

Summer Placement
In
Max Healthcare Super Specialty Hospital

(April 8 to 29 May 2015)

A Report

By

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Institute of Health Management Research, Jaipur

Mba in Health and Hospital Management

2014-2016



CERTIFICATE

This is to certify that Dr. Nazia Zaidi has undergone summer training at Max Super Specialty Hospital, Dehradun from 7th April to 7th June, 2015.

The candidate has herself carried out all the studies related to the summer training. Her approach to the studies has been sincere, scientific and analytical. This summer training is a course requirement recommended before awarding the degree of Masters in Business Administration (MBA) in Hospital Management.

I wish her success in all her future endeavors.

Col. (Dr.) Ashok Kaushik (Retd.)
Dean (Academic and Student Affairs)
IIHMR University, Jaipur

Mrs. Sunita Nigam
Associate Professor
IIHMR University, Jaipur

Acknowledgements:

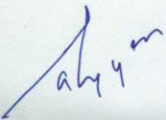
A summer training is a golden opportunity for learning and self development. I consider myself very lucky and honored to have so many wonderful people lead me through the completion of the project.

I am extremely indebted to all the professionals at Max Healthcare Super Speciality Hospital (MSSH), Dehradun, for sharing generously their knowledge and precious time which inspired me to do best during summer training .

I owe a great debt to Unit Head Human Resource Mr. Ankur Nayyar (MSSH) for providing me an opportunity to work as a trainee in their organization. I would like to thank Dr. Pankaj Jhaldiyal, Mr. Laeeq Ahmed, Dr. Anurag Gupta, Dr. Arafat Faizal, Dr. Bala for the summer training in MSSH, without whose help it would not have been possible for me to understand the hospital to the extent as I have now. I am highly grateful to all the staff of Human Resource and Emergency Department for their cooperation which enabled me to complete my special assignment in the department.

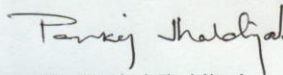
I am also grateful to all the department heads and staffs for giving me time in spite of their busy schedule .Without their active cooperation and participation it would not have been possible to accomplish my task.

Dr. Nazia Zaidi



Ankur Nayyar

Senior Manager & Unit Head- Human Resources



Dr. Pankaj Jhaldiyal

HOD- Emergency And Trauma Services

Summer training certificate

This is to certify that Dr.Nazia Zaidi of IIMHR, Jaipur-19 batch IIMHR University (Jaipur), has successfully completed her summer internship from 8th April 2015 to 29th May 2015.

The projects undertaken by her were in Human Resource Department and Emergency Department of Max Super Specialty Hospital, Dehradun.

1. Assessing Employee Turnover- Strategies to improve Retention.
2. Quality Care Indicators(Emergency department MSSH-Dehradun)

The project on evaluation fulfills all her stated criteria and the student findings are her original work.

I hereby certify her work [✓]excellent/good/ satisfactory to be in the best of my knowledge.



Ankur Nayyar

Senior Manager & Unit Head- Human Resources

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Abbreviation	Meaning
MSSH	Max Super Speciality Hospital
DDN	Dehradun
NCR	National Capital region
NGO	Non Governmental Organisation
OT	Operation Theatre
IPD	In Patient department
OPD	Outpatient Department
CSSD	Central Sterile Services Department
MRD	Medical Record Department
IT	Information Technology
N.S.I.C.U.	Neurosurgical intensive care unit
N.I.C.U.	Neonatal intensive care unit
G.I.C.U.	Gastrointestinal intensive care unit
C.C.U.	Cardiac Care Unit
CTVS I.C.U.	Cardio Thoracic Vascular Operations
M.I.C.U.	Medical Intensive Care Unit
CATH	Catheterization
PAC	Premature Atrial Contraction
COW	Computer on wheels
CPRS	Computerized Patient Record System
GDA	General Duty Assistants
ACLS	Advanced Cardiac life Support
BLS	Basic life Support
EMO	Emergency Medical Officer
GI	Gastrointestinal
ONCO	Oncology
NEURO	Neurology
URO	Urology
ENT	Ear Nose Throat
EMS	Emergency Medical Superintendent
CXR	Chest X-ray
RRT	Rapid response Team
MS	Microsoft

