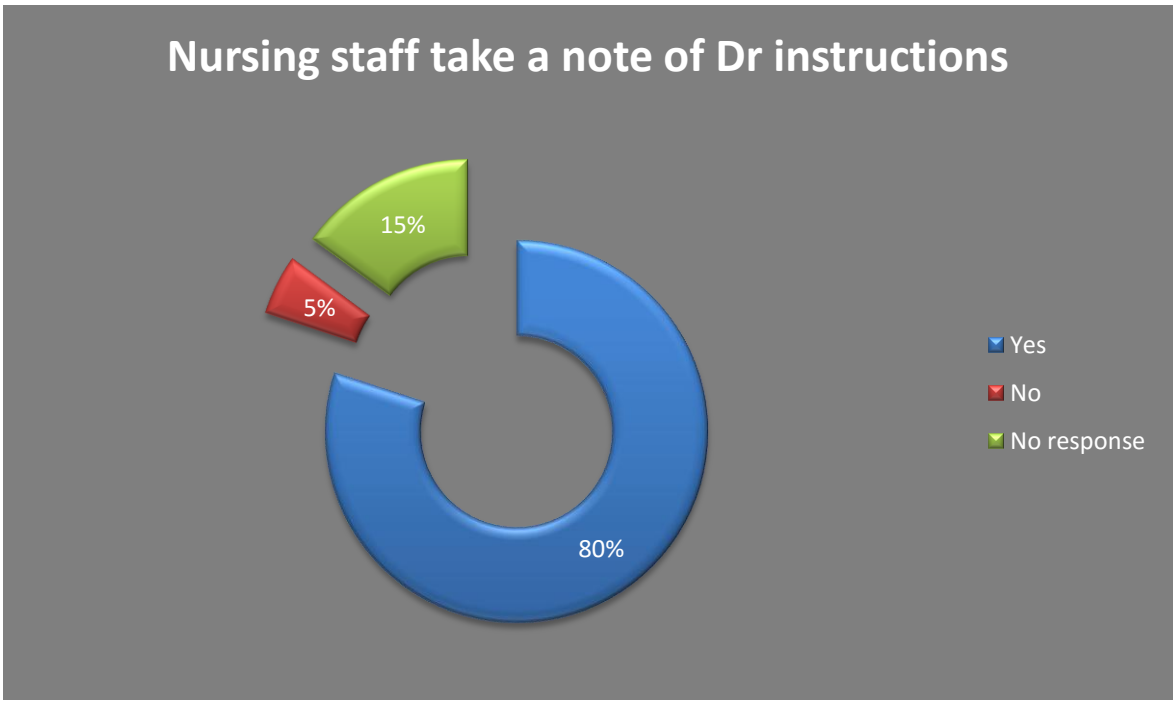


INTERPRETATION: **As per analysis, 45% of the Doctors in the West wing are aware about the escalation matrix of the hospital whereas 55% of the Doctors in the East wing are aware about the escalation matrix of the hospital.**

WEST BLOCK (Fig61)

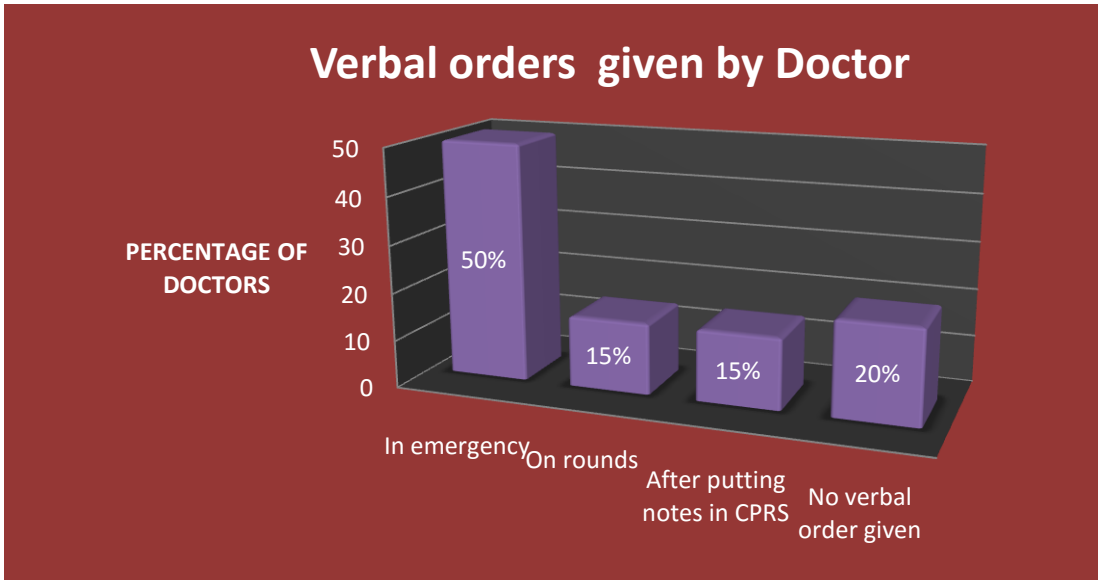


EAST BLOCK (Fig 62)

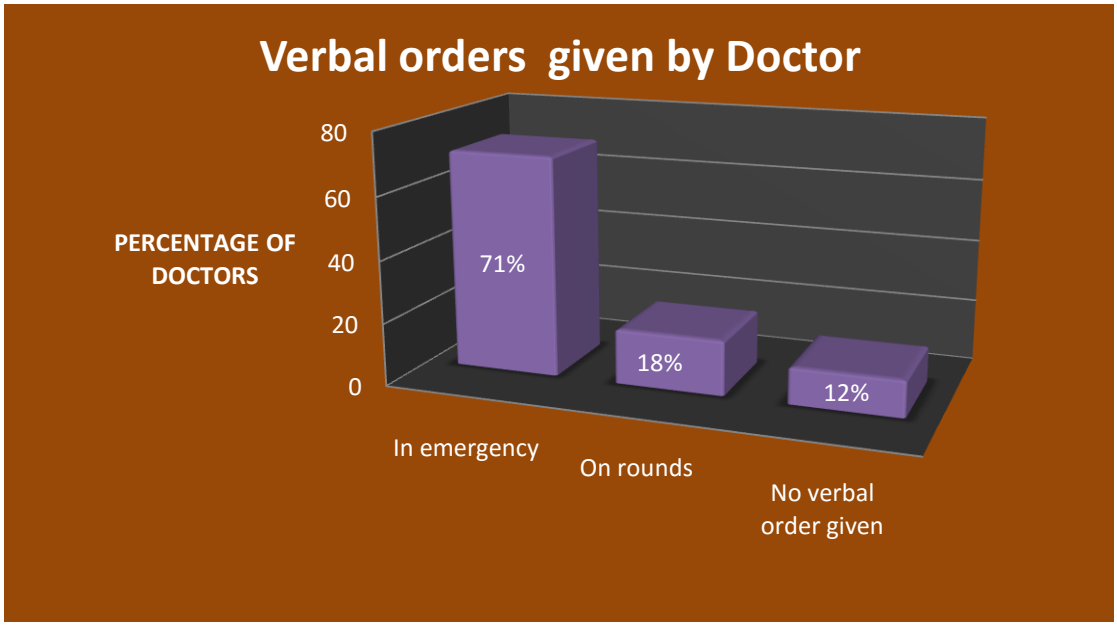


INTERPRETATION: **As per analysis, 95% of the nurses of West wing take a note of Dr Instructions whereas 80% of the nurses of the East wing take a note of Dr Instructions**.

WEST BLOCK (Fig 63)

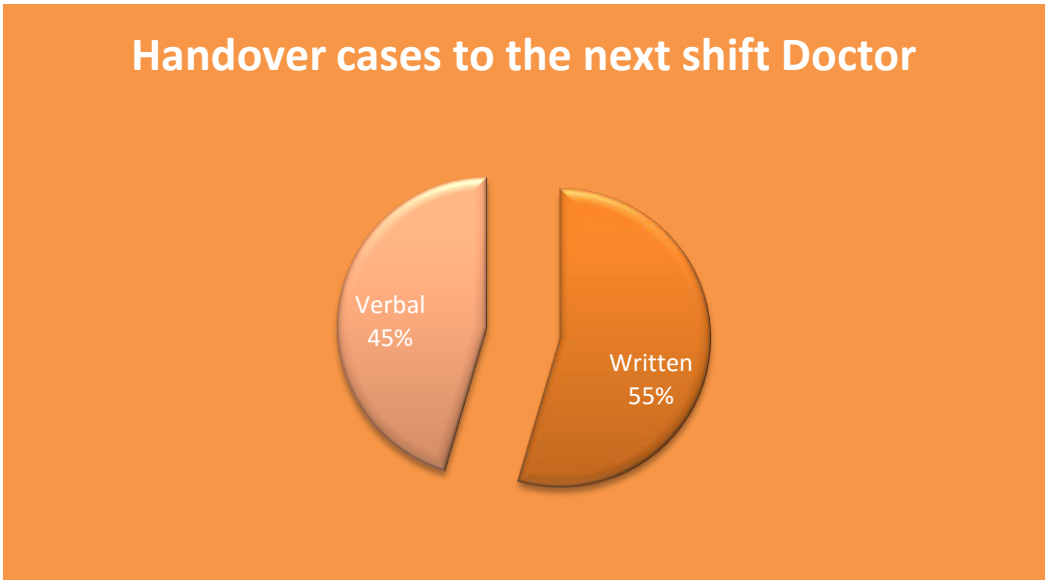


EAST BLOCK (Fig 64)

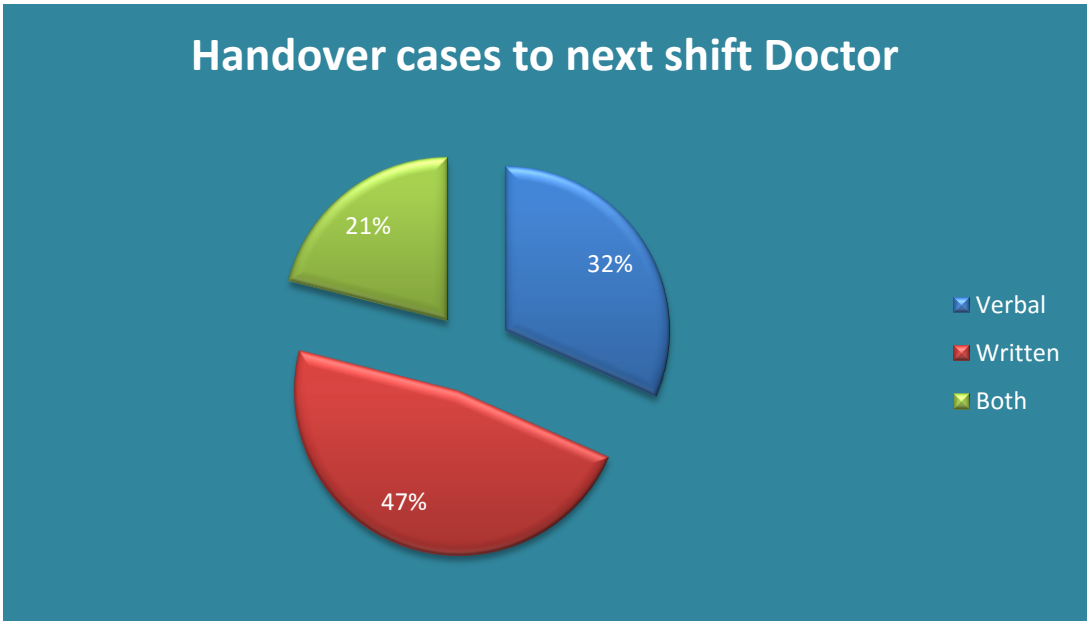


INTERPRETATION: **As per analysis, 18% of the Doctors of the East wing give verbal orders on rounds whereas 15% of the Doctors of the West wing give verbal orders on rounds**.

WEST BLOCK (Fig 65)

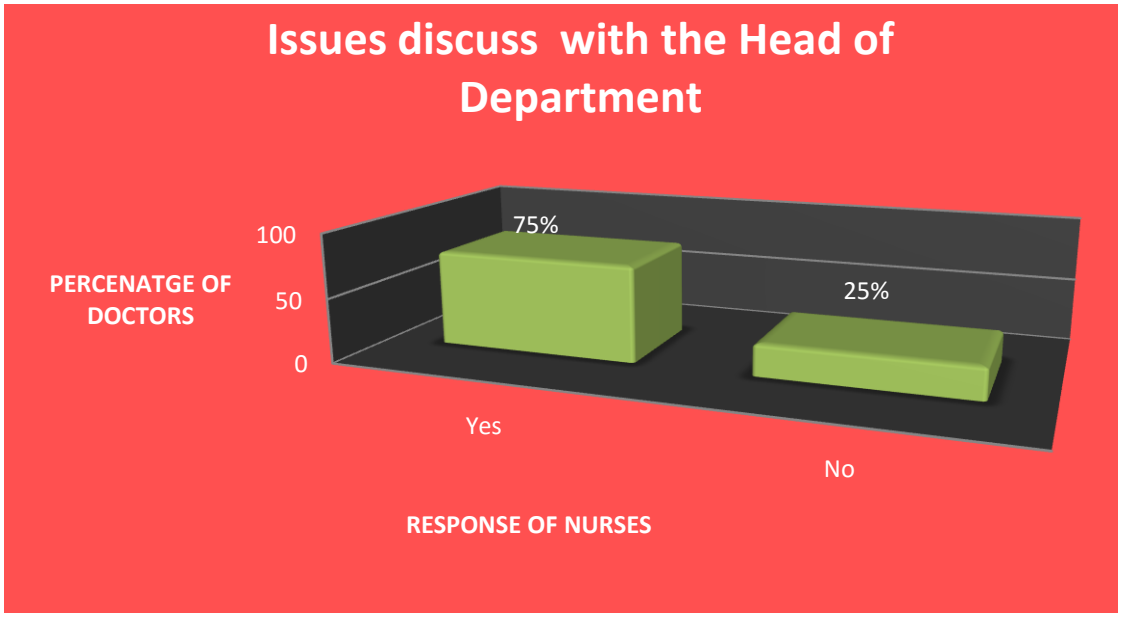


EAST BLOCK (Fig 66)

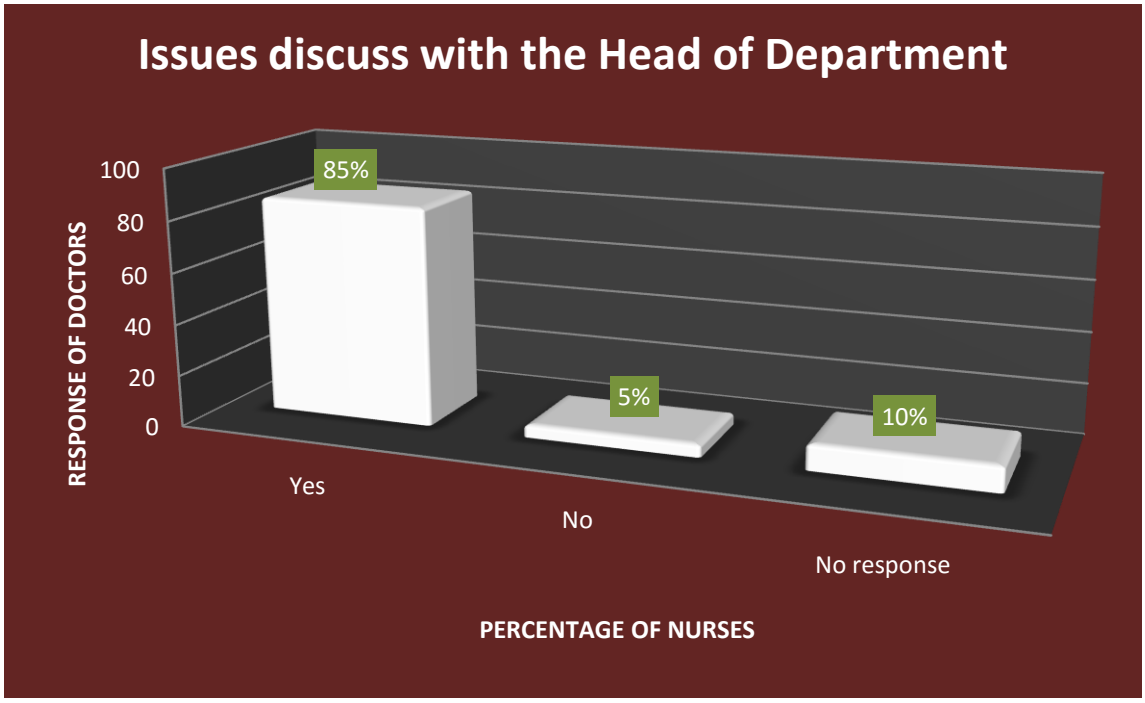


INTERPRETATION: **As per my analysis, 55% of the Doctors of the West wing give written handover to the next shift Dr whereas 47% Doctors of the East wing give written handover to the next shift Dr.**

WEST BLOCK (Fig 67)

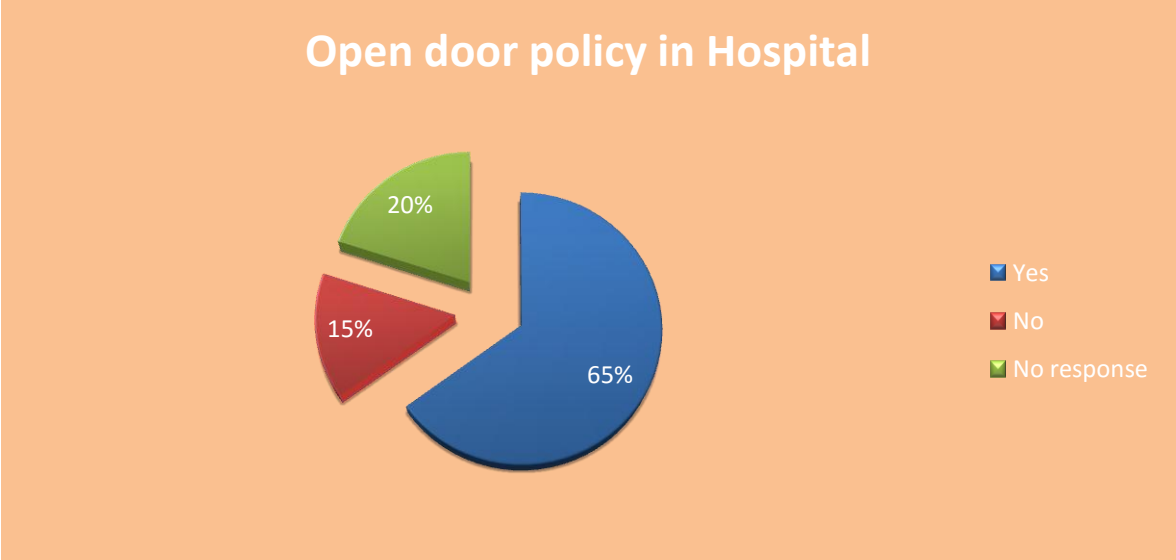


EAST BLOCK (Fig 68)

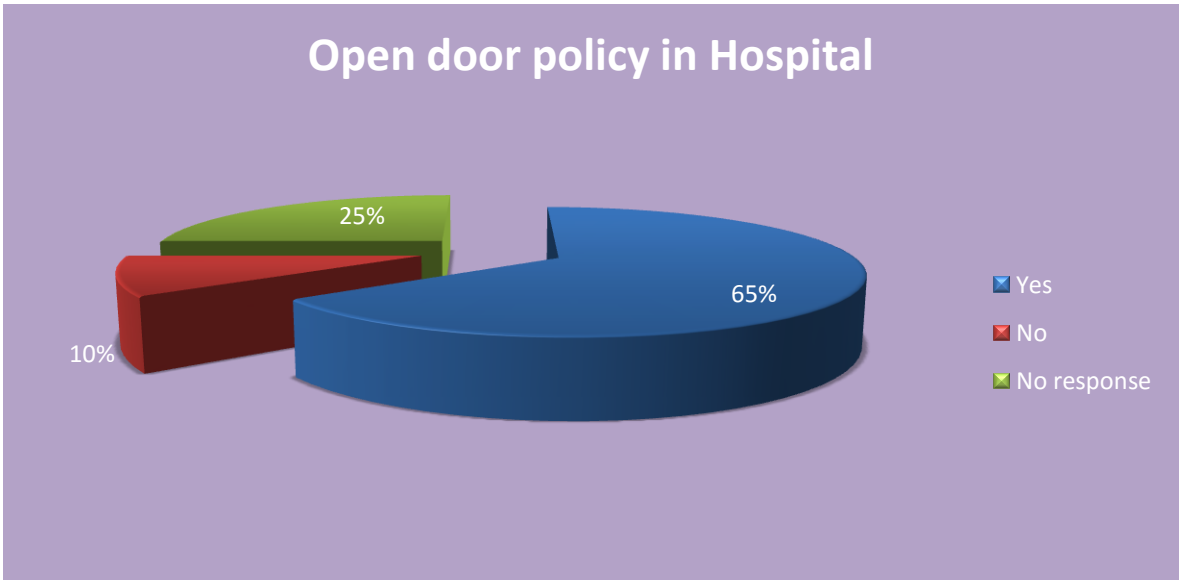


INTERPRETATION:**As per analysis,75% of the Doctors of the West block said that their issues are discuss with the Head of Department whereas 85% of the Doctors of the East block said that their issues are discuss with the Head of Department .**

WEST BLOCK (Fig 69)



EAST BLOCK (Fig 70)



INTERPRETATION: **As per analysis, 65% of Doctors in both the wings said that there is a open door policy in the hospital.**

RESULT:

NURSES

The nurses in **East wing** are **better** in communication as compared to the Nurses in the West wing as they are more aware about the International Patient Safety Goals and also know that communication is one of them, awareness regarding the hands on training for the soft skill development is more, they resolve the miscommunication with the Dr, has less language barrier with the Doctors, more number of Nurses give written handover to the next shift Nurse as compared to the West wing, the more number of Nurses are in continues observation under the Senior Nurse.

The Nurses of both the wings said that face to face is the most effective channel for communication and tone of voice plays most important role in communication, they equally prioritize their work; record the patient details in CPRS, they don't have any problem in communicating with Dr of opposite sex, they are clear about their reporting i.e. to TL or Supervisor, their first interaction with the patient occurs at while introducing and greeting the patient.

DOCTORS

The Doctors in the **West wing** are **better** in communication as compared to the Doctors in the East wing as they are more aware about the International Patient Safety Goals and also know that communication is one of them, ask open ended questions from the patient which further facilitate the communication with the patient, more number of Doctors follow up the care plan after the discharge, more awareness regarding the Escalation matrix, more number of Nurses takes a note of Doctor instructions as compared to the East wing, Doctors give less verbal orders on rounds, more number of doctors give written handover to the next shift Nurse.

Doctors of both the wings said that face to face is the most effective channel for communication and tone of voice plays most important role in communication, they are equally aware about the open door policy.

SUGGESTIONS AND RECOMMENDATIONS:

1. Hands on training should be given to the Nurses as well as to the Doctors for soft skill development on monthly basis.

2. Educate staff about the importance of communication, International Patient Safety Goals, about the risks for miscommunication.

3. There should not be any verbal communication between Doctor and Nurse except in case of emergency.

4. The number of nursing staff should increase in order to reduce the workload for effective communication.

5. The Nurses from the other states should be given communication classes on Hindi or English language in order to overcome language barrier.

6. The more experiences Nurses to be retained in the Hospital as new Nurses take time to learn and it affects the quality of care.

7. The Nurses should check the Doctor notes as soon as possible in order to avoid any miscommunication.

8. The Nurses should resolve the miscommunication with the Doctor as well as with the patient to avoid further confusion.

9. The Nurses and Doctors should give written handover only to the next shift staff as verbal handover may leads to the medication error.

10. The Nurses should be in continuous observation under the Senior Nurse as by doing so they will be more alert and thus reduces the chances of doing wrong things and increases the quality of patient care.

11. The Doctors should not use any medical jargons while explaining any procedure to the patient as patient will not understand and can result in miscommunication.

12. The Doctors should ask open ended questions(interactive) from the patient as it will facilitate effective communication.

13. There should not be given any verbal orders on rounds by the Doctors.

14. The issues of both the Doctors as well as the Nurses should be discussed with the Head of Department on the daily basis. There should be an open door policy for the same.

15. The critical values for each diagnostic test should be reported immediately

ANNEXURE: QUESTIONNARE FOR NURSES

Tool To Overcome Communication Barriers in a Hospital

1. What is the importance of communication in a hospital?

   _____

2. What channel is used to communicate in your organization?

   ☐ Face to face ☐ Written

   ☐ Telephonic ☐ All of them

   Which channel you think is more effective?

   _____

3. Are you aware about the International Patient Safety Goals? Yes/No

   Do they include communication? Yes/No

4. What according to you plays the most important role in communication?

   ☐ Tone of voice ☐ Expressions ☐ Body language

5. Does your organization provide any hands on training for soft skill development? Yes/No If yes, how many times you have attended the same? _____

6. What are the risks for miscommunication?

   _____

Doctor-Patient

7. Do you make use of medical jargons while explaining any procedure to the patient? Yes/No
8. Are you sharing information with your patients regarding the prognosis or treatment before starting any procedure? Yes/No

   If yes, do you document that information? Yes/No

9. What kind of questions do you ask the patient to know his/her complaints- open ended or close ended? Give example:

   _____

10. How much time do you devote to your:

    Outpatient- _____

    Inpatient- _____

11. How do you take care of your patient's privacy?

    _____

12. Do you follow up the care plan even after discharge of your patient? Yes/No

    How? _____

    Do you provide emergency contact number to your patients to contact you after discharge? Yes/No

13. How do you resolve any conflict with your patient?

    _____

    Is there any escalation matrix followed in your organization? Yes/No

Doctor-Nurse

14. Does your nursing staff take notes of your instructions every time? Yes/No

    What do you do if you find that nurses are not following your notes?

    _____

15. When do you give verbal orders? _____

Doctor-Doctor

16. How do you handover your work or case visit to your colleagues?

    _____

17. Do you think there is importance of quality of a referral letter from a general practitioner to inpatient physician or cross consult between different specialty doctors? Yes/No

    Does the admitting doctor's team communicate with the prior inpatient doctor's team for a patient? Yes/No

18. What according to you is the importance of discharge summary in treatment process of that patient on his/her next visit to the hospital?

    _____

19. Are your issues discussed with the Head of the Department on the daily basis? Yes/No

Is there an open door policy followed in your organization?

ANNEXURE: QUESTIONNARE FOR DOCTORS

Tool To Overcome Communication Barriers in a Hospital

1. What is the importance of communication in a hospital?

_____

2. What channel is used to communicate in your organization?

- ☐ Face to face
- ☐ Written
- ☐ Telephonic
- ☐ All of them

Which channel you think is more effective?

_____

3. Are you aware about the International Patient Safety Goals? Yes/No

Do they include communication? Yes/No

4. What according to you plays the most important role in communication?

- ☐ Tone of voice
- ☐ Expressions
- ☐ Body language

5. Does your organization provide any hands on training for soft skill development? Yes/No If yes, how many times you have attended the same? _____
6. What are the risks for miscommunication?

_____

7. Is the communication between you and the doctor- verbal or written?
8. Are you assigned multiple tasks at a time by your doctor? Yes/No
   If yes, does it makes you feel overloaded with work, at times? Yes/No
9. Do you prioritize your work? Yes/No
   How? _____
10. Do you feel any hesitation to communicate with doctors of opposite sex? Yes/No

11. How do you overcome language barrier with the doctors?

_____

12. How do you take a note of your doctor's instructions?

_____

After what time interval do you check the notes by your doctor for your patient?

_____

13. Do you sort the issues after miscommunication with your doctor? Yes/No

If yes, how do you resolve?

_____

Nurse-Patient

14. What is the first interaction between you and your patient?

_____

15. How do you record your patient's details? _____

16. How do you take the patient's complaints or issues?

_____

Nurse-Nurse

17. How do you handover the cases to the next shift nurse?

▢ Verbally ▢ Written_____

18. Are you clear about the roles as to whom and where to report? Yes/No

Whom do you report? _____

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A STUDY TO FIND OUT THE COMPLIANCE OF INFORMED CONSENT IN ICU's OF EAST AND WEST WING

AT

MAX SUPERSPECIALITY HOSPITAL, SAKET

IIHMR UNIVERSITY **Institute of Health Management Research, Jaipur**

DECLARATION

I do hereby declare that I am a student of 1st year, MBA in Hospital and Healthcare Management, IIHMR University, Jaipur, Rajasthan session 2014-2016.

I would like to state that I have carried out my Internship on the topic "Study to find out the compliance of informed consent in ICU's of East and West wing "under the guidance of Dr. Sandeep Mor, DMS (Deputy Medical Superintendent)) at Max Super Speciality Hospital, Saket, New Delhi for the partial fulfillment for the degree of MBA in Hospital and Healthcare Administration.

This project work is my own and has not been submitted to any of the other Institute or University for the purpose of award of any degree or diploma.

Dr.Kirti Aggarwal

IIHMR University

(2015-2017)

ACKNOWLEDGEMENT

A summer project is a golden opportunity for learning and self development.

I consider myself very lucky and honored to have wonderful people leading me through the completion of this project.

I consider myself fortunate for having been provided an opportunity to undergo summer training at Max Super Specialty Hospital, Saket, New Delhi and wish to express my indebted gratitude to Dr. Sahar Qureshi, Assistant General Manager Operations, MSSH, East Block

I also wish to extend a special thanks to Dr.Sandeep More, DMS,(Deputy Medical Superintendent), who in spite of being extraordinarily busy with his duties, took time to hear, guide and keep me on the correct path and allowing me to carry out my project work at their esteemed organization during the training.

I am obliged to Dr. Ominder Singh Jain for the valuable information provided by her in the respective field. I am grateful to the co-operation of Max Staff during the period of my project.

Lastly, I thank Almighty, my family and friends for their constant encouragement without which assignment would not be possible.

Dr. Kirti Aggarwal

Dr. Sandeep Mor
DMS (Deputy Medical Superintendent)
MSSH, Saket, New Delhi

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INTRODUCTION

Medical practice today is not simple because of various factors impinging on the doctor-patient relationship. Mutual trust forms the foundation for good relationship between doctor and patient. Today, patients tend to be well- or ill-informed about the disease and health. With the hype created in the print and visual media regarding ‘beauty’, ‘shape, size and appearance of body parts’, ‘quality and quantity of hair’, etc., patients tend to come to dermatologists with unreasonable demands and unrealistic expectations. Therefore, providing adequate information and educating the patient about realities and obtaining informed consent before subjecting a patient to any test/procedure/surgery is very essential.

Informed consent: The process by which a patient learns about and understands the purpose, benefits, and potential risks of a medical or surgical intervention, including clinical trials, and then agrees to receive the treatment or participate in the trial.

ETHICAL ANGLE

The concept of consent arises from the ethical principle of patient autonomy and basic human rights. Patient's has all the freedom to decide what should or should not happen to his/her body and to gather information before undergoing a test/procedure/surgery. No one else has the right to coerce the patient to act in a particular way. Even a doctor can only act as a facilitator in patient's decision making.

LEGAL ANGLE

No one has the right to even touch, let alone treat another person. Any such act, done without permission, is classified as “battery” - physical assault and is punishable. Hence, obtaining consent is a must for anything other than a routine physical examination.

IMPLIED VS. EXPRESSED CONSENT

The very act of a patient entering a doctor's chamber and expressing his problem is taken as an implied (or implicit) consent for general physical examination and routine investigations. But, intimate examination, especially in a female, invasive tests and risky procedures require specific expressed consent. Expressed (explicit) consent can be oral or written. Written consents are

preferable in situations involving long-term follow-up, high-risk interventions and cosmetic procedures and surgeries. It is also needed for skin biopsy, psoralen with ultraviolet A (PUVA) therapy, intralesional injection, immunosuppressive therapy, electrocautery etc.

Consent is necessary for photographing a patient for scientific/educational/research purpose or for follow up. Specific consent must be taken if the identity of the patient is likely to be revealed while publishing. Consent is a must for participation in clinical trials and research projects.

PRE-REQUISITES

Patient should be competent to give consent; must be an adult and of sound mind. In case of children, consent must be obtained from a parent. In case of incapacitated persons, close family members or legal guardians can give consent. Adequate information should be provided to a prudent patient during informed consent.

Prudent patient means a reasonable or average patient. To decide whether adequate information has been given, courts rely on this “Prudent Patient Test”. It is not easy to answer the question, how much information is “adequate”? A netizen may expect and demand detailed information. On the other hand, an illiterate may say that “I do not understand anything, Doctor; you decide what is best for me!” If a patient knowingly prefers not to get full information that attitude also needs to be respected as a part of patient's right to autonomy.

Patients' perception of risk of a medical intervention is also highly individualistic, variable and unpredictable. The information provided to a patient should include all material risks. But, the list of risks and side effects cannot be exhaustive to the level of absurdity and impracticality. For example, hardly any patient can go through the product information leaflet included in any drug pack and if somebody does, it is unlikely that the drug is consumed. So, what is expected is that the doctor should provide information that a prudent or reasonable patient would expect to make a knowledgeable decision about the course of action to be taken in the presence of alternatives.

Patient should be given opportunity to ask questions and clarify all doubts. There must not be any kind of coercion. Consent must be voluntary and patient should have the freedom to revoke the consent. Consent given under fear of injury/intimidation, misconception or misrepresentation of facts can be held invalid.

And finally, informed consent assumes that when patient make his/her decision, he/she is not pressured – they freely choose based on what they feel is best for them.

DOCUMENTATION

It is important to document the process of consent taking. It should be prepared in duplicate and a copy handed over to the patient. It should be dated and signed by the patient or guardian, the doctor and an independent witness.

REVIEW OF LITERATURE

"Informed consent" is a technical term first used in a medical malpractice United States court case in 1957. In tracing its history, some scholars have suggested tracing the history of checking for any of these practices.

1. a patient agrees to a health intervention based on an understanding of it
2. the patient has multiple choices and is not compelled to choose a particular one
3. the consent includes giving permission

Medical history:

Historians cite a series of medical guidelines to trace the history of informed consent in medical practice.

The Hippocratic Oath a 500 BC Greek text was the first set of Western writings giving guidelines for the conduct of medical professionals. It advises that physicians conceal most information from patients to give the patients the best care. The rationale is a **beneficence** model for care—the doctor knows better than the patient, and therefore should direct the patient's care, because the patient is not likely to have better ideas than the doctor.

Henri de Mondeville, a French surgeon who in the 14th century, wrote about medical practice. Among his recommendations were that doctors "promise a cure to every patient" in hopes that the good prognosis would inspire a good outcome to treatment. Mondeville emphasize the need for the patient to have confidence in the doctor. He also advised that when deciding therapeutically unimportant details the doctor should meet the patients' requests "so far as they do not interfere with treatment".

Benjamin Rush advised that doctors ought to share as much information as possible with patients. He recommended that doctors educate the public and respect a patient's informed decision to accept therapy.

Thomas Percival said that patients have a right to truth, but when the physician could provide better treatment by lying or withholding information, he advised that the physician do as he thought best.

According to the **American Medical Association Code of Medical Ethics,** physicians should fully disclose all patient details truthfully when talking to other physicians.

Seven criteria define informed consent: (1) competence to understand and to decide, (2) voluntary decision making, (3) disclosure of material information, (4) recommendation of a plan, (5) comprehension of terms (3) and (4), (6) decision in favor of a plan, and (7) authorization of the plan. A person gives informed consent only if all of these criteria are met. If all of the criteria are met except that the person rejects the plan, that person makes an informed refusal.

ACCORDING TO THE NABH CHAPTER -2 (Patient Care and Rights)

The rights and responsibilities of the patient and family are outlined. The staff is aware of these and is trained to protect patient rights. Patients are informed of their rights and educated about their responsibilities at the time of admission. The costs are explained in a clear manner to patient and/or family. A documented process for obtaining patient and/or families consent exists for informed decision making about their care.

Patient and families have a right to information and education about their healthcare needs in a language and manner that is understood by them.

Standard 6

Patient and family rights support individual beliefs, values and involve the patient and family in the decision making processes.

Objective Elements:

a. Patient and family rights include respect for personal dignity, privacy and confidentiality during examination, procedures and treatment.

b. Patient and family rights include protection from physical abuse or neglect.

c. Patient and family rights include refusal of treatment.

d. Patient and family rights include access to his / her clinical records.

e. Patient and family rights include right to be informed about triage.

f. Patient and family rights include right to be informed about the findings of the initial assessment.

g. Patient and family rights include right to be informed about the care plan and treatment.

h. Patient and family rights include right to know the attending doctor and nurse by name.

i. Patient and family rights include right to know the drug and route of administration.

j. Patient and family rights include right to give feedback and get complaint redressal

k. Patient and family rights include right to be informed about the cost of treatment

Standard 7

A documented procedure for obtaining patient and / or family's consent exists for informed decision making about their care.

Objective Elements:

a. Informed consent includes information regarding the procedure, risks, benefits, alternatives and as to who will perform the requisite procedure and this is explained to the patient/family in a language that they can understand.

b. The procedure describes who can give consent when patient is incapable of independent decision making.

c. Informed consent is taken by the person performing the procedure.

d. Staff is aware of the informed consent procedure.

REQUIREMENTS OF THE PROFESSIONAL:

Informed consent requires doctors to disclose significant risks, as well as risks of particular importance to that patient. This approach combines an objective (the reasonable patient) and subjective (this particular patient) approach.

The doctrine of informed consent should be contrasted with the general doctrine of medical consent, which applies to assault or battery. The consent standard here is only that the person understands, in general terms, the nature of and purpose of the intended intervention. As the higher standard of informed consent applies to negligence, not battery, the other elements of negligence must be made out. Significantly, causation must be shown: That had the individual been made aware of the risk he would not have proceeded with the operation (or perhaps with that surgeon).

Optimal establishment of an informed consent requires adaptation to cultural or other individual factors of the patient. For example, people from Mediterranean and Arab appear to rely more on the context of the delivery of the information, with the information being carried more by who is saying it and where, when, and how it's being said, rather than *what* is said, which is of relatively more importance in typical "Western" countries.

The informed consent doctrine is generally implemented through good healthcare practice: pre-operation discussions with patients and the use of medical consent forms in hospitals. However, reliance on a signed form should not undermine the basis of the doctrine in giving the patient an opportunity to weigh and respond to the risk. In one British case, a doctor performing routine surgery on a woman noticed that she had cancerous tissue in her womb. He took the initiative to remove the woman's womb; however, as she had not given informed consent for this operation, the doctor was judged by the **General Medical Council** to have acted negligently. The council stated that the woman should have been informed of her condition, and allowed to make her own decision.

Nurses or other members of the health care team may be involved in filling out the consent form and witnessing the signature of the patient or the parent or guardian, if the patient is a minor. In medical research, the patient must be informed that the procedure is experimental and that

consent can be withdrawn at any time. By law, informed consent must be obtained more than a given number of days or hours before certain procedures, including therapeutic abortion and sterilization, and must always be obtained when the patient is fully competent.

EXCEPTIONS TO DISCLOSURE:

Therapeutic privilege

If a doctor is of the opinion that certain information can seriously harm a patient's health - physical, mental or emotional - he has the privilege to withhold such information. But, it should be shared with close relatives. This situation usually does not occur in cutaneous aesthetic surgical procedures.

Placebo

Use of placebos in certain self-limiting conditions or in patients with high psychological overlay or in those who insist for some form of medication is justified as there are high chances of benefit to the patient with negligible risk. Revealing the truth to the patient takes away the very purpose of administration of placebo.

:

BLANKET CONSENT

An all-encompassing consent to the effect “I authorize so and so to carry out any test/procedure/surgery in the course of my treatment” is not valid. It should be specific for a particular event. If, consent is taken for microdermabrasion, it cannot be valid for any other procedure like acid peel. Additional consent will have to be obtained before proceeding with the latter.

If a consent form says that patient has consented to undergo laser resurfacing by Dr. X, the procedure cannot be done by Dr. Y, even if Dr. Y is Dr. X's assistant, unless it is specifically mentioned in the consent that the procedure may be carried out by Dr. X or Dr. Y (or his authorized assistants).

INFORMED REFUSAL

Patient has got the right of self-determination. If, a doctor diagnoses varicella in a child, the parent may choose to avail no treatment because of religious belief. Doctor's duty is to explain the possible consequences of non-treatment and benefits of treatment and leave the decision to the parent. Such informed refusals must be documented clearly. But, a patient's freedom cannot impinge on the rights of others or cause harm to a third party or community. Therefore, the said parent's freedom of choice cannot extend to sending the child to school, as the infection can spread to other children.

Discharge against medical advice also falls into this category and needs to be properly recorded in the case sheet with signature of the patient/guardian.

In an emergency situation, for example intestinal perforation, a doctor may have to operate even in the absence of consent, to save the life of the patient. It is possible that even with such an intervention, the patient may not survive. Assuming that the doctor is competent and has exercised due care and diligence, doctor cannot be held responsible for patient's death, as he has acted in good faith and in the best interest of the patient. This protection is given under Section 88 of Indian Penal Code.

RATIONALE:

This report is indented to find out the compliance of informed consent in the ICU's of both the East and West wing at Max Super Specialty Hospital, Saket as providing adequate information and educating the patient about realities before subjecting a patient to any test/procedure/surgery is very essential. Informed consent is important both for the patient safety as well as for the healthcare professionals.

Establishing a standard protocol procedure and recommending certain specific measures to increase the compliance of the informed consent in ICU's help in reducing the medical, ethical and legal issues.

OBJECTIVES:

- To study the compliance of informed consent in ICU's of East and West wing at Max Super Specialty Hospital, Saket.

- To search for areas of problem and find reasons for the same.
- To give recommendations for further improvement to prevent legal and medical issues.

METHODOLOGY:

- **Type of study** *:* Descriptive cross-sectional
- **Study population** : In ICU Patients and Doctors from 15th April to 15th May at Max Super Speciality Hospital, Saket, Delhi
- **Study area** - All ICU's at Max Hospital, East & West wing, Saket, Delhi
- **Duration of Study** – 1 month
- **Type of Data** - Quantitative
- **Technique** – Data collected.
- **Sample size** – In patients from 15th April to 15th May
- **Sampling technique**- Non probability sampling
- **Inclusion criteria**-
    - All ICU In-Patients and Doctors Admitted in Max Hospital, East & West wing, Saket from April to May,2016
    - Standard Protocols Followed by Doctors for the informed consent
- **Exclusion criteria**-
    - Other patients and doctors in rest of the hospital..

- **Data collection** - Quantitative (1 Month)
- **Data entry**- Manually
- **Data Analysis**- Using bar charts, pie charts, line graph

DATA ANALYSIS

COMPLIANCE OF INFORMED CONSENT OF ALL THE ICU'S

APEX CORONARY CARE

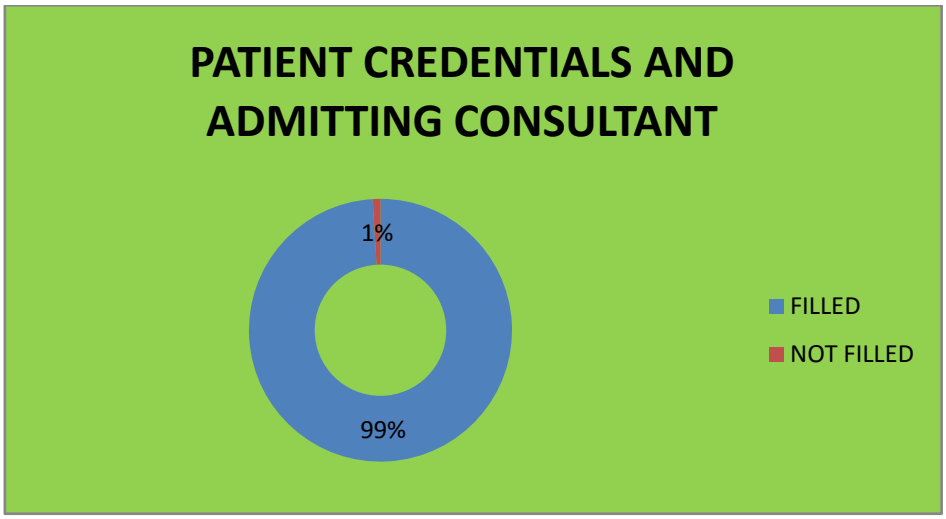


FIG 1

INTERPRETATION: **As per analysis, compliance of patient credentials and admitting consultant in informed consent of Medical ICU is 99%.**

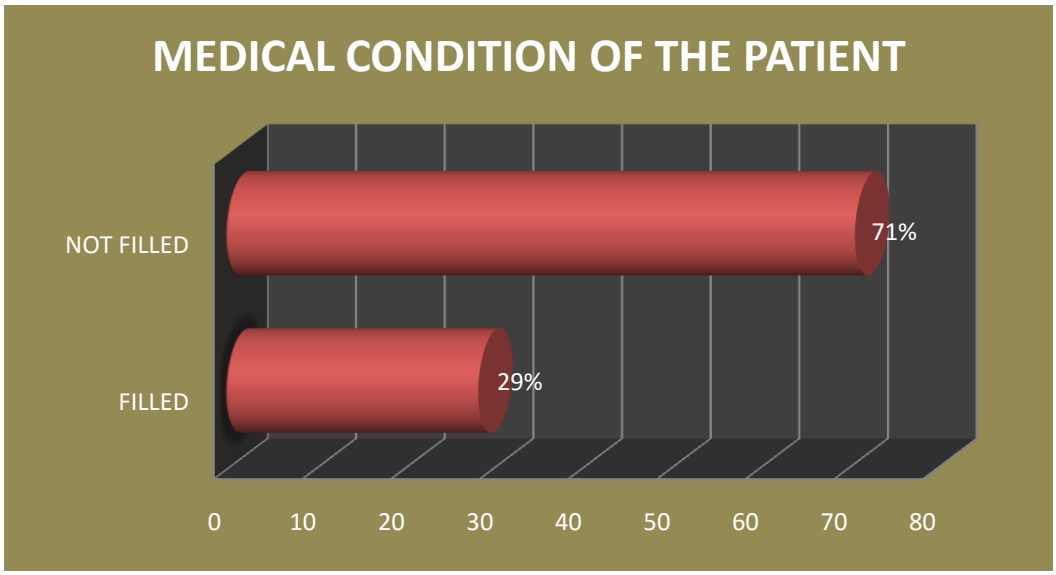


FIG 2

INTERPRETATION: **As per analysis, the compliance of medical condition of the patient in informed consent of Medical ICU is 71%.**

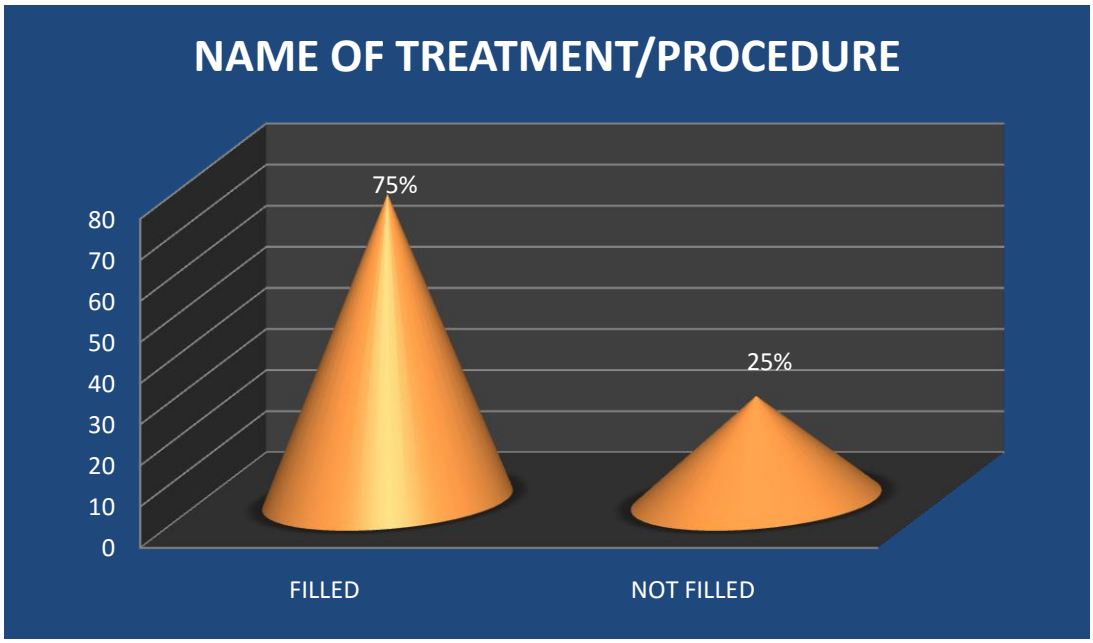


FIG 3

INTERPRETATION: **As per analysis, the compliance of name of treatment /procedure in informed consent in Medical ICU is 75%.**

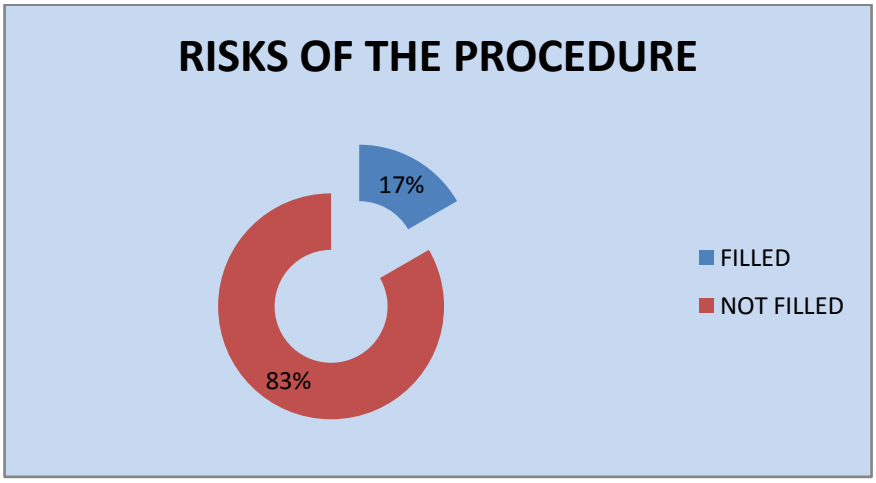
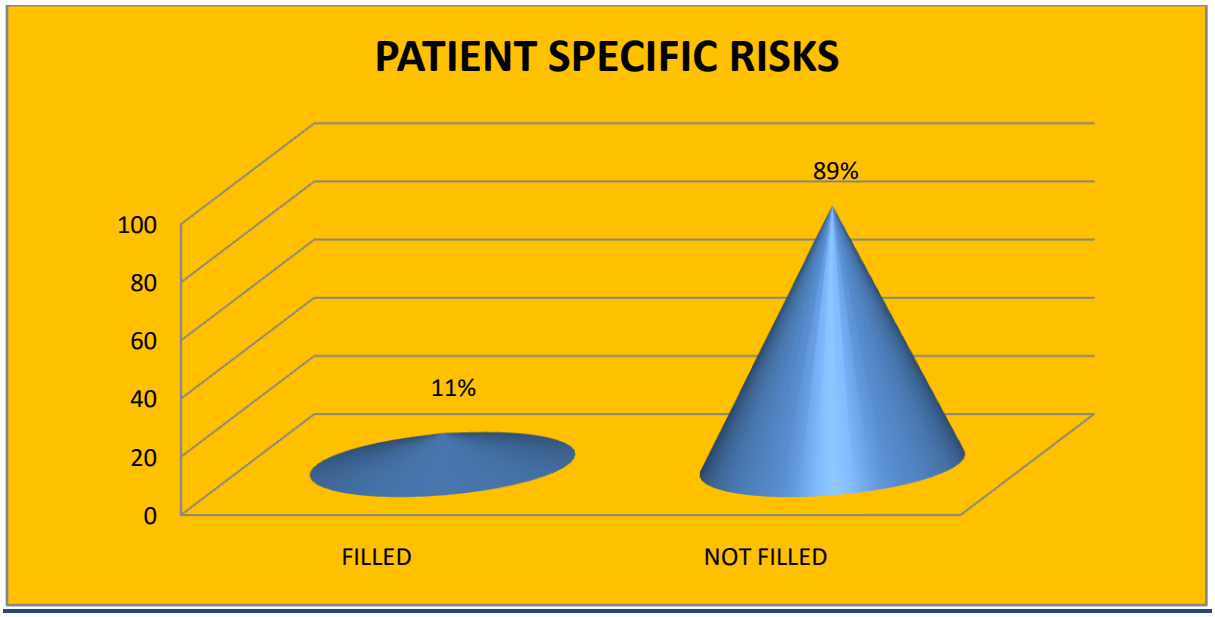


FIG 4

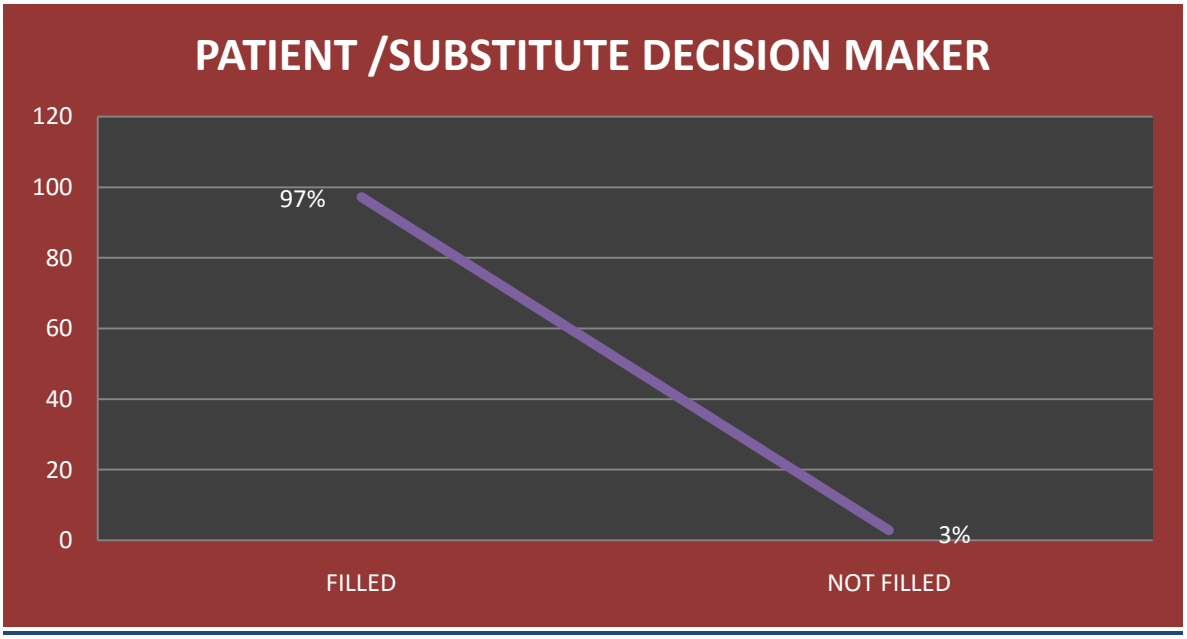
INTERPRETATION: **As per analysis, the compliance of the risks of the procedure in the informed consent of Medical ICU is 83%.**

Fig 5



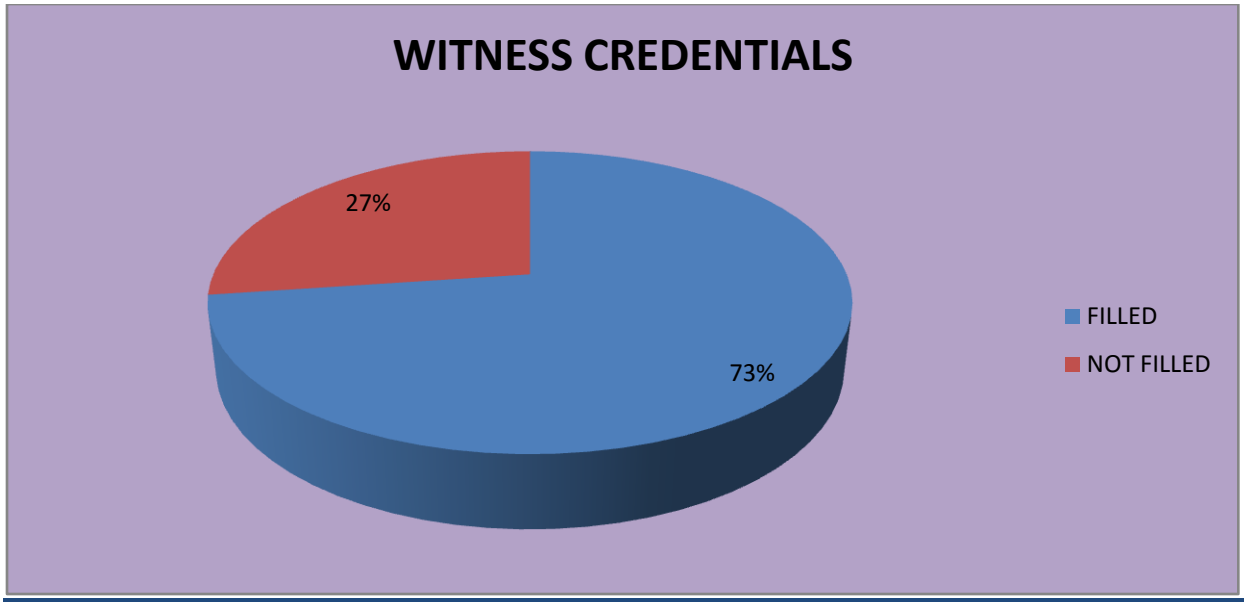
INTERPRETATION: **As per analysis, the compliance of patient specific risks in informed consent of MEDICAL ICU is 89%.**

Fig 6



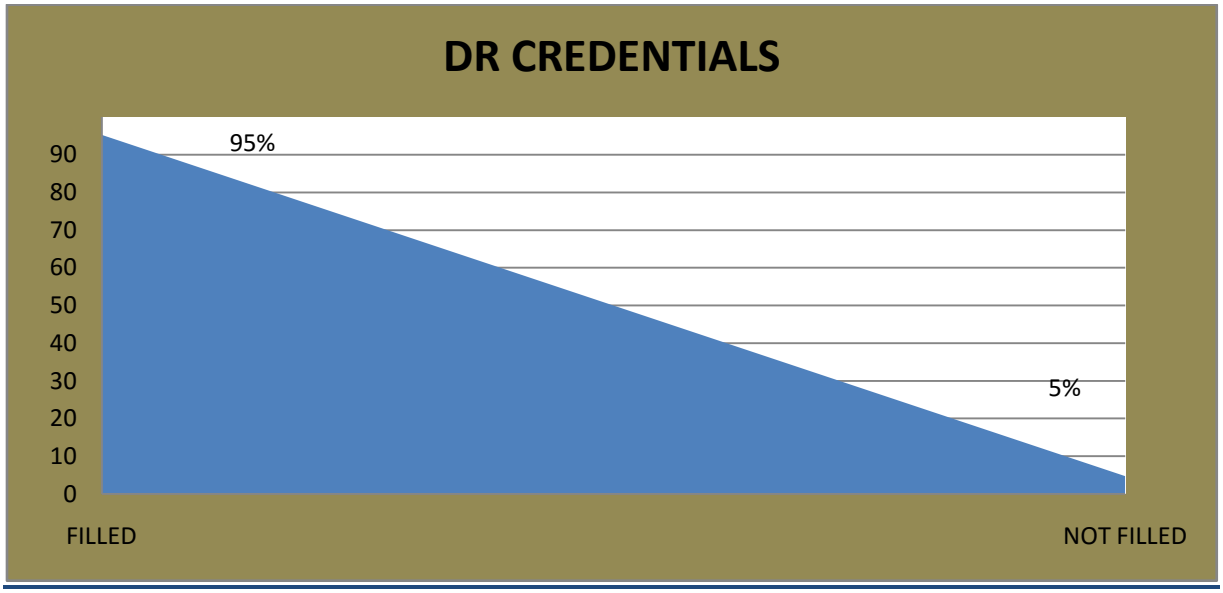
INTERPRETATION: **As per my analysis, the compliance of patient/substitute decision maker informed consent of Medical ICU is 97%.**

Fig 7



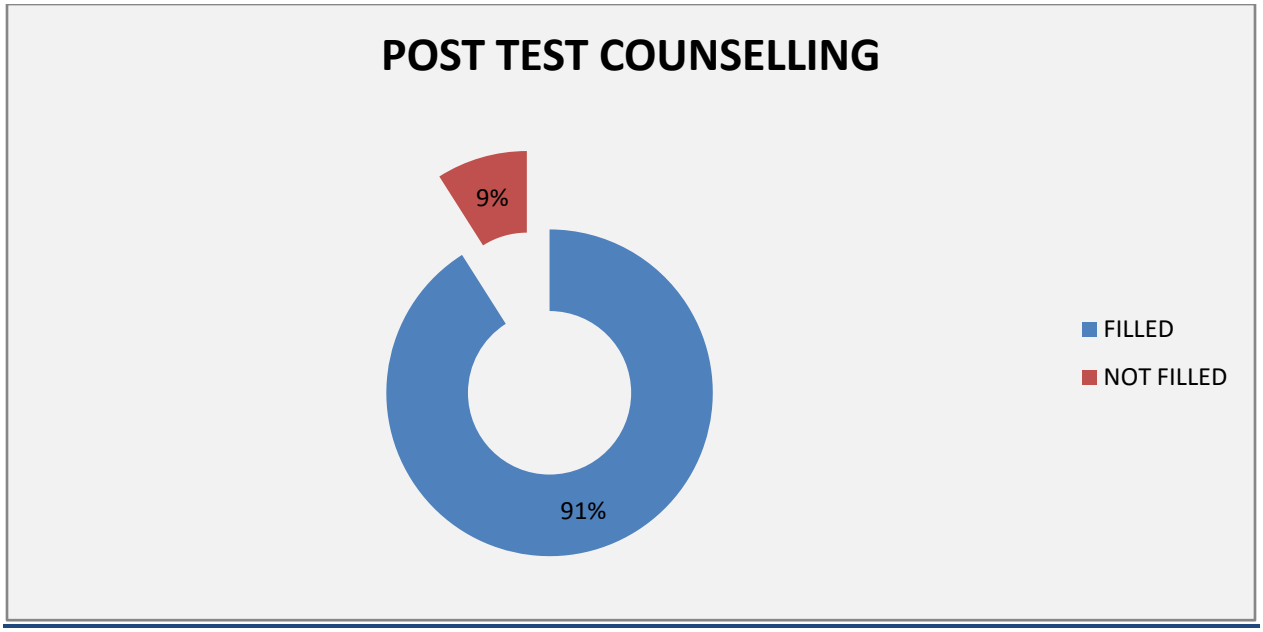
INTERPRETATION: **As per my analysis, the compliance of witness credentials in informed consent of Medical ICU is 73%.**

Fig 8



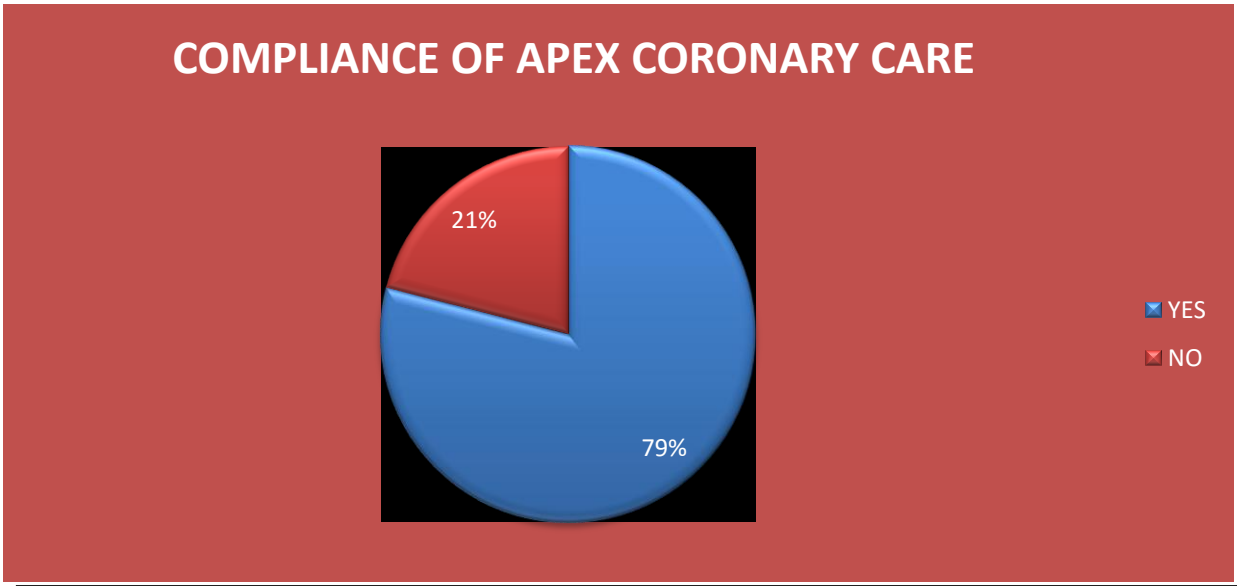
INTERPRETATION**: As per my analysis, the compliance of Dr Credentials in informed consent of Medical ICU is 95%.**

Fig 9



INTERPRETATION**: As per my analysis, the compliance of post test counseling in informed consent of Medical ICU is 91%.**

Fig 10

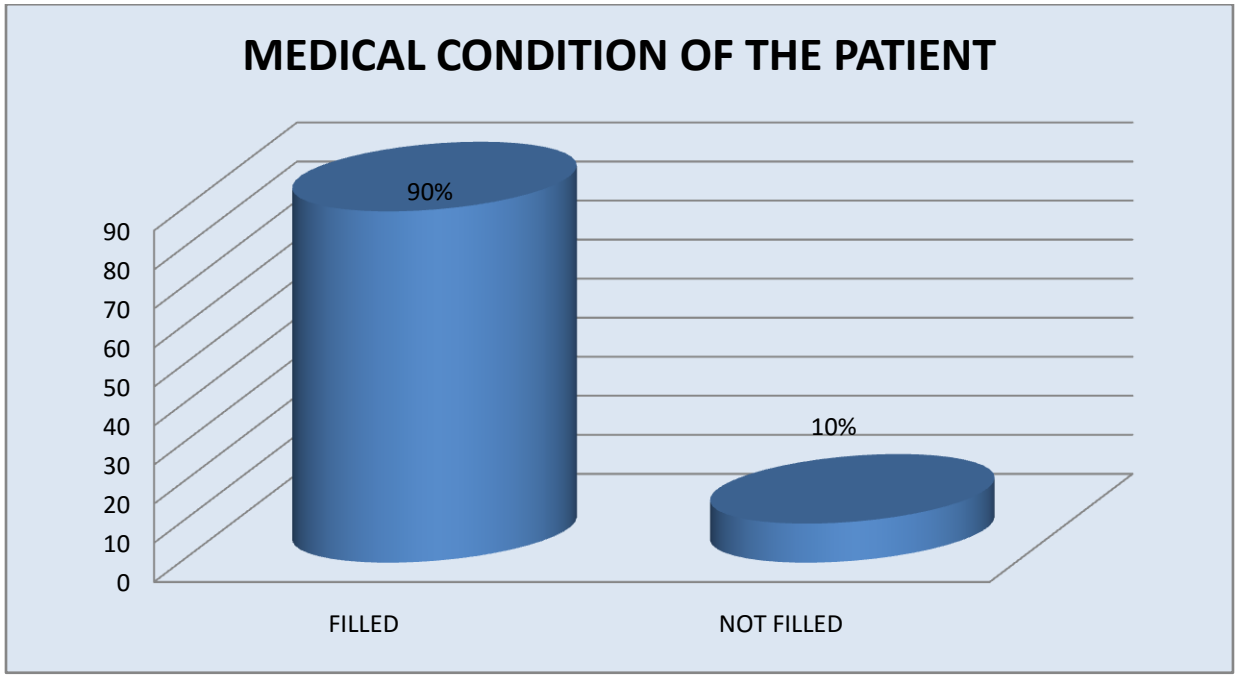


INTERPRETATION: **As per my analysis, compliance of Apex Coronary Care is 79%.**

CTVS PEDIATRIC ICU

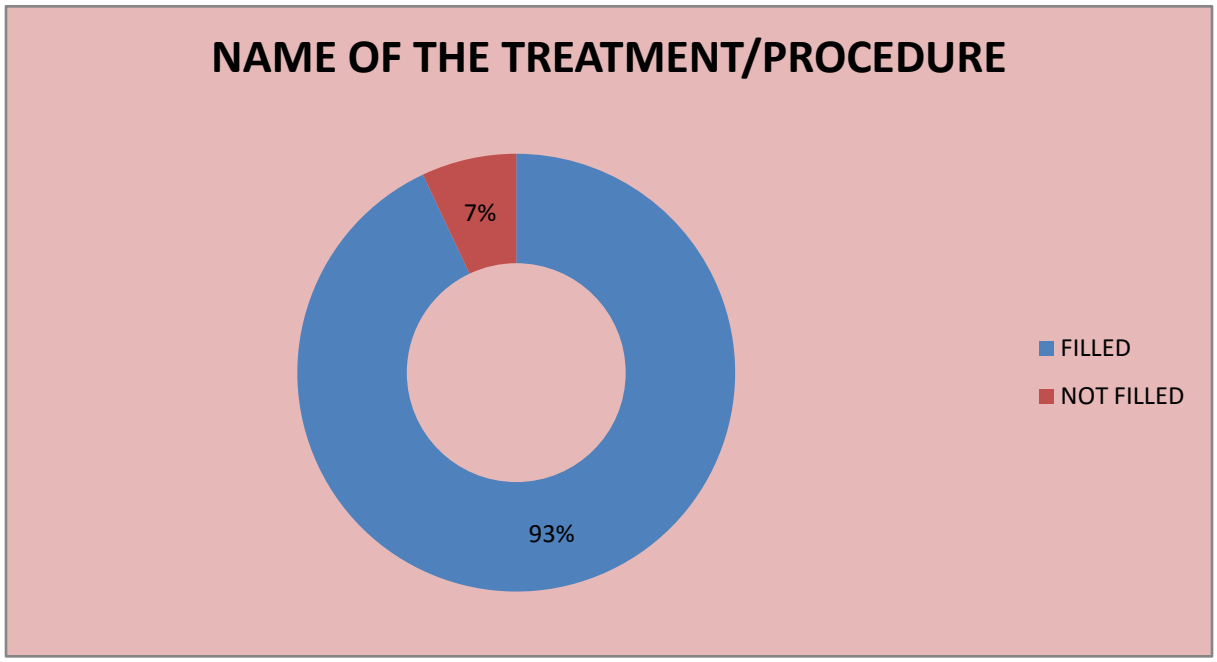
INTERPRETATION**: The compliance of Patient Credentials, Admitting Consultant, Dr Credentials and Post Test Counseling in informed consent is 100%.**

FIG 11



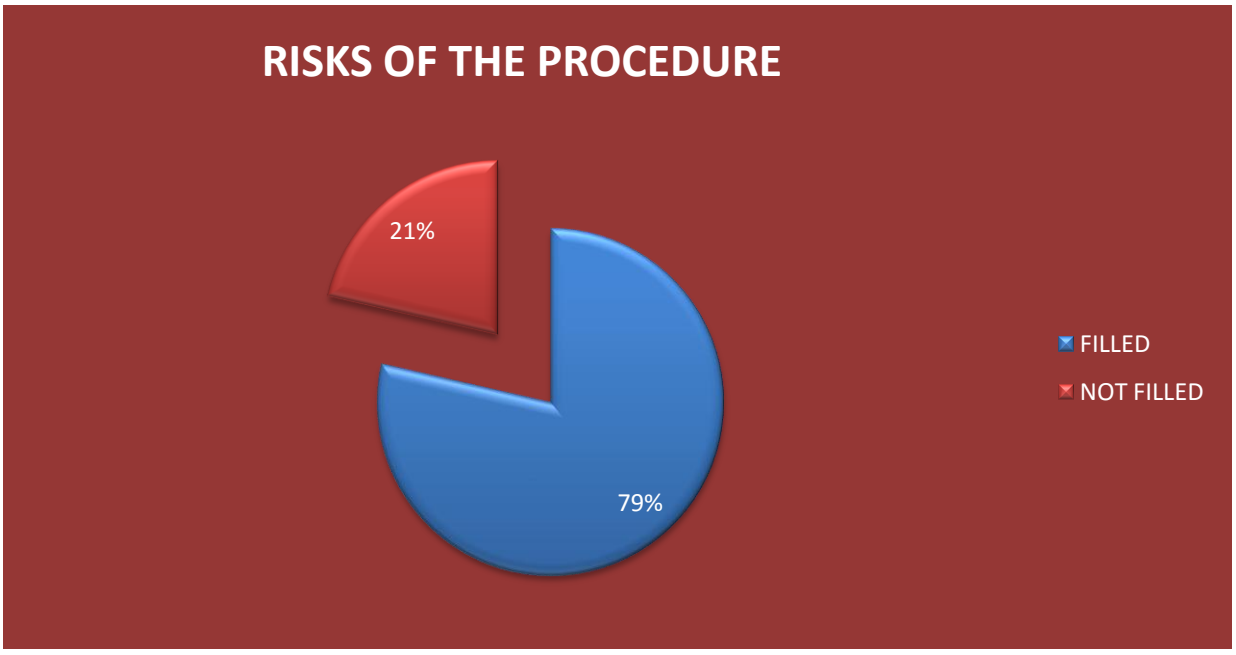
INTERPRETATION:**As per analysis, the compliance of medical condition of the patient in informed consent of CTVS PEDIATRIC ICU is 90%.**

FIG 12



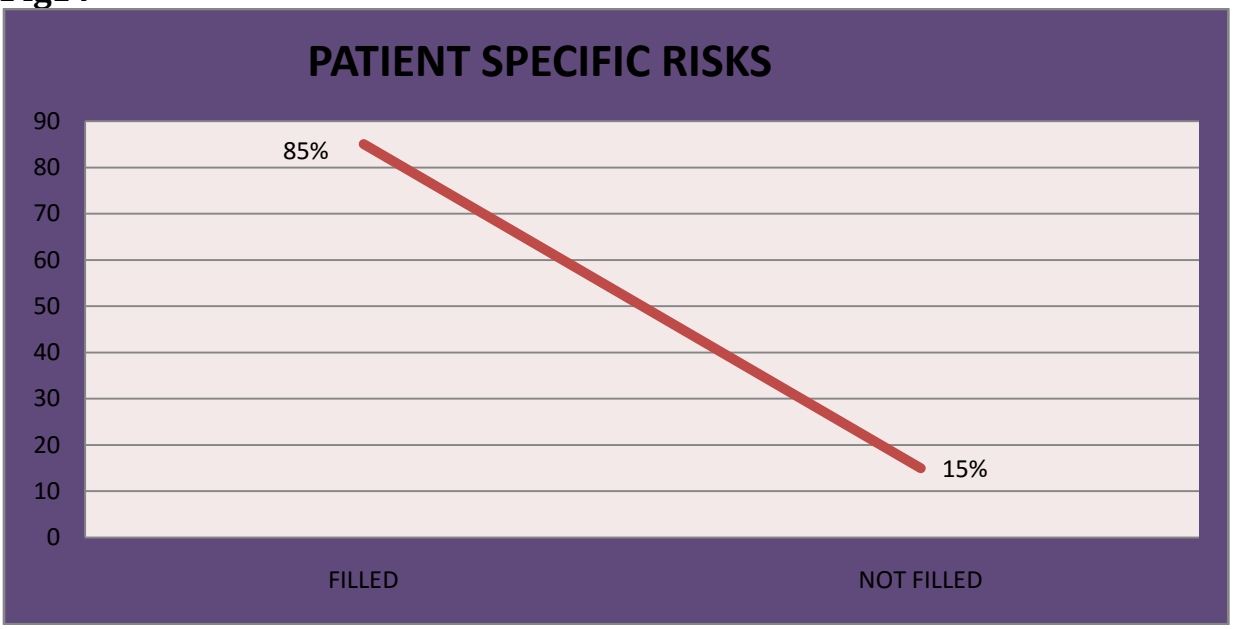
INTERPRETATION: **As per my analysis, the compliance of name of the treatment/procedure in informed consent of CTVS Pediatric ICU is 93%.**

Fig 13



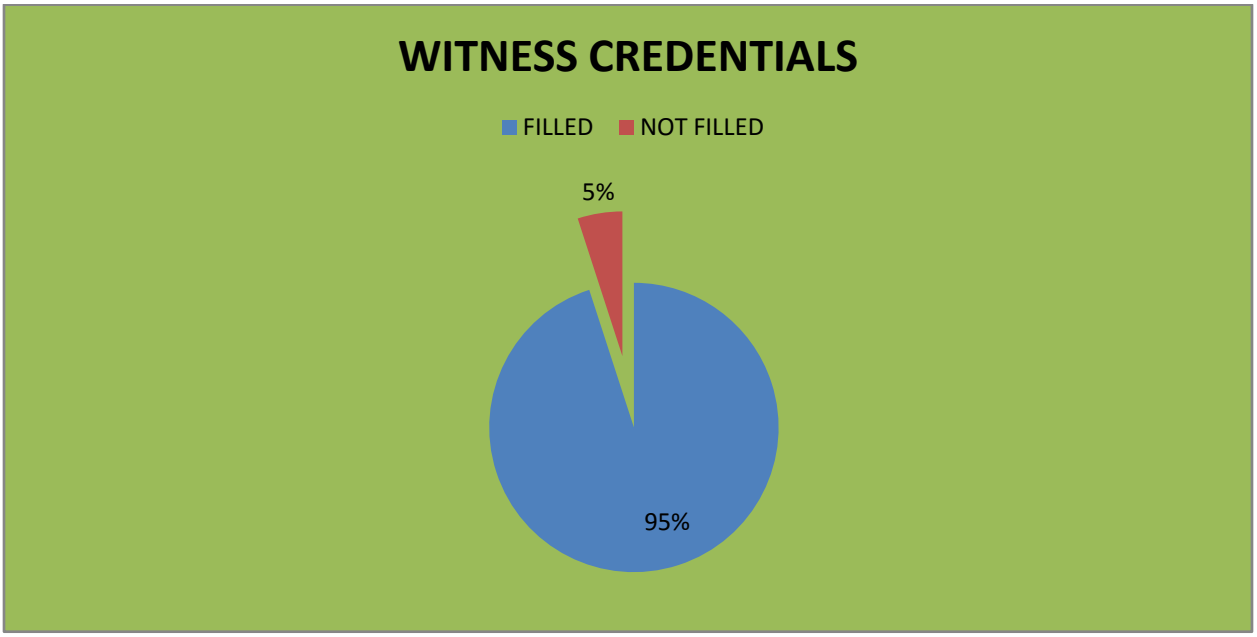
INTERPRETATION: **As per analysis, the compliance of risks of the procedure in informed consent of CTVS Pediatric ICU is 79%.**

Fig14



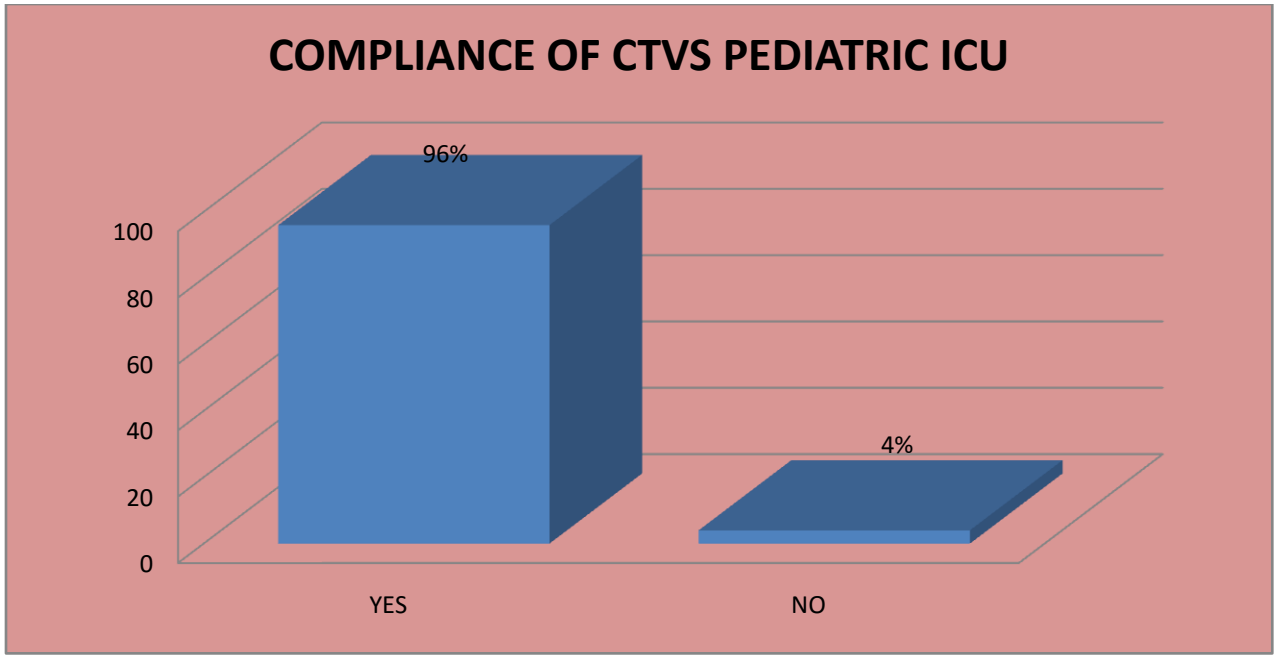
INTERPRETATION:**As per my analysis, the compliance of patient specific risks in informed consent of CTVS Pediatric ICU is 85%.**

Fig 15



INTERPRETATION:**As per my analysis, the compliance of witness credentials in informed consent of CTVS Pediatric ICU is 95%.**

Fig 16

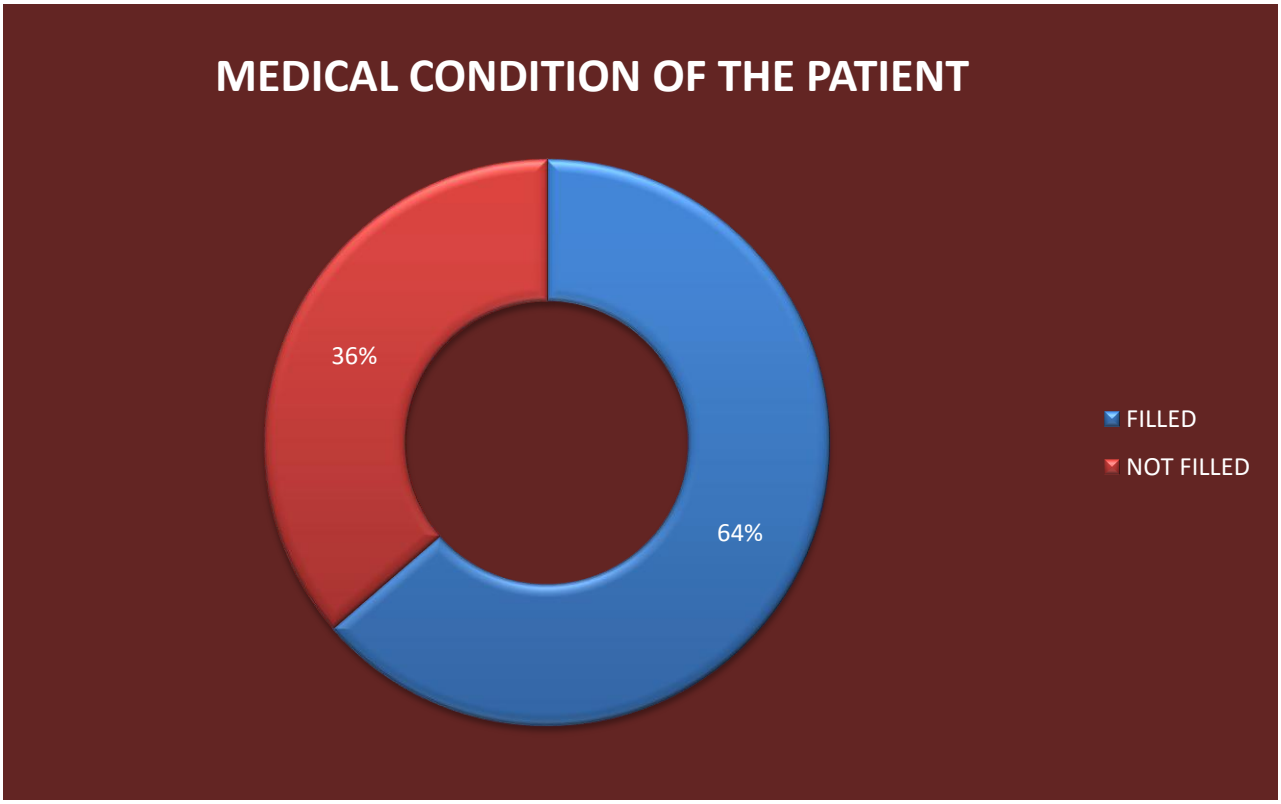


INTERPRETATION: **As per my analysis, the compliance of CTVS Pediatric ICU is 96% and that is highest of all the ICU's.**

CTVS ADULT ICU

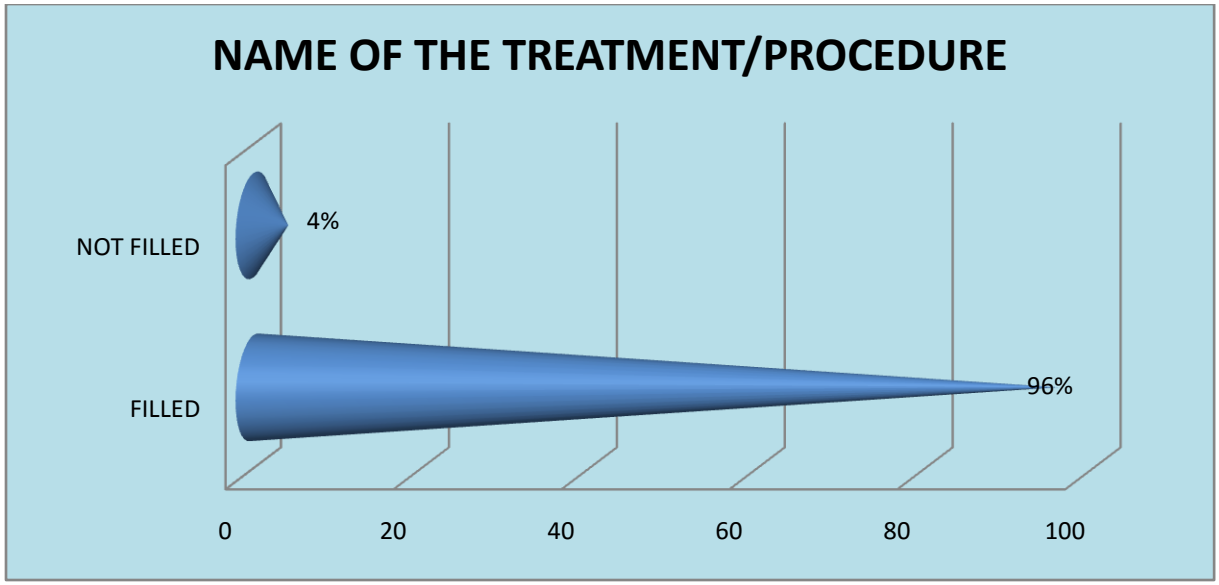
INTERPRETATION**: The compliance of Patient Credentials, Admitting Consultant, Dr Credentials, Patient /Substitute decision maker and Type of Restraint in informed consent is 100%.**

FIG 17



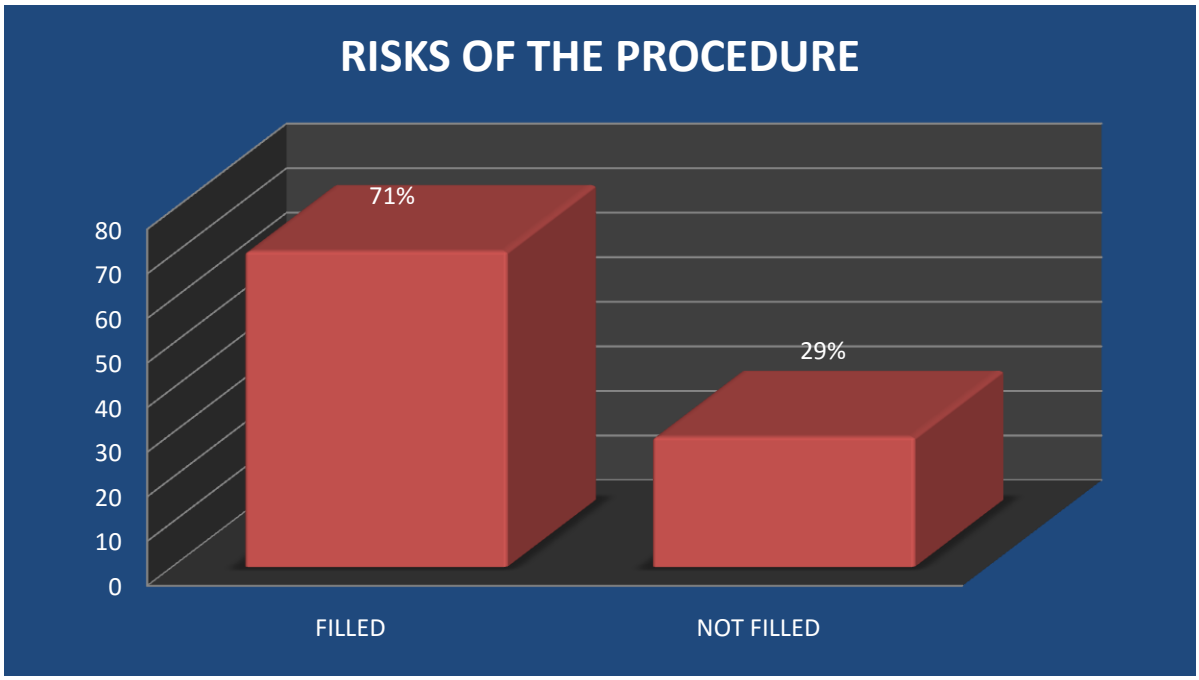
INTERPRETATION: **As per my analysis, the compliance of medical condition of the patient in informed consent of the CTVS Adult ICU is 64%.**

FIG 18



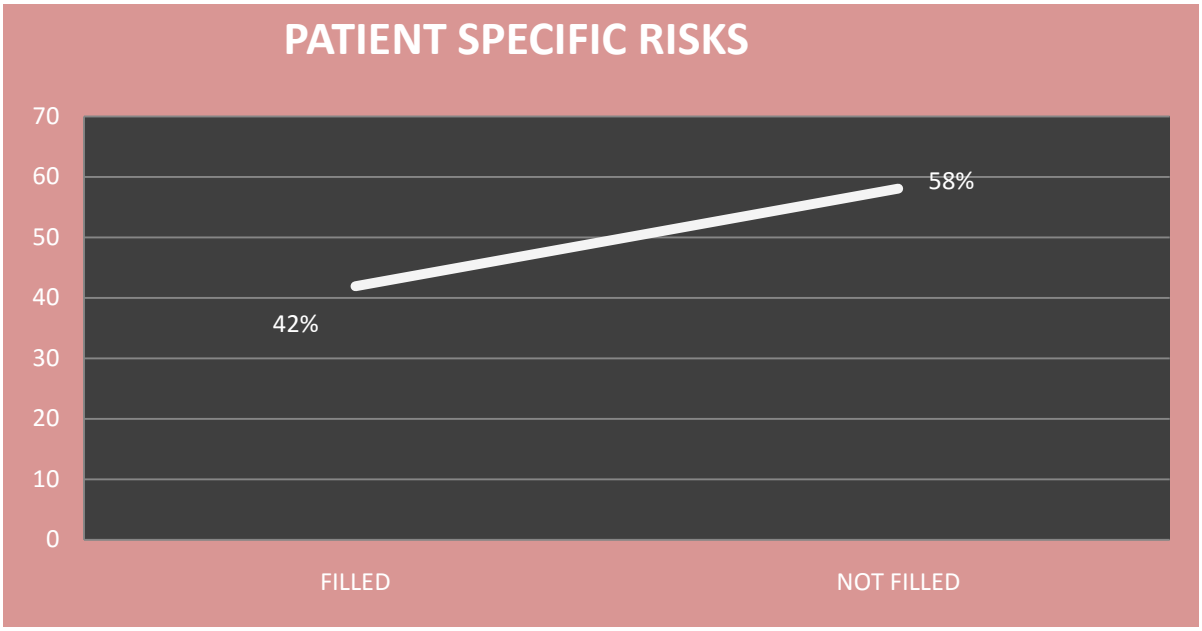
INTERPRETATION: **As per my analysis, the compliance of name of the treatment/procedure in informed consent of CTVS Adult ICU is 96%.**

Fig 19



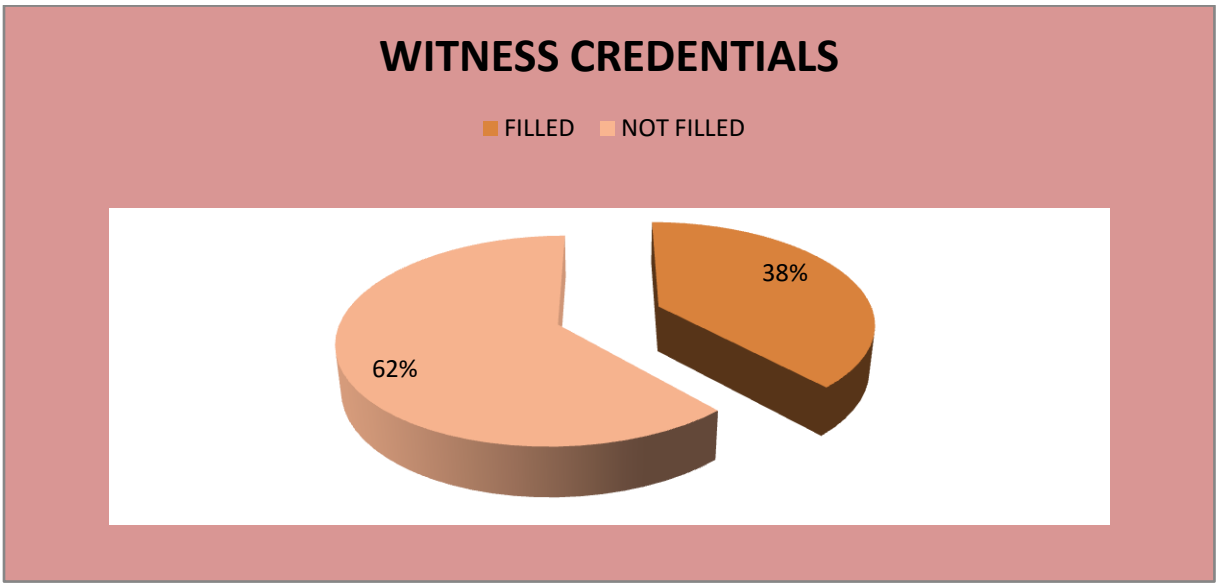
INTERPRETATION: **As per analysis, the compliance of risks of the procedure in informed consent of CTVS Adult ICU is 71%.**