About Summer Training:

The MBA in Health and Hospital Management (MbaHM) program of Institute of Health management Research (IIHMR) aims at preparing professionally trained managers of health care organizations and hospitals to meet the increasing need for managerial skill. It involves a eight week summer placement for the first year students to provide them with a firsthand experience of the hospital system or environment. As a part of the program I had the privilege to undergo my practical training at Max Super Speciality Hospital, Dehardun to get a firsthand knowledge and experience about the functioning of the hospital. I worked all through under the operations team there from 8th April 2015 to 8th June 2015. The main aim of the summer training was to get exposed to operation of all the hospital in general, and an in-depth insight of the Third Party Administrator, Pharmacy, medical Record Department and Laboratory in the hospital in particular.

Objective:

The summer training program had the following objectives:

- To have a basic orientation of the hospital set up.
- To study the functioning of the hospital as a system and its departments as subsystems of the hospital.
- To observe all the department in terms of their location, work plan and staffing pattern.
- To study about the staffing pattern and job responsibility of staff.
- To understand hospital working in a better way and to the organization by doing specific projects.

METHOD OF DATA COLLECTION:

The data collected was primary and secondary data.

Primary data was collected from:

- Personal observation during the summer training and department visits.
- Further information was gathered by discussion with the department heads and staff on the basis of unstructured interview.

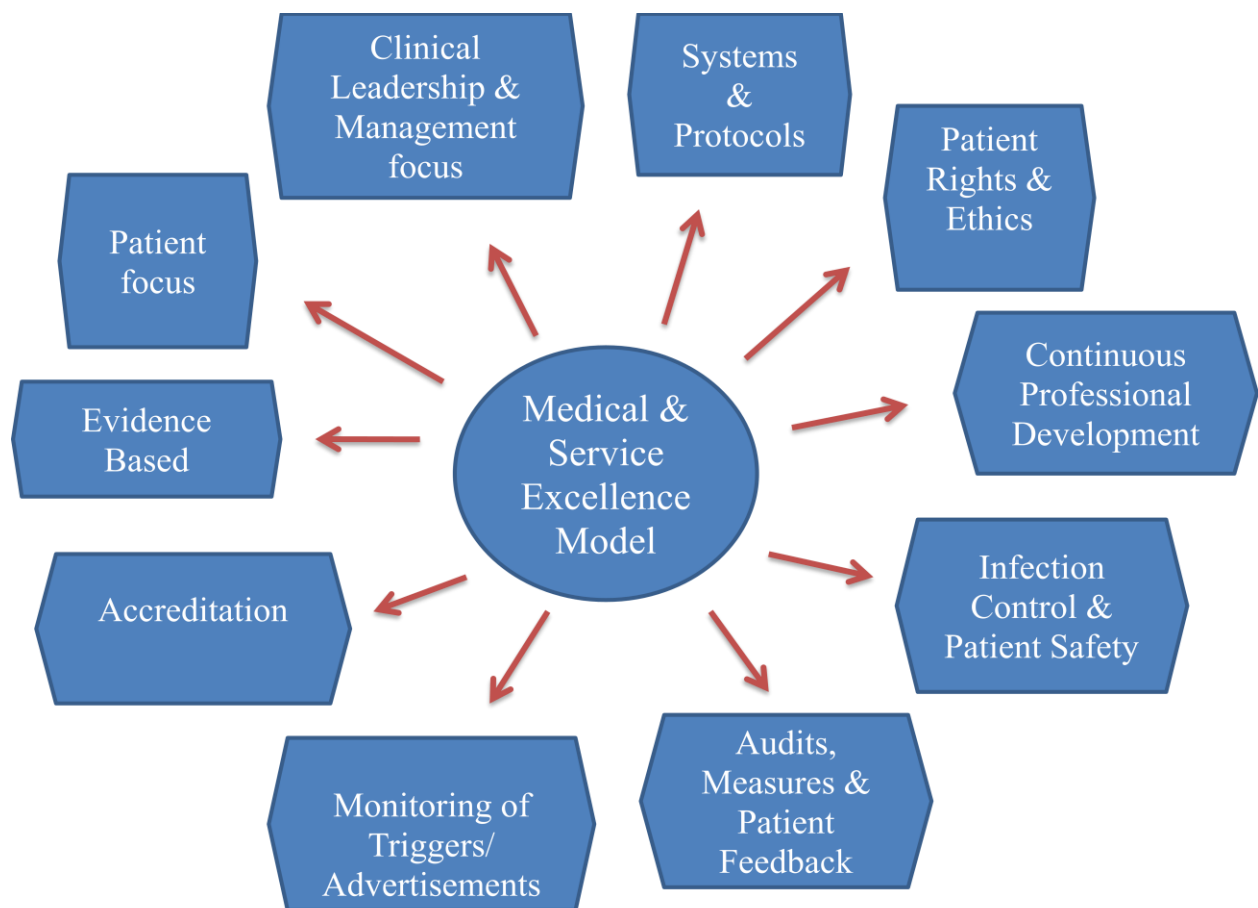
Secondary data was collected from:

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

OBSERVATIONAL LEARNING

INTRODUCTION

Max Healthcare follows a core of 'Patient Centred 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:

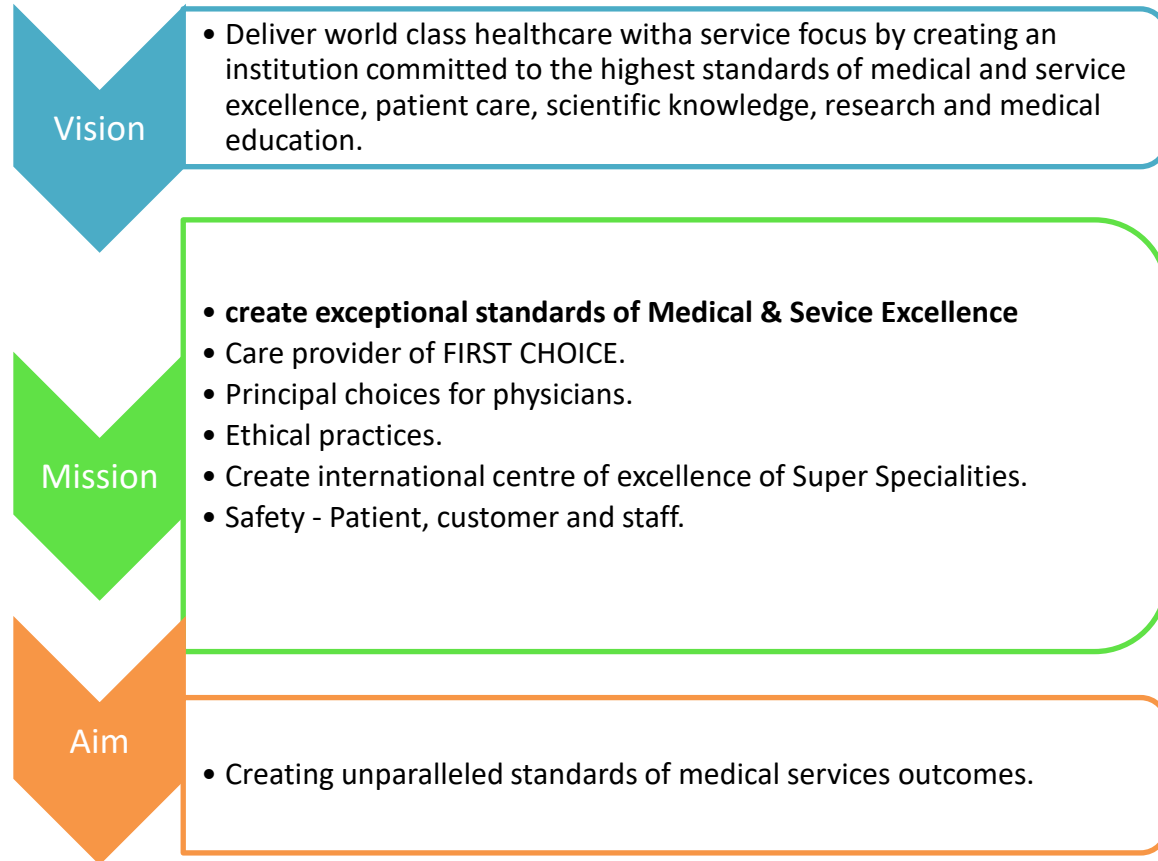
- Clinical governance
- Credentialing and clinical privileging of physicians & nurses
- Use of standardized, evidence based protocols
- Patient and staff safety
- Infection control
- A culture of audit and continuous professional development