Fig 20



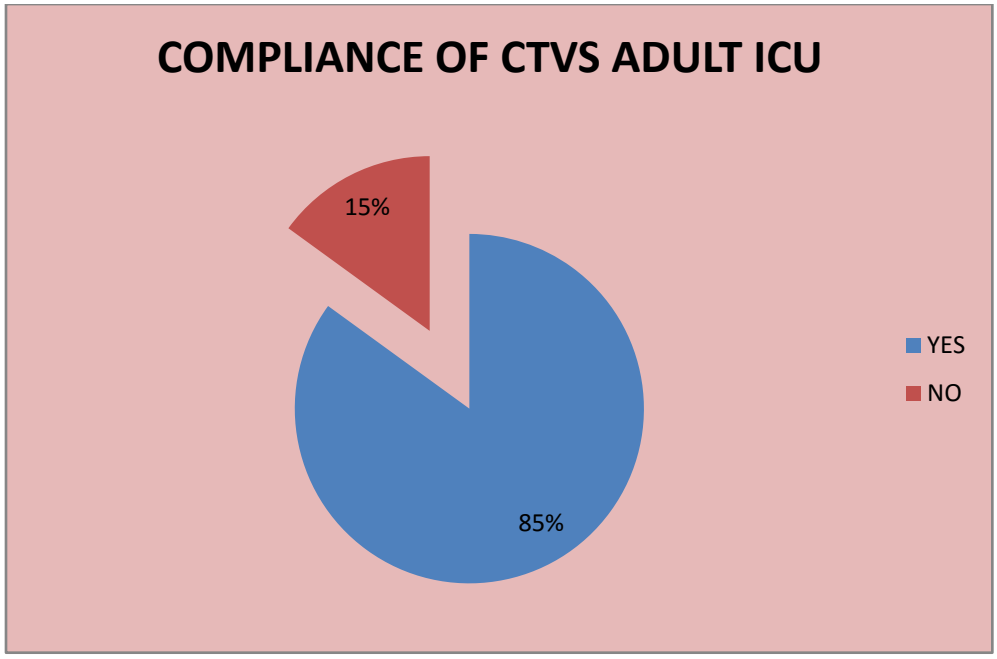
INTERPRETATION: **As per my analysis, the compliance of patient specific risks in informed consent in CTVS Adult ICU is 42%.**

Fig21



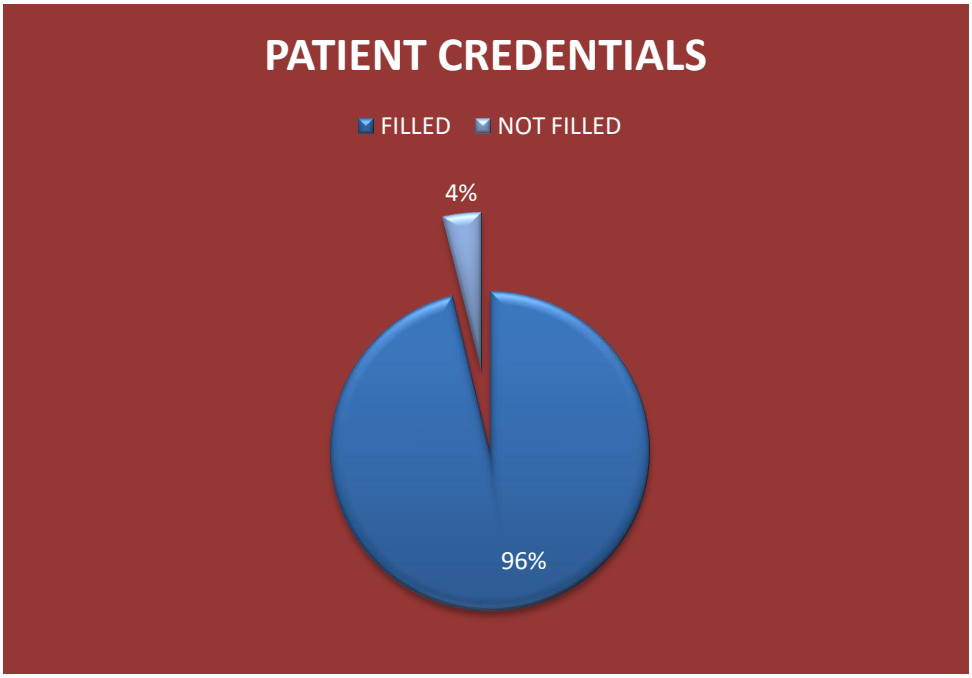
INTERPRETATION: **As per analysis, the compliance of witness credentials in informed consent of CTVS Adult ICU is 62%.**

Fig 22



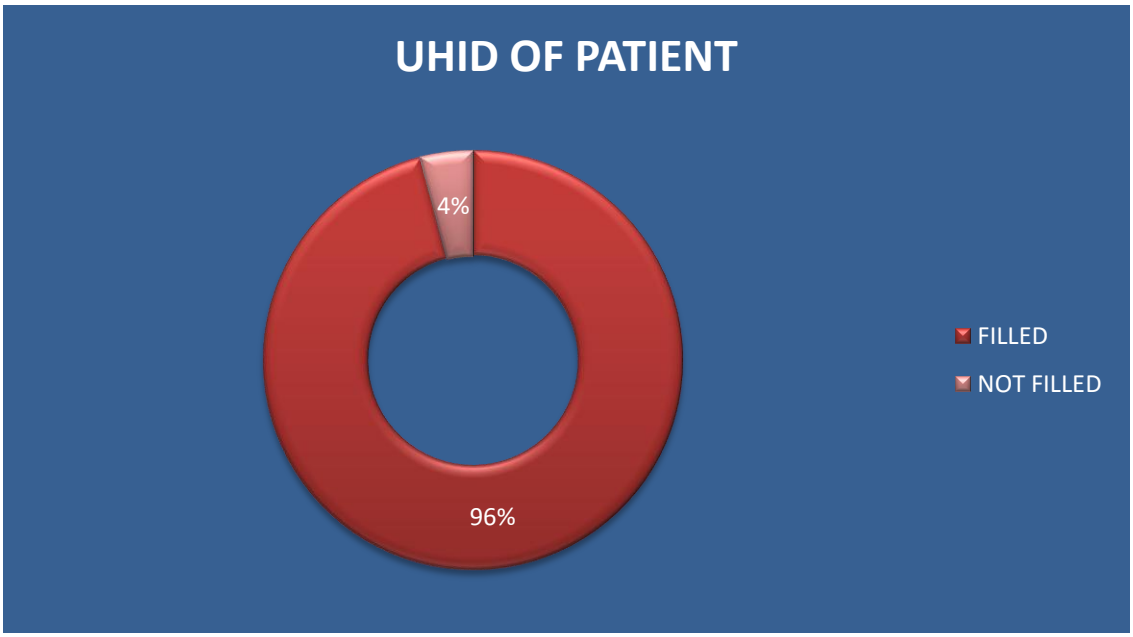
INTERPRETATION: **As per my analysis, the compliance of CTVS Adult ICU is 85%.**

MEDICAL ICU (Fig 23)



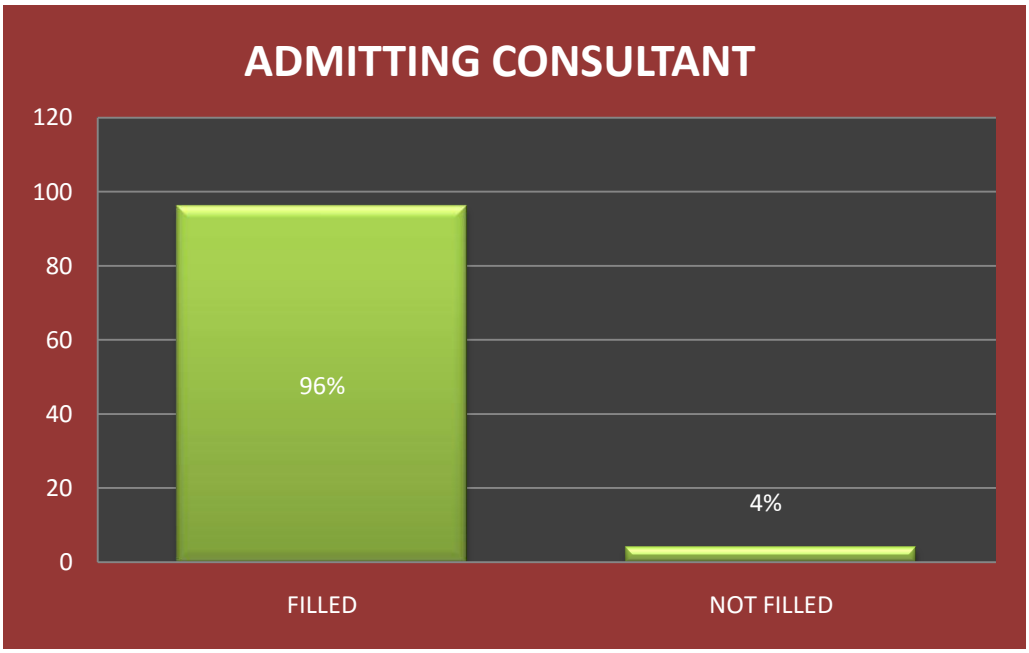
INTERPRETATION**: As per my analysis, the compliance of patient credentials in informed consent of Medical ICU is 96%.**

Fig 24



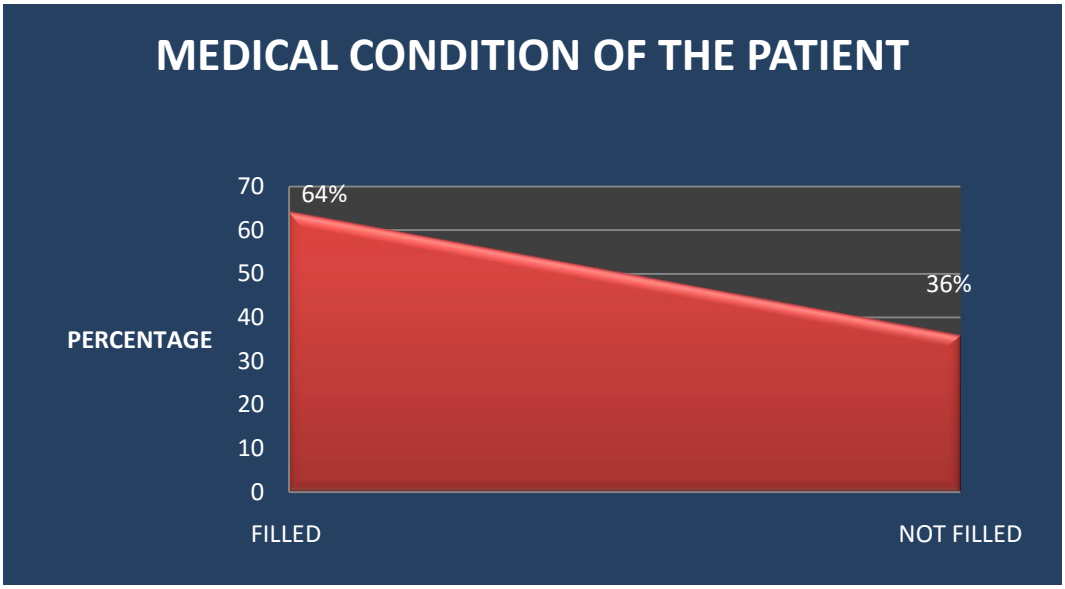
INTERPRETATION: **As per analysis, the compliance of UHID of the patient in informed consent of Medical ICU is 96%.**

Fig 25



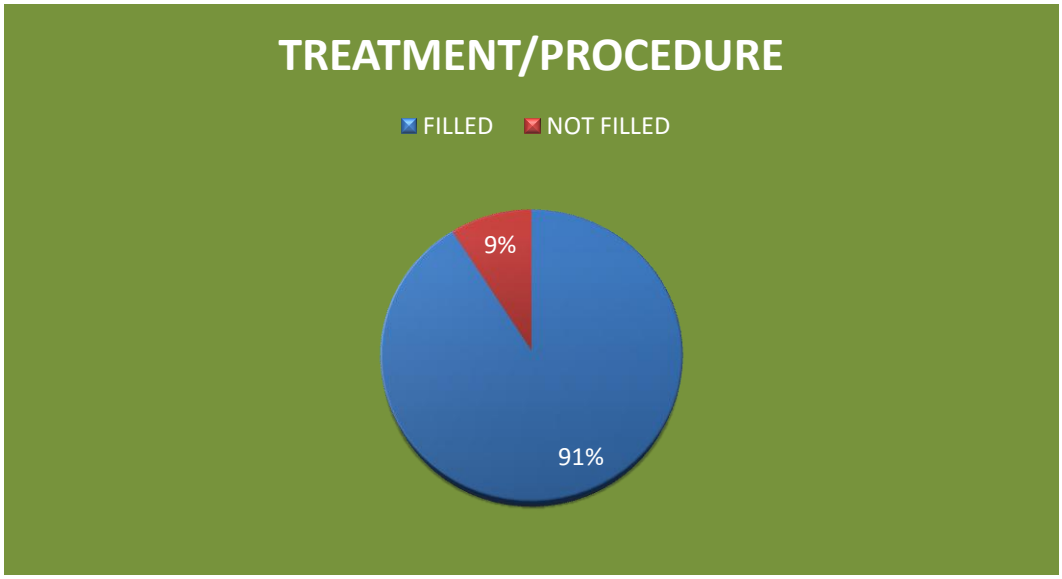
INTERPRETATION: **As per analysis, the compliance of admitting consultant in informed consent of the Medical ICU is 96%.**

Fig 26



INTERPRETATION: **As per analysis, the compliance of medical condition of the patient in informed consent of Medical ICU is 64%.**

Fig 27



INTERPRETATION: **As per analysis, the compliance of name of the treatment /procedure in informed consent of Medical ICU is 91%.**

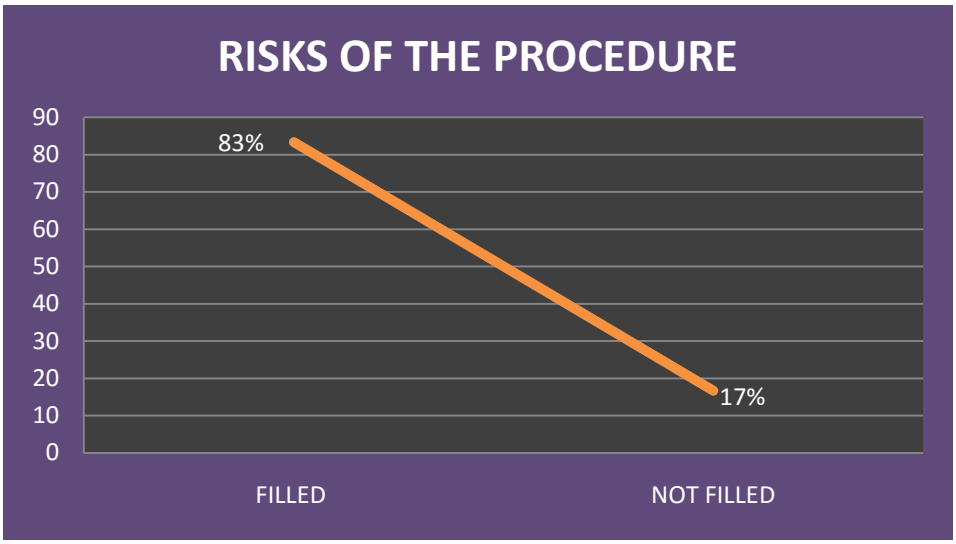


Fig 28

INTERPRETATION: **As per my analysis, the compliance of risks of the procedure in informed consent of Medical ICU is 83%.**

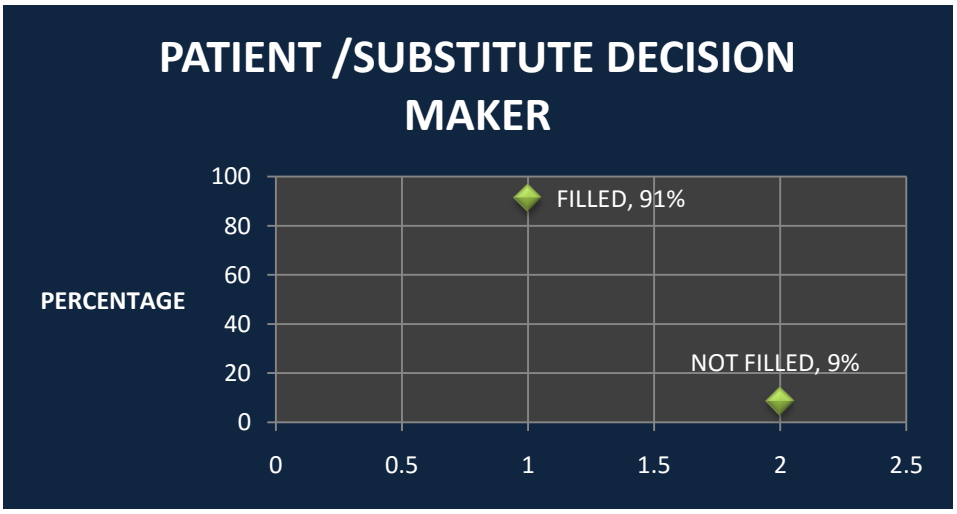
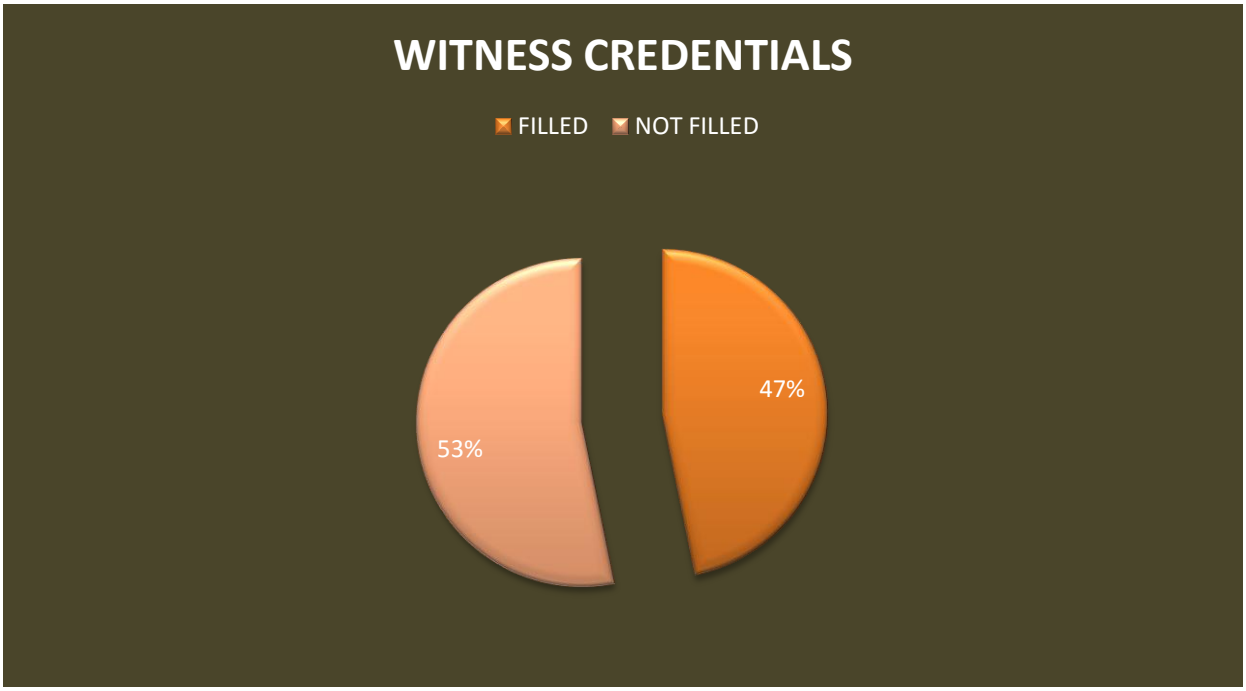


Fig 29

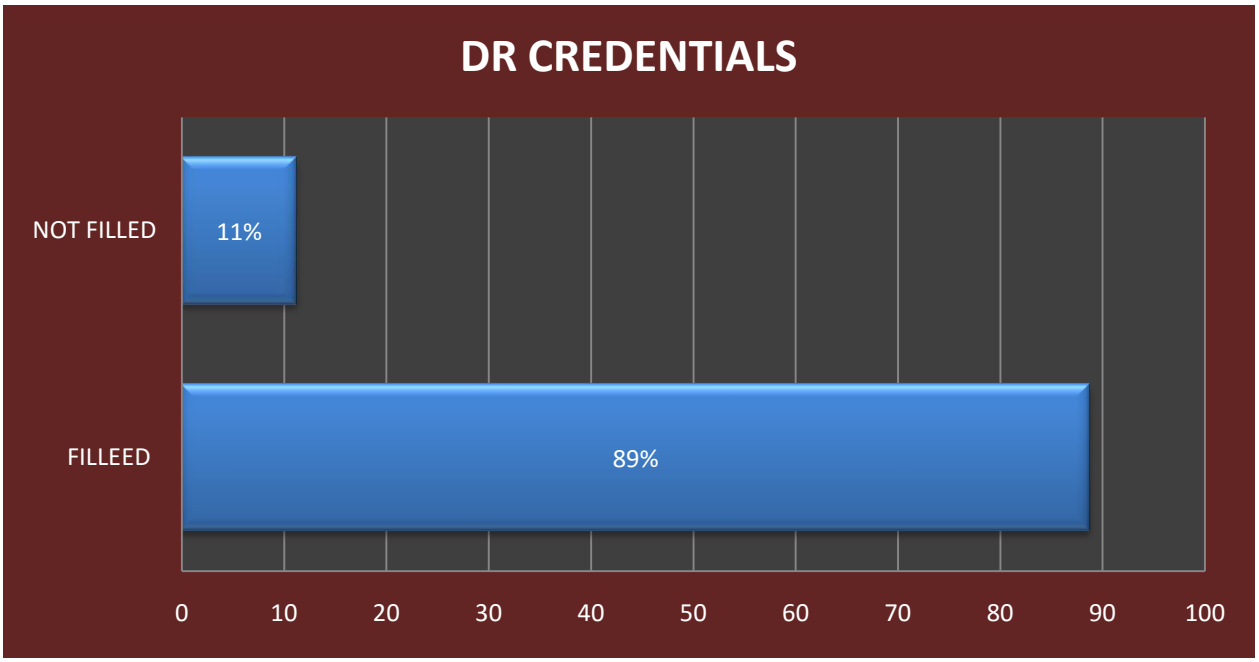
INTERPRETATION: **As per analysis, the compliance of patient / substitute decision maker in informed consent of Medical ICU is 91%.**

Fig30



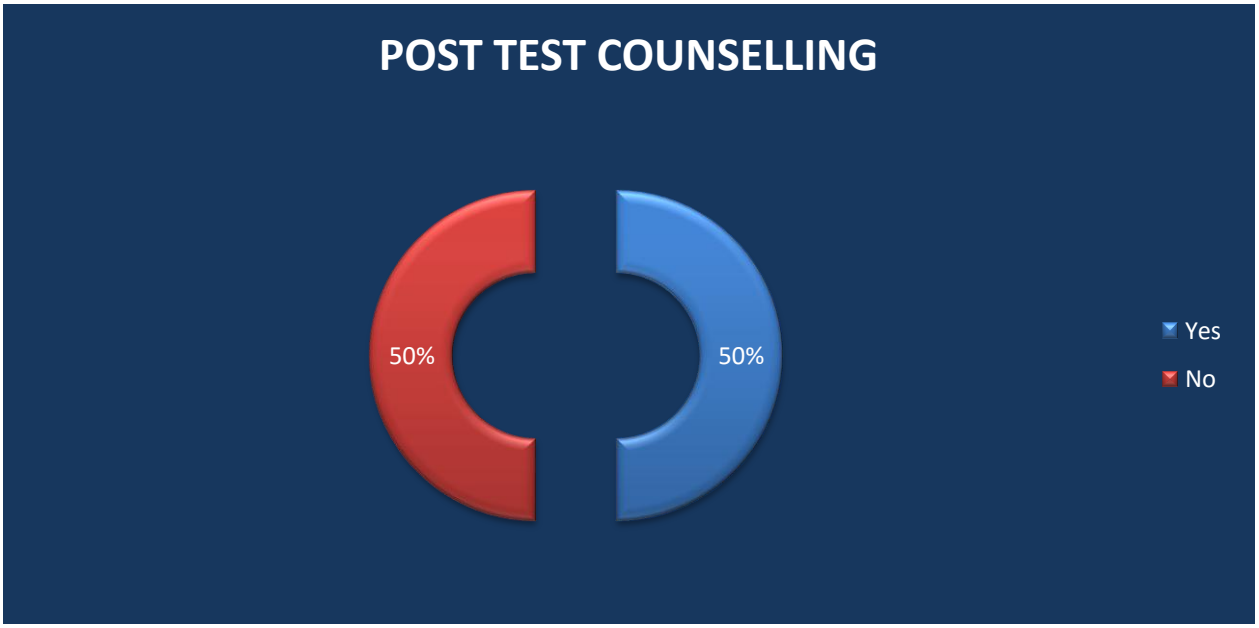
INTERPRETATION: **As per analysis, the compliance of witness credentials in informed consent of Medical ICU is 53%.**

Fig31



INTERPRETATION: **As per analysis, the compliance of Dr Credentials in informed consent of Medical ICU is 89%.**

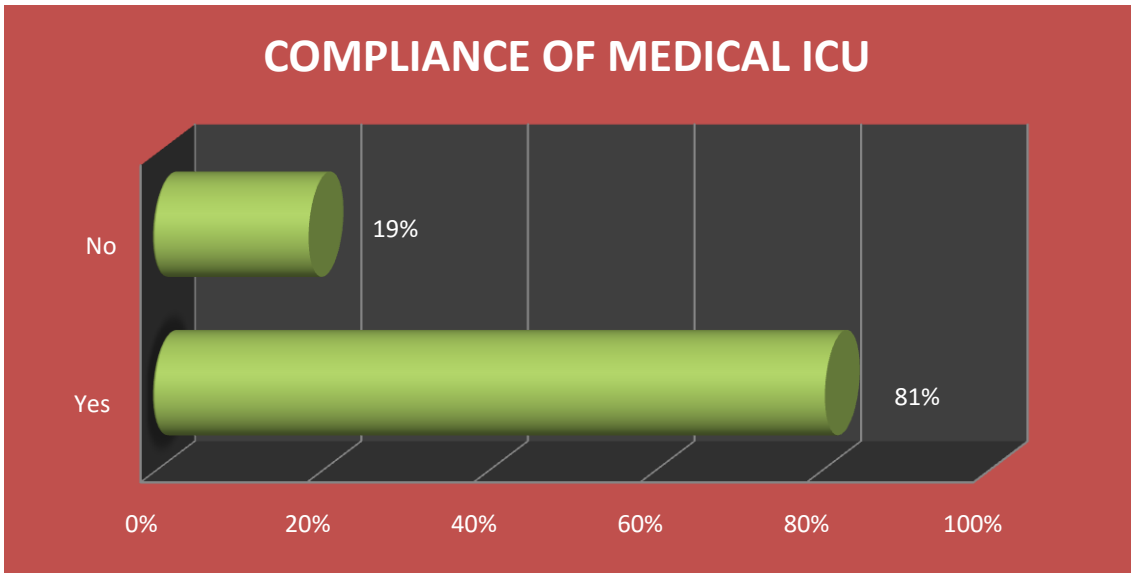
Fig 32



INTERPRETATION**: As per analysis, the compliance of post test counseling in informed consent of Medical ICU is 50%.**

INTERPRETATION**: As per analysis, the compliance of type of restraint informed consent of Medical ICU is 100%.**

Fig 33

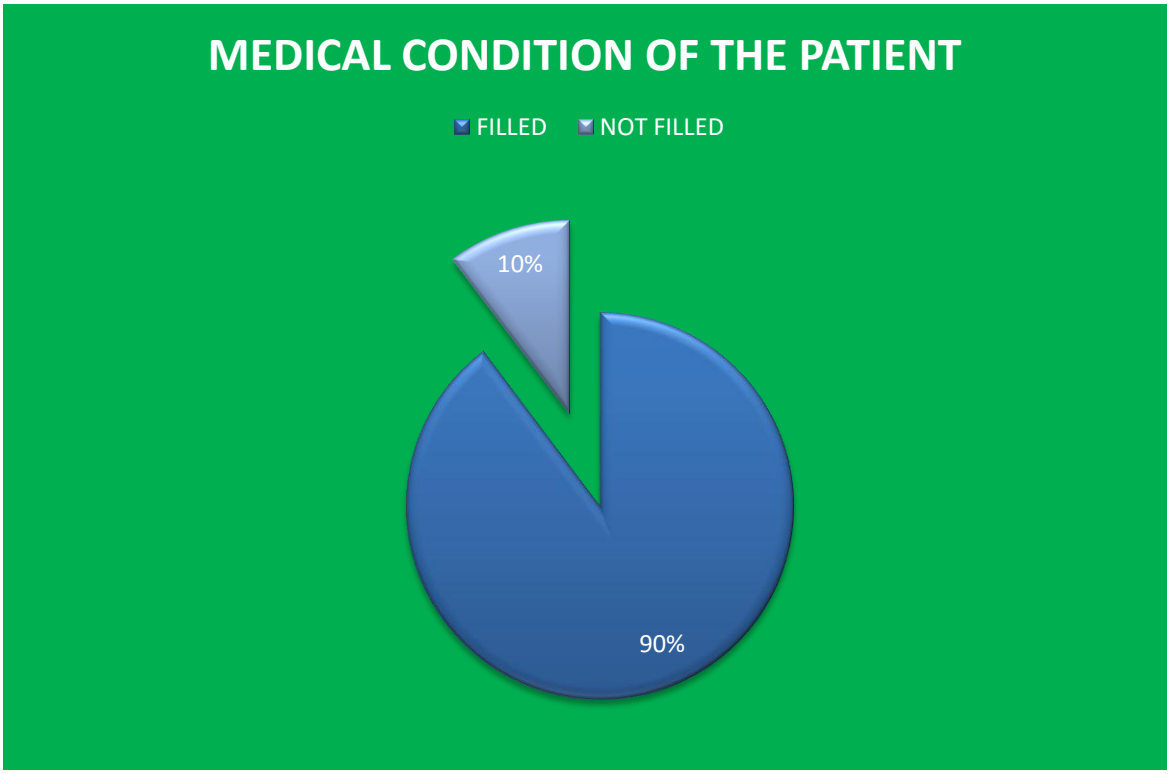


INTERPRETATION: **As per analysis, the compliance of MEDICAL ICU is 81%.**

SURGICAL ICU

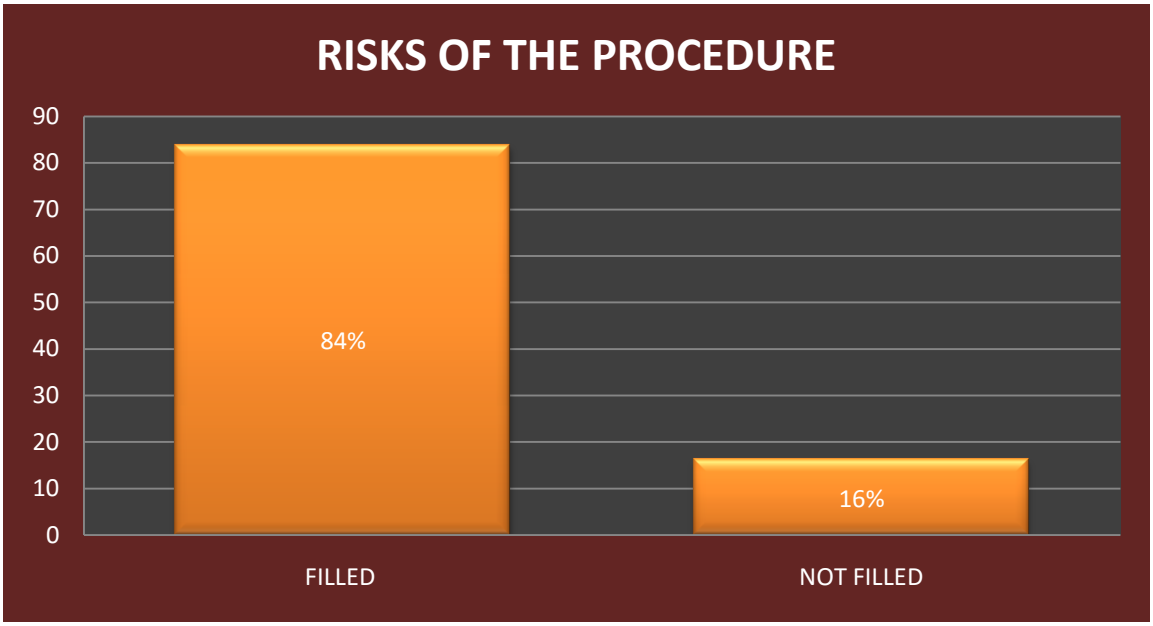
INTERPRETATION: **As per analysis, the compliance of patient credentials, UHID of the patient, admitting consultant and name of the treatment /procedure in informed consent of Surgical ICU is 100%**

Fig 34



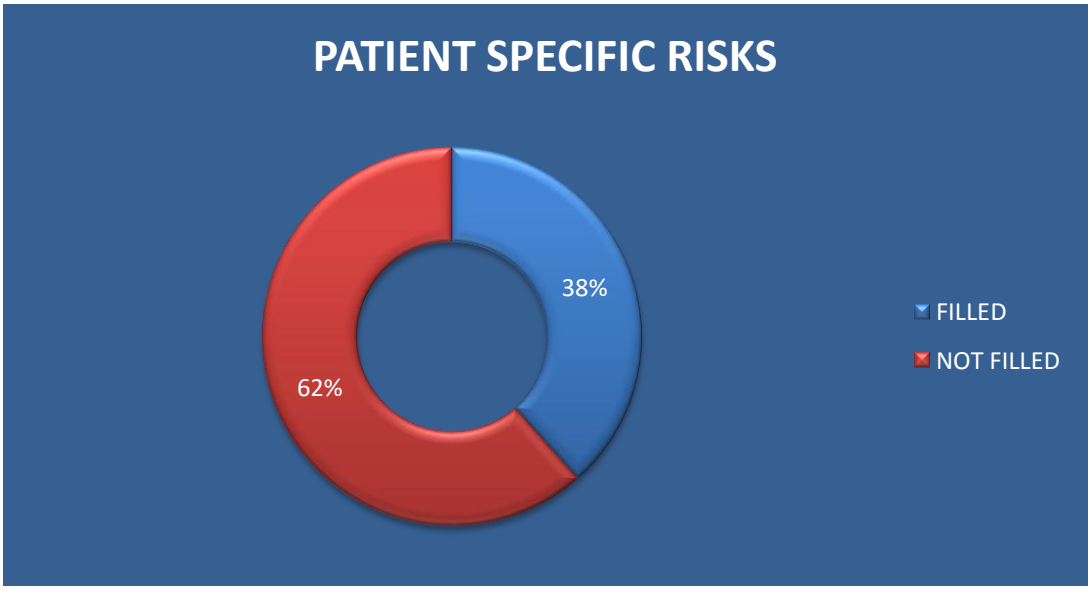
INTERPRETATION: **As per analysis, the compliance of medical condition of the patient in informed consent of the Surgical ICU is 90%**

Fig 35



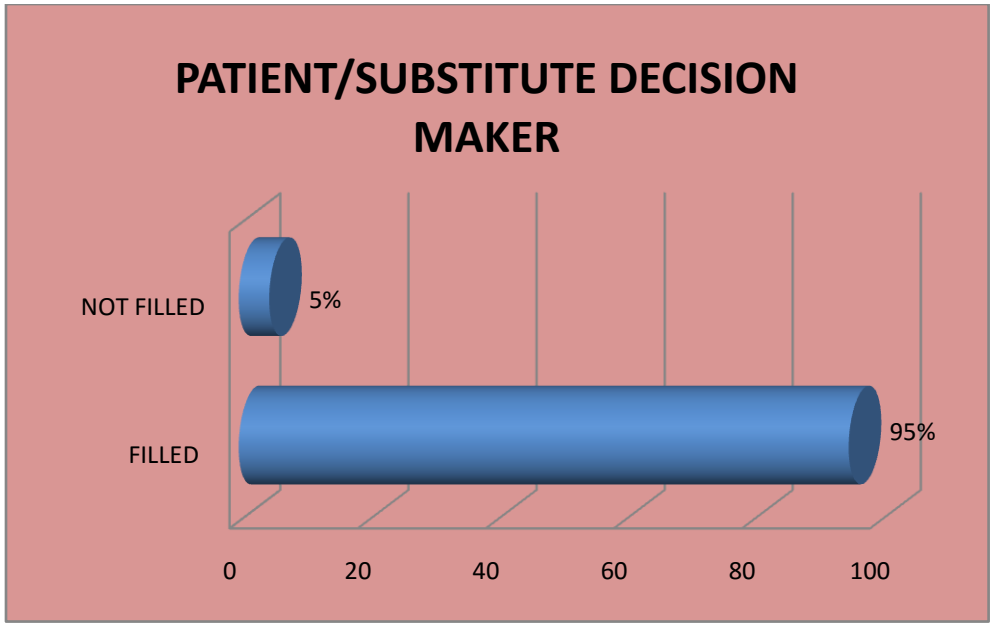
INTERPRETATION: **As per analysis, the compliance of risks of procedure in informed consent of the Surgical ICU is 84%.**

Fig 36



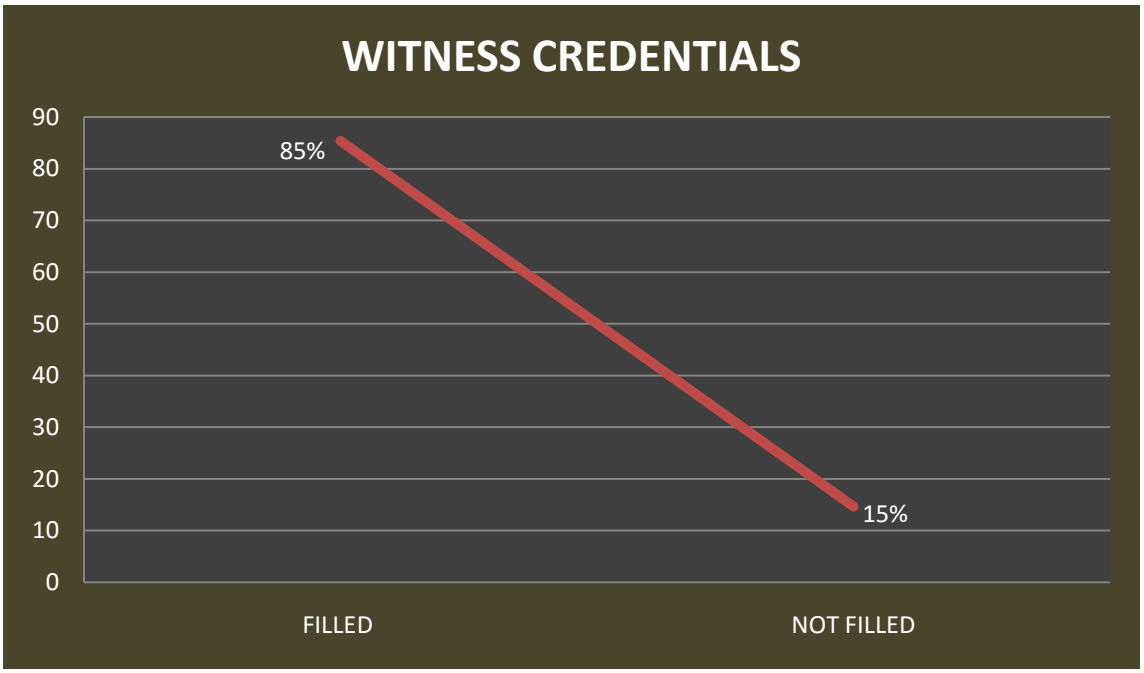
INTERPRETATION**: As per analysis, the compliance of patient specific risks in informed consent of Surgical ICU is 62%.**

Fig 37



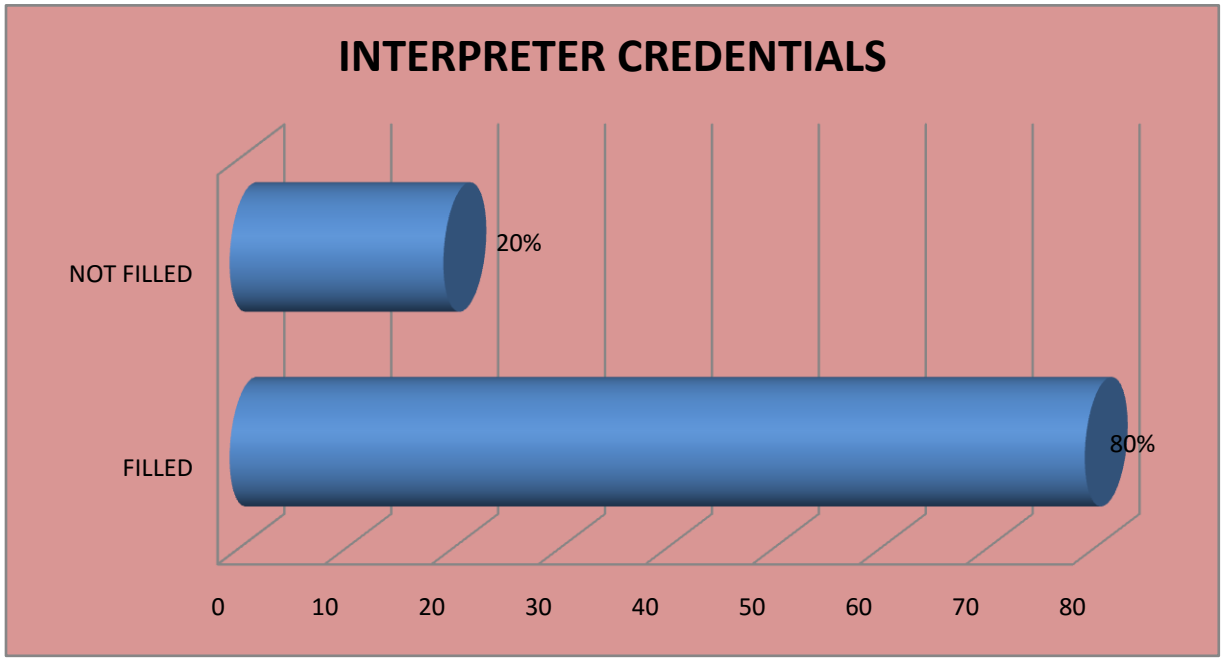
INTERPRETATION**: As per analysis, the compliance of patient/substitute decision maker in informed consent of Surgical ICU is 95%.**

Fig 38



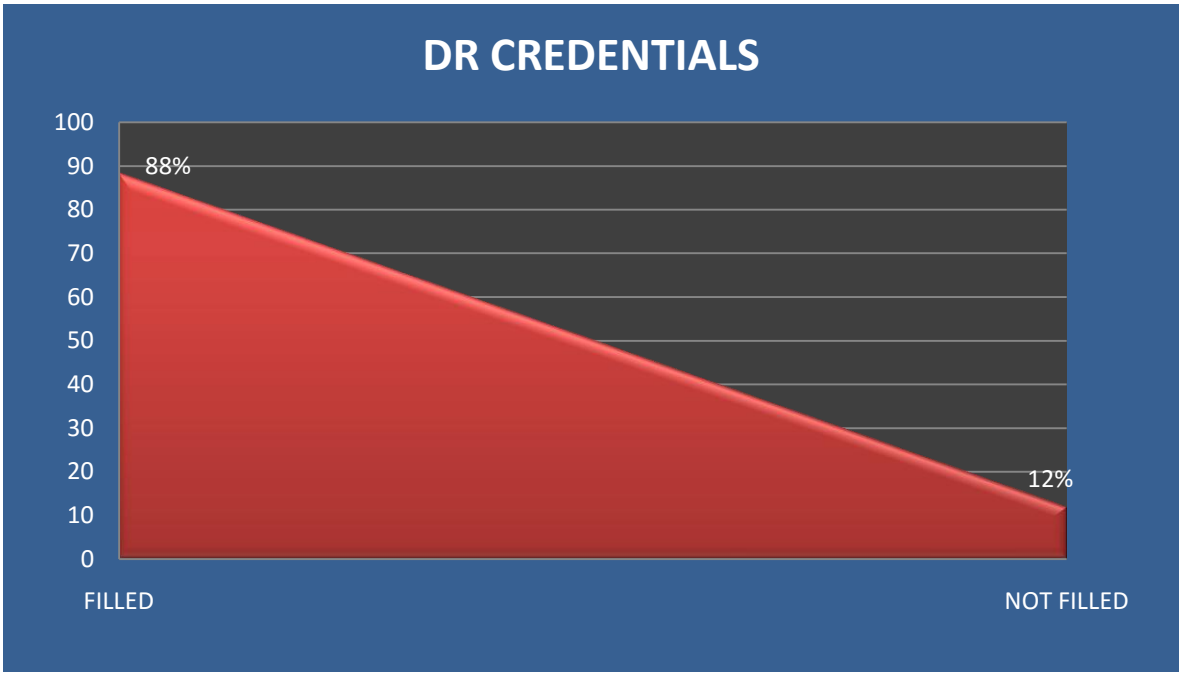
INTERPRETATION: **As per analysis, the compliance of witness credentials in informed consent of Surgical ICU is 85%.**

Fig 39



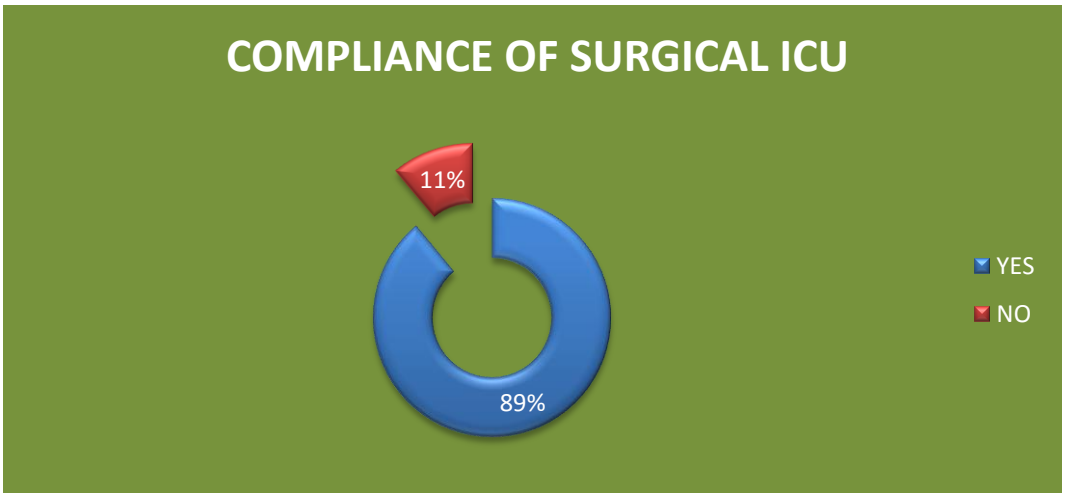
INTERPRETATION: **As per analysis, the compliance of interpreter credentials in informed consent of Surgical ICU is 80%.**

Fig 40



INTERPRETATION**: As per analysis, the compliance of Dr Credentials in informed consent of Surgical ICU IS 88%.**

Fig 41

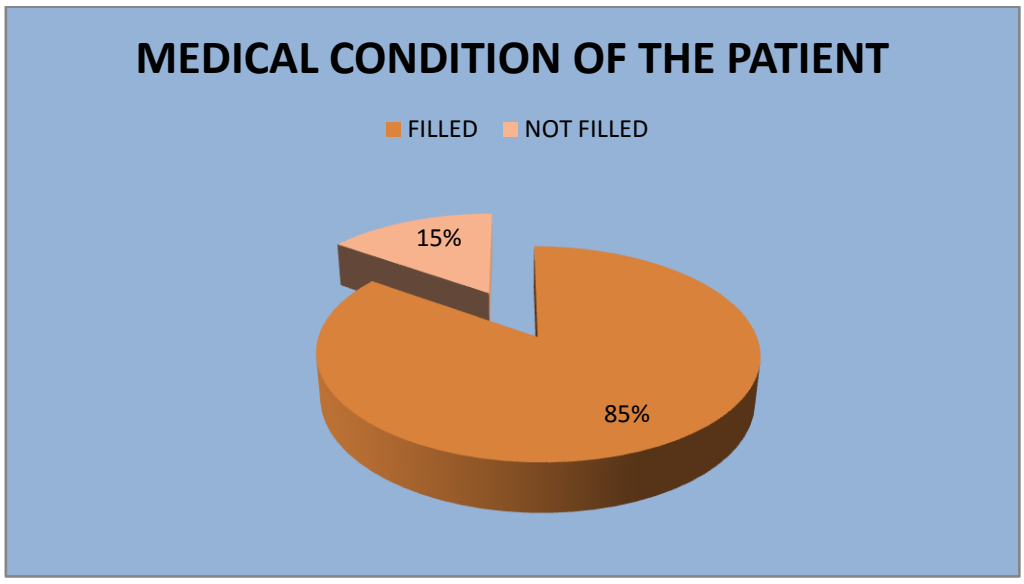


INTERPRETATION: **As per analysis, the compliance of Surgical ICU is 89%.**

Neurosurgical ICU

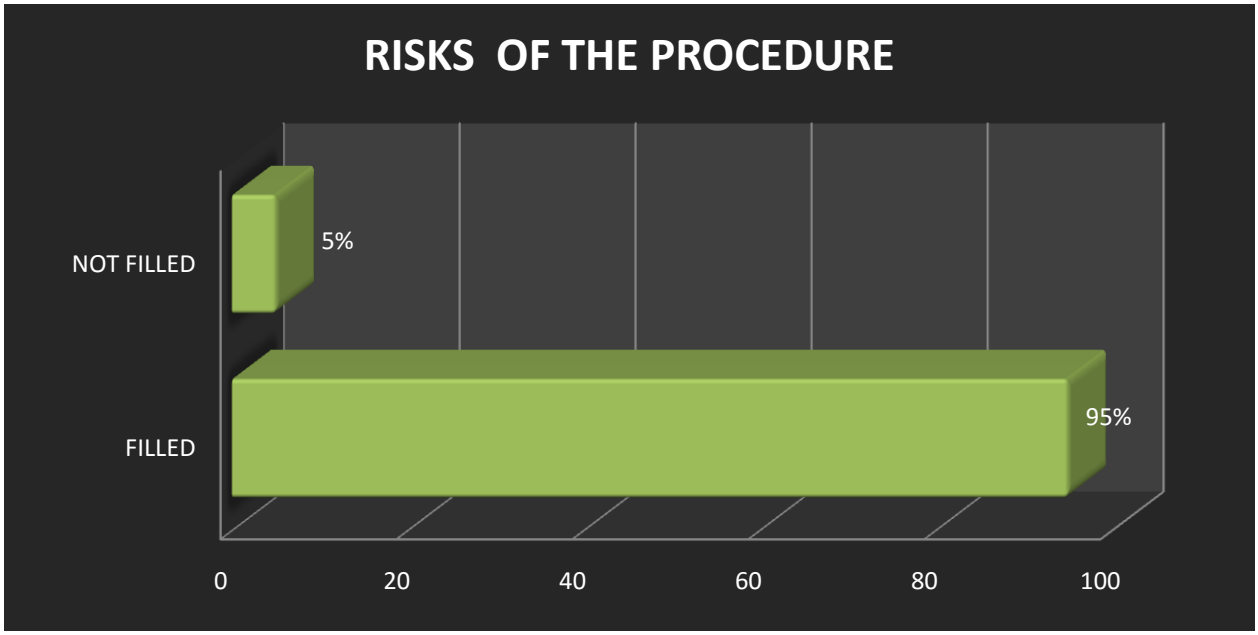
INTERPRETATION: **As per analysis, the compliance of patient credentials, UHID of the patient, name of the admitting consultant in informed consent of the Neurosurgical ICU**

Fig 42



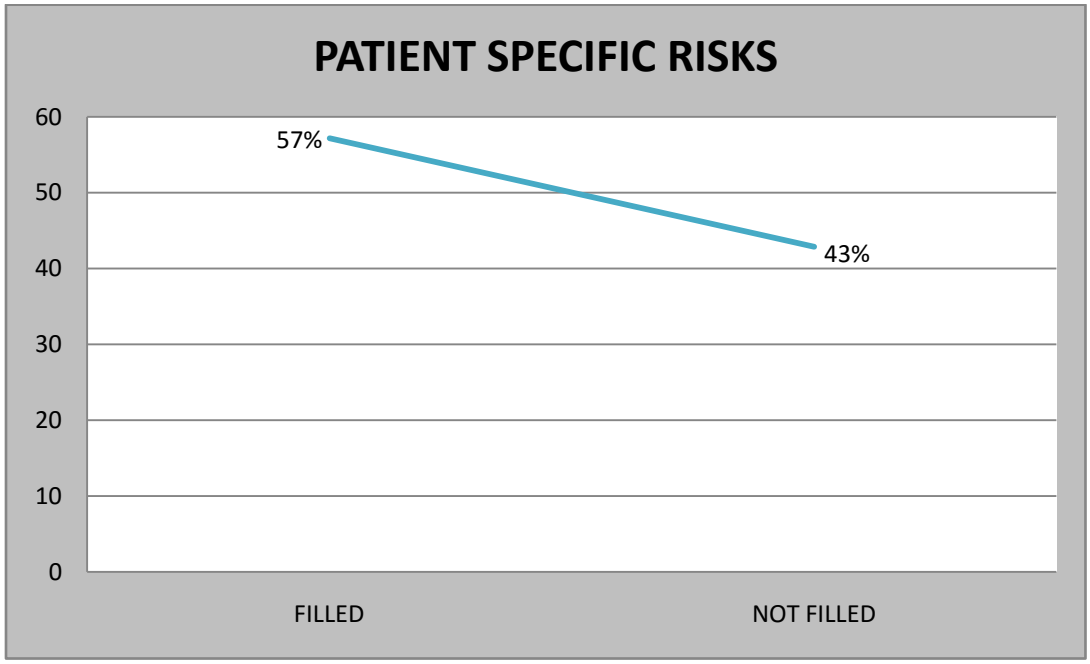
INTERPRETATION: **As per analysis, the compliance of medical condition of the patient in informed consent of the Neurosurgical ICU is 85%.**

Fig 43



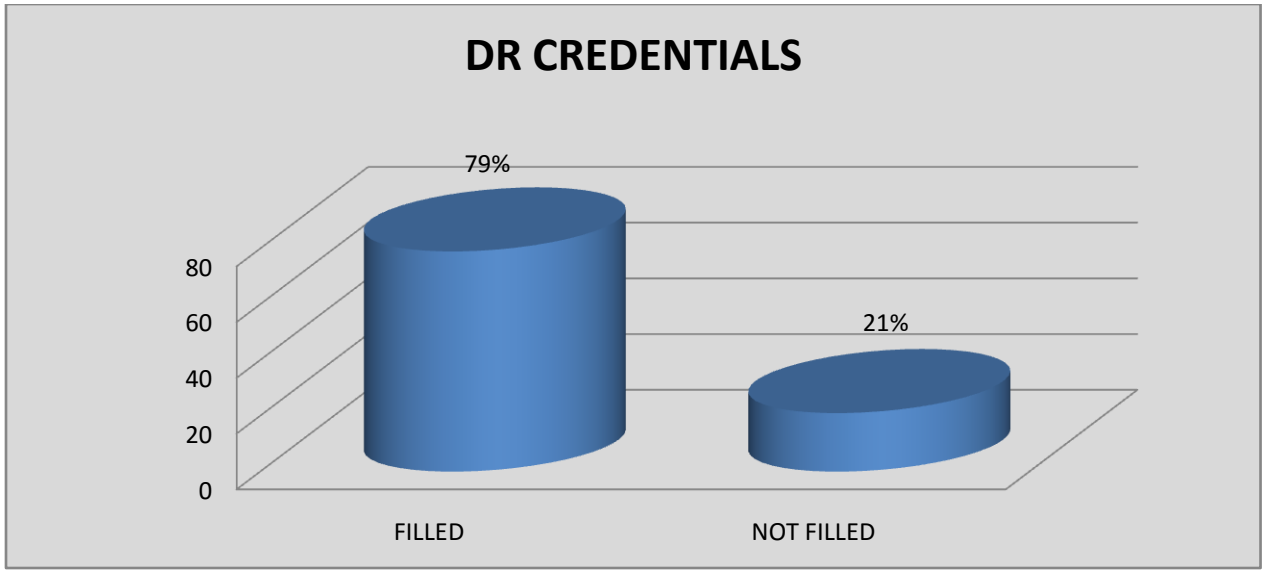
INTERPRETATION: **As per analysis, the compliance of risks of procedure in informed consent of the Neurosurgical ICU is 95%.**

Fig 44



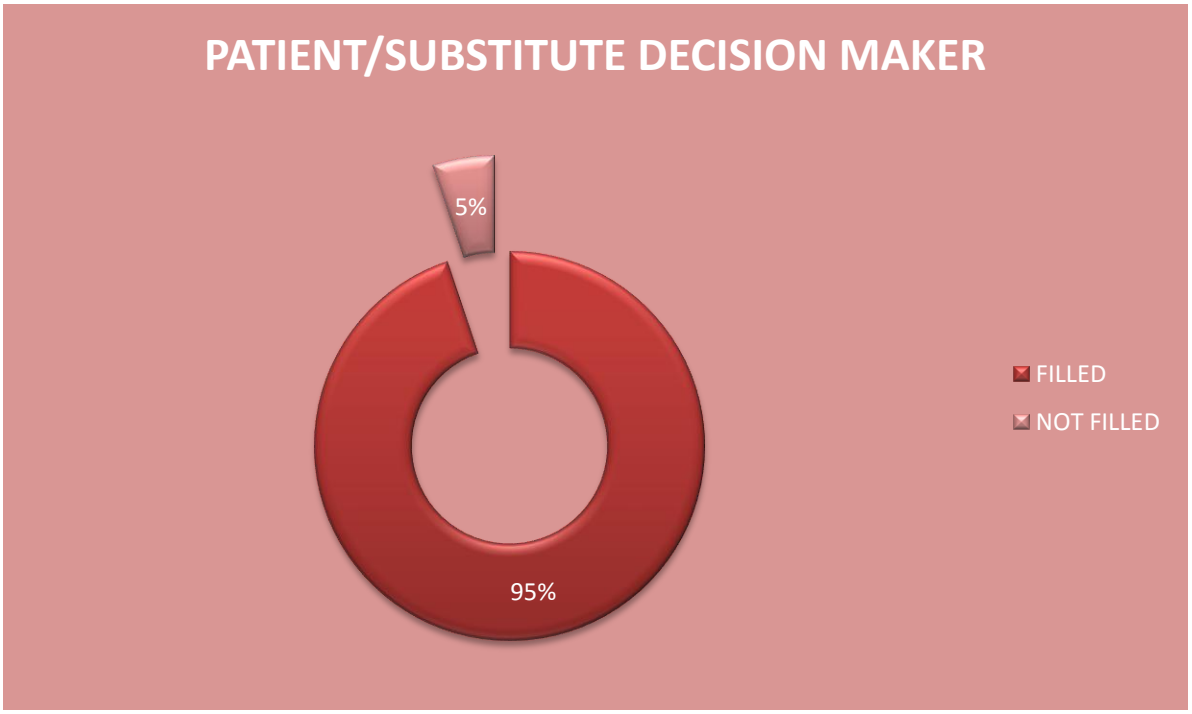
INTERPRETATION: **As per analysis, the compliance of patient specific risks in informed consent of the Neurosurgical ICU is 57%.**

Fig 45



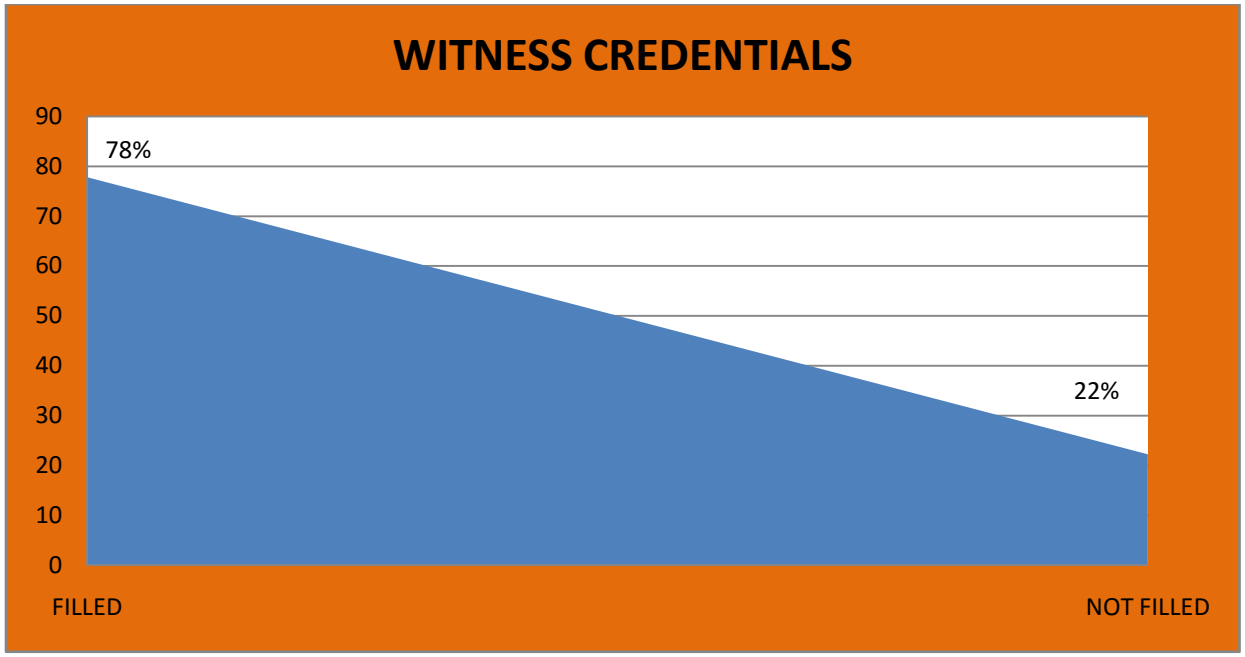
INTERPRETATION: **As per analysis, the compliance of Dr Credentials in informed consent of the Neurosurgical ICU is 79%.**

Fig 47



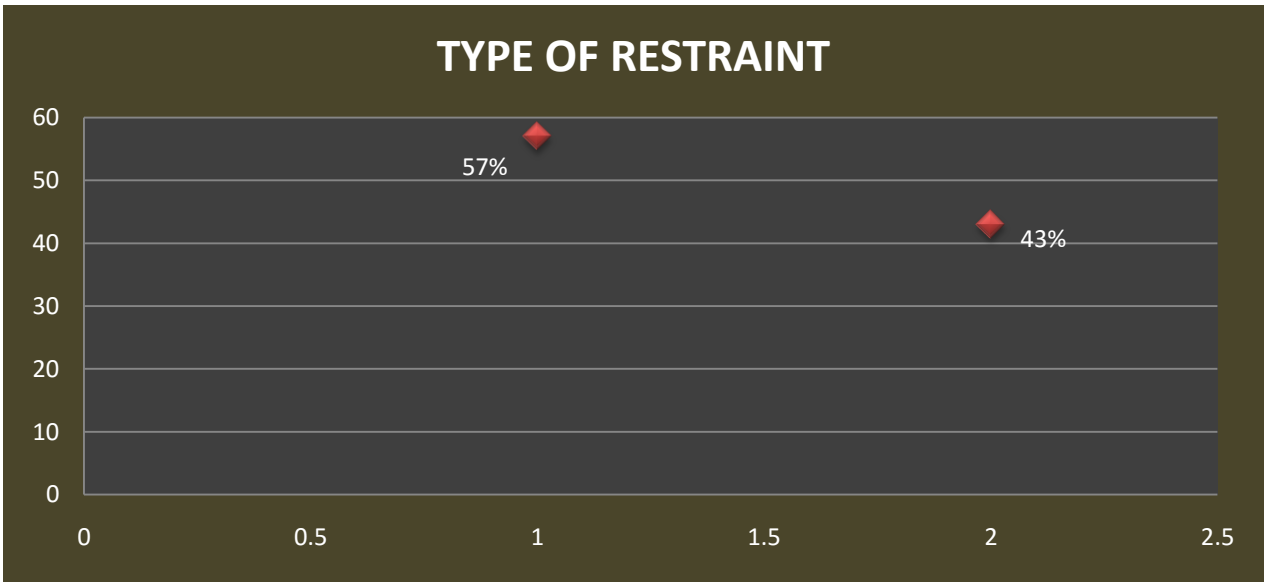
INTERPRETATION**: A s per analysis, the compliance of patient/substitute decision maker in informed consent of Neurosurgical ICU is 95%.**

Fig 48



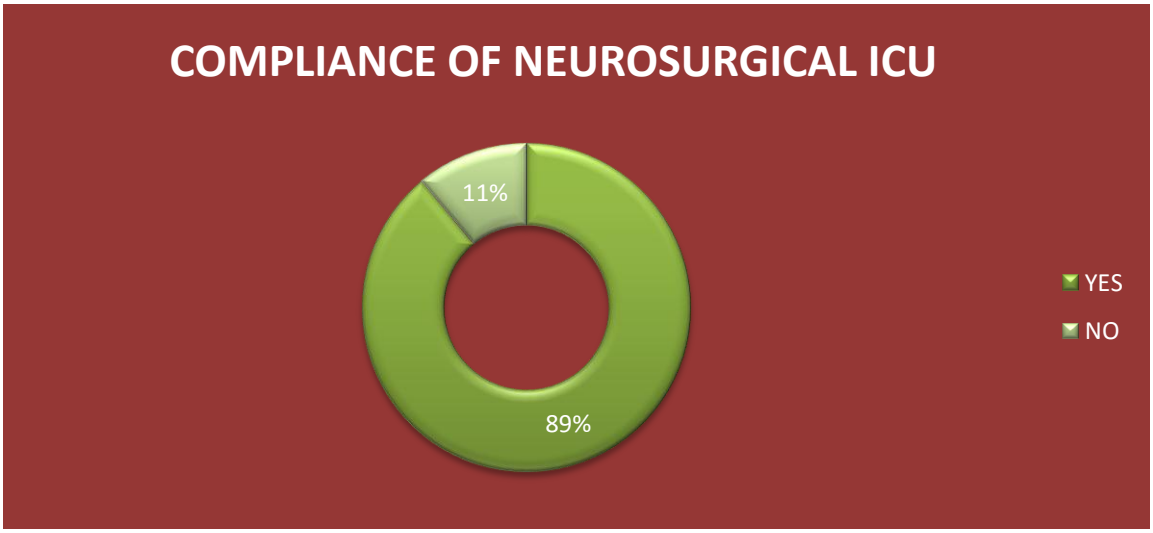
INTERPRETATION: **As per analysis, the compliance of witness credentials in informed consent of the Neurosurgical ICU is 78%.**

Fig 49



INTERPRETATION: **As per analysis, the compliance of type of restraint in informed consent of Neurosurgical ICU is 57%.**

Fig 50

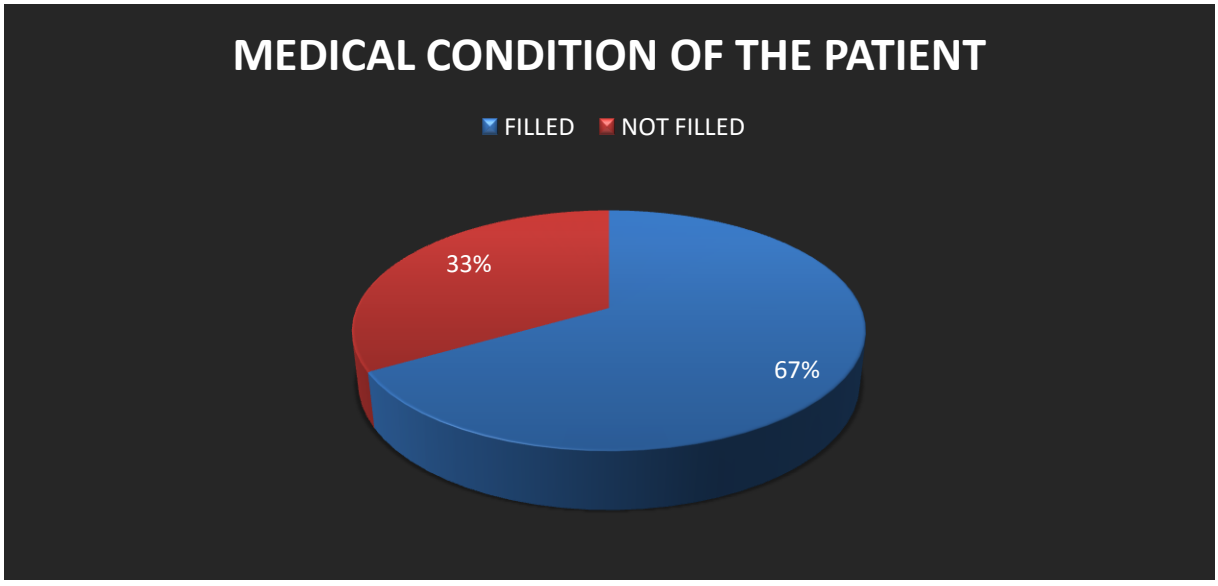


INTERPRETATION**: As per analysis, the compliance of Neurosurgical ICU is 89%.**

STROKE ICU

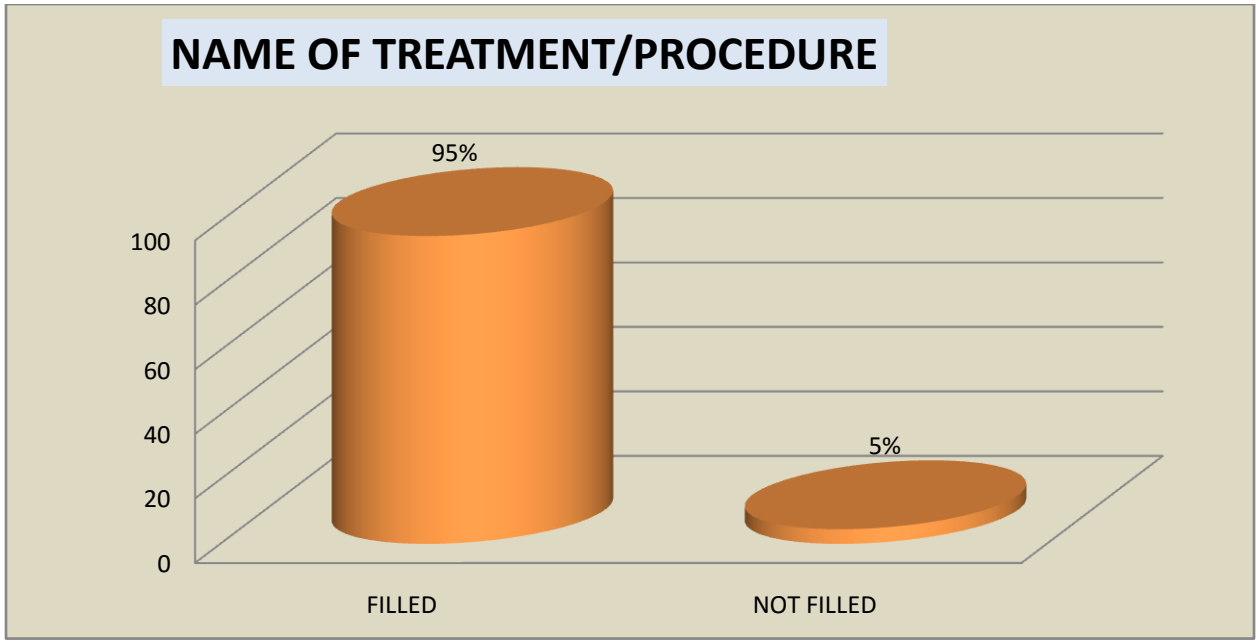
INTERPRETATION: **As per analysis, the compliance of patient credentials, UHID of the patient, name of the admitting consultant, patient/substitute decision maker and post test counseling in informed consent of Stroke ICU is 100%.**

Fig 51



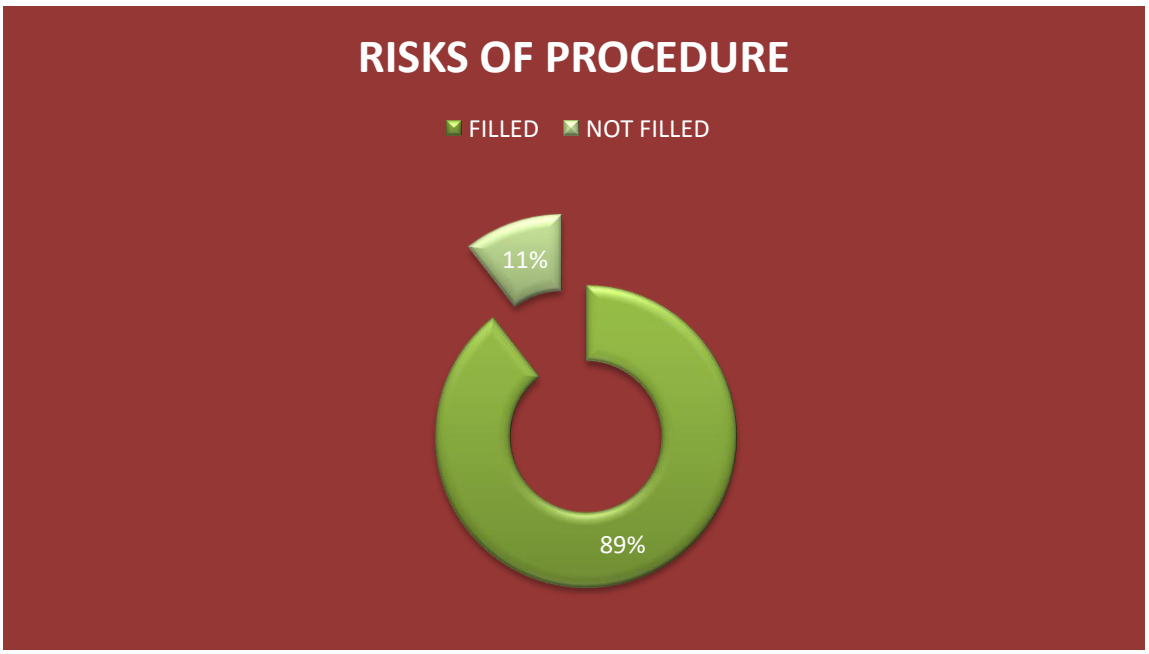
INTERPRETATION: **As per analysis, the compliance of medical condition of the patient in informed consent of Stroke ICU is 67%.**

Fig 52



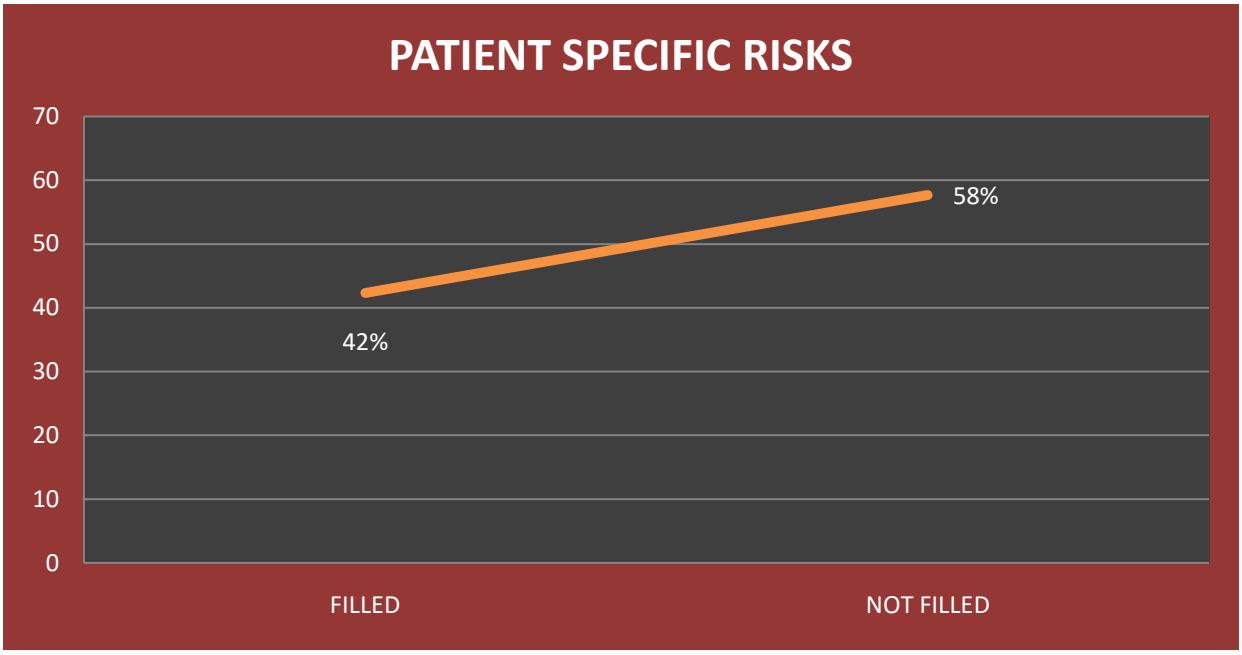
INTERPRETATION**: As per analysis, the compliance of name of the treatment/procedure in informed consent of Stroke ICU is 95%.**

Fig 53



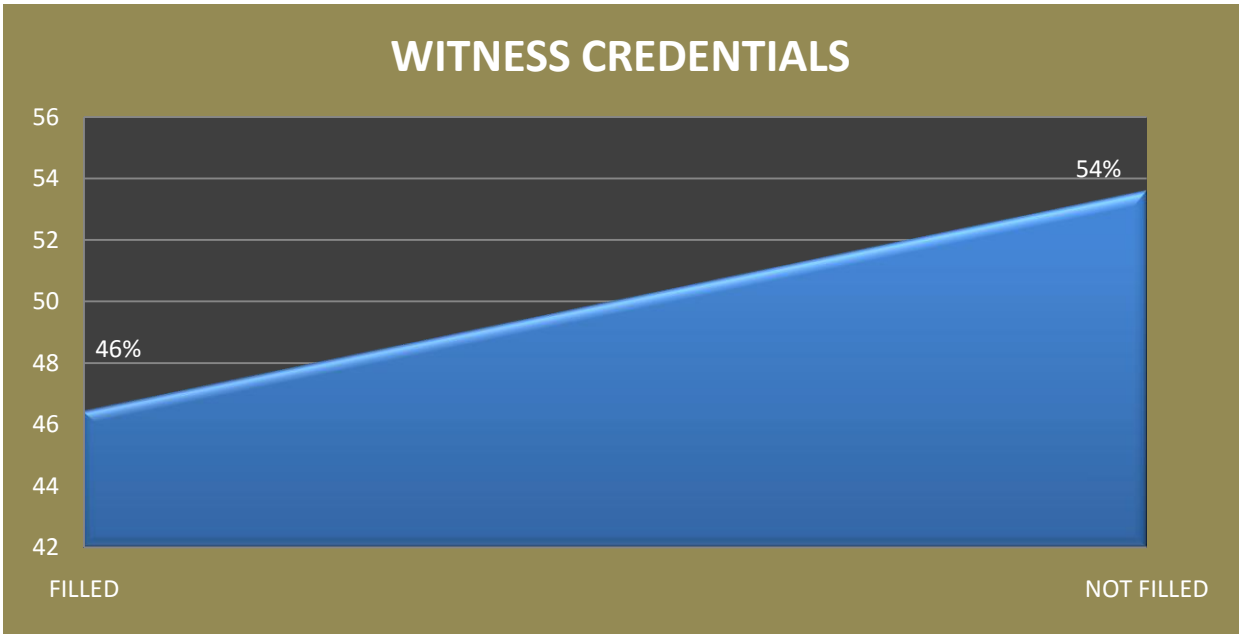
INTERPRETATION**: As per analysis, the compliance of risks of procedure in informed consent in Stroke ICU is 89%.**

Fig 54



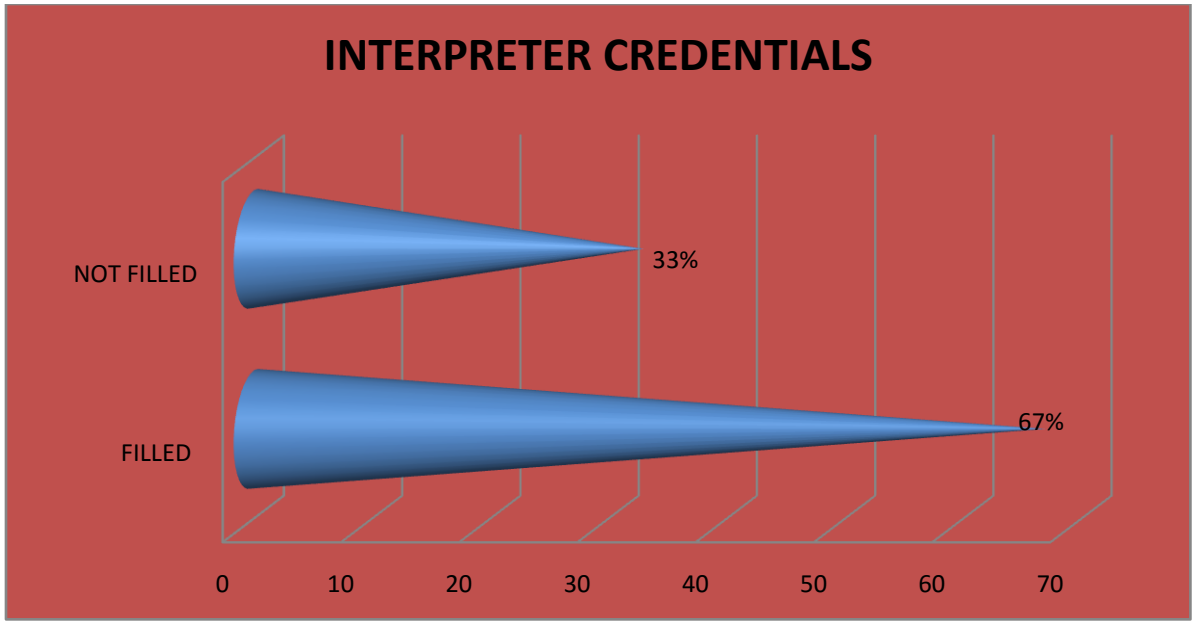
INTERPRETATION: **As per analysis, the compliance of patient specific risks in informed consent in Stroke ICU is 58%.**

Fig 55



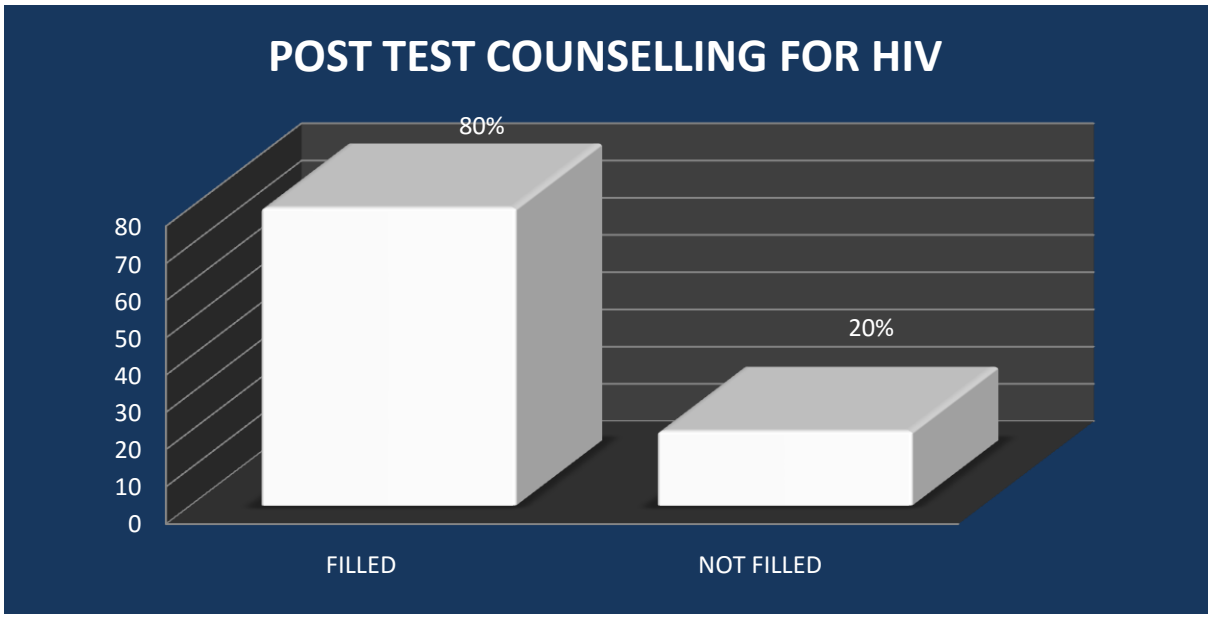
INTERPRETATION: **As per analysis, the compliance of witness credentials in informed consent of Stroke ICU is 54%.**

Fig 56



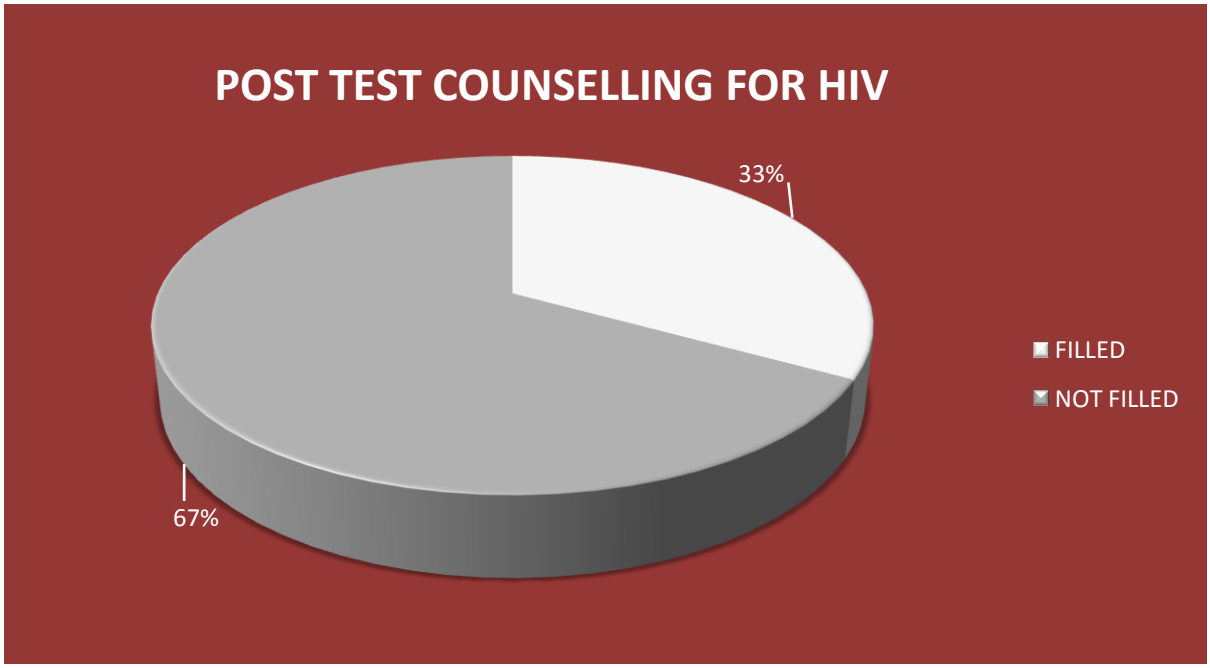
INTERPRETATION**: As per analysis, the compliance of interpreter credentials in informed consent of Stroke ICU is 67%.**

Fig 57



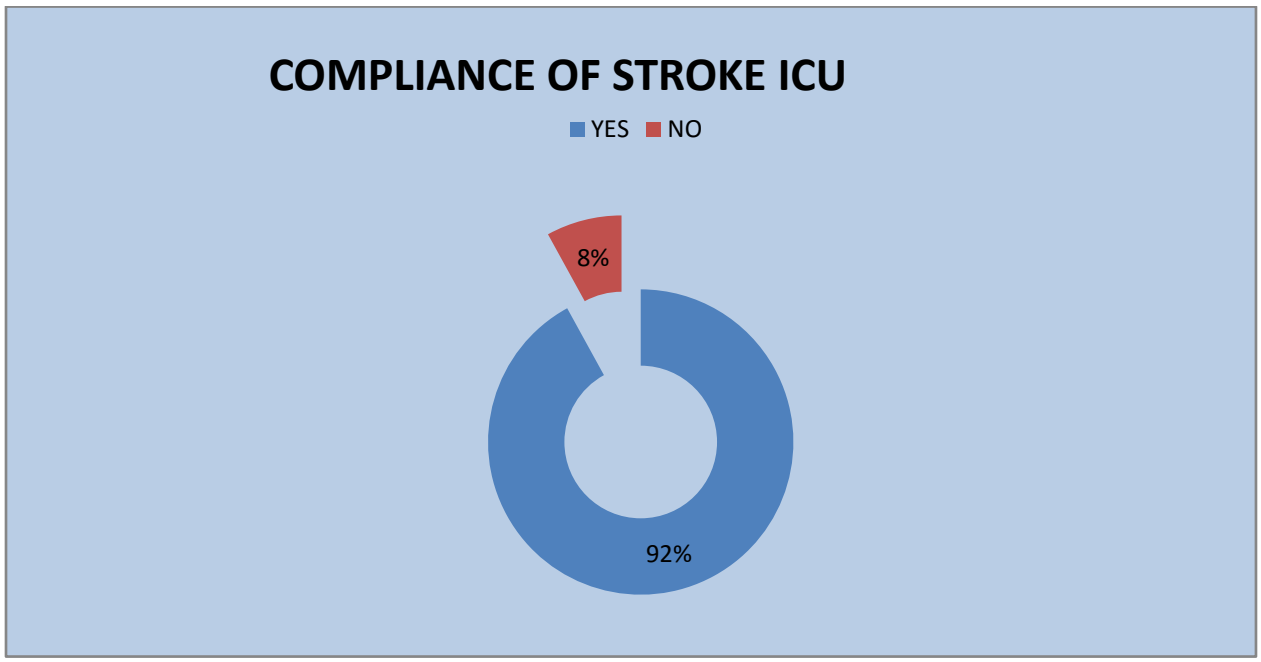
INTERPRETATION**: As per analysis, the compliance of post test counseling in informed consent in Stroke ICU is 80%.**

Fig 58



INTERPRETATION**: As per analysis, the compliance of pots test counseling for HIV in informed consent in Stroke ICU is 67%.**

Fig 59



INTERPRETATION**: As per analysis, the compliance of STROKE ICU is 92%.**

PEDIATRIC ICU

INTERPRETATION**: As per analysis, the compliance of patient credentials, UHID of the patient, name of the admitting consultant , Dr credentials and patient/substitute decision maker in informed consent of the Pediatric ICU is 100%.**

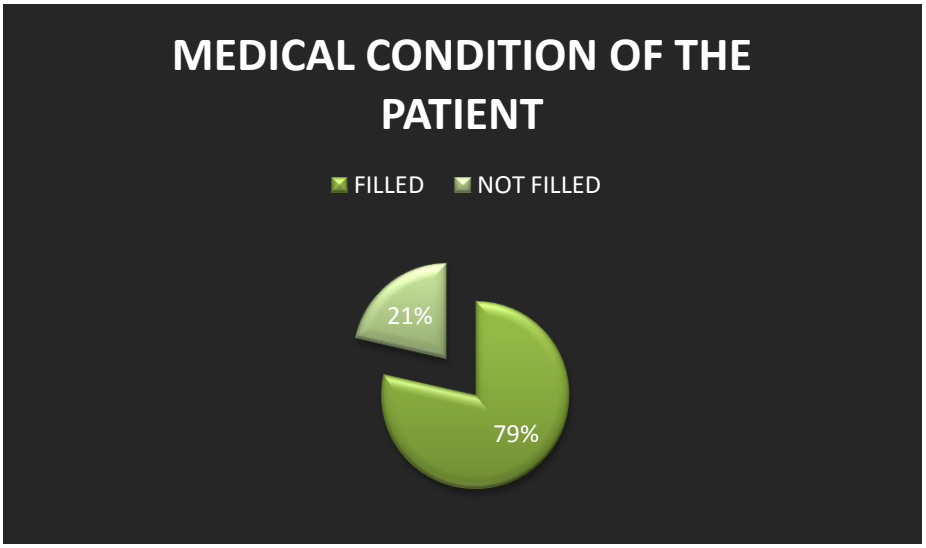


Fig 60

INTERPRETATION: **As per analysis, the compliance of medical condition of the patient in informed consent of Pediatric ICU is 79%.**

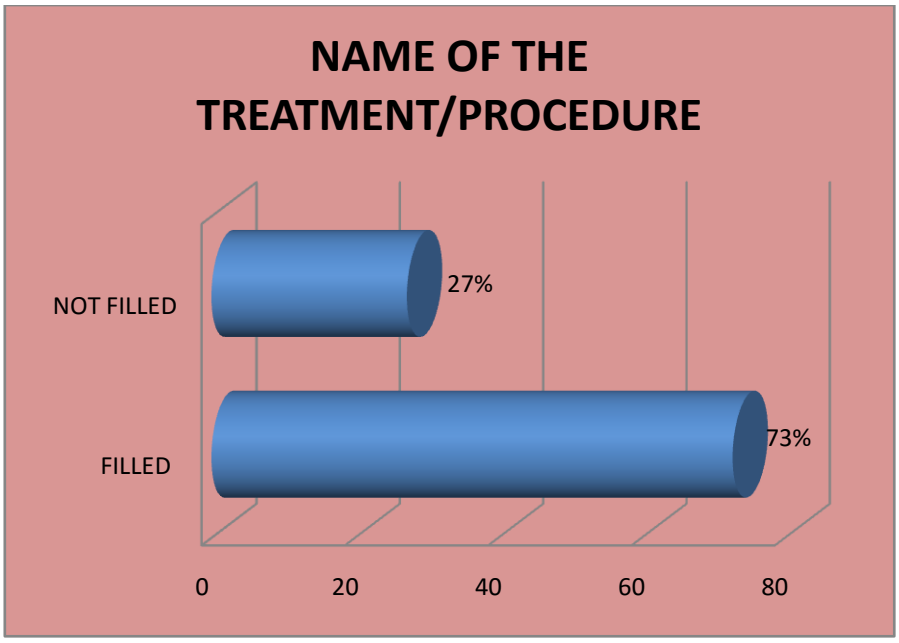
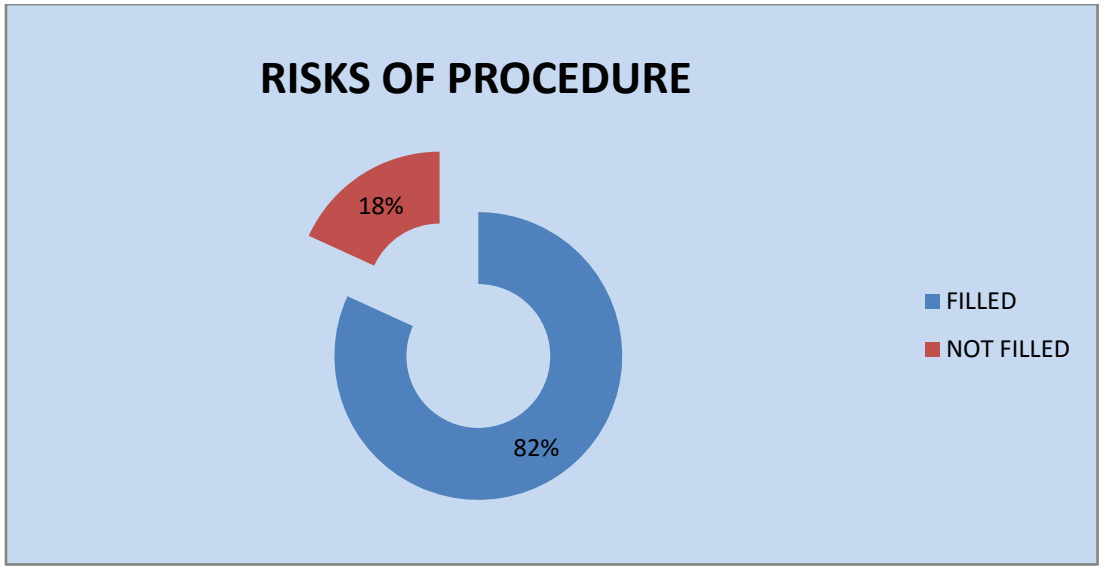


Fig 61

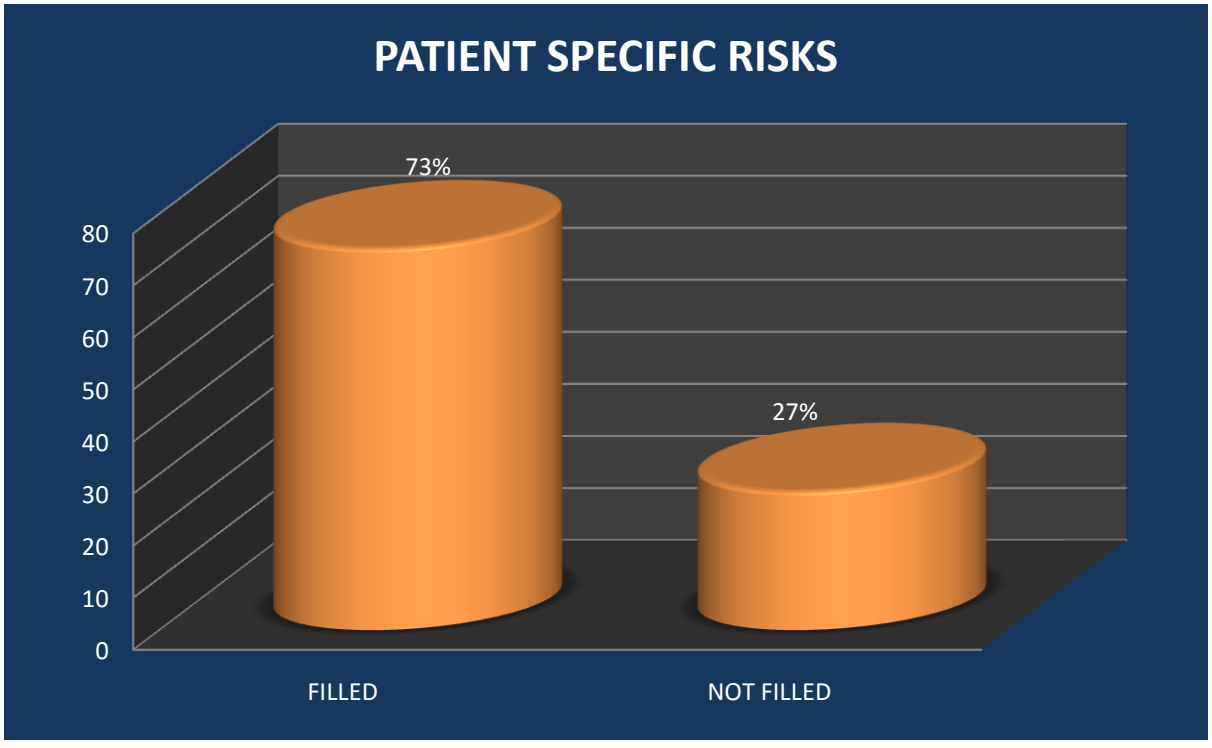
INTERPRETATION: As per analysis, the compliance of name of the treatment/procedure in informed consent of Pediatric ICU is 73%.