Max India Group. Was invented as a group in 2000, from being manufacturing business it transformed into a service sector enterprise and entered into the “The business of Life”. It stands a multi business corporate, driven by the spirit of enterprise and focuses on people and service oriented business. It protects life through the Life Insurance subsidiary Max New York Life, a joint venture between Max India and New York Life. a fortune 100 company. ‘care for life’ through the healthcare company, Max Healthcare, a subsidiary of Max India Limited; ‘Enhance life’ through the Health Insurance Company, Max Bupa Insurance, a joint venture between Max India and Bupa Finance Plc., and ‘Improve Life’ through the Clinical Research Business, Max Neeman, a interest speciality Products manufacturing for packaging industry. As a group it has the manpower of over 80.000 people and serve over 3 Million customers. Also actively involved in social service through Max India Foundation. Committed to fostering an exclusive society, Max India Foundation spearheads the CSR initiatives of all groups companies and also partners with several reputable NGO’s.

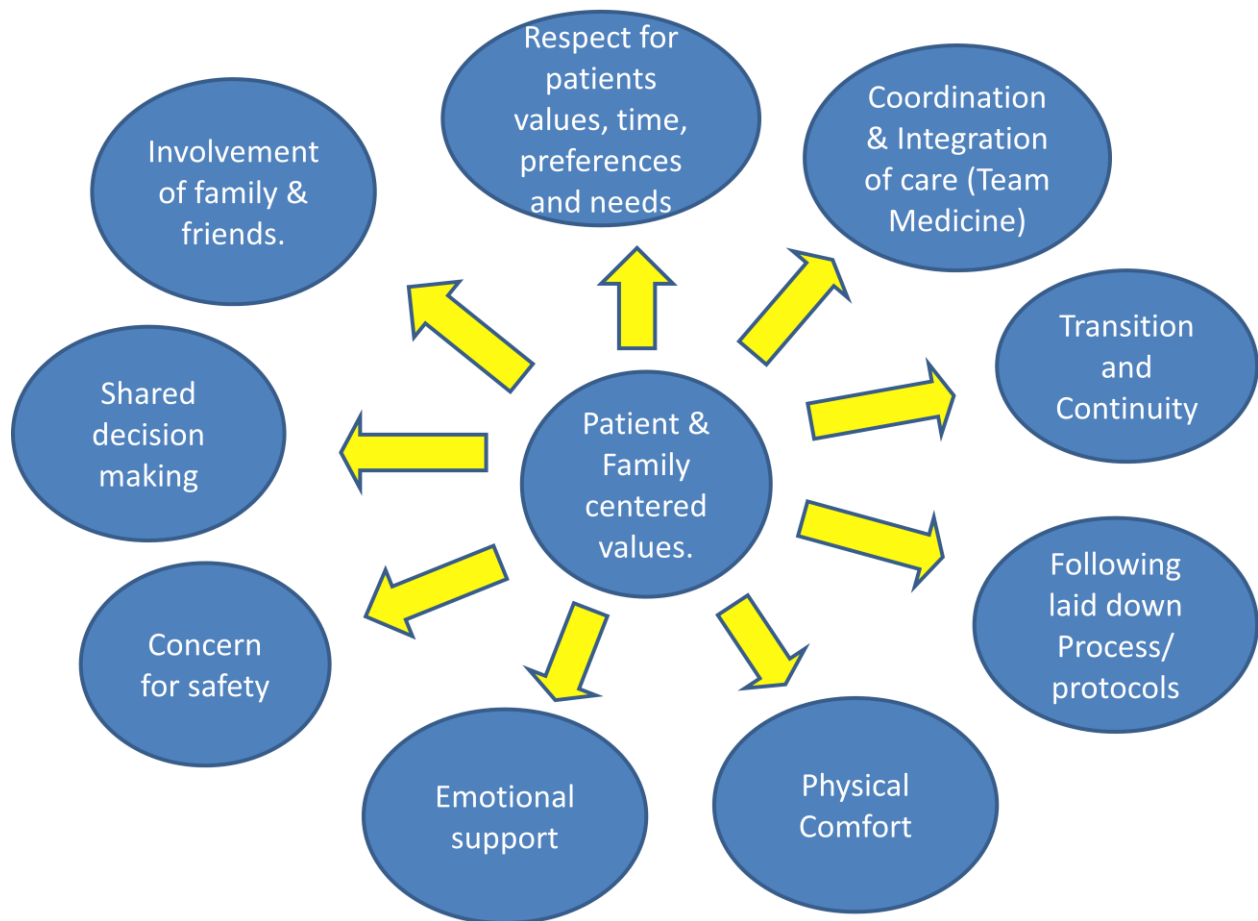
Max Healthcare commenced operations in 2001 and is India’s first provider of comprehensive, seamlessly integrated, world class healthcare services. It is primarily focused on the National Capital Region(NCR) of Delhi, and is well known on its way to become the region’s key healthcare provider in private sector.