Fig 62



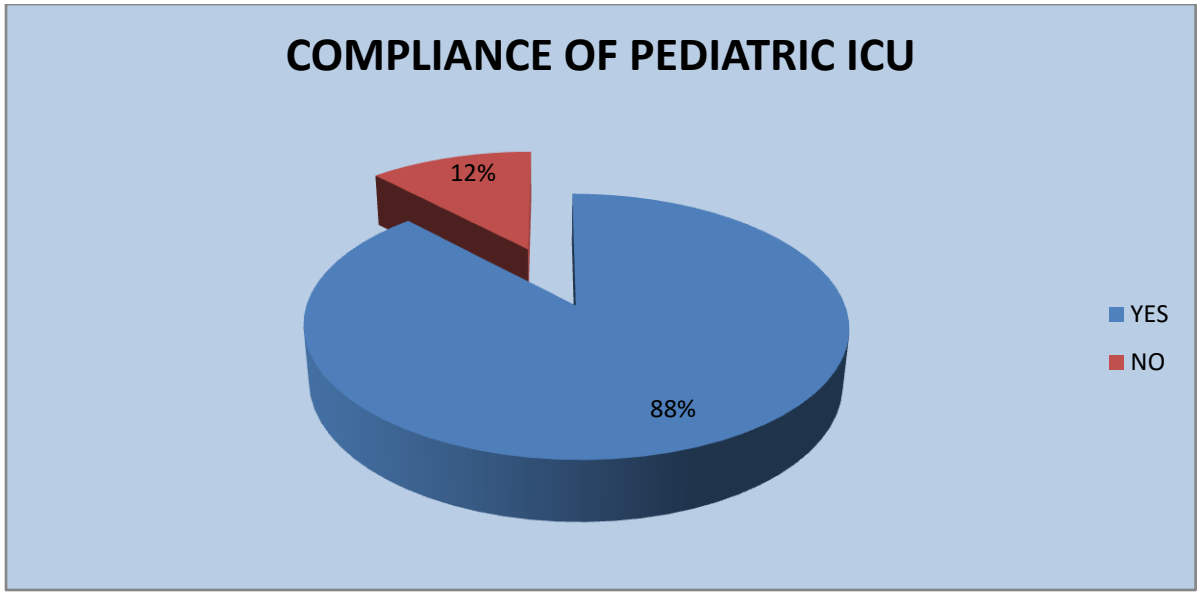
INTERPRETATION: **As per analysis, the compliance of risks of procedure in informed consent in Pediatric ICU is 82%.**

Fig 63



INTERPRETATION: **As per analysis, the compliance of patient specific risks in informed consent in Stroke ICU is 73%.**

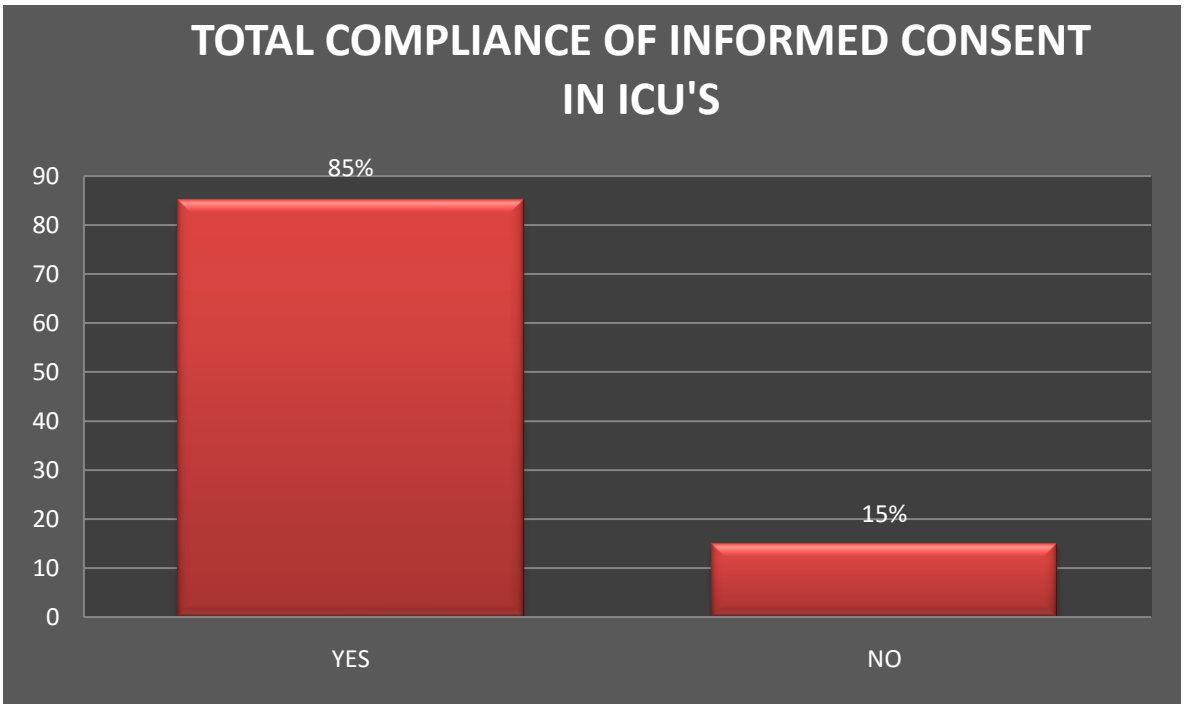
Fig 64



INTERPRETATION: **As per analysis, the compliance of PEDIATRIC ICU is 88%.**

Fig 65

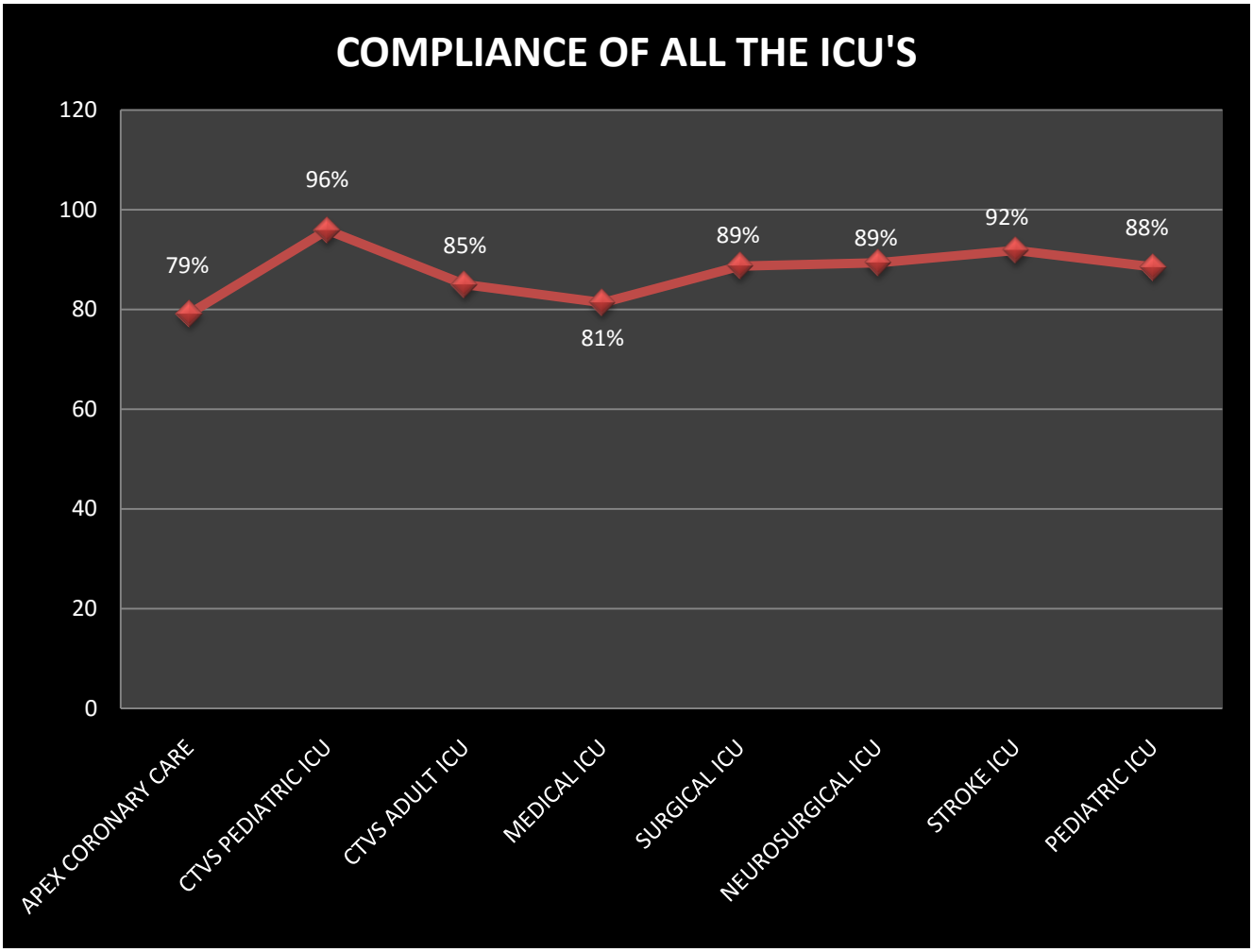
OVERALL COMPLIANCE OF INFORMED CONSENT IN ALL ICU's



INTERPRETATION: **As per analysis, the total compliance of informed consent is 85%.**

Fig 66

COMPLIANCE OF INFORMED CONSENT IN DIFFERENT ICU's



INTERPRETATION**: As per analysis, the, maximum compliance of informed consent is of CTVS PEDIATRIC ICU i.e.96% and minimum is of APEX CORONARY CARE i.e. 79%.**

RESULT:

As per the analysis, the overall compliance of informed consent in all the ICU's is 85%.The maximum compliance is of CTVS PEDIATRIC ICU i.e. 96% and minimum is of Apex Coronary Care i.e. 79% as forms are not filled properly.

The overall compliance is less mainly due to the three parameters:

a. Patient specific risks

b. Witness credentials

c .Medical condition of the patient

SUGGESTIONS AND RECOMMENDATIONS:

1. The medical condition of the patient in the consent form needs to be filled by all ICU's.

2. The patient specific risks in the consent form needs to be filled by all ICU's as this is one of the major factor that is missing in all the consent forms.

3. The column of the witness credentials in the consent form needs to be filled.

4. The overall compliance of Apex Coronary Care is least and this can improve by filling the consent forms properly.

5. The benefits of the procedure should also be there in the consent form..

7. The column for the post test counseling for HIV needs to be filled properly as it is very important in case of the HIV patients.

8. The consent form should be filled by the Doctors performing the procedure.

9. Doctors should explain all the information regarding the procedure to the patient before taking consent from the patient.

10. The consent should be taken in the language he knows.

11. The consent should be taken for every procedure performed on the patient.

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2. Informed Consent: An Ethical Obligation or Legal Compulsion

K H Satyanarayana Rao

3. NABH CHECKLIST OF CONSENT FORM

4. WHO site –www.who.int/rpc/research_ethics/informed consent/ en/

5 www. U.S department of health and human services.com

6. Types of consent forms –

www. Institutional review board.com

A STUDY ON THE SURGICAL BED UTILISATION IN ECONOMY WARD, EAST BLOCK

AT

MAX SUPERSPECIALITY HOSPITAL, SAKET

Institute of Health Management Research, Jaipur

INTRODUCTION

Bed occupancy and the ratio of beds per population remain predominant metrics in hospital capacity planning. There are several problems associated with this approach. Most importantly, bed numbers or bed occupancy do not provide a good measure of the services provided inside hospitals, given the wide variation in case mix and thus treatment costs of those occupying the beds, nor are they suitable for predicting future demand. The measure implies that the bed is the core piece of capital stock in the hospital, constraining the performance of the other assets around it. The near universal trend towards growing numbers of day cases and shorter lengths of hospital stay further invalidates beds as a measure of capacity.

Traditionally, hospitals were designed around specialties and departments rather than around the needs of patients. Patients often spend most of their time in hospitals waiting for something to happen, with large areas provided for this inactivity. The situation is often exacerbated by the inefficient management of admission and discharge. A consequence is that in many hospitals the flow of patients is inefficient, dislocated and disorganized. Yet poor patient flow impairs patient and staff satisfaction, and the effective utilization of resources. Several factors, including the growing complexity of treatment and a willingness to see the care process from the patient's perspective, have rendered this situation unacceptable, leading to demands for care models based on syndromes, care processes and patient pathways.

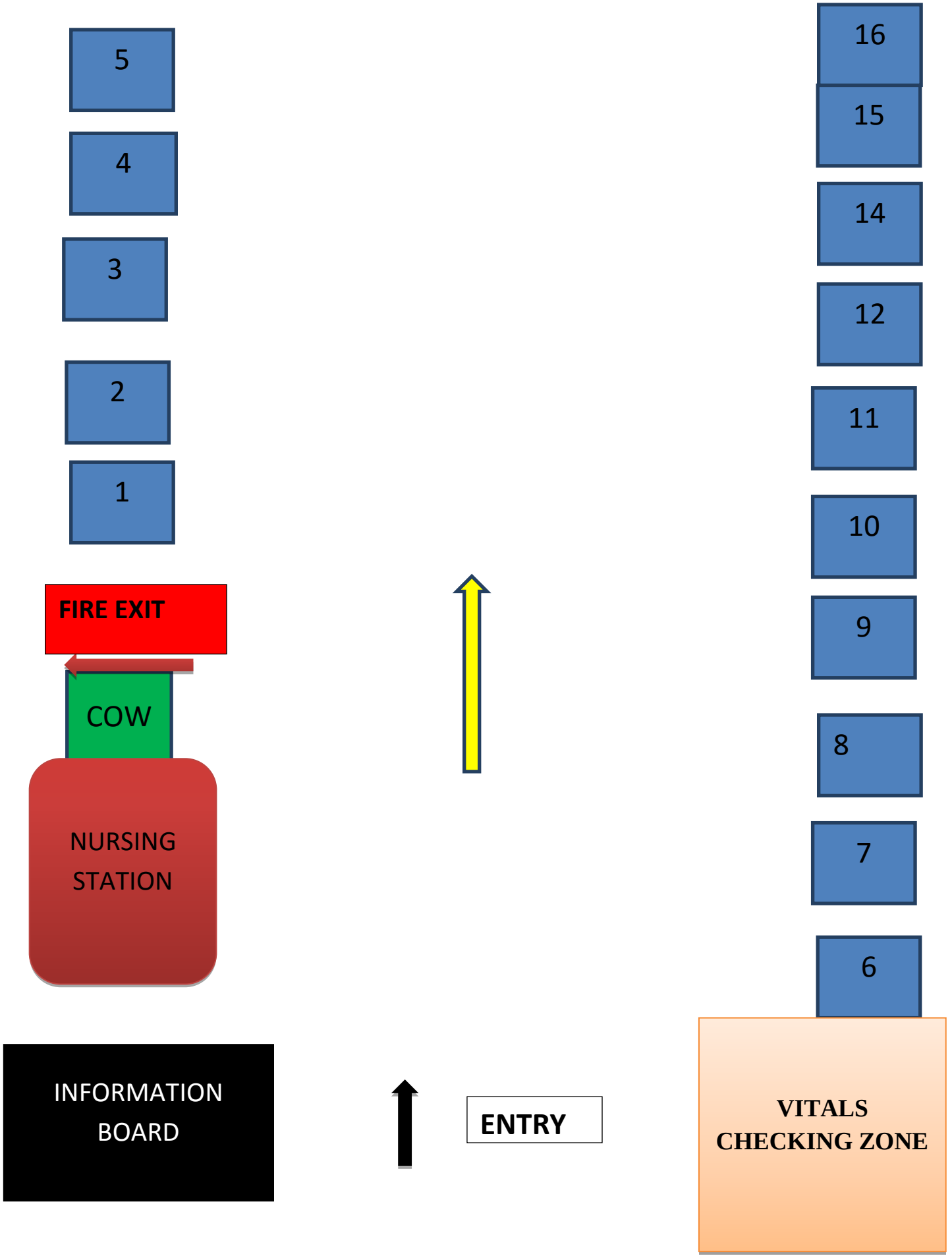
A major implication of applying management theory to health care is the need to separate different flows of patients, work and goods, enabling each to move according to its own logic and pace. For hospitals, this means that the focus should not be on similar clinical conditions but rather on similar processes**.** Improving patient flow has major implications for our understanding of hospital capacity. Rather than counting beds, a new definition of capacity could start from a description of the pathways travelled by patients, whether in batches or as flows, followed by identification of those elements that can constrain them (the bottlenecks). In some cases, this could be the number of beds but in others it will be operating theatres, diagnostic equipment or particular specialist staff – in each case, these depend on the

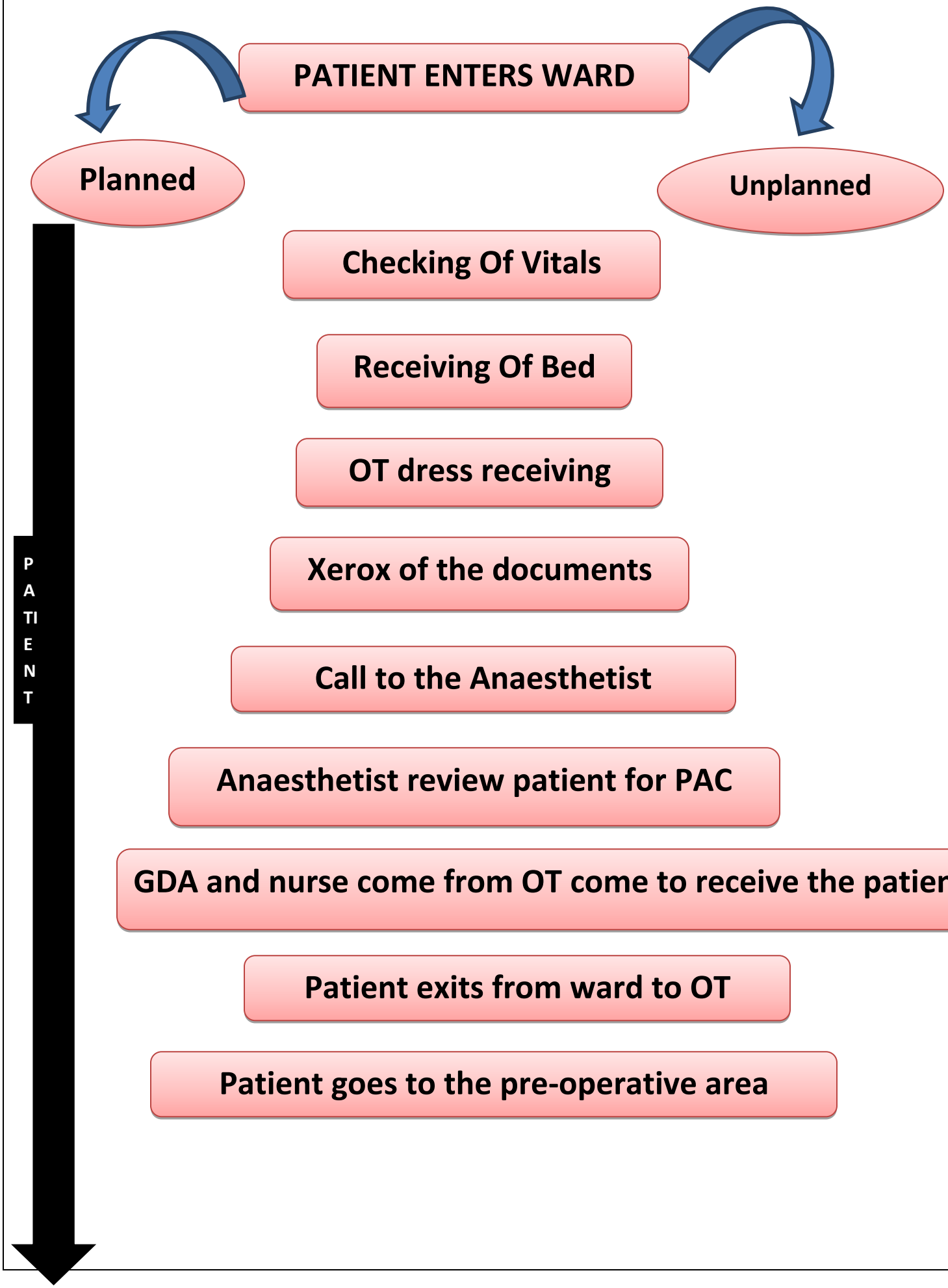
particular site and its relation to the local health-care economy. It is necessary to examine how these elements are configured within and outside hospitals, recognizing that many pathways will join together at bottlenecks, such as in operating theatres, before going their separate ways. The key to successful capacity planning is then to ensure that each patient travels along the shortest (or least costly) path possible within the network, encountering as few delays at bottlenecks as possible.

Our study was done in the economy ward located on the ground floor of east block of Max Super Speciality Hospital. The economy ward is a 15 bedded ward .The patients undergoing general surgery, ENT surgery, Internal medicine and post-surgery are admitted here. There are seven nurses working in three different shifts which are morning(8:00a.m to 2:00a.m.), evening(2:00p.m to 8:00p.m) and night(8:00 p.m. to 8:00 am).There are two staff nurses and one team leader in the morning shift, two staff nurses each in evening and night shift.

This ward is for providing services to economically weaker section patients but due to unavailability of the beds in other wards of the hospital, patients (cash/TPA) from these wards are admitted in the economy ward.

The layout of the economy ward is as follows:


5
4
3
2
1
16
15
14
12
11
10
9
8
7
6
FIRE EXIT
COW
NURSING STATION
INFORMATION BOARD
ENTRY
VITALS CHECKING ZONE


PATIENT ENTERS WARD
Planned
Unplanned
Checking Of Vitals
Receiving Of Bed
OT dress receiving
Xerox of the documents
Call to the Anaesthetist
Anaesthetist review patient for PAC
GDA and nurse come from OT come to receive the patient
Patient exits from ward to OT
Patient goes to the pre-operative area
PATIENT

Patient goes to the OT

Patient goes to post-operative area

EXIT from OT to Ward/ICU

REVIEW OF LITERATURE

The availability of hospital bed has always been a problem in developing countries. The availability of beds is perhaps the most important single factor in determination of the hospital utilization in a country. In India, shortage of hospital beds in a huge problem, the average bed population ratio being 6.8 / 10,000.Moreover the cost of construction of a new bed is also to an extent of Rs. 50,000 to Rs. 100,000 added to its huge maintenance cost. This situation is further deteriorated by population explosion, increasing the flow of patients and rising demand for hospitalization. On the other hand, hospital facilities may not be fully utilized due to a multitude of factors, including medical and social customs.

Bed in this context represents not simply a place for the patient to sleep but the services that go with being cared for by the medical facility that is admission processing, physician time, a nursing care, necessary diagnostic work, appropriate treatment and so on.

Bed utilization the number of hospital beds occupied by patients expressed as a percentage of the total beds available in the ward, specialty, hospital, area, or region. It is used to assess the demands for hospital beds and hence to gauge an appropriate balance between demands for health care and number of beds.

The role of the hospital can be fully studied only by taking into consideration all aspects of hospital service that is by including the services to the community on an out-patient as well an in-patient basis. However, the concept of "hospital utilization statistics" is relatively less known in our country.

Various indices are utilized in the assessment of hospital utilization. Hospital bed utilization indices will provide trends and pattern of hospital utilization. Davis and Macula (1996) have described the indices related to hospital :-

Average length of stay (ALOS)

Bed occupancy rate (BOR)

Bed turnover interval (BTI)

Shortage of beds can result in cancellation of admissions for planned (elective)surgery, admission to inappropriate wards(like surgery patients in medical wards) and transfer of existing in patients between wards which will add a day to a patient length of stay. To maintain a certain occupancy rate, depends upon several factors of hospital as hospital size, number of non-substitutable patient facilities, the present of non-urgent beds, the number of hospital serving an area.

In the UK during 1997–98, average bed-occupancy levels varied between around 50% and 99%.However, most National Health Service (NHS) acute trusts reported periods during which inpatient bed demand exceeded availability. At those times, emergency patients were more likely than usual to be assessed and have treatment initiated in EDs before moving to an inpatient ward. Furthermore, those hospitals with higher average bed-occupancy rates cancelled a significantly higher proportion of elective operations and had longer delays in the transfer of patients from the Emergency department to inpatient beds. It was acknowledged that "hospitals with average occupancy levels above 85 per cent can expect to have regular bed shortages and periodic bed crises". It has been suggested that reducing bed-occupancy rates below a "threshold" level should reduce excessive waiting times in Emergency Departments.

Observations made within the NHS have been used to develop a discrete-event stochastic simulation model to study the relationship between demand and available hospital bed capacity. This model suggests that there is a discernible risk of a hospital failing to provide sufficient beds, and thereby safe, efficient care, when average bed occupancies exceed 85%. A hospital with an average bed occupancy of 85% would be expected to "be short of beds for admissions on four days in a year", with disruption of normal function of up to 8 weeks. The authors concluded that "spare [bed] capacity is essential if an emergency admissions service is to operate efficiently and at a level of risk acceptable to patients". In 2005, the average hospital bed-occupancy rate was shown to be 84% in the UK compared with 64% in the Netherlands, with the same number of acute beds per head of population in both countries. In the Netherlands, where, notably, nursing home patients have access to care that avoids the need for admission in an acute facility, admission decisions were not affected by bed pressures.

RATIONALE

This report is intended to find out the utilization of the beds. In the economy ward, 5 out of 15 beds are being reserved for the surgery patients whether planned or unplanned, irrespective of patients turning up or not. With the help of this study we want to check whether advance blocking the bed is required or not. And if required, then how many beds should be blocked? This study will also help us to analyze whether there is a delay in the process of patient flow and the reasons for this delay.

This delay leads to bed-blockage which further results in ineffective utilization of the beds and improper usage of hospital resources.

OBJECTIVES:-

1. To check the effective utilization of beds booked for the surgery patients in the economic ward.

2. To observe the patient flow from "entry into the ward" and "exit from OT".

3. To examine the areas of delay and reasons behind it, at each and every level of the process flow.

METHODOLOGY

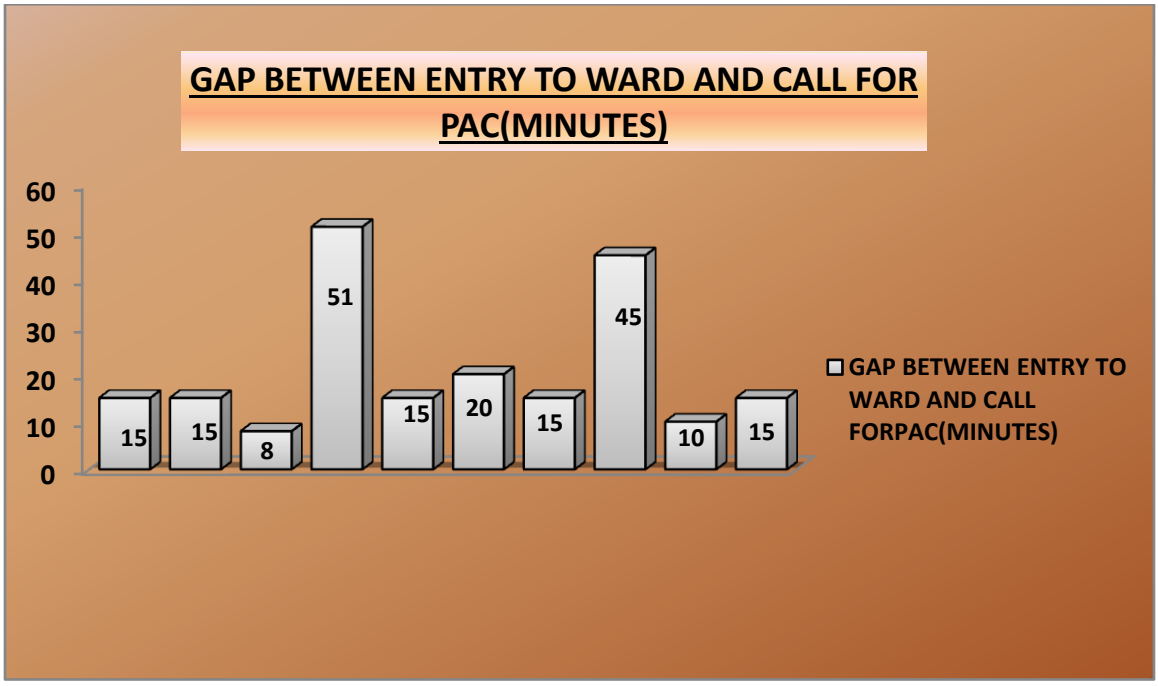
- **Type of study** *:* Descriptive cross-sectional
- **Study population**: Planned/unplanned surgery patients, nurses, anaesthetist, surgeons in the economic ward at Max Super Speciality Hospital, Saket , Delhi.
- **Study area** –Economy ward ,East wing, Saket, Delhi
- **Duration of Study**– 1 month.(18^{th} April, 2016 to 18^{th} May 2016)
- **Type of Data** - Quantitative
- **Technique** – Direct observation to track the patients from entering the ward and coming back from OT.
- **Sample size** –23 patients.
- **Sampling technique**- Non probability sampling

- ***Inclusion criteria***-
    - All Surgery In-Patients, Nurses, Anaesthetist, Surgeons present in Economy ward, East wing, Max Hospital, Saket from 18th April to 18th May, 2016.
- ***Exclusion criteria***-
    - Other patients and doctors in the economy ward.

- **Data collection** - Quantitative (1 Month)
- ***Data entry***- Manually
- ***Data Analysis***- Using bar charts, pie charts, line charts

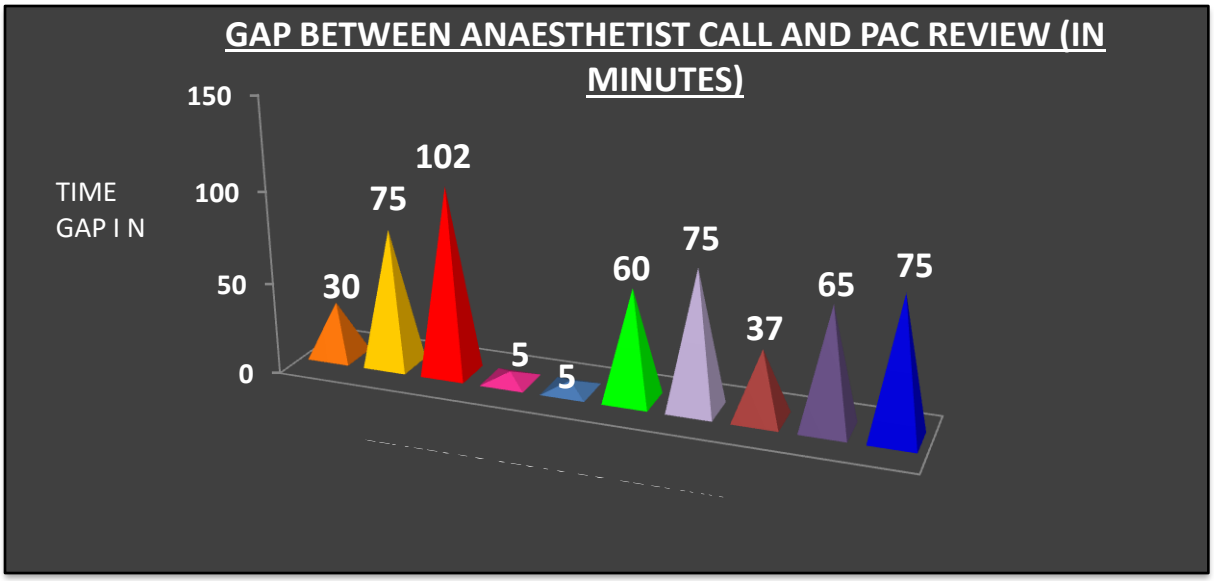
DATA ANALYSIS:

Figure-1



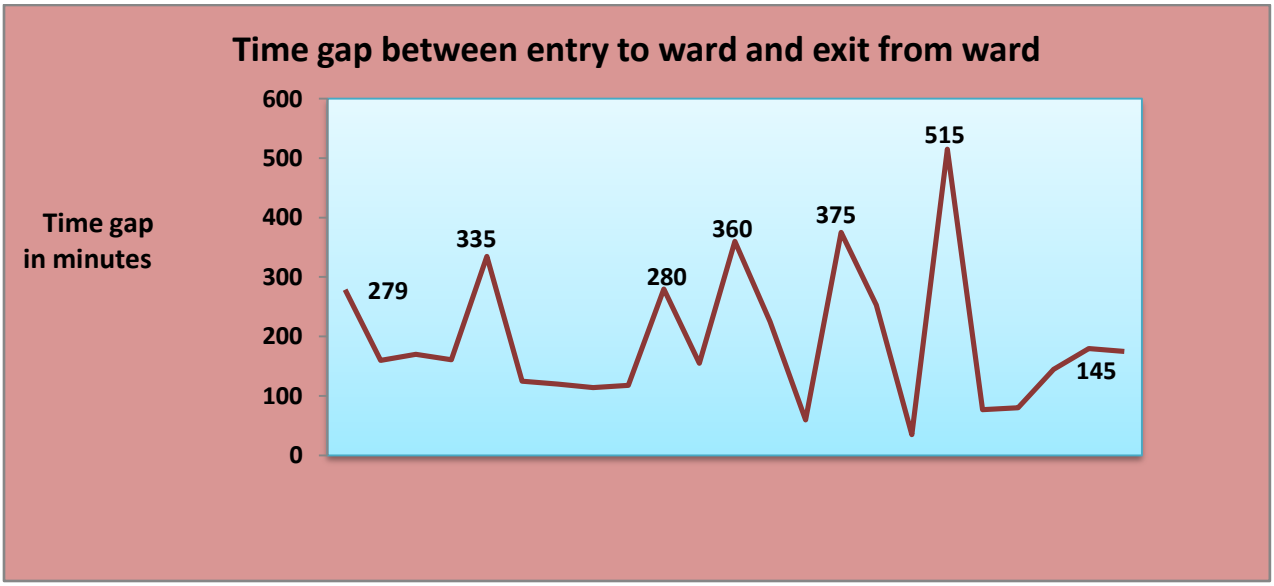
INTERPRETATION:

The maximum time gap observed between entry to ward and call to PAC is 51 minutes.



INTERPRETATION:

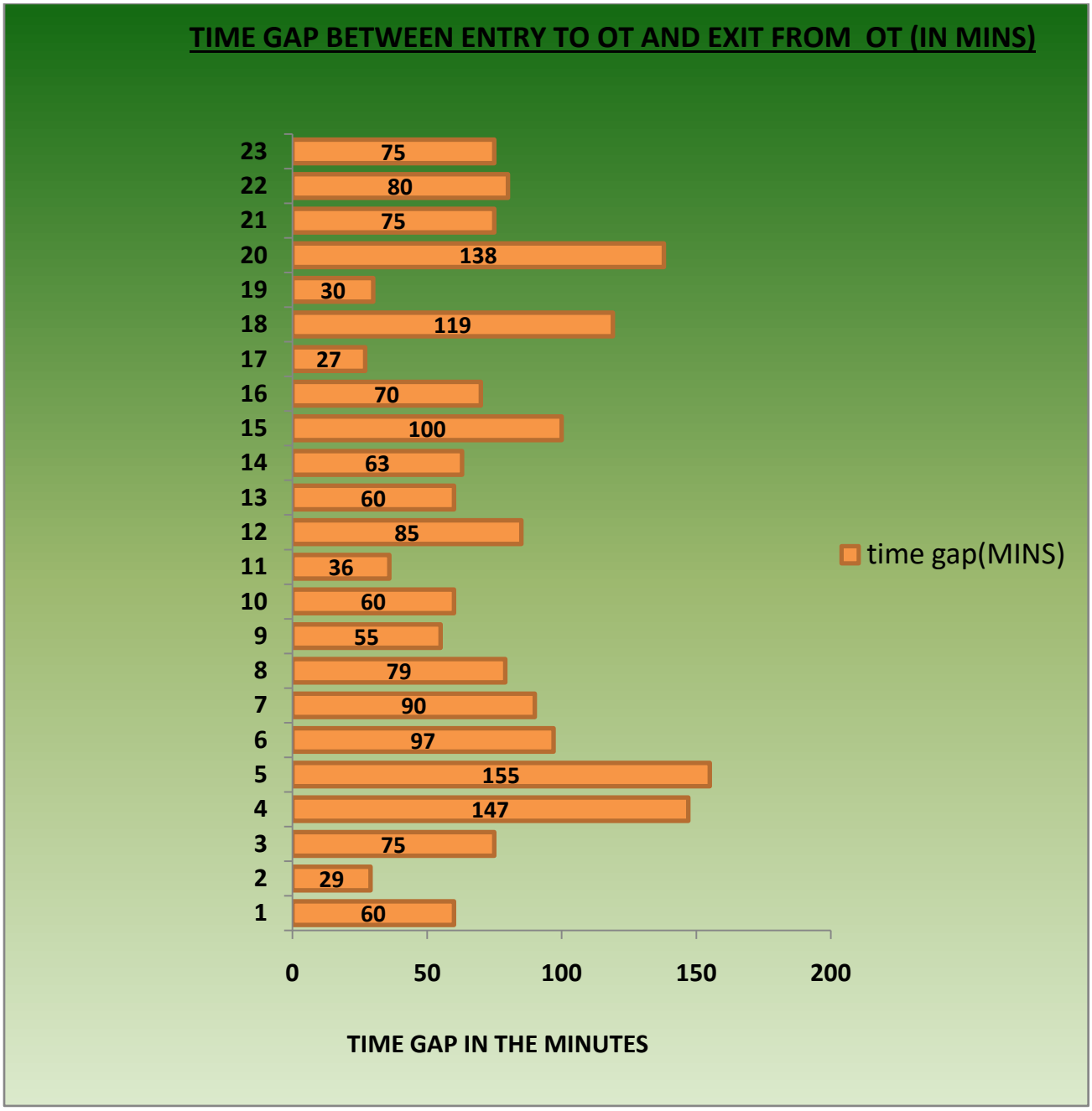
The maximum time gap recorded between anesthetist call and PAC review is 102minutes.This time gap contributes to one of the major reasons of the delay in the patient flow.



INTERPRETATION:

The maximum time gap between entry to ward and exit to OT is observed as 515 minutes.

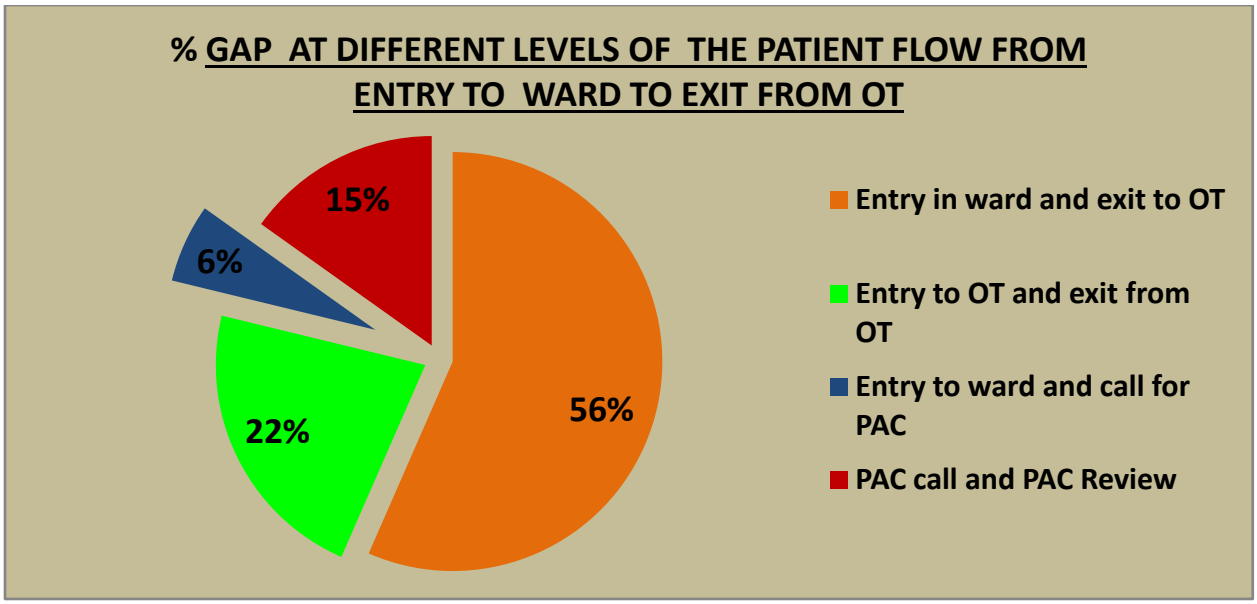
Figure-4



INTERPRETATION:

The maximum time gap seen between entry to OT and exit from OT is 155 minutes.

Figure – 5



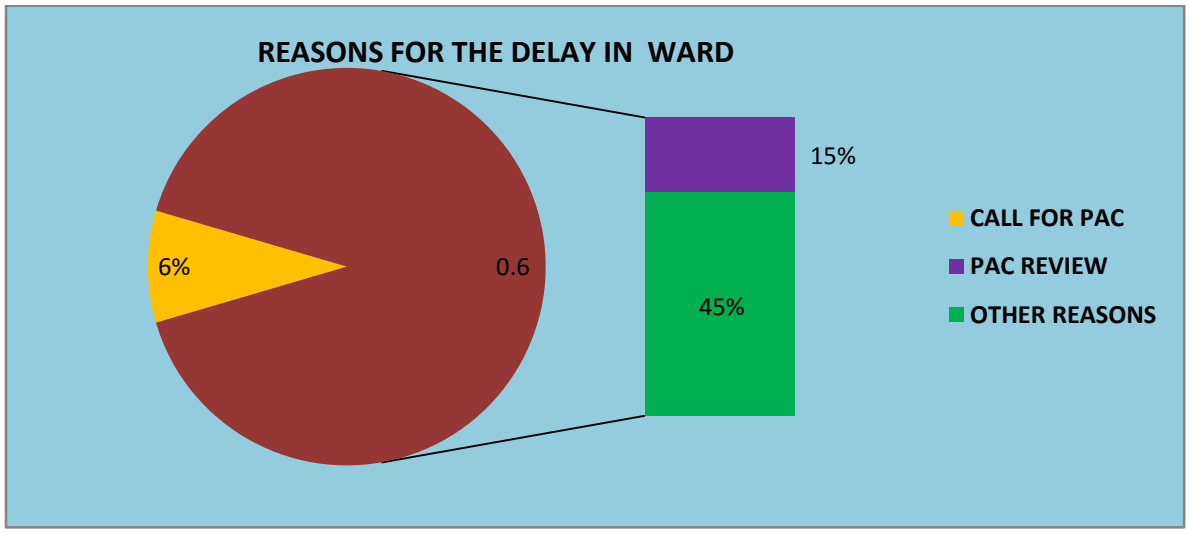
INTERPRETATION

It is seen that the delay within the economic ward from patient's entry to exit for OT is 56%.

This process also includes call to the anesthetist and PAC review.There was a delay of 15% associated with the call to PAC and PAC review.

The delay of 6% is seen in entry in the ward and call to PAC

Figure – 6



INTERPRETATION:-

There is 15 % gap in the case of PAC review whereas 6% in call for PAC.

There is a time gap of 45% in the OT due to other reasons like delay in reports, surgeon's unavailability and majorly financial clearance etc.

CONCLUSION:

In our study of one month, we came across delays at various levels of the patient's process flow.

We observed that delay occurs due to financial clearance, medical clearance, lab reports not ready which all together accounts to 45% There was 22% delay observed in OT which includes unavailability of surgeons, anesthetist, GDA, OT not prepared. Whereas 15% delay was due to Pre-Anaesthetize Check-up (PAC) and 6% is recorded by the nurses in the ward in calling the anesthetist.

RECOMMENDATIONS AND SUGGESTIONS

- The financial clearance of the patient should be done before scheduling of the surgery to avoid hindrance during the process flow
- The call to anaesthetist for pre-anaesthetic check-up (PAC) should be done as early as possible to avoid further delays.
- A day before the surgery, a list of the patients should be made and given to the anaesthetist, to help him with scheduling of PAC.
- There should be a turn-around time (TAT) for PAC to be done by the anaesthetist as PAC clearance has been observed to be one of the major reasons behind the delay.
- It should be the duty of the nursing staff to check that the patient's record file contains all the required reports needed before surgery. And then only the bed should be allotted to the patient.
- Any additional test recommended by the doctor at the time of PAC, should be done as soon as possible and reports should be made on an urgent basis.
- There should be no delay by the OT team in sending the GDA to the economy ward to shift the patient to the OT.
- The patient should not wait unnecessarily in the pre-operative recovery area due the improper management of OT scheduling.
- There should be availability of concerned surgeon and anaesthetist and no delay on their part.
- The OT should be prepared and cleaned before the arrival of the patient.
- There should always be availability of the GDA to shift the patient from post recovery area to the ward

A STUDY ON THE COMPLIANCE OF

"RAPID RESPONSE TEAM"

AT

MAX SUPERSPECIALITY HOSPITAL, SAKET

A Report by: **Dr. Kirti Aggarwal, Dr.Himanshi Chhabra**

Indian Institute of Health Management Research, Jaipur

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DECLARATION

I do hereby declare that I am a student of 1st year, MBA in Hospital and Healthcare Management, IIHMR University, Jaipur, Rajasthan session 2015-2017.

I would like to state that I have carried out my Internship on the topic "A study on the Compliance of Rapid Response Team" under the guidance of Dr. Sandeep Mor (Deputy Medical Superintendent) at Max Super Specialty Hospital, Saket, New Delhi for the partial fulfillment for the degree of MBA in Hospital and Healthcare Administration.

This project work is my own and has not been submitted to any of the other Institute or University for the purpose of award of any degree or diploma.

Dr. Kirti Aggarwal

IIHMR University

(2015-2017)

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INTRODUCTION

Rapid Response Team in a hospital constitutes the healthcare providers who provide early intervention and stabilization to the hospitalized patients to prevent clinical deterioration on non critical areas prior to cardiopulmonary arrest or any life-threatening event.

The thought of Rapid Response Teams (RRT) at hospitals was founded on the concept of "Failure to Rescue". The term, "failure to rescue" was coined in the 1990s by Jeffrey Silber, MD as a way to characterize patients who could potentially have been rescued if health care providers had responded earlier or differently. Failure to Rescue refers to the lack of caregiver's ability to recognize early signs and symptoms of deterioration of a patient's condition, or acting too late to prevent a cardiac arrest. The phrase is a measure of the by-and-large performance of a hospital and not anticipated to imply negligence or wrongdoing. The rapid response team aims to eliminate failure-to-rescue events from taking place.

Implementation of RRTs in hospitals is one of the six initiatives of the Institute for Healthcare Improvement (IHI), 5 Million Lives Campaign from December 2006 to December 2008.

RRT helps in reducing the unexpected hospital mortality, unplanned admissions to ICU and overall length of stay for post RRT patients transferred to higher level of care and increasing patient, family and staff satisfaction.

REVIEW OF LITERATURE

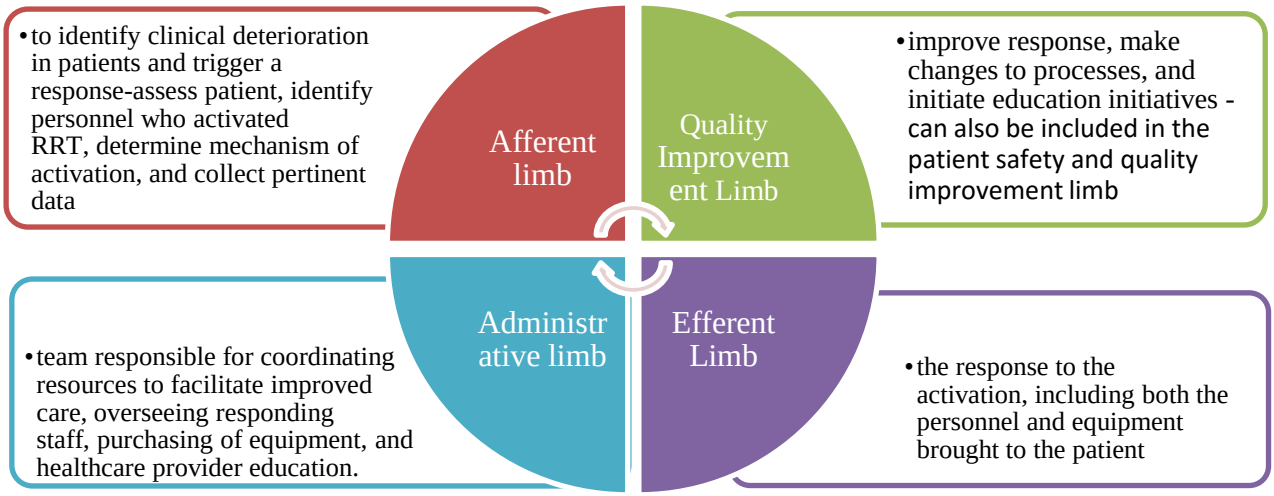
The adoption of Rapid Response Teams (RRTs) as a component of safety and quality enhancement initiatives is not only saving the lives of the patients but also bolstering the nursing profession in a number of hospitals and health systems. A rapid response team is an assembly of clinicians that nurses and other hospital staff can call upon at any time to provide critical care expertise at the bedside of a patient whose condition is deteriorating.

Unpublished data from UCSD have documented that rapid response criteria are present in 80% of non ICU in-patient arrests, with a median duration of five hours prior to loss of vital signs. Similar findings were published in the Journal of the American Medical Association (JAMA); in this study, researchers concluded that adult patients often exhibit detectible physiological changes up to eight hours before a cardiopulmonary arrest.4 If a health care provider notices these early warning signs and activates the RRT, the team can then appropriately assess, treat, and triage the patient prior to a code.

Rapid response teams may be confused with a Code Blue team; however, there is a fundamental difference between the two. Table 1 compares the differences between a code team and a rapid response team. 5 Traditionally, the Code Blue team is called for patients that are unresponsive, lacking a pulse, and/or loss of vital signs. A rapid response team intervenes when there has been a sudden change in the patient's condition. Most institutions have a list of criteria that indicate when a health care provider, or in some instances a family member, should activate the RRT.

Commitment Studies suggest that a rapid response program is unlikely to succeed without support from hospital leaders, including senior medical and nursing personnel.8 In order to be successful, everyone must want the program to succeed. While this sounds intuitive, RRTs may be implemented because the Joint Commission says they should be.

All rapid response systems utilize the same basic principles, typically thought of as four limbs:



Scientific Evidence that RRTs Help: Research has shown that with RRTs:

- 50% reduction in the occurrence of cardiac arrest outside the ICU.[1]
- 17% decrease in the incidence of cardiopulmonary arrests (6.5 vs 5.4 per 1000 admissions).[2]
- Severe postoperative adverse events (i.e., respiratory failure, stroke, severe sepsis, acute renal failure) were reduced by 58%, emergency ICU admissions were reduced by 44%, postoperative deaths were reduced by 37%, and mean duration of hospital stay decreased from 23.8 to 19.8 days in surgical patients.[3]
- Decrease in the number of unnecessary transfers to a higher level of care by a mean of 30%.[4]

Staff Accountable and Responsible

Medical Advisor and Clinical Directors/Coordinators are responsible for ensuring the implementation and monitoring of the RRT protocols.

RRT Team at Max Healthcare includes an Intensivist on call, JC Cardiology or JC/SR- Medicine and a nursing supervisor or Team Leader. All the team members must be available to respond immediately when informed about RRT. Other staff responsible for ensuring RRT protocol to be followed includes Floor AMS/Executives and Nursing Supervisors, Duty Doctors and Quality Managers.

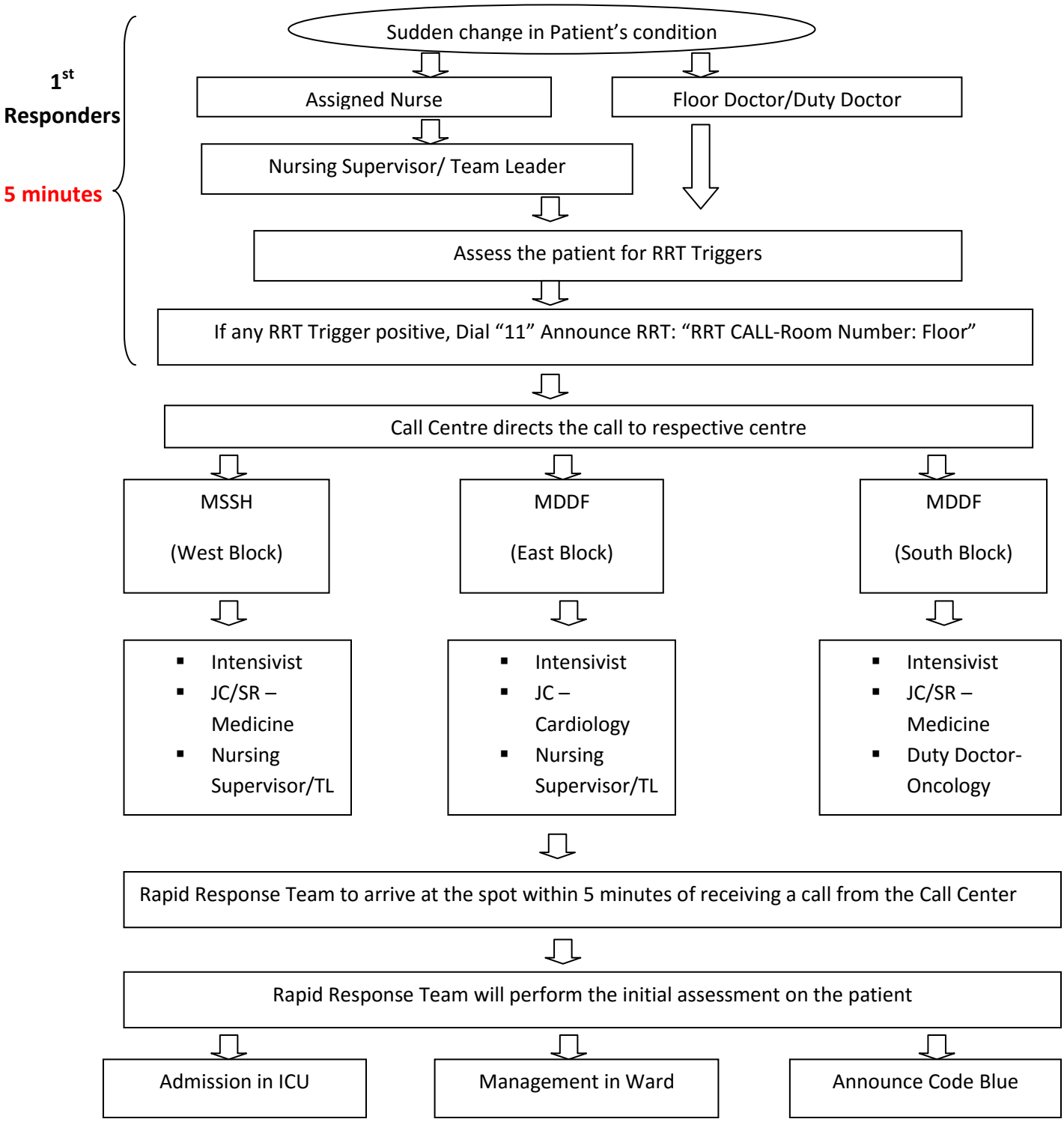
Triggers for Alerting Rapid Response Team

There is a RRT protocol followed in Max Healthcare, Saket that defines the criteria for which the staff nurse can activate the RRT on observing an undesirable change in patient's condition. It has been reported that identifiable signs of deterioration are evident in 2/3 of the patients within 6-8 hours of cardiac arrest.[5]

Airway/Breathing	➢ Threatened Airway ➢ Respiratory Rate <8 or >28 ➢ Acute changes in oxygen saturation <90% despite oxygen therapy or prescribed treatment ➢ New requirement for >50% oxygen to keep saturation above 90% ➢ Acute, new onset shortness of breath and difficulty speaking.
Circulation	➢ Heart Rate <50 or >130 with new symptoms or any rate >140 ➢ Systolic Blood Pressure <90 or >180 or Diastolic >100 with symptoms (neurologic change, chest pain, difficulty in breathing) ➢ Acute Blood Pressure change of >20% from baseline ➢ Color change (of patient extremity): Pale, dusky, gray or blue
Neurological	➢ Any unexplained change in the level of consciousness ➢ New onset repeated or prolonged seizures ➢ Sudden loss of movement (or weakness) of face, arm or leg ➢ Unexplained agitation or delirium
Renal	➢ Acute decrease in urine output <30 ml/hour times 2 hours without history of renal dysfunction
Miscellaneous	➢ Staff concerned/ Worried: "THE PATIENT DOES NOT LOOK/ACT RIGHT", gut instinct that patient is beginning a downward spiral even if none of the physiological triggers have yet occurred ➢ Unexpected, excessive or uncontrolled bleeding ➢ New onset of chest pain ➢ Uncontrolled pain despite intervention
Critical Lab Values	➢ E.g. Blood Platelets <30,000/mm^3 in adults & <20,000/mm^3, Blood WBC >150,000/Ml, Blood Hemoglobin <5g/dL(adults) & <8 g/dL(newborn), Serum Glucose <40 or >700 mg/Dl(adults) & <30 or >300 mg/dL(newborn), Serum Potassium <2.7 or >6.5 mEq/L,

Positive blood culture, Presence of Tumor or blast cell in Body fluid, Serum Bilirubin total >18md/Dl in newborns etc.

Procedure to Activate RRT



Documentation of RRT

The First and Foremost reason for the documentation of RRT is that it is the medical record of all the interventions that occur during resuscitation. The record has numerous benefits:

- It provides information that can guide continuing care for the patient.
- It helps to answer questions the family may have about the event.
- It assists the institution to know if resuscitation care has been provided according to current standards.
- It identifies quality issues so they can be investigated in a timely manner.
- It provides data that can be aggregated to describe the population undergoing resuscitation to determine if processes of care are delivered in the time intervals as per standards and to know if an institution's outcomes are similar to those of like institutions.
- The aggregate data can be used to identify variances of concern and as the base for continuous quality improvement efforts.
- It provides information to guide resource allocations related to personnel, equipment and supplies used during resuscitations.
- It helps to identify learning needs of staff.
- It can provide the data to answer research questions.
- It can reduce the risk of medical litigation.

Max Healthcare uses a structured RRT form to capture and organize the information and action taken when responding to patients in crisis. This document analyzes the responses, plan quality improvement activities and provide feedback about the success of the RRT and lessons learned, to serves as a base for staff education.

The RRT protocol requires the RRT form to be filled by Intensivist within 24 hours. The original copy of the form is to be kept in Patient's file and a photocopy to be sent to the Quality manager by the assigned nurse. RRT register to be maintained by Nursing Superintendent.

RATIONALE

This report is indented to find out the various factors contributing in the compliance of Rapid Response Team at Max Super Specialty Hospital, Saket. RRT acts as one of the major component in reducing the cost bear by the patients, preventing the number of mortalities, decrease the average length of stay and thereby cutting the cost in maintenance for the hospital. Increasing the efficiency of the RRT can contribute largely to the main motive of the hospitals- saving lives and spreading happiness.

Following the established protocols for RRT will also help in promoting efficiency amongst the employees and helps in establishing a significant position of the hospital amongst competitors.

OBJECTIVES

General Objective:

To study the compliance of Rapid Response Team at Max Super Specialty Hospital, Saket.

Specific Objectives:

19. To analyze the compliance of RRT protocol followed at both the wings-East and West, of Max Super Specialty Hospital, Saket.
20. To explore the touch points of problems in achieving 100% compliance in various departments of hospital.
21. To confer recommendations for further improvement in the RRT procedures.

METHODOLOGY

- ***Type of study :*** Descriptive cross-sectional
- ***Study population*** : All In-Patients who underwent RRT at Max Super Specialty Hospital, Saket, Delhi
- ***Study area*** – East, South & West wing, Max Hospital Saket, Delhi
- ***Duration of Study*** – 20 weeks (January 2015 to May 15, 2016)
- ***Type of Data*** - Quantitative& Qualitative
- ***Technique*** –Analyzing RRT documented forms, attending RRT mock-drill
- ***Tool –*** *RRT forms*
- ***Sample size*** – All the RRT incidents in the duration of study, i.e. **59**
- ***Inclusion criteria***-
    - All In-Patients who underwent RRT at Max Super Specialty Hospital, Saket
    - Standard Protocols Followed by the staff during RRT in Max Saket Hospital.
- ***Exclusion criteria***-
    - Rest of the procedures or events or codes of the Hospital.

- ***Data collection*** –Secondary
- ***Data entry*** & ***Analysis***- Using excel (bar charts, pie charts, line diagram)

OBSERVATIONS AND FINDINGS

RAPID RESPONSE TEAM

1. **The organization has a well designed, comprehensive and well documented Rapid Response Team protocols to be followed every time when patient is observed clinically deteriorating.**
    a. The RRT protocol is well documented and put on every nursing stations.
    b. The RRT form adheres to the RRT protocols decided by the organization.
    c. There are designated members for the RRT.
    d. The RRT team member reaching the site at the earliest heads the event, i.e. he/she becomes the authority to manage the staff and the event according to the RRT protocol.
    e. Documentation of RRT is the responsibility of the Intensivist, i.e. a trained staff is assigned to record the event details and he documents the details after the procedure is complete.
2. **RRT Mock Drills**

The organization has prepared a 3 month calendar of 14 mock RRT drills in the hospital. Whole of the event and the staff has to run as if a real RRT has been announced.

The RRT mock drill attended was called in the Nuclear Medicine department on the ground floor of East wing at Max Healthcare, Saket. A mannequin was arranged in place of a real patient. The Cardiologist reached the site of the event in 1min 29 seconds, Intensivist reached in 2 min 37 seconds and the nursing supervisor reached in 4 min 29 seconds. The staff of the department informed the nursing supervisor late. As per the protocol, the Cardiologist headed the event. The Intensivist asked the nurse to tell the reason for RRT announcement in brief. The nurse was not aware of the imaginary situation could not brief the doctor in the minimum time as possible.

3. **RRT is supported by the organization's management.**
    a. Proper facilities and resources are made available to follow RRT protocols.
    a. Nurses are trained as to what RRT is and what the triggers to call a RRT are, during their induction.
    b. The RRT protocol is put on all the nursing stations.
    c. The staff is aware of the RRT extension number- "11" and the mechanism to announce the RRT call with "Name of the personnel announcing the RRT"- "Department and Location of the event".

CHALLENGES observed in Documentation of RRT

The implementation of an RRT presents numerous logistical challenges:

i. RRT documentation does not start when the patient is found clinically deteriorating, but rather begins sometime later after the patient is stable.
ii. The job of documentation during a RRT is not considered one of the key, desirable roles.
iii. Several different clocks are used to enter times onto the RRT record.
iv. The data on the RRT record is incomplete.
v. The data on the RRT record is often illegible.
vi. The names of all RRT members are not present on the record.

DATA ANALYSIS

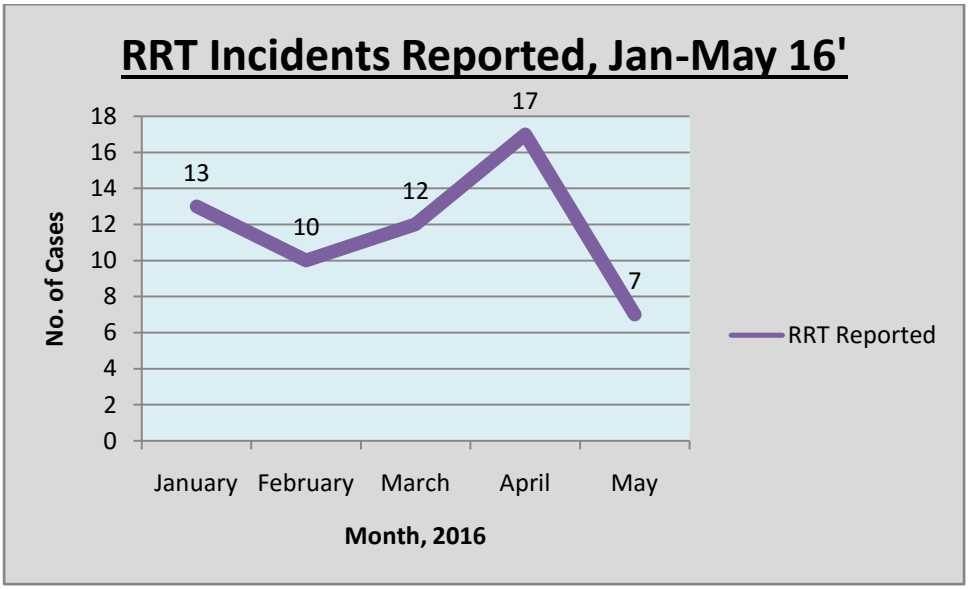
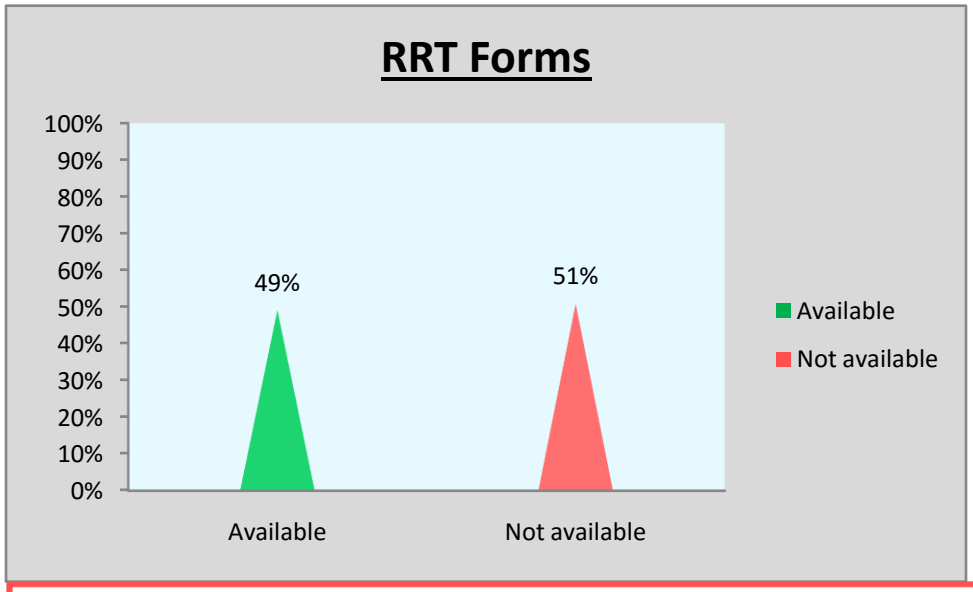


Fig.1

RRT Incidents Reported:
Number of RRT cases reporting in Max Healthcare has **increased** while reaching the end of 1st quarter of 2016. This implies Q1 has shown improvement in preventing more number of patients from deterioration to any life threatening event.

Fig 2



RRT Forms:
Just about the half (51 percent) of the RRT forms were not available during the period of the study, i.e. January to mid of May,2016.

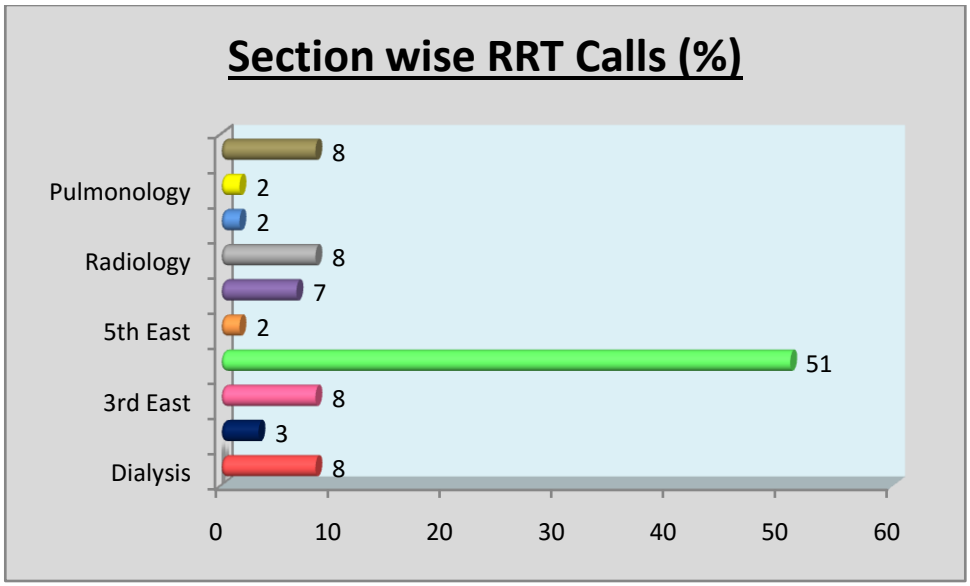


Fig.3

Section wise RRT Calls:
About the half (51 percent) of the RRT cases in Max Healthcare are reported from the Oncology Department from Jan16'-May16'.

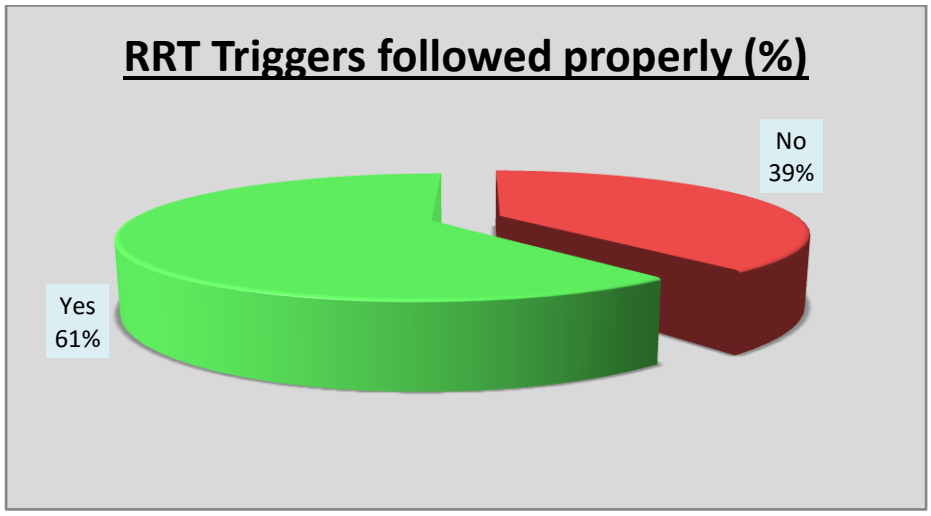


Fig.4

RRT Triggers Followed:
Only **61 percent** of the cases have followed proper triggers as per RRT protocol in Max Healthcare.

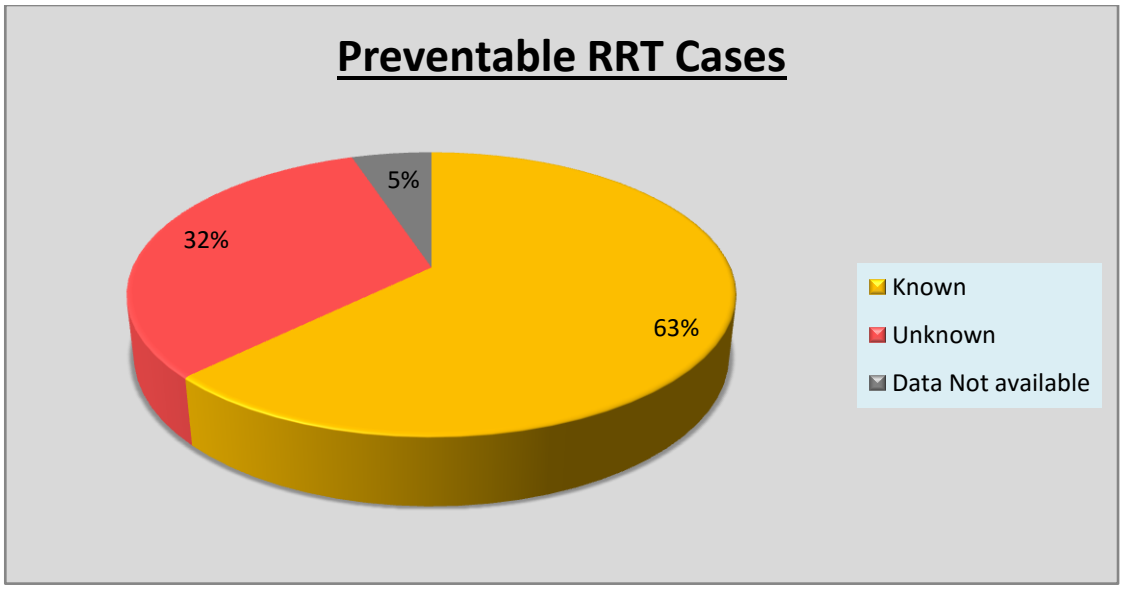


Fig.5

Preventable RRT Cases:
Majority (**63 percent)** of the RRT cases in Max Healthcare are **Known** cases, i.e those patients were already debilitated since last check-up done and if taken precautions, could have been prevented from turning into RRT case. While **32 percent** of the cases were **Unknown** as history was not taken properly.

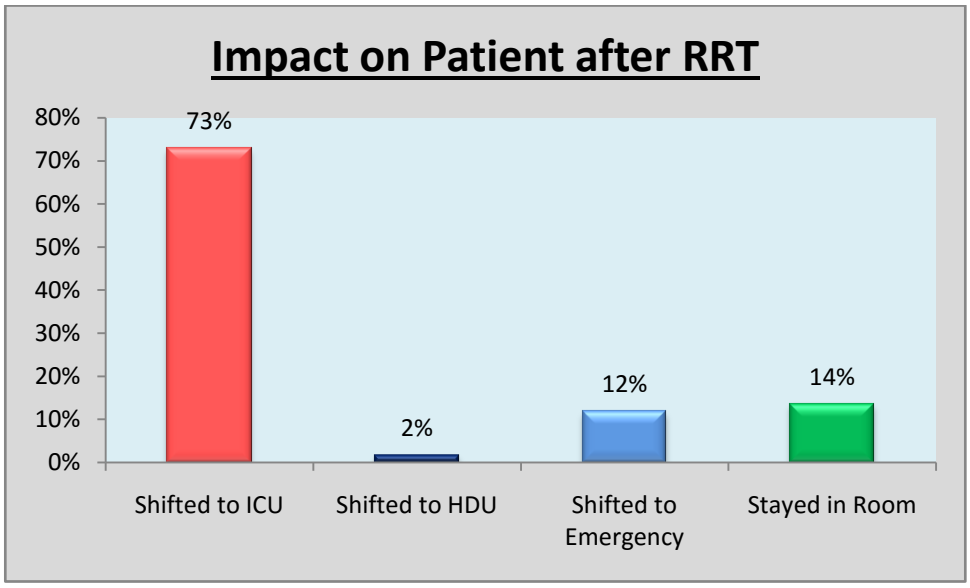


Fig.6

Impact on Patient after RRT:
Only **14 percent** of the patients stayed in the room after RRT, while **73 percent** of the RRT cases are shifted to ICU.

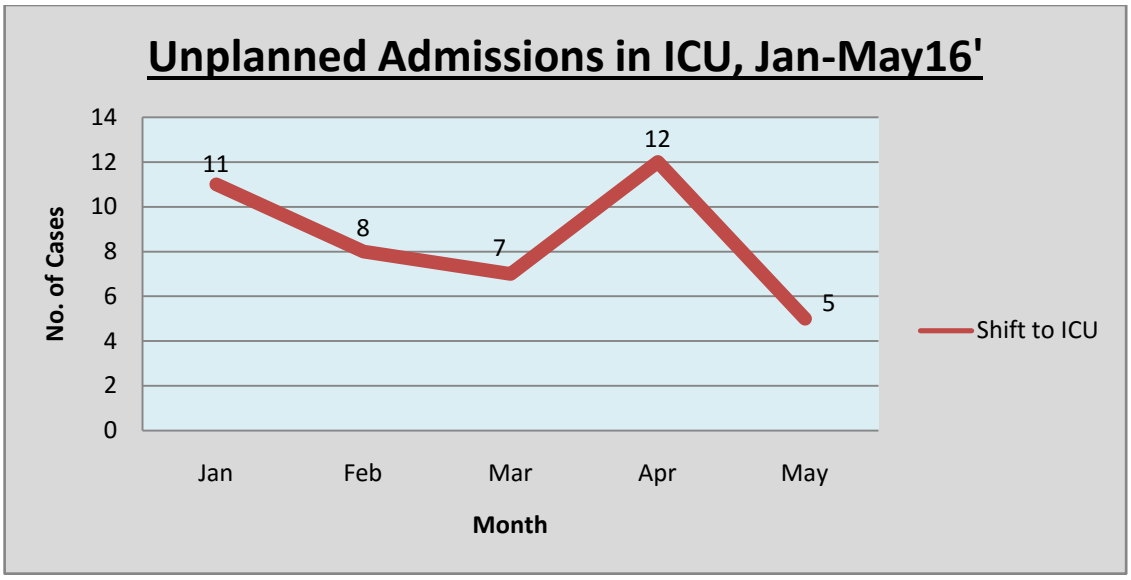


Fig.7

Unplanned Admissions in ICU, Jan-May 16':
The number of RRT cases shifting to ICU has decreased from January to February and then remained constant for the month of March and has risen drastically in the month of April.

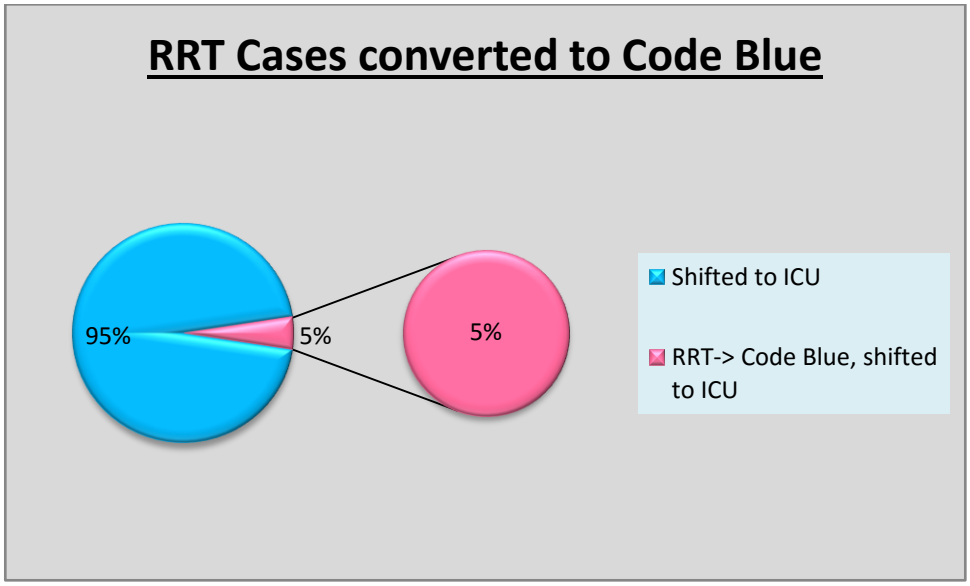


Fig.8

RRT Cases Converted to Code Blue:
Amazingly, **95 percent** of the patients were prevented to be announced for Code Blue, the emergency situation, by announcing RRT on early signs of clinical deterioration.

INTERPRETATION

The data studied depicts the number of RRT cases reported has increased in the first quarter of 2016. More reporting suggests the greater awareness of the staff about their patient's condition.

The data analysis gives evidence for prevention of 95% of the RRT cases from converting to Code Blue, thus fulfilling the aim of the very being of the RRT.

More than 50% of the forms unavailability raises a concern regarding the improper documentation or maintaining the records not the key desirable role.

The maximum number of cases reported from the Oncology department illustrates the greater number of critically ill patients in the department. This analysis points to the need of more number of staff in the area to strengthen the RRT procedure and save patients from converting into Code Blue.

61% of the total RRT records have followed the RRT triggers as per the RRT protocol is a good sign but needs improvement in the percentage as to get better compliance.

The more number of known cases is a factor of concern for the staff and the management as to why the care or precautions were not taken if the patient had started showing signs of shifting from the normal range.

Greater the number of RRT patients shifting to ICU, directly increases the number of unplanned admissions to the critical care units, thereby reducing the chance of another patient to get a bed in the ICUs. If this number is reduced, the ICUs can be utilized more efficiently for the planned cases. Thus, it reduces the extra cost on the hospital for maintaining the ICU for unplanned cases.

The touch points of problems in achieving 100% compliance are-

1. Unavailability of Rapid Response Team records.
2. A particular section reporting more number of Rapid Response Team calls.
3. Improvement required in following of RRT triggers.
4. The greater number of known RRT cases.
5. The increasing number of unplanned admissions to ICU after RRT.

SUGGESTIONS & RECOMMENDATIONS

1. As the maximum number of RRTs is observed in the Oncology department, there should be increase in the number of the critical care staff available all the time in that department. The nurses in that area should be trained more often for the RRT protocols to be followed.
2. For RRT documentation to become accurate and complete, it must be valued.
3. The documenter should have no other role during the resuscitation so that full attention can be given to collecting the needed data and following the multiple interventions that often occur simultaneously. It has even been suggested that the documenter have a designated position around the patient's bed so that all providers will know where to target their information.
4. The RRT form should include the names of the team members who were present during the whole procedure.
5. Proper focus should be made on mentioning the time of the RRT announcement and the time of arrival of RRT team in the RRT form.
6. A pharmacist may also be involved in the RRT team to ensure quick access to medication.
7. Feedback should be given to the providers for a job well done or improvement needed. Systems of care should change based on concerns reported so that staff see their input has been used to improve the quality of care.
8. The number of RRT mock drills should increase to educate and monitor the staff as to how to act fast and smart in the emergency situation.
9. There is a need of a RRT surveillance or review committee to review the effectiveness of the team and the event documentation by including rounds and quality checks in the high risk areas such as Oncology.

10. The organization may take into consideration of the Modified Early Warning Score (MEWS) to reduce the number of known RRT cases.

Table1. Modified Early Warning Score

Vitals	Score 3	Score 2	Score 1	Score 0	Score 1	Score 2	Score 3
Respiratory Rate		≤8		9-14	15-20	21-29	>29
Heart Rate		≤40	41-50	51-100	101-110	111-129	>129
Systolic BP (mmHg)	≤70	71-80	81-100	101-199		≥200	
Urine Output (ml/kg/h)	Nil	<0.5					
Temperature (^{o}C)		≤35	35.1-36	36.1-38	38.1-38.5	≥38.6	
Neurological				Alert	Reacting to voice	Reacting to pain	Unresponsive

Note- Inform the Dr., if the total score is 4 or more

The MEWS intends to result in earlier intervention on the ward so that transfer to a critical care facility is either prevented or occurs without a delay.[6]

ANNEXURE: RRT Form

AFFIX PATIENT LABEL

Rapid Response Team Record

Date: **Time:**

Arrival Time: **Event Ended:**

Primary Reason For Call

o Staff Concerned/worried

Specify_____

o Heart rate <50 or >130 with new symptoms or any rate >140 /min

o SBP less < 90mmHg or>180 mm hg,

o DBP>100 with symptoms

o Acute blood pressure change of >20% from baseline

o Acute, new onset shortness of breath

o SpO2 less than 90%

o RR < 8 or >28 per min

o Acute Significant Bleed

o Acute Mental status change

o Sudden loss of movement (or weakness) of face, arm or leg or Seizures

o New requirement for >50% oxygen to keep saturation above 90%

o New onset of chest pain

o Oliguria

o Sudden Color change (of pt extremity)

o Critical Lab Values

Situation (Clinical scenario)

……

……

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Admitting diagnosis:

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……

Assessment:

HR:

BP:

RR:

SpO2:

GCS:

Temp:

…….

……

……

……

……

Recommendations / ***Interventions:***

Airway / Breathing

o Oral Airway

o Suctioned

o Nebulizer Treatment

o Intubated

o NPPV

o Bag mask

o O2 Mask/Nasal prongs

o ABG

o CXR

o No Intervention

Circulation

o IV Fluid Bolus

o EKG

o CPR

o Defibrillation

o Cardio version

o No Intervention

Suggested treatment plan:

Outcome:

o **Stayed in Room** o **Transferred to_____**

o **Other, please specify _____**

Signature:

RRT Team leader Name:

Notified Treating Consultant:

Date:

Time:

Date & Time:

To be filled by the RRT Team Leader within 24 hours of the event

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A STUDY ON THE PATIENT IDENTIFICATION IN A HOSPITAL

AT

MAX SUPERSPECIALITY HOSPITAL, SAKET

A Report by: Dr. Kirti Aggarwal, Dr. Himanshi Chhabra

Institute of Health Management Research, Jaipur

DECLARATION

I do hereby declare that I am a student of 1st year, MBA in Hospital and Healthcare Management, IIHMR University, Jaipur, Rajasthan session 2015-2017.

I would like to state that I have carried out my Internship on the topic "A study on the Patient Identification in a Hospital" under the guidance of Dr. Sandeep Mor (Deputy Medical Superintendent) at Max Super Specialty Hospital, Saket, New Delhi for the partial fulfillment for the degree of MBA in Hospital and Healthcare Administration.

This project work is my own and has not been submitted to any of the other Institute or University for the purpose of award of any degree or diploma.

Dr. Kirti Aggarwal

IIHMR University

(2015-2017)

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INTRODUCTION

. within a wide range of safety problems. The traditional medical oath— "First do no harm"—is rarely desecrated intentionally by physicians, nurses, or other practitioners, but the verity in every country across the globe remains that patients are harmed every day in the course of receiving health care. The first things that we must do are to acknowledge this disturbing truth; to eliminate the notion that the status quo is acceptable; and, perhaps most important, to rectify the problems that are contributing to unsafe care. All patients have a right to effective, safe care at all times. But unintended harm to patients undergoing treatment is not a new phenomenon.

Thus Joint Commission International came forward with International Patient Safety Goals (IPSG) with the aim to improve patient safety and quality of care in the hospitals across the world. These goals help the accredited organizations address specific areas of concern in some of the most problematic areas of patient safety.

Goal 1: Identify patients correctly

Goal 2: Improve effective communication

Goal 3: Improve the safety of high-alert medications

Goal 4: Ensure correct-site, correct-procedure, correct-patient surgery

Goal 5: Reduce the risk of health care-associated infections

Goal 6: Reduce the risk of patient harm resulting from falls.[1]

Broadly talking about the IPSG-1, Patient Identification is to correctly identify all patients whenever care is provided and correctly match patients to their intended treatment. Patient identification and the matching of a patient to an intended treatment is an activity that is performed routinely in all care settings. Risks to patient safety occur when there is a mismatch between a given patient and components of their care, whether those components are diagnostic, therapeutic or supportive.

Thus, the purpose for this goal is **two-fold**: first, to reliably identify the individual as the person for whom the service or treatment is intended; second, to match the service or treatment to that individual. Acceptable identifiers may be the individual's name, an assigned identification number, telephone number, or other person-specific identifier.

This approach of including it as a patient safety goal to be strictly followed in all hospitals suggests that the development of safety routines for common tasks (such as patient identification) provides a powerful defense against simple errors that may progress and cause harm to the patients. These routines allow the personnel to focus their attention on those activities that require more cognitive handling and judgment, such as the provision of clinical care.

The health care industry has been reporting the misidentification of patients repeatedly and has correlated that information to an intended clinical intervention continues to result in wrong person, wrong site procedures, medication errors, transfusion errors, discharge of infants to wrong families and diagnostic testing errors. Patient safety incidents such as near miss, sentinel events and medication errors associated with incorrect patient identification are recognized international problems. Prevention of such incidents has been identified as a key patient safety goal by all of the major international agencies including the World Health Organization (Surgical Safety Checklist), National Patient Safety Agency in the United Kingdom, Joint Commission International Centre for Patient Safety and the Australian Commission on Safety and Quality in Health Care (Ensuring Correct Patient, Correct Site, Correct Procedure protocols).[2]

REVIEW OF LITERATURE

Mandatory patient identification descriptors

A complete system of unique identification for each patient should be mandatory at all the hospitals. The core patient identifiers must include:

FULL NAME

UMRN (Unit Medical Record Number or equivalent)

DOB (Date of Birth written as DD/MM/YYYY)

As a **minimum,** the core identifiers must be used on registration or admission, when care, therapy or other services are provided and whenever clinical handover, patient transfer or discharge documentation is generated.

Issues that will need to be determined locally at the hospital / health service level include: inclusion of **substitute** identifiers, in the instance that one or more of the mandatory identifiers listed above is unknown.

Patient identification bands

Patient identifiers on identification bands must be **limited to** the core patient identifiers.

Identification band specifications

All inpatients, day procedure patients and Emergency Department patients must have an identification band securely attached immediately after patient registration/admission and before any treatment, collection of pathology samples, blood transfusion, drug administration or X-rays are undertaken.

Where possible, the patient must view and verify that these details are correct. If the patient is unable to do so, the next of kin/legal guardian/care taker may undertake this responsibility; otherwise, a second staff member must check the information on the identification band against the admission details.

Identification band use

Where possible, the identification band must remain on the patient throughout the hospital admission. If a detached identification band is not replaced immediately, it cannot be reattached. In this case, the patient must be re-identified and a new identification band attached.

Colored identification bands

A single white identification band should be used for patient identification.

As per current hospital procedure, the admitting clinician must ascertain and document whether the patient has an allergy, has ever had an adverse reaction or another known risk. Patients with a known allergy or other known risk can be issued with a RED patient identification band. The RED identification band will have patient identifiers in black text on a white background. The RED identification band should not contain details of the meaning of the alert. This information should be recorded in the patient's health care records. The patient's health care record must be reviewed by clinical staff to determine the meaning of the alert. In the instance that a RED identification band is removed for a procedure or treatment, the staff member responsible for removing the identification band must also take responsibility for replacing it.

Process for confirming the patient's identity

Identification of patients on admission

All patients shall be positively identified prior to patient registration/admission by:

- Asking the patient to state their date of birth and address and spell their family and given names. If the patient is unable to give this information all reasonable attempts must be made to confirm the patient's identity which can include an accompanying adult, checking with other identification (e.g. driver's license) or via an interpreter. This should be documented in the patient's health care record, if the patient's identify cannot be reliably confirmed.

Procedures if two or more patients in a ward have the same family name

If two or more patients in a ward have the same family name a local "PATIENT WITH THE SAME NAME IN WARD" cautionary card must be applied to each patient's health care record. Alerts must also be applied to all ward bed lists and other patient documentation while both patients remain in the ward. The patient's given name should also be printed on these cards.

Procedures if the patient's identity cannot be confirmed

When a patient's identity cannot be reliably confirmed (e.g. patient is unconscious, intoxicated, mentally impaired, or experiencing language difficulties) they must be registered as 'Unknown Male' or 'Unknown Female' using an emergency UMRN. Pre-printed 'Unknown' files are recommended for emergency patients for resuscitation where samples/investigations must be initiated prior to patient registration. Once the patient is identified, patient information should be updated and a new identification band attached. Local operational policy must stipulate procedures to ensure that such patients can be correctly identified throughout their admission; particularly, in relation to the reconciliation of samples/investigations. If a previous UHID is found, the pre-existing medical record will be merged with the new medical record.

Procedures if the patient's identity is changed/ updated

In the event that core patient identification details (Family name and given names, DOB) are legitimately changed or updated (e.g. Unknown patient or baby name change): patient details must be updated in the Patient Administration System (UHID must not change), a new identification band must be attached to the patient. If the Transfusion Medicine Unit has already performed tests or cross matched blood they must be notified immediately
Departments that have performed investigations, such as blood tests and X-rays must be notified.

Identification of patients at handover, transfer and discharge

Health services/sites must develop policies to ensure the correct identification of patients at handover, transfer and discharge.
All handover, transfer and discharge documentation should include the three national patient identifiers.

Identification procedures for neonates

The same patient identifiers outlined in this policy must also apply to neonates. A single white patient identification band should be placed on the neonate at birth to indicate the mother's identification details (i.e. Mother's UHID). Once the infant's name is registered, the identification band with the mother's details can be removed and replaced with an identification band listing the infant's details.

Procedures for clinical areas where no identification bands are used

The policy recognizes that there are some situations where a patient may not be able to wear a patient identification band, including: mental health patients, patients who refuse to wear the patient identification band, patients who cannot wear a patient identification band because of their clinical condition or treatment.

In situations where the wearing of a patient identification band is inappropriate, due to a patient's condition or treatment, consideration may be given to the use of photo identification. Any form of identification should comply with the National Specifications for Patient Identification Bands. In non-inpatient areas where the identity of a patient needs to be checked and the patient is not wearing a name band, the patient's name, address and date of birth must be checked against the health care record identification label.

Procedures in the event that a patient is incorrectly identified

If a patient is incorrectly identified:

- the previous identification band with incorrect patient details should be removed
- patient health care records should be corrected and a new identification band with the correct patient details should be provided immediately
- all departments that have performed investigations and treatment, such as X-rays, pathology and pharmacy, should be notified as a matter of urgency
- The event should be thoroughly documented in the patient's health care record and reported as a clinical incident.

Transfusion medicine presents a particularly high risk to patient safety with regard to patient misidentification. It is therefore critical that incidents relating to patient and/or sample misidentification are communicated appropriately and immediately.

Action in the event of a wrong patient, wrong procedure or wrong site clinical incident

In the event of a patient being incorrectly identified or a clinical incident occurring as the result of incorrect patient identification, the most senior member of the clinical team must ensure the

patient involved in the incident is safe and that all necessary steps have been taken to support and treat the patient and to prevent injury to others. If the procedure was incorrect or performed on the wrong patient or wrong site, the clinician should also ensure that relevant steps are taken to perform the correct procedure on the correct patient as soon as practicable.
All the hospital/health service staff should identify, report, investigate and disclose clinical incidents that occur in their premises.

RATIONALE

This report is proposed to identify various aspects of patient identification in Max Super Specialty Hospital, Saket. Patient identification is of dire importance for safety of a patient in the hospital, as it prevents most of the hospital induced errors such as wrong patient, medication errors, wrong procedure, wrong site surgery, diagnostic errors, transfusion errors and many more.

The knowledge of correct patient identifiers with the hospital staff contributes in the efficiency of a hospital and also keeping the hospital at par from its counterparts.

OBJECTIVES

General Objective:

To observe and analyze the awareness of Patient Identification protocols in Max Super Specialty Hospital, Saket

Specific Objective:

1. To analyze the awareness of Patient Identification protocols among the staff from various departments at Max Super Specialty Hospital, Saket.
2. To identify the problems faced by the staff in correctly identifying the patients at Max Hospital, Saket.

3. To suggest recommendations for diminishing the misidentification of the patients.

METHODOLOGY

- ***Type of study :*** Analytical cross-sectional
- ***Study population*** : Staff identifying the patients at Max Super Specialty Hospital, Saket, Delhi
- ***Study area*** – East, South & West wing, Max Hospital Saket, Delhi
- ***Duration of Study*** – 8 weeks (April-May, 2016)
- ***Type of Data*** - Quantitative& Qualitative
- ***Technique*** – Data collection
- ***Tool –*** Self structured Questionnaire
- ***Sample size*** - **174**
- ***Sampling technique***- Multi-stage sampling, Stage I Stratified Sampling to ensure participation from each department and Stage II Convenient sampling to make selection by convenience.
- ***Inclusion criteria***-
    - Staff from various departments involved in the patient identification in Max Super Specialty Hospital, Saket
    - Standard protocols followed for Patient Identification in Max Saket Hospital.
- ***Exclusion criteria***-
    - Rest of the staff of the Hospital.

- ***Data collection*** – Primary (2 months)
- ***Data entry & Analysis***- Using Excel (bar charts, pie charts, line diagram)

OBSERVATIONS AND FINDINGS

Max Healthcare follows its own Patient Safety Goals, which are aimed to improve patient safety practices & clinical outcomes and reduce the occurrence of preventable adverse events. Max Healthcare has outlined various activities for implementation of this goal to raise awareness and ensure that the best practices are shared and deployed.

To identify patients correctly is the 1st MHC Patient Safety Goal for 2015-16. The organization has defined approved patient identifiers and the staffs are expected to follow all the steps that are written in the policy when they are performing patient identification.

MHC Patient Identification Policy– Key Points

Three steps to identify patients:

1. Ask the patient to tell you their **name** and **date of birth**. Check this is compatible with the patient's ID band
2. **Comatose patients** - refer to the ID band and, verify the information by asking attendant/family member/clinical staff who knows the patient.
3. Ask patient's relative to identify the patient by name and/or date of birth.

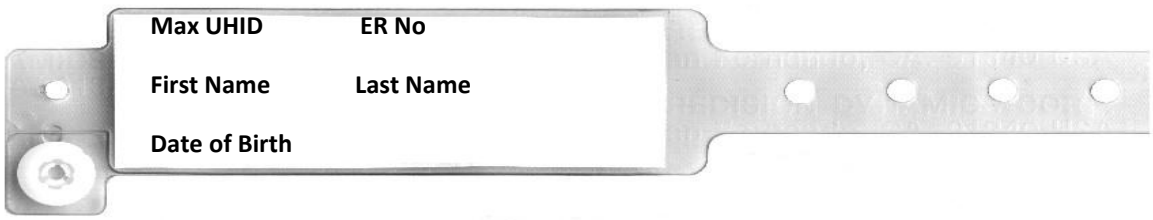
 Two identifiers – UHID plus any other - e.g. patient's full name and date of birth – to be used to verify a patient's identity.
 Neither of these identifiers should be the patient's room number or location or initials of patient's name.

ALL IN PATIENTS to wear an ID (Identification Band) that meets the national specifications for patient ID bands.
Different ID bands used in Max Super Specialty Hospital, Saket are:

White Bracelet - To be worn by all IN patients

Contents of White ID Band – To be filled completely

In Case Of Emergency Department



Red Bracelet - To be worn by patients with **known allergies**

Allergic drug - Name of the drug (to be written in CAPITAL LETTERS) Red and white band to be present on the **same wrist**

PROCEDURES REQUIRING POSITIVE IDENTIFICATION OF PATIENTS

The list below is not exclusive. In-patients should *always* wear an identification band.

- Blood sampling
- Blood transfusion
- Collecting of patient bodily fluid samples
- Confirmation of death
- Administration of all medicines
- Surgical intervention and any invasive procedure
- Transport / transfer of the patient
- X-rays and imaging procedures

ALERT!

DO NOT PROCEED with any procedure if the patient has no ID band

The ID band must be replaced by the nurse caring for the patient before the procedure can begin

Outpatient clinic setting and Consultation,

Verification of the patient will be made by the **Front office staff** posted at registration by noting the patient's:

• Full name

• Date of birth

• Address

During Blood Transfusion

Two practitioners are responsible for positive patient identification.

• Check verbally

• Check ID band

RADIOLOGY

It is the ultimate responsibility of **the technician** to ensure that the correct patient is being examined according to the request that has been made.

If the patient details stated on the request form are incomplete or have not been completed correctly, further information must be obtained before an exposure is performed. The exposure must not be performed until the patient's identification has been verified.

DAY CARE PATIENTS

All patients attending in day care for day treatment MUST wear an identity bracelet for safety purposes. The ID band should be applied to the patient on arrival of the patient by assigned nurse.

Unknown/ Unconscious patients 

Identification is made by **staff** until a unique identification has been made by means of a number on a bracelet, or until the patient's true identity is established.

Theatre/sedated patients

• ID band is applied to the patient's ankle by the assigned nurse prior transfer to theatre.
• A member of the theatre staff team identifies the patient prior to medical exposure.
• **Checks in OT**:
• 1st Check - arrival at the OT Complex
• 2nd check - Prior to Anesthesia
• 3rd check - Just before the actual procedure begins

Patient with missing limbs

If a limb is missing then bands must be securely attached to the patients clothing using strapping, on an area of the body which is clearly visible. The band must be reattached as clothing is changed, and must accompany the patient at all times. In emergency or operative situations where clothing is removed, identification must be attached to the patient's skin using see-through plastic adhesive film.

Deceased patients

• Are correctly identified with **2 identification bands**:
• One attached to the wrist
• One attached to the ankle.

Maternal identity bracelet:

Prior to delivery: Mother's identity bracelet should include all mothers' details as discussed.

After delivery: 3 ID bands to be made for the baby:

1st Band - Mother to be given an **additional identity bracelet with the baby's details:**

- Name of mother,
- Sex of the child,
- Date of Birth,
- Time of birth

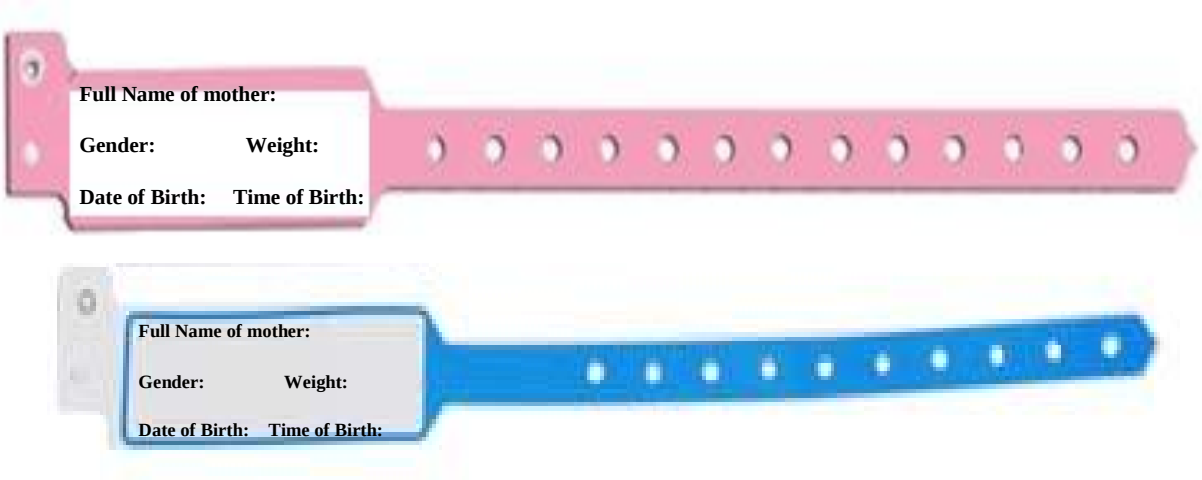
After delivery of the baby, mother to be given an additional ID band with the following baby's details

Two Baby identification bracelets*:*

2nd & 3rd - Two identity bracelets should be applied to **two separate baby limbs**.

Information to be read:

- Name of mother
- Sex of the child
- Date of Birth
- Time of birth
- Weight



In case of twins, twins should be named as Twin 1 and Twin 2.

INCIDENT REPORTING SYSTEM

Max Hospital, Saket has implemented a robust organization wide system of reporting, investigation and change management to respond to any patient care mismatching events. Any staff member who discovers any variance or deviation from this policy must complete a Max Healthcare incident report which is available at every nursing station and submit it to Nursing Supervisor. This would include an incident that has occurred as a result of misidentification and also 'near miss' situations where the error has been detected before an incident has taken place.

DATA ANALYSIS

Patient Identification is the first International Patient Safety goals, given by Joint Commission International.

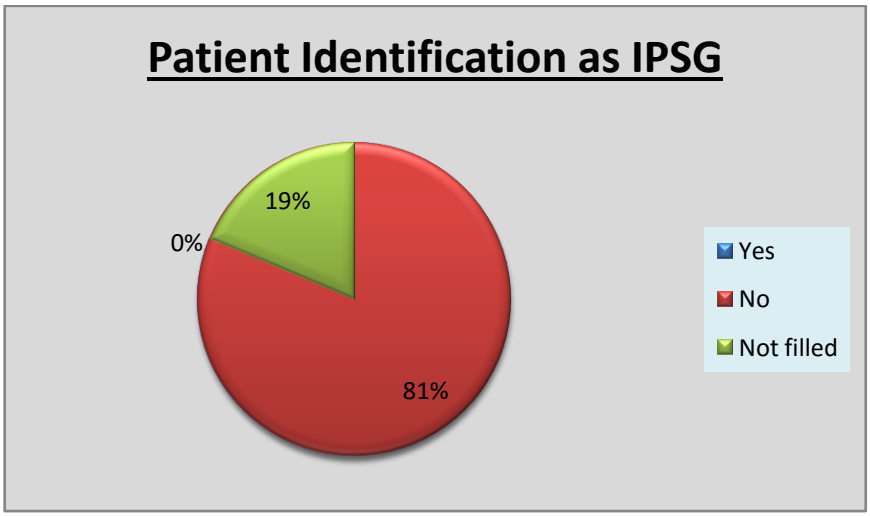


Fig.1

Patient Identification as IPSG:
The analysis states that **81 percent** of the staff of Max Healthcare is aware of Patient Identification as International Patient Safety Goals (IPSG).

There are a number of patient identifiers followed in Max hospital, Saket:

- Patient Full Name
- Unique Health Identification Number (UHID)
- Date of Birth
- In-Patient Number

According to the Patient Identification protocols in Max Healthcare, none of the identifiers should be room number, as room numbers are not person-specific identifiers, since patients can be moved from room to room nor initials of patient's name.

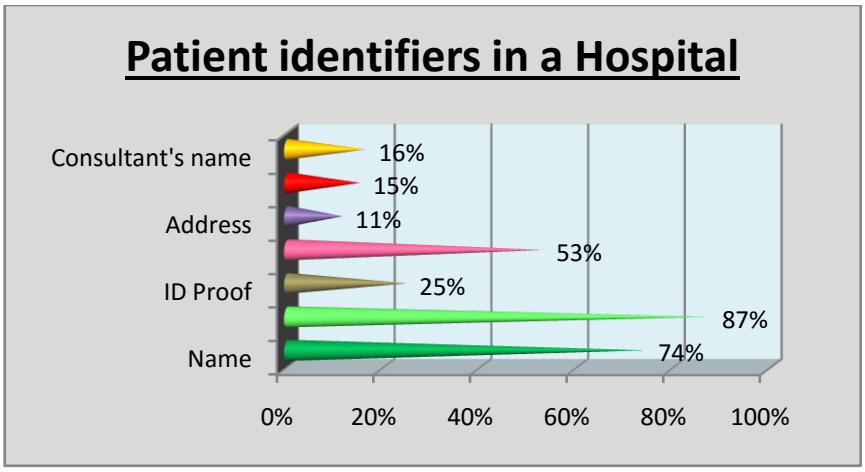


Fig.2

Patient Identifiers in a Hospital:
The analysis states that **87 percent** and **74 percent** of the Max Healthcare staff identifies their patient with Name & UHID of the patients. While **15-16 percent** of the staff identifies the patient with their room number and their consultant's name.

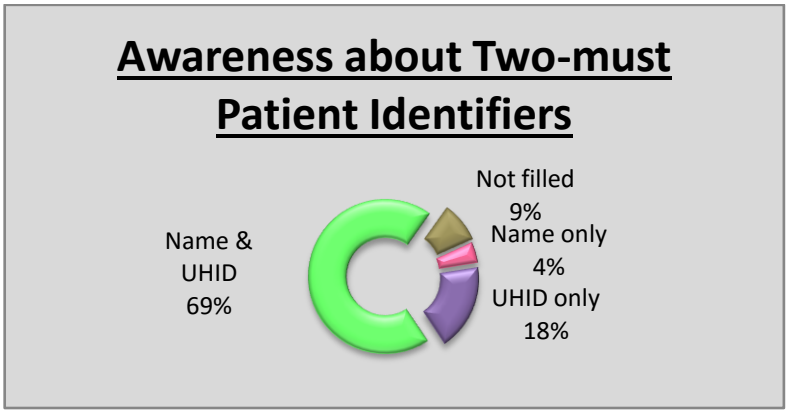
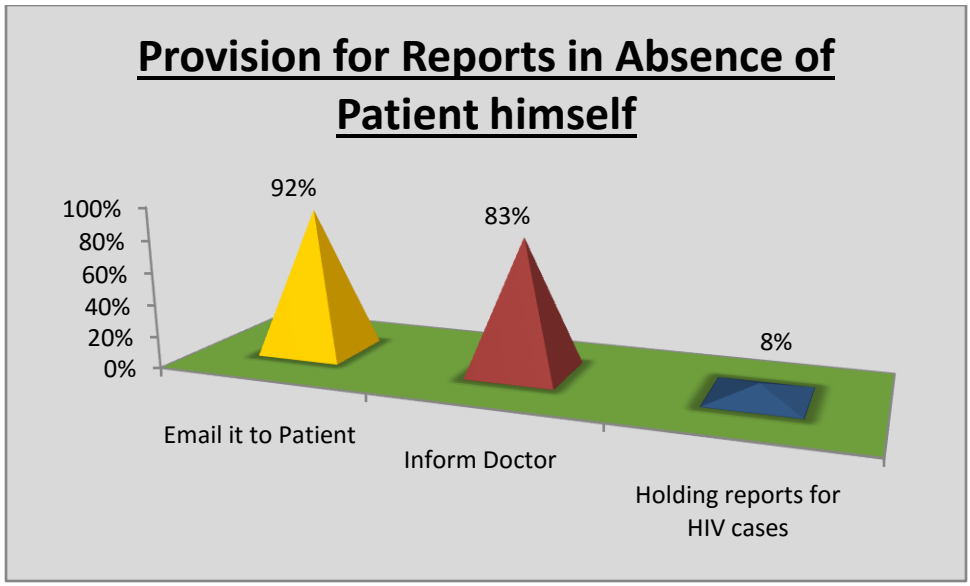


Fig.3

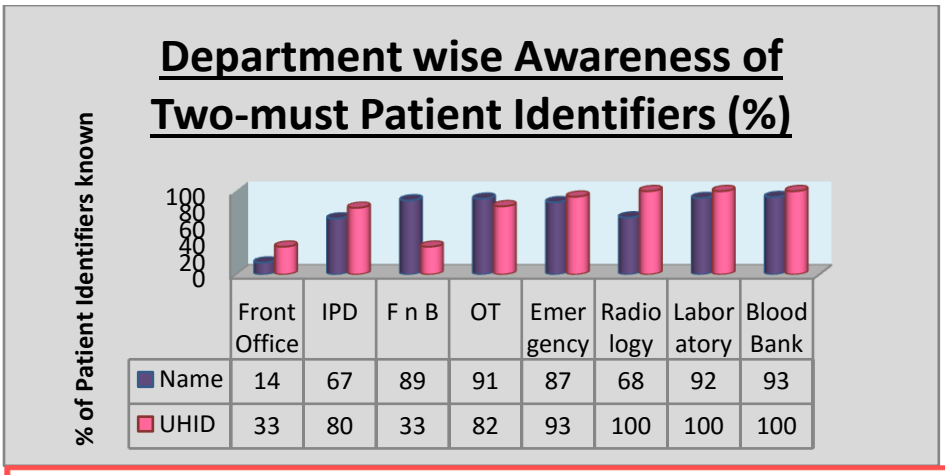
Two-must Patient Identifiers:
The analysis depicts **69 percent** of the Max Healthcare staff is aware of the Two-must Patient identifiers- Full name & UHID.

The practice of having the patient involved in identifying themselves and using “two patient identifiers” is essential in improving the reliability of the patient’s identification process. The use of two identifiers also helps ensure that a correct match is made between the service or treatment and the individual. This process will help eliminate errors and enhance patient c



Provision for Reports in absence of Patient himself:
The analysis shows that **92 percent** of the Laboratory staff of Max Healthcare mail the reports to the patient's email ID if they cannot come to collect their reports themselves.

BLOOD BANK DEPARTMENT



Department wise Awareness of Two-must Patient Identifiers:
The graph depicts that how much percentage of the staff in every department is aware about the two-must patient identifiers-**Patient's name** & **UHID**, according to the policy of Patient Identification in the Max Healthcare.

The two identifiers must be directly associated with the individual and the same two identifiers associated with the medication, blood product, specimen container (attached label), treatment, or procedure.

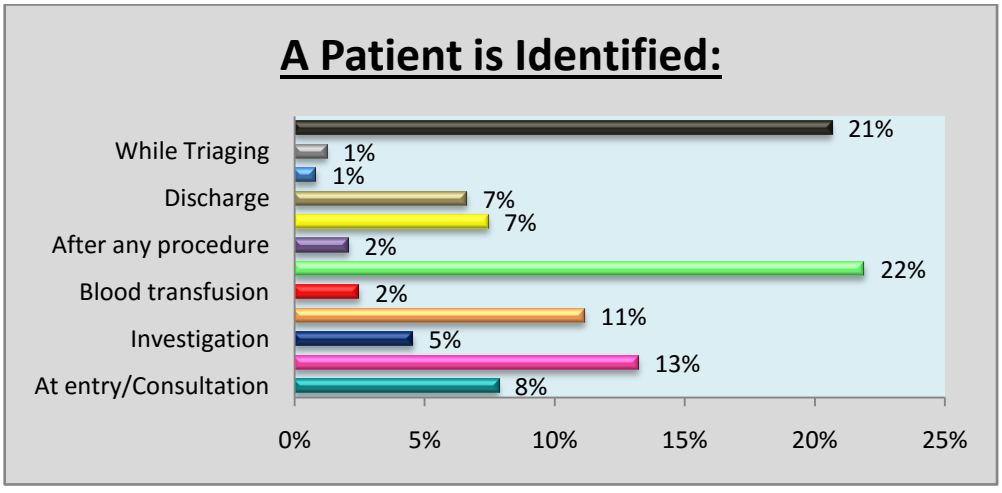
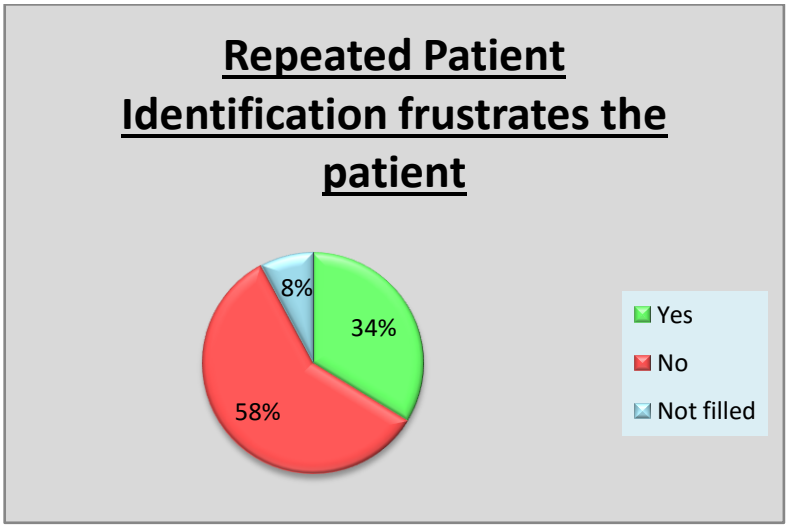


Fig.5

When should a Patient be Identified:
According to the analysis, **22 percent** of the Max Healthcare staff knows that a patient should be identified before doing any procedure, followed by **13 percent** during admission.

Patients may wonder why their identity is confirmed so often. Staff members should always explain that it is done to ensure the right care is provided to the right patient all the time.

Fig.6



Repeated Patient Identification frustrates the patient:
The analysis shows that **58 percent** of the Max Healthcare staff doesn't think that asking patient's details before every procedure may compromise their relationship with the patient or may frustrate him.

Every new staff- clinical & non-clinical should be trained to correctly identify the patients in the hospital setup.

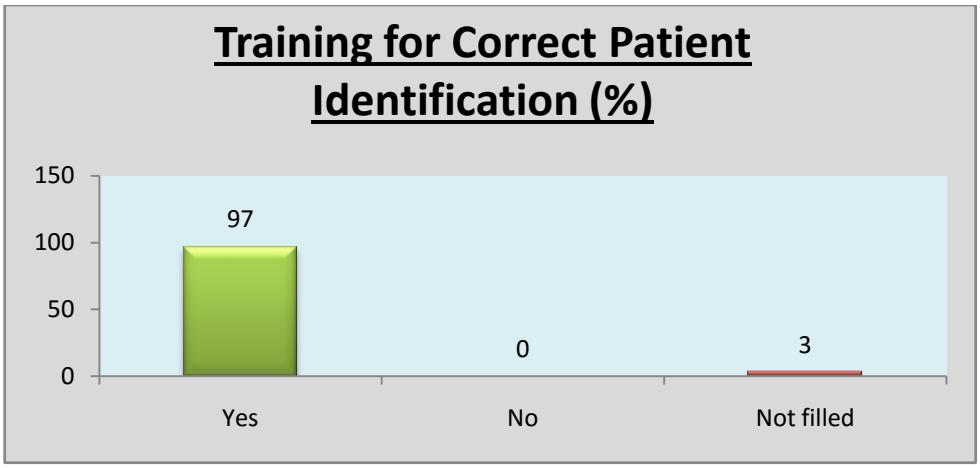


Fig.7

Training for Correct Patient Identification:
As per analysis, **97 percent** of the Max Healthcare staff says that their organisation provides training for all the ways to identify patient correctly.

Max Healthcare has identified vulnerable patients as:

- <12 yrs children
- >65 years elders
- Patients who cannot understand our language
- Unattended or alone female patient in the hospital
- Patients who are not able to perform their routine activities.

The vulnerable patient policy includes wearing of a violet identification band in the hand and a purple colored sticker on the door label; and knowing and using non-verbal approaches for identifying comatose or confused patients.

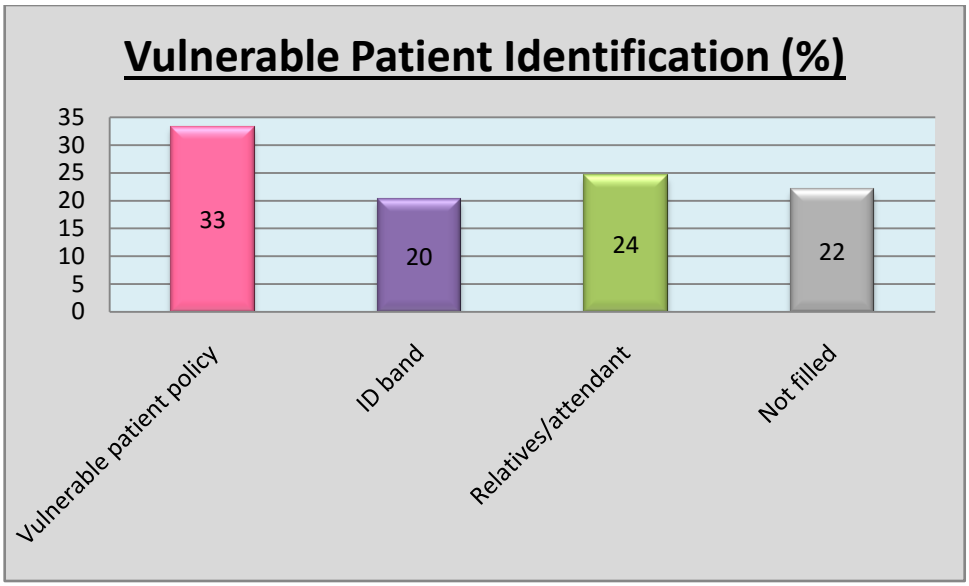


Fig.8

Vulnerable Patient Identification:
Only **33 percent** of the Max Healthcare staff is aware that there's a vulnerable patient policy (purple color band) followed for the patients who cannot provide their details themselves.

All the foreign patients who cannot understand our language are vulnerable patient for the Max Healthcare and provision of Interpreter or Translator is available in the hospital.

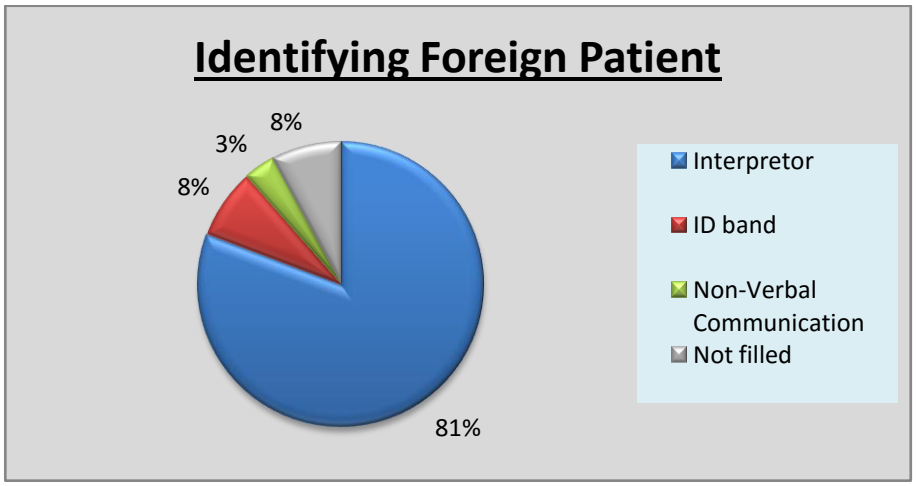


Fig.9

Identifying Foreign Patient:
The analysis represents **81 percent** of the Max Healthcare staff uses an Interpretor to overcome language barrier in identifying a foreign patient. While **3 percent** staff also uses non-verbal communication such as sign languages, gestures etc.

Every patient is registered with a Unique Health Identification Number in Max Healthcare, which is valid for life time. Whenever a patient visits the hospital, he may provide his UHID No. or even a phone number with which he was registered the first time and can move ahead with the treatment.

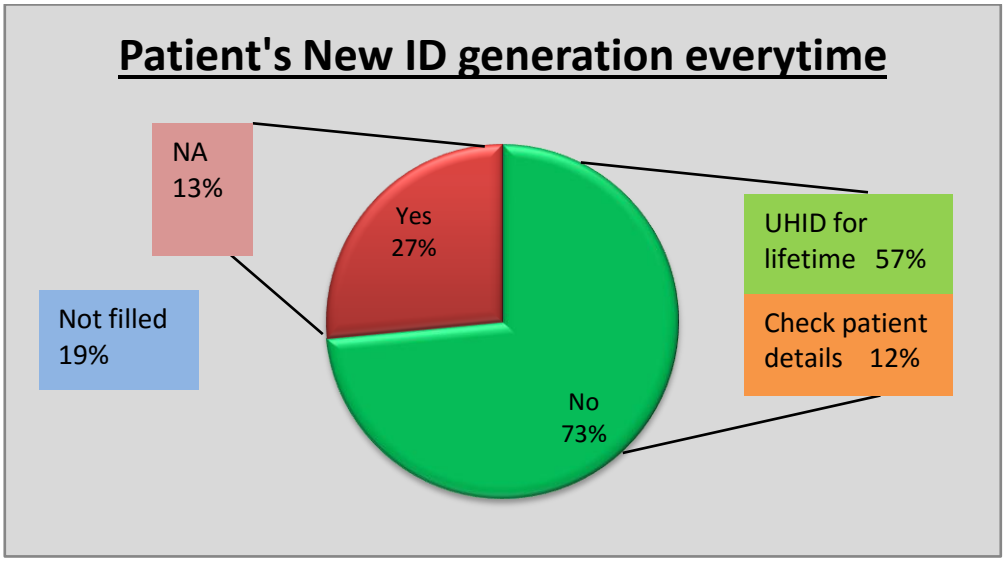


Fig.10

Patient's New ID generation everytime:
The graph illustrates, **73 percent** of the Max Healthcare staff says that they don't generate new ID for the patients for their every visit as UHID is generated once for lifetime.

Patient Identification has to be followed irrespective of heavy workload or heavy in-flow of patients at Max Healthcare, Saket.

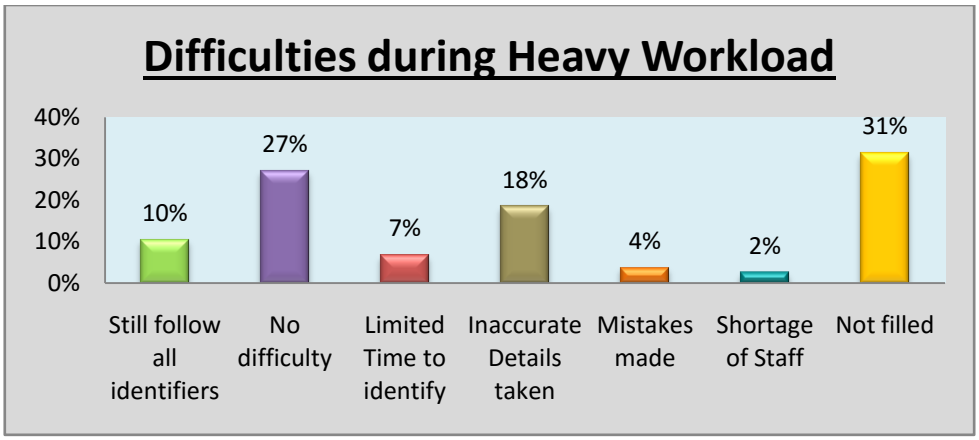


Fig.11

Difficulties during Heavy Workload:
The analysis states that **27 percent** of the Max Healthcare staff says that they don't face any difficulty to identify patients during heavy workload. While **18 percent** of the staff feels that heavy workload makes them take inaccurate details of the patients.

Patients should be educated about the importance and relevance of correct patient identification in a positive fashion that also respects concerns for privacy. The staff should encourage the patients & their families or surrogates to be active participants in identification, to express concerns about safety and potential errors, & to ask questions about the correctness of their care.

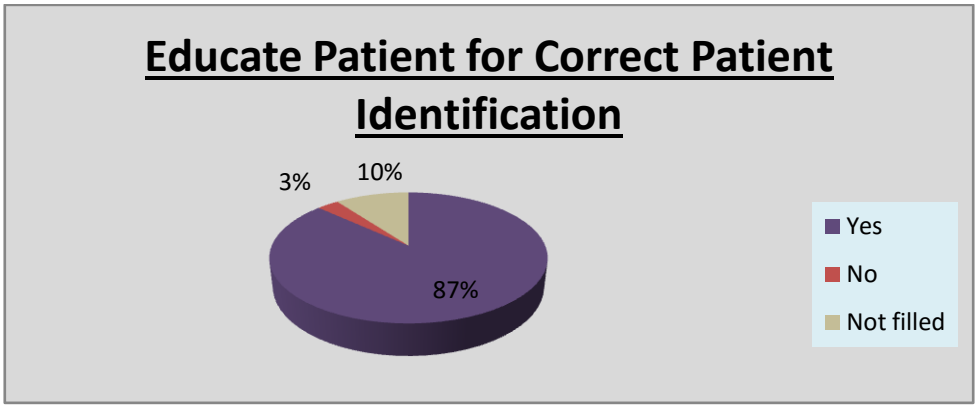


Fig.12

Educate Patient for Correct Patient Identification:
According to the analysis, **87 percent** of the Max Healthcare staff educates the patients about the importance of correct patient identification in their treatment, so the patients cooperate in the procedure of Patient Identification.

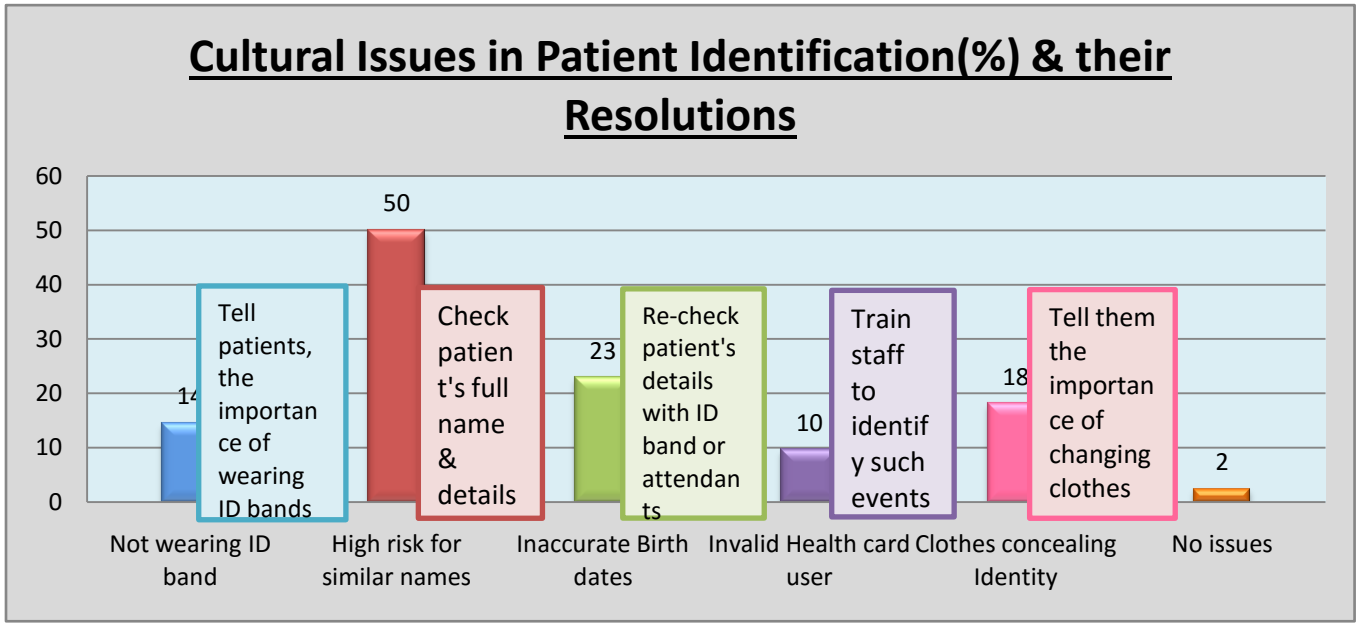
Some of the potential barriers for Patient Identification are the Cultural issues, which includes:

- Stigma associated with wearing an identification band.

- High risk of patient misidentification due to name structure, close similarity of names, inaccuracies in birth dates for elderly patients.
- Patients using health cards belonging to other individuals, in order to access services.
- Clothing that conceals identity.
- Lack of familiarity with local names for increasing number of foreign health-care workers.

  Source: (*Patient Identification*; Patient Safety Solutions; Volume 1, solution 2, May 2007)

Fig.13



Cultural Issues in Patient Identification:
About half, **50 percent** of the Max Healthcare staff believes that the most common cultural issue faced during patient identification is high risk for close similarity of names, which they resolve by checking the patient's full name & details in ID band or from relatives.

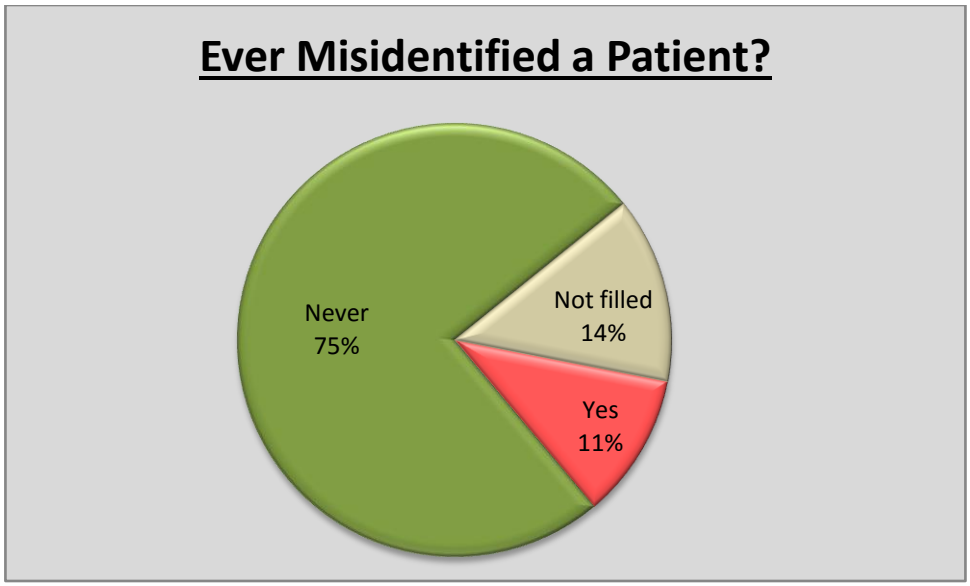


Fig. 14

Misidentification of a Patient:
The analysis depicts that **75 percent** of the Max Healthcare staff says that they have never been through patient mis-identification. And only **11 percent** of the staff admits that they have sometimes mis-identified their patients in their service.

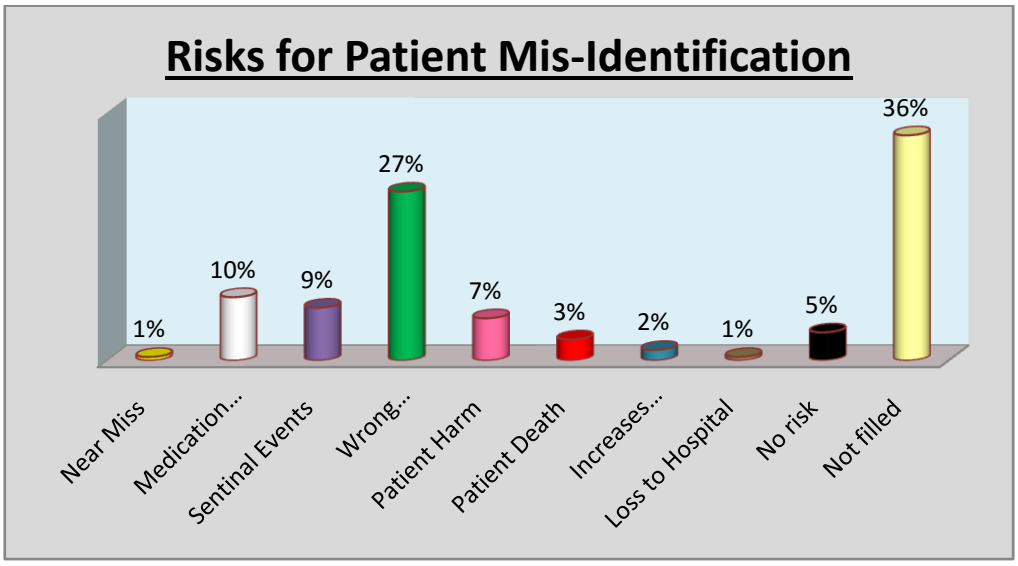


Fig.15

Risks for Patient Mis-Identification:
The analysis shows that **27 percent** of the Max Healthcare staff believes that the patient may undergo wrong procedure or investigation if the patient is mis-identified. **3 percent** of the staff believes that patient may even die, whereas **5 percent** staff says there is no risk for patient mis-

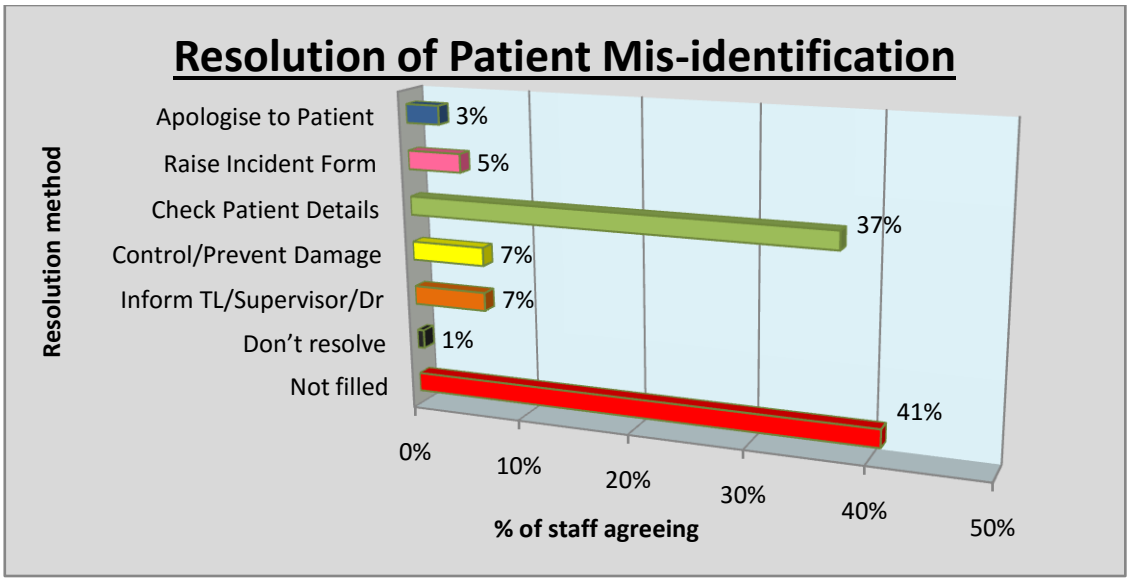


Fig.16

Resolution of Patient Mis-identification:
The analysis shows that **37 percent** of the Max Healthcare staff rechecks patient details when they mis-identify a patient.

Escalation Matrix allows to escalate the unresolved problems and issues to the higher authorities in the concerned department.

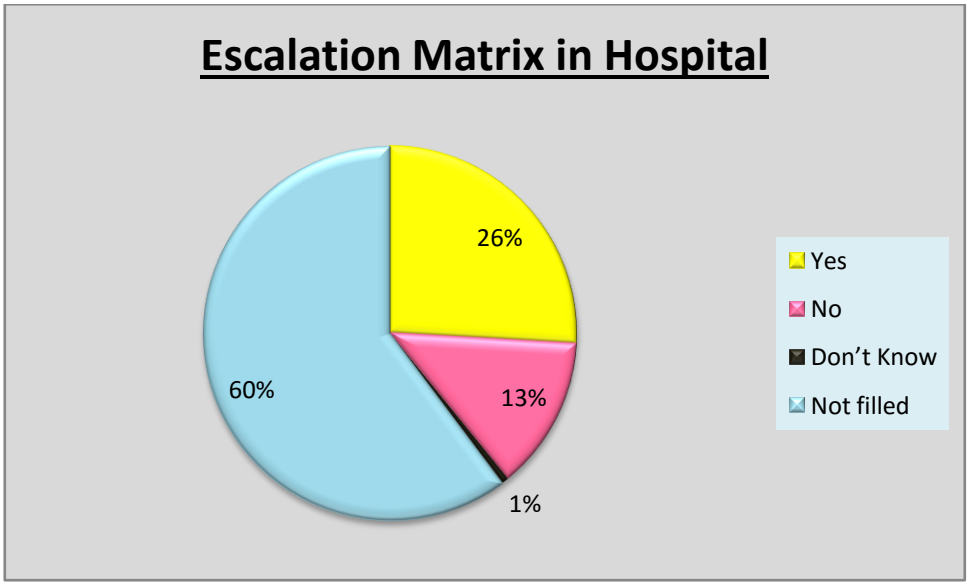


Fig.17

Escalation Matrix in Hospital:
Only **26 percent** of the Max Healthcare staff is aware that there is an Escalation Matrix in their hospital. While **13 percent** staff says that there's no such system in their hospital.

RADIOLOGY DEPARTMENT

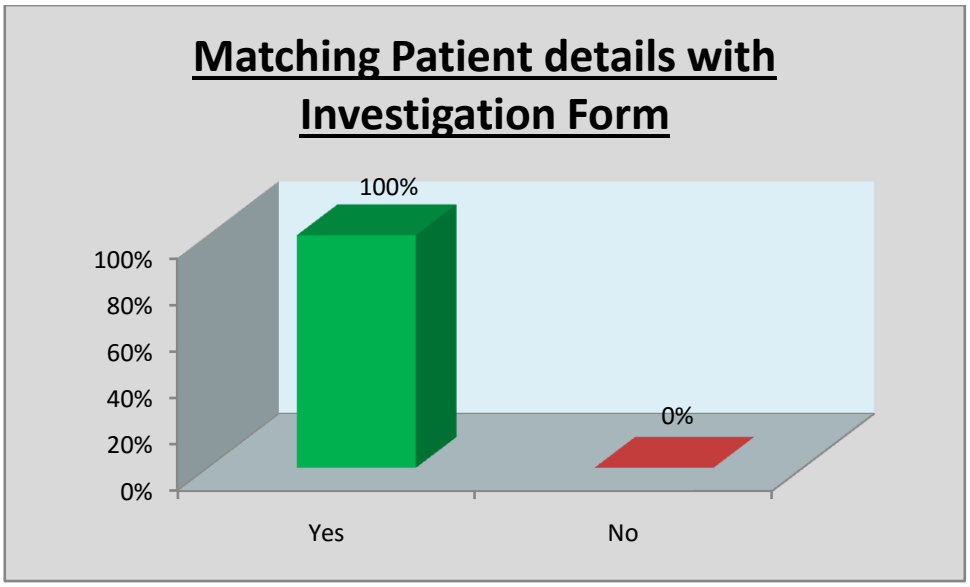


Fig.18

Matching Patient's Details with Investigation form:
All of the Radiology staff matches the patient's information before any investigation, with the request form sent by the various departments.

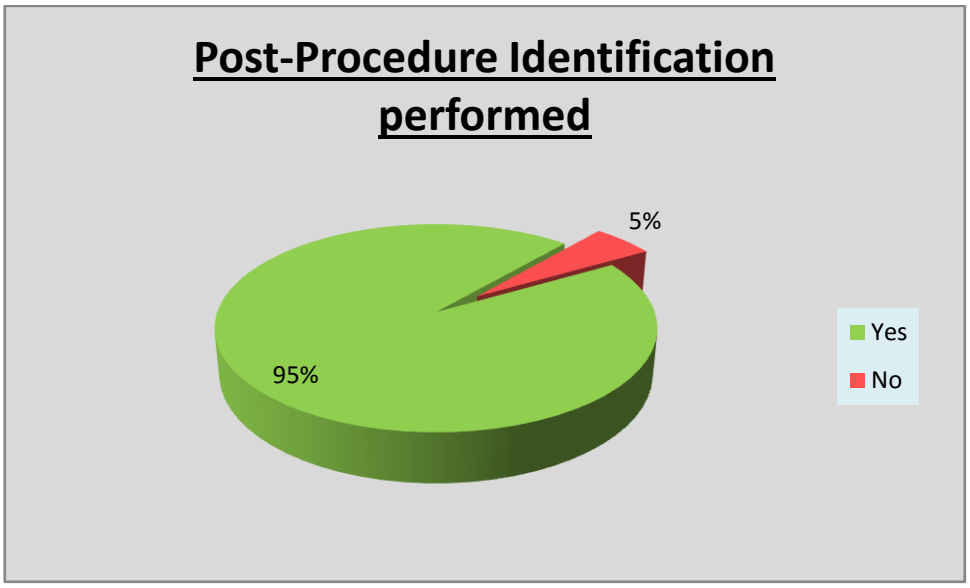


Fig.19

Post-Procedure Identification:
Majority, **95 percent** of the Radiology staff says that they perform post-procedure confirmation or identify images with the history of the patient.

LABORATORY SERVICES

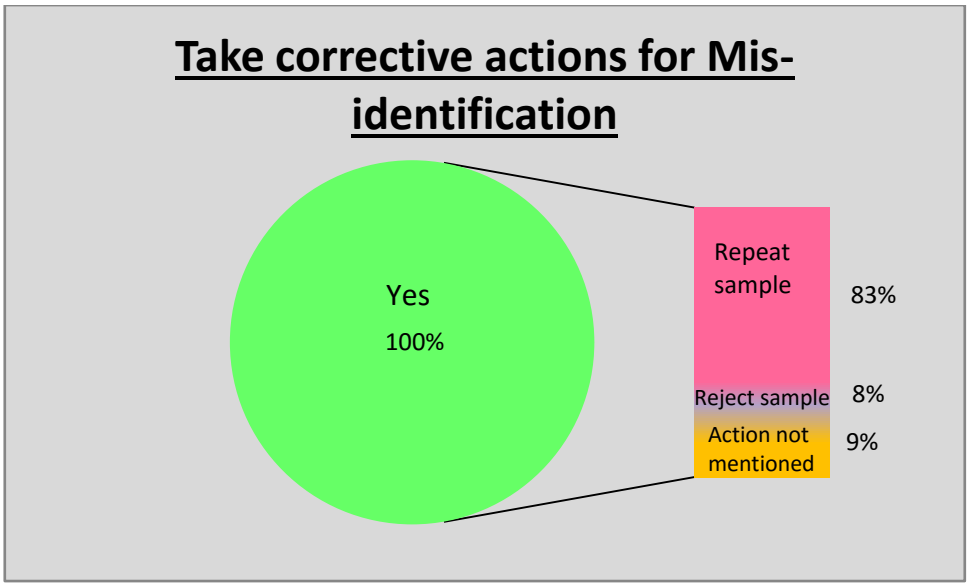


Fig.20

Take Corrective actions for Mis-identification:
All of the Laboratory staff of Max Healthcare take corrective measures when they mis-identify a patient, out of which **83 percent** request a repeat sample for the same patient.

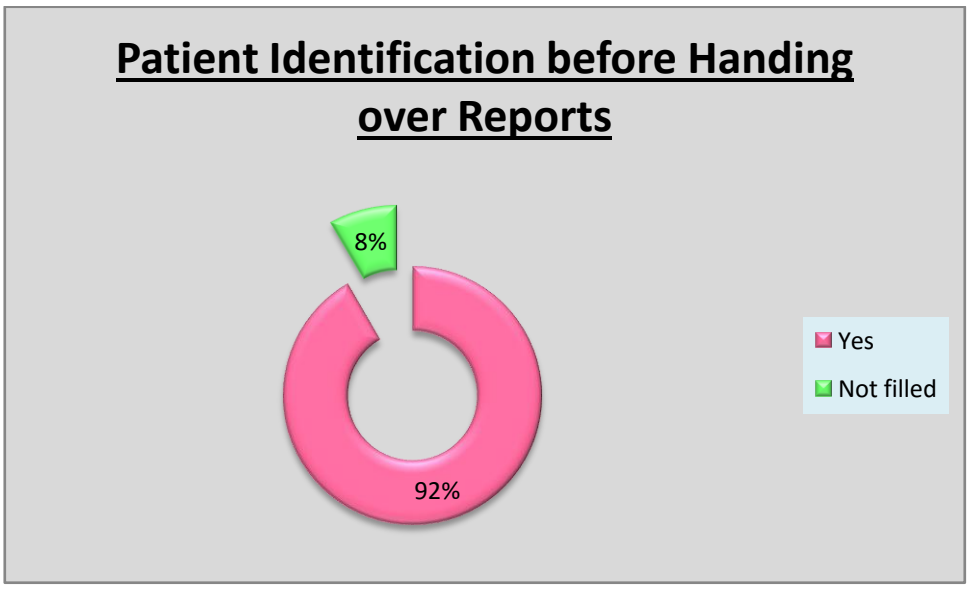


Fig.21

Patient Identification before Handing over Reports:
Most (**92 percent**) of the Laboratory staff of Max Healthcare agrees that they recheck the stored details with the patient before handing them their reports.

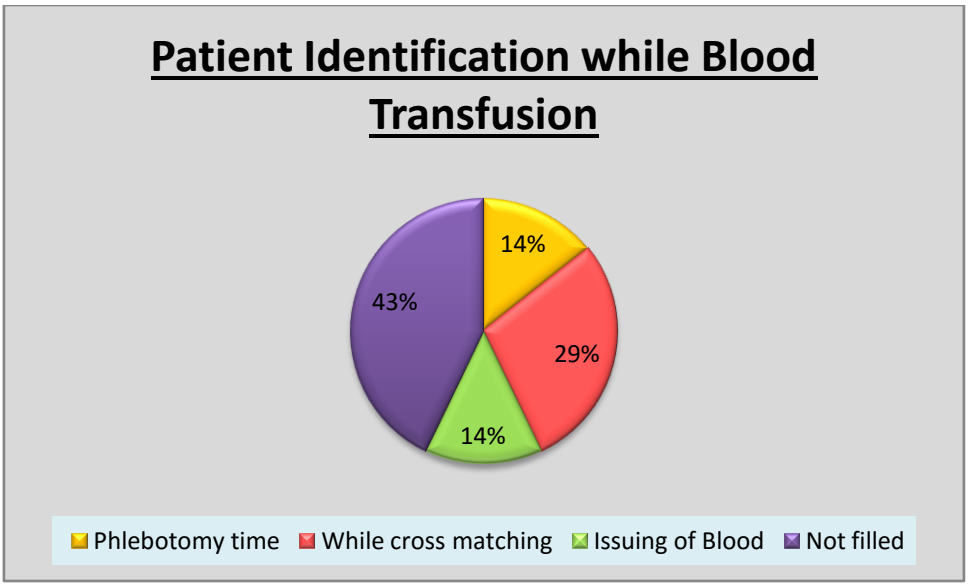


Fig.22Fig.23

Patient Identification while Blood Transfusion:
The graph represents **29 percent** of the Blood Bank staff of Max Healthcare identifies the patient during cross-matching the blood components when blood is to be transfused to the patient.

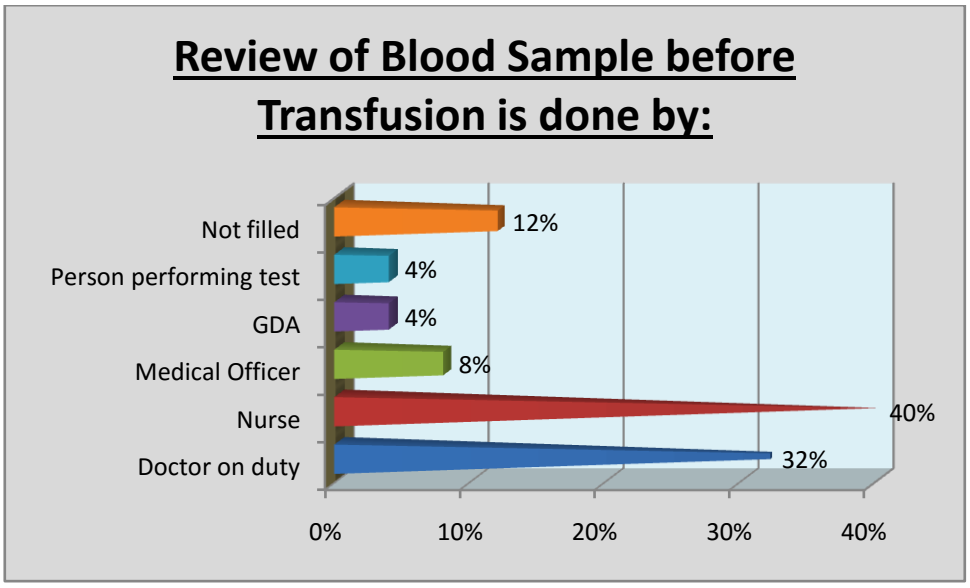


Fig.24

Review of Blood Sample before Transfusion:
The analysis states that **40 percent** of the Blood Bank staff of Max Healthcare says that the blood sample is reviewed by the nurses before adminitering it to the patient.

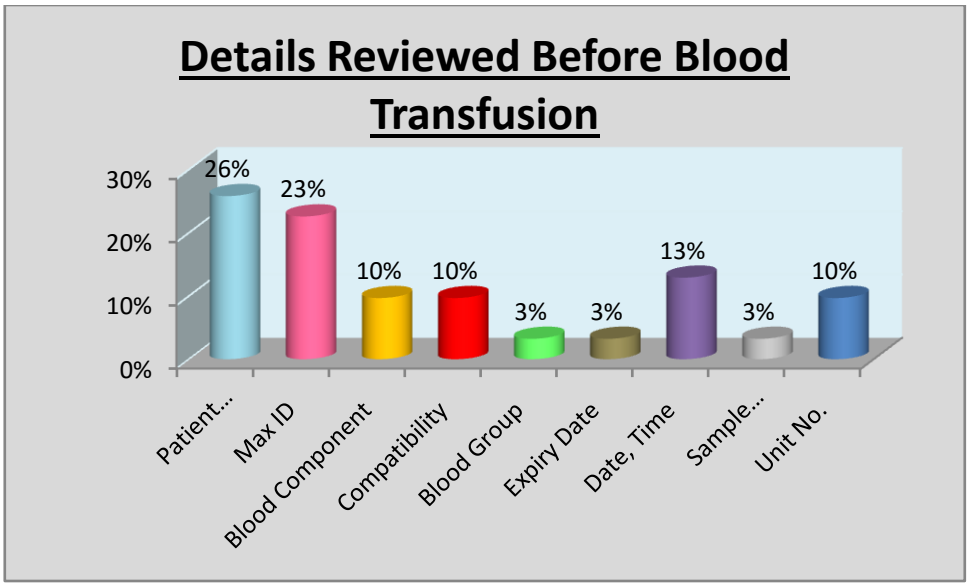


Fig.25

Review of Blood Sample before Transfusion:
According to the analysis, **26 percent** & **23 percent** of the Blood Bank staff of Max Healthcare reviews Patient Credentials and Max ID before performing blood transfusion to the patient.

EMERGENCY DEPARTMENT

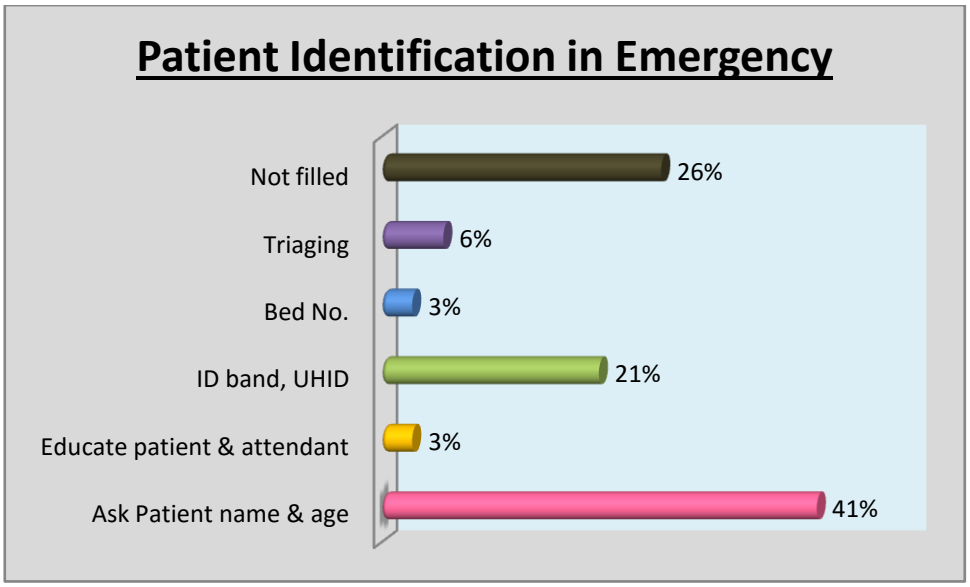


Fig.26

Patient Identification in Emergency:
About **41 percent** of the Emergency staff of Max Healthcare asks for patient name & age for identifying a patient in emergency situation. While **21 percent** of the staff checks the ID band & UHID for the same.

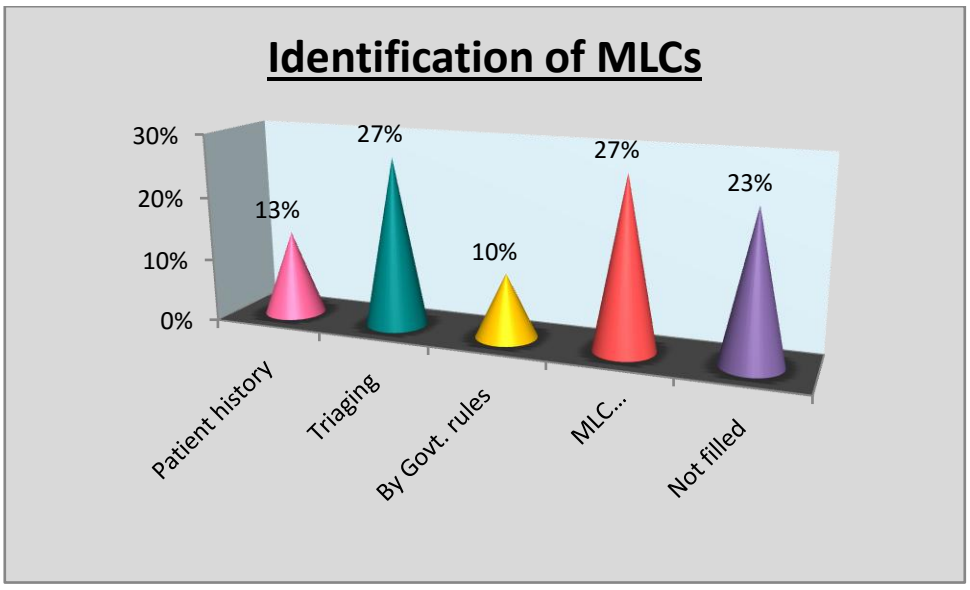


Fig.27

Identification of MLC:s
The Emergency staff of Max Healthcare identifies the Medico-Legal cases by triaging according to the cases such as RTA, poisoning, self-harming events & assault, or by putting a MLC stamp on the documents of such patients.

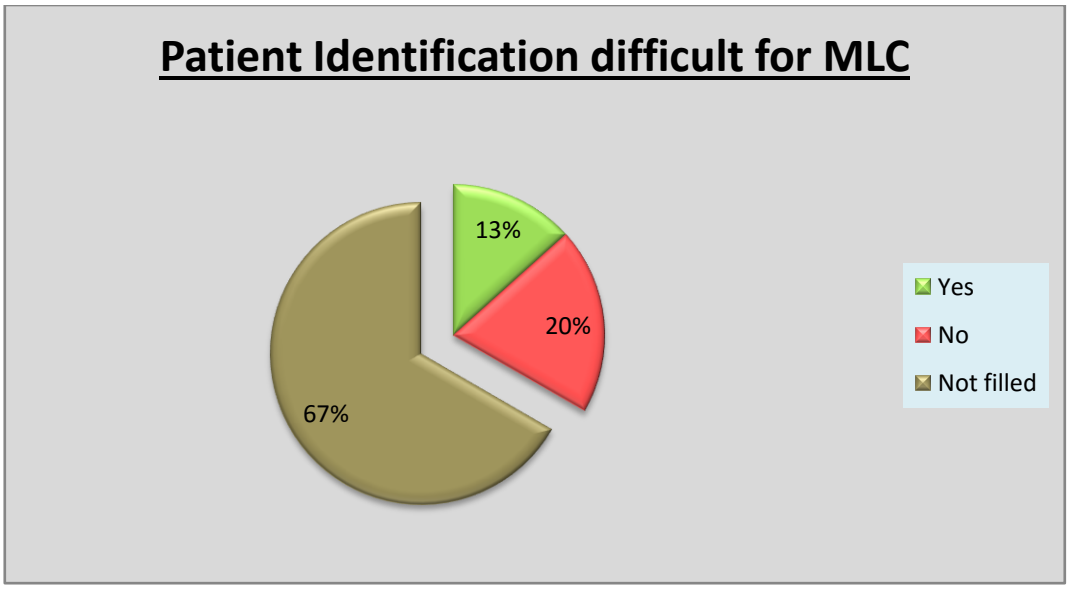


Fig.28

Patient Identification difficult for MLC:
About **20 percent** of the Emergency staff of Max Healthcare states that maintaining confidentiality of the Medico-Legal cases **does not** reduces correct patient identification.

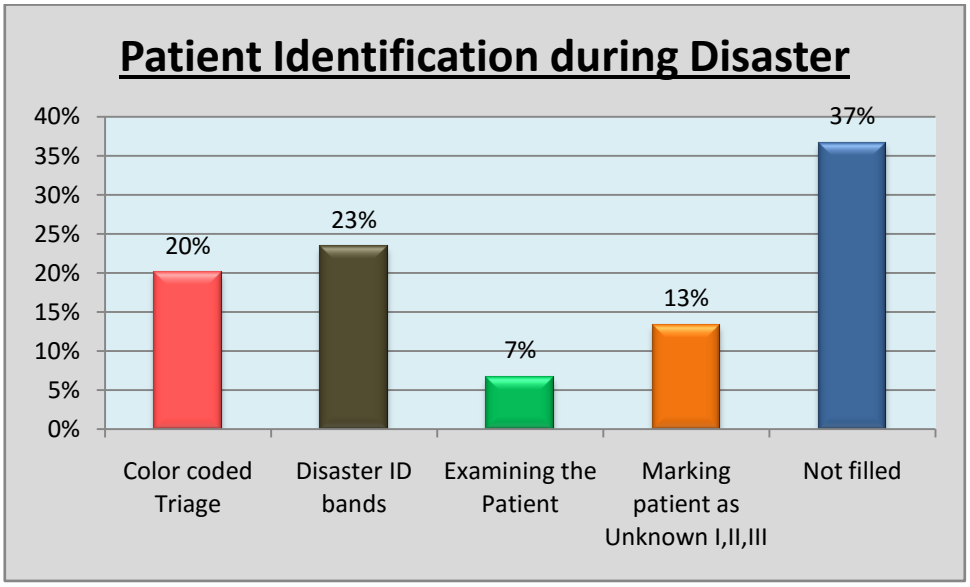


Fig.29

Patient Identification during Disaster:
Only **20 percent** of the Emergency staff of Max Healthcare would identify patients by color coded Triage and **23 percent** checks the disaster bands to identify patients during disaster.

OPERATION THEATRE

Wrong-patient errors occur in virtually all stages of diagnosis and treatment. Evidence indicates that procedures that place the patient at the most risk include those that involve general anesthesia or deep sedation, although other procedures may also affect patient safety. Hospitals can enhance safety by correctly identifying the patient, the appropriate procedure, and the correct site of the procedure.[3]

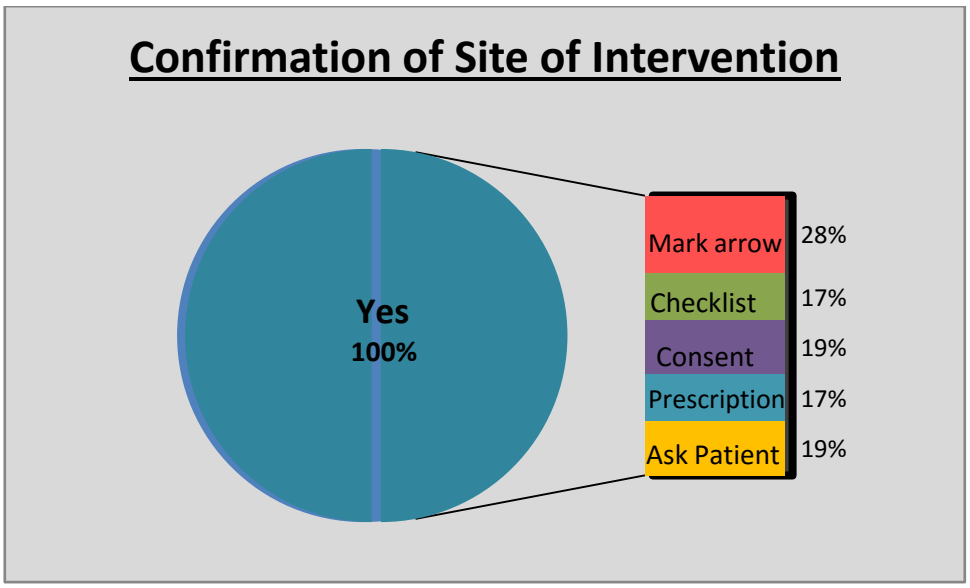


Fig.30

Confirmation of Site of Intervention:
All of the OT staff confirms the site of intervention before initiating the treatment. Out of which, **28 percent** of the staff confirms the site of intervention by marking arrow on the limb to be treated. While others checks the checklist, consent, prescription or directly confirms with the patient.

Identification markers on the patient will prevent wrong-procedure and wrong-site surgery.

IN-PATIENT DEPARTMENT

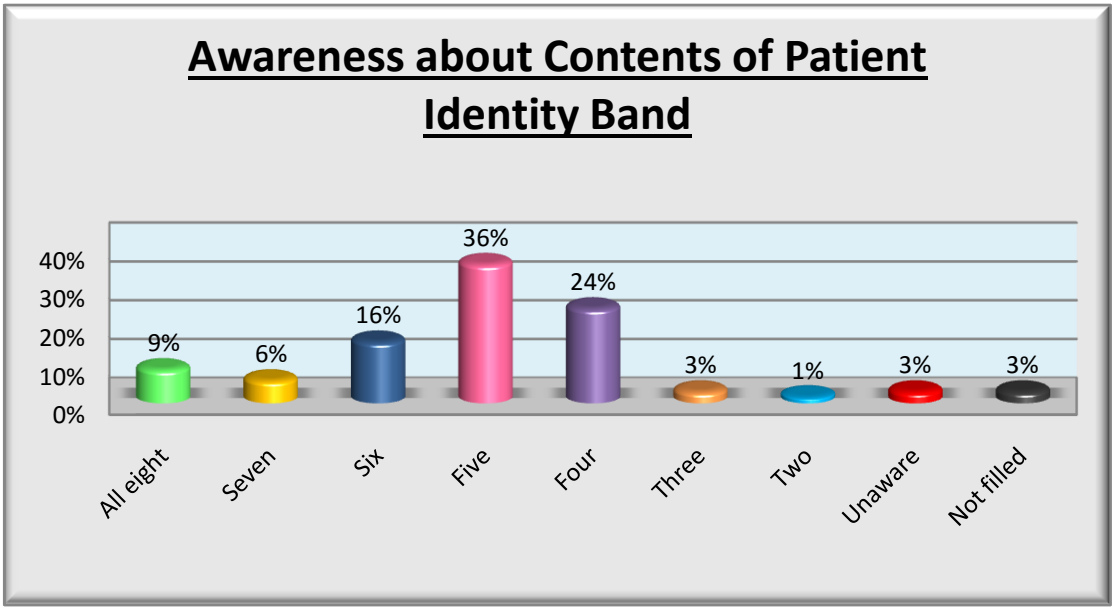


Fig.31

Awareness about Contents of Patient Identity Band:
Only 9 percent of the In-patient staff is aware about all eight contents of the patient Identity Band. While **36 percent** of the staff is aware only about five of the patient ID band's contents correctly.

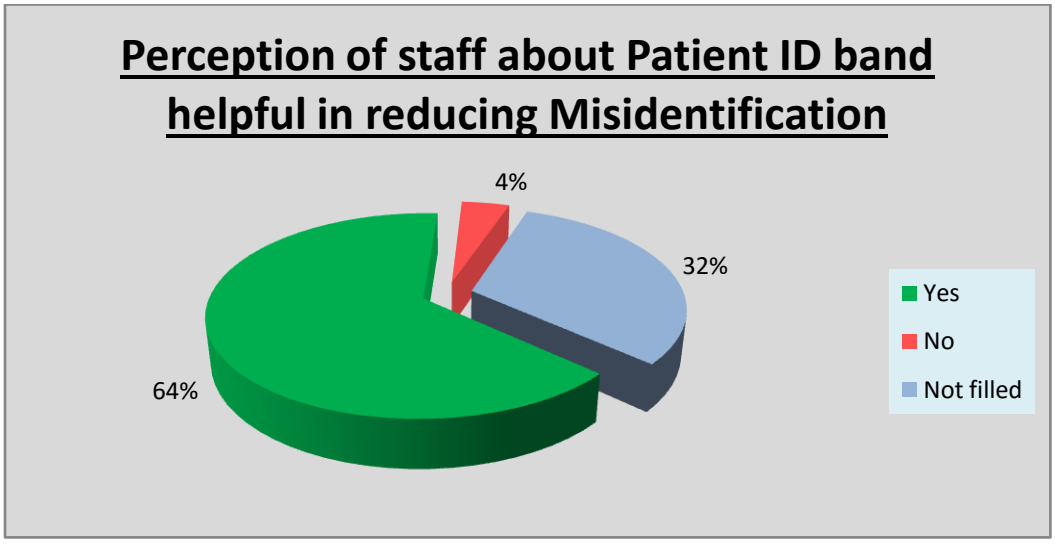


Fig.32

Perception of staff about Patient ID band helpful in reducing Misidentification:
Majority (**64 percent**) of the In-patient staff in Max Healthcare has a perception that the implementation of Patient Identification Band in their hospital has helped to reduce misidentification of patients.

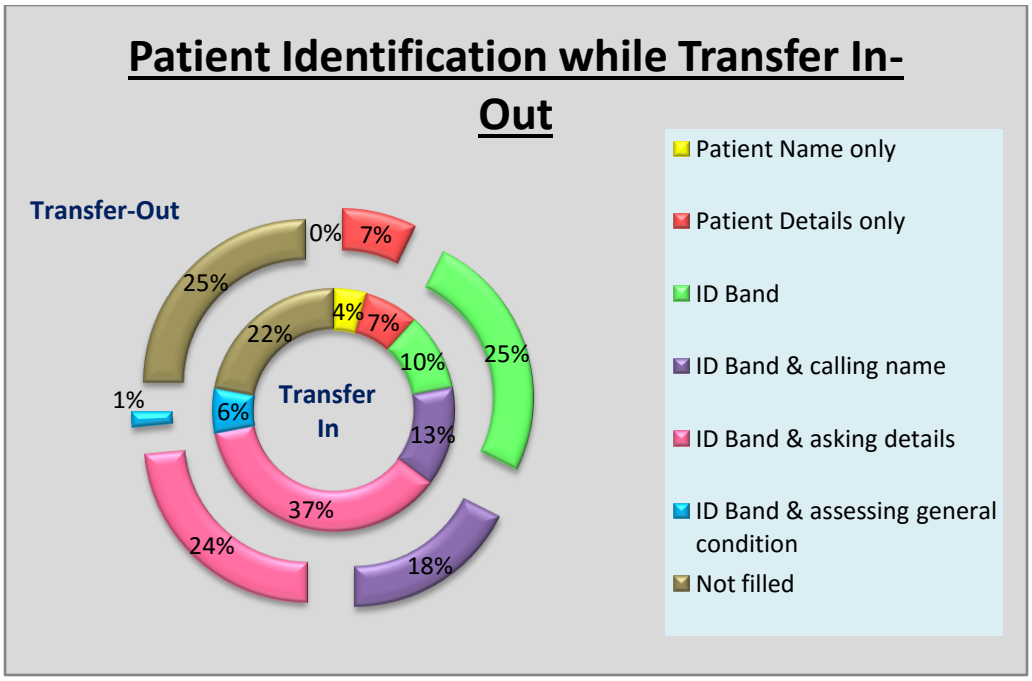


Fig.33

Patient Identification while Transfer In-Out:
The analysis states that **37 percent** of the In-patient staff in Max Healthcare identify the patient with ID Band correlated with patient's details during his **Transfer-In**, while **25 percent** checks only the ID Band during **Transfer-out** of the patient.

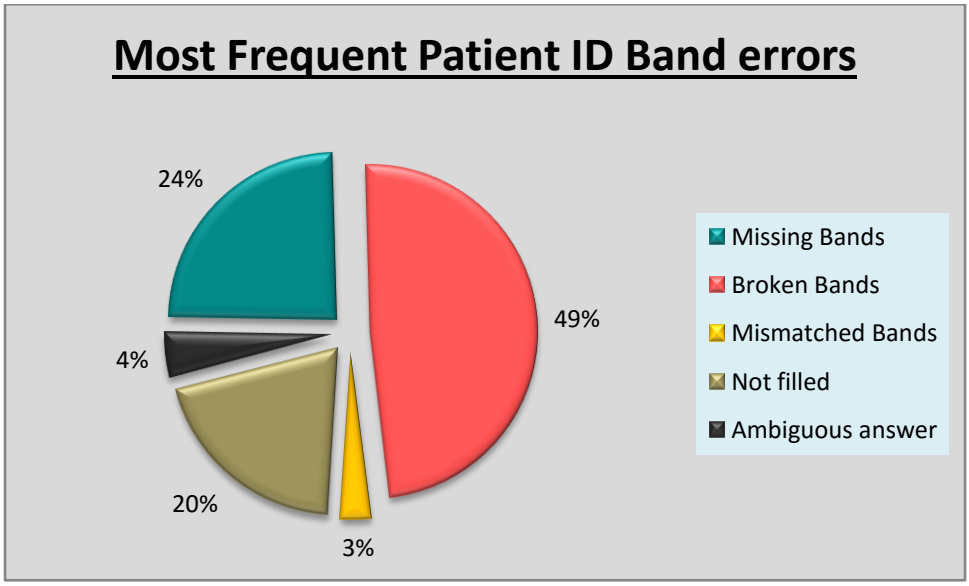


Fig.34

Most frequent Patient Identity Band errors:
About half (**49 percent**) of the In-patient staff in Max Healthcare reports the broken or damaged bands as the most frequent errors observed by them.

Six most common types of wristband errors as an aid in foreseeing the hazards associated with wearing a wristband:

(**Missing Band**) A. Wristband is not present

(**Mismatched Bands**) B. Wrong wristband, i.e. another patient's wristband

C. Presence of more than one wristband and conflicting information is written on both.

D. Erroneous information on the wristband

E. Patient's name is written the same, written close to the same, and/or pronounced the same as another patient's name

(**Broken Bands**) F. Partially missing information on the wristband

G. Written information on wristband is illegible

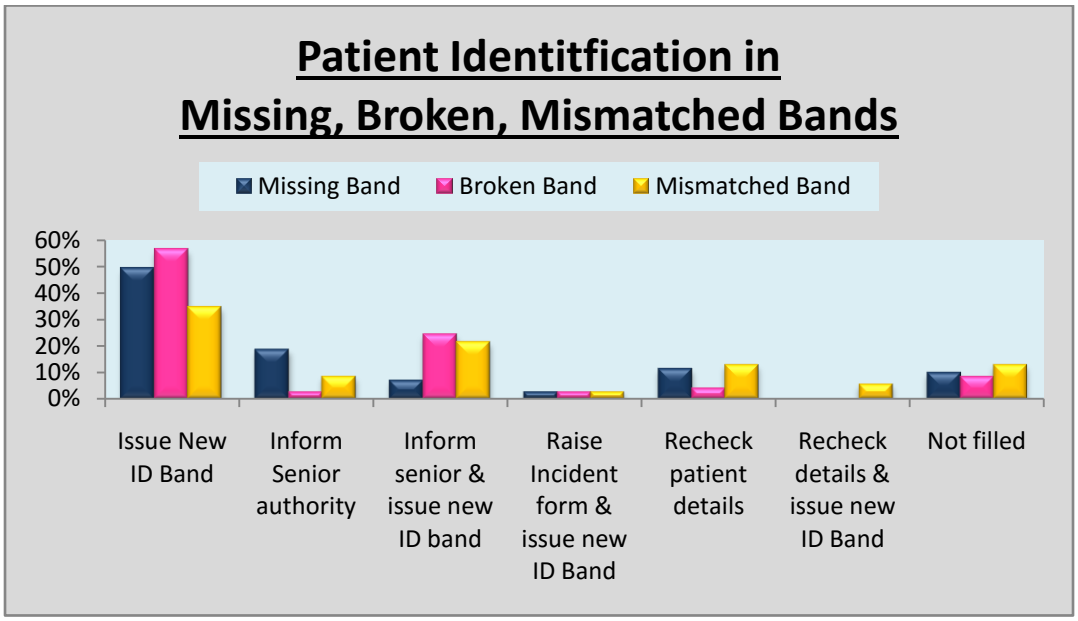


Fig.35

Patient Identification in Missing, Broken, Mismatched Bands:
Only 3 percent of the In-patient staff in Max Healthcare raises an Incident form when they observe any missing,broken or mismatched band and request an issue for a new Patient Identity Band.

FOOD AND BEVARAGE DEPARTMENT

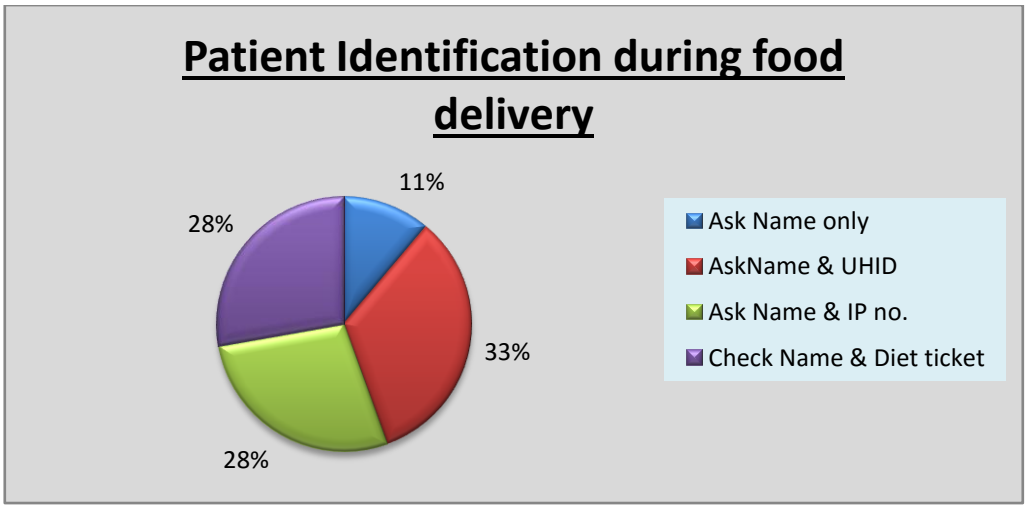


Fig.36

Patient Identification during Food Delivery:
About **33 percent** of the Food & Bevarage staff asks name & UHID before delivering food to the patient.

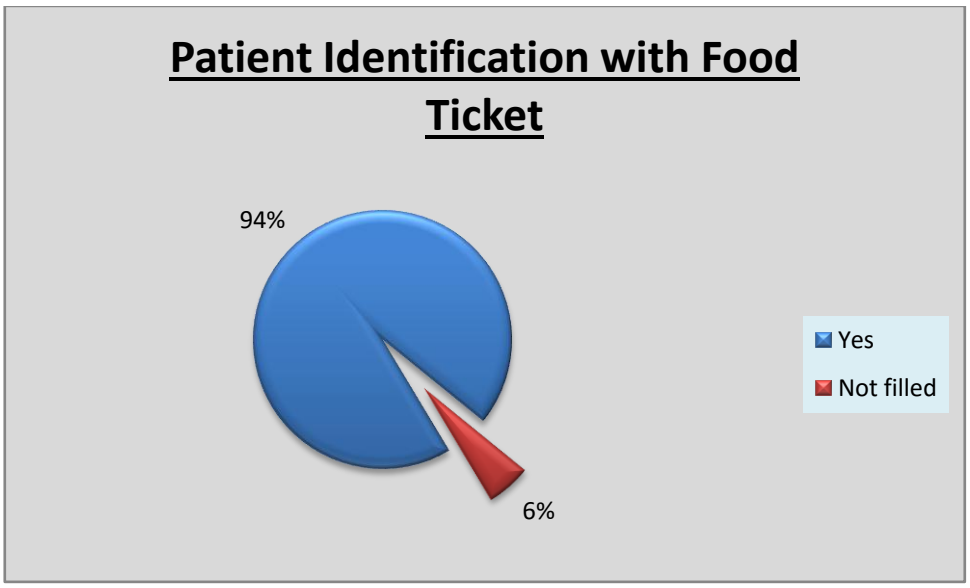


Fig.37

Patient Identification with Food Ticket:
Most (**94 percent**) of the Food & Bevarage staff matches the food ticket with the patient details while delivering the food to the in-patients at Max Healthcare, Saket.

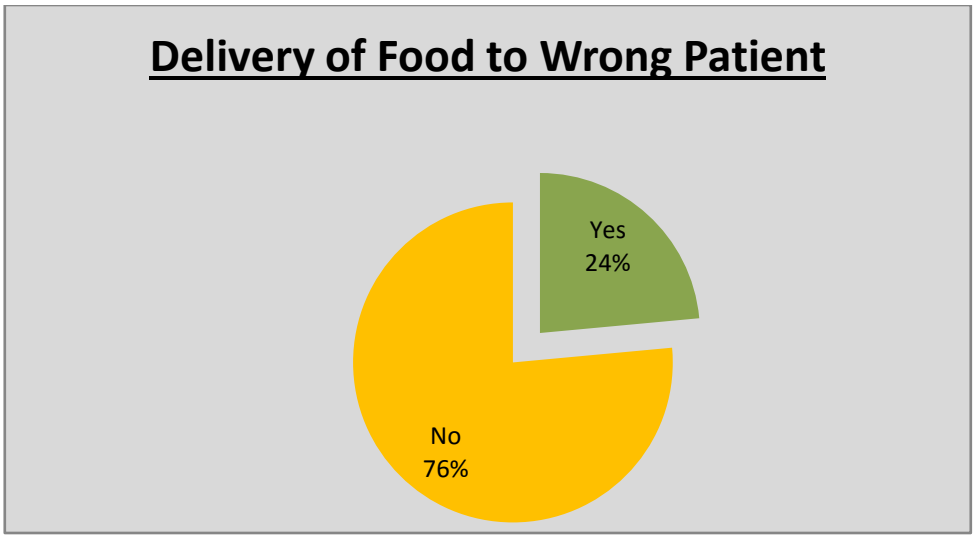


Fig.38

Delivery of Food to Wrong Patient:
Majority (**76** percent)of the Food & Bevarage staff says that they have never delivered food to a wrong patient.

SUGGESTIONS & RECOMMENDATIONS

1. Only 15-16 percent of the staff agrees that they identify their patients with their room number and their consultant's name, but majority of the staff is identifying the patients with the room number. This should be strictly prohibited.
2. Correct patient Identification posters should be pasted at visible and operational areas of the hospital.
3. There should be quiz organized to analyze the awareness of patient identification among the staff.
4. Incident forms should be filled more often on misidentifications of the patients.
5. The staff should be made more aware on the escalation matrix followed in the organization.
6. The staff should be provided with training on standard patient identifiers in a hospital.
7. Half of the staff believes that there is a high risk for patients with same name, "PATIENT WITH THE SAME NAME IN WARD" cautionary card must be applied to each patient's health care record.
8. The protocol to be followed during disaster should be clearly written and visible in the emergency department.
9. There should be scanning of the food ticket also like medications, so to avoid delivery of food to the wrong patient.
10. The staff should be taught the lessons of time management during heavy workload, so to never misidentify the patient.

CONCLUSION

The Solutions from this initiative will not address the broad underlying causes of patient safety problems, but rather will be directed at the specific level where good process design can prevent potential human errors such as patient identification from actually reaching the patient. Solutions, therefore, will be intended to promote an environment and support systems that minimize the risk of harm despite the complexity and lack of standardization in modern health care.

ANNEXURE: QUESTIONNAIRE

Evaluation of Positive Patient Identification in a Hospital

1. What is the importance of patient identification in a hospital?

   _____

2. Does your hospital follow any standards for identifying a patient? Yes/No
   If yes, are you aware about the International Patient Safety Goals? Yes/No
   If yes, do they include patient identification? Yes/No
3. What according to you are basic requirement to identify a patient in a hospital?

- ☐ Name
- ☐ Id Proof
- ☐ Address
- ☐ Patient room Number
- ☐ Date of Birth
- ☐ Patient Unique Id
- ☐ Patient's consultant name

Any other, please specify_____

4. When all should you do identification for a single patient between his/her entry and exit from the hospital?

   _____

5. Do you think asking patient's details before every procedure may compromise your relationship with the patient or may frustrate him? Yes/No
6. Does your organization train your staff about all the ways to identify patient correctly? Yes/No
   How do you check if your training is giving fruitful results?

   _____

7. How do you overcome the language barrier in case of identifying a foreign patient?

   _____

8. Do you generate new Id for those patients who visit your hospital again and again? Yes/No
   If no, then what do you do?

   _____

9. Do you think
10. What difficulties do you face in identifying patients during heavy workload?

    _____

11. Do you educate patient about the importance of positive patient identification? Yes/No
12. Which of the cultural issues do you face during patient identification?

- ☐ Stigma associated with wearing an identification band
- ☐ High risk for close similarity of names
- ☐ Inaccuracies in birth dates for elderly patients
- ☐ Patients using health cards belonging to other individuals in order to access services

☐ Clothing that conceals identity
What do you do to resolve such issues?

_____

13. Have you ever been through patient misidentification? Yes/No
    What are the risks for misidentifications of a patient?

    _____

14. How do you resolve the problems due to misidentification of a patient?

    _____

    Is there any escalation matrix for the same? Yes/No

Radiology Department

1. Do you match patient's information against the request form sent to you by the various departments? Yes/No
2. Do you perform post-procedure confirmation or identification of images with the history of the patient? Yes/No

Laboratory Services

1. What all samples collection requires to verify a patient's details?

   _____

2. What corrective actions you take in case of misidentification of samples?

   _____

3. Do you recheck your stored details with the patient before handing him his/her reports? Yes/No
4. How do you manage to provide reports if the patient himself doesn't come to collect it?

   _____

Blood Bank Department

1. What all times do you cross check the patient's details while the process of blood transfusion?

   _____

2. Who reviews the details on the blood sample before blood is administered to the patient?

   _____

What all details are reviewed? _____

Emergency Department

1. How do you manage to identify patients in emergency situation, when you are short of the time?

   _____

2. How do you identify Medico-legal cases?

   _____

   Does maintaining confidentiality of such cases reduce the positive patient identification? Yes/No
3. How do you identify a patient in disaster?

   _____

Operation Theatre

1. Do you confirm the site of intervention prior to initiating the treatment? Yes/No
   If yes, how do you confirm?

   _____

In Patient Department

1. What are the contents of a patient identity band?

   _____

   Do you think that implementation of patient identification band in your hospital has helped to reduce mismatch errors? Yes/No
2. Do you match the patient's inconsistent results with his/her history? Yes/No
3. How do you identify a patient while:
   Transfer in _____
   Transfer out _____
4. a) What do you do in case of-
   Missing bands _____
   Broken bands _____
   Mismatched bands _____
   b) Which of these is the most frequent error? _____

Food and Beverage Department

1. Do you identify a patient before delivering the food to the patient? Yes/No
   How?

   _____
2. Do you match the details on the food ticket with the patient's details? Yes/No
3. Have you ever delivered food to a wrong patient? Yes/No

Comments:

_____

_____

REFERENCES

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9. Joint Commission International Centre for Patient Safety. Patient Identification Patient Safety Solutions. 2007