Max DDN speciality – Cardiology, Neurosciences and Orthopaedics. Holds the best team of doctor’s in the three speciality zones all over Dehradun.

Vision, Mission and Aim of MHC :



MHC Patient & Family Centred values :



The branches of Max Healthcare –Max Hospital Saket East & South, Max Hospital Saket west, Max Hospital Patparganj, Max Hospital Panchsheel, Max Hospital Pitampura, Max Hospital Noida, Max Hospital Centre Panchsheel, Max Hospital Gurgaon, Max Hospital Shalimar Bagh, Max Hospital Dehradun, Max Hospital Mohali, Max Hospital Bhatinda.

HOSPITAL INFRASTRUCTURE

1. Lower basement

- Accident and Emergency
- Endoscopy
- Minor OT
- Radiology department
- Pathology department
- Mortuary
- Administration department
- IPD Pharmacy
- Housekeeping
- Biomedical Waste Management unit
- CSSD
- MRD
- Biomedical Department
- Staff canteen
- Engineering and Maintenance
- IT
- Security Control Room
- Call Centre
- Uniform Room
- Staff Changing areas

2. Ground Floor

- Main Reception
- IPD Admission, Discharge and billing
- Main OPD
- Central report collection centre
- OPD Pharmacy

- Cardiology OPD
- Neurosciences OPD
- Blood Bank
- Physiotherapy Unit
- Nuclear Medicine Unit
- Dental Unit
- Cafe Coffee Day & Cafe Prez (Out sourced)
- Waiting Area
- Audiometry room

3. First Floor

- OT's
- Labour room
- N.I.C.U., N.S.I.C.U., G.I.C.U., POST OPERATIVE I.C.U., C.C.U., C.T.V.S.I.C.U.,
- PAC ROOM
- CATH LAB
- Doctor's lounge
- I.C.U. waiting area

4. Second Floor

- M.I.C.U.
- Nursing station
- Training room
- Wards
 - Private rooms
 - Semi private rooms
 - Economy ward

5. Third Floor

- Wards
 - Private rooms
 - Semi private rooms
 - Economy ward
 - Day care beds
 - Oncology ward
 - Oncology OPD
 - Nephrology ward(Dialysis unit)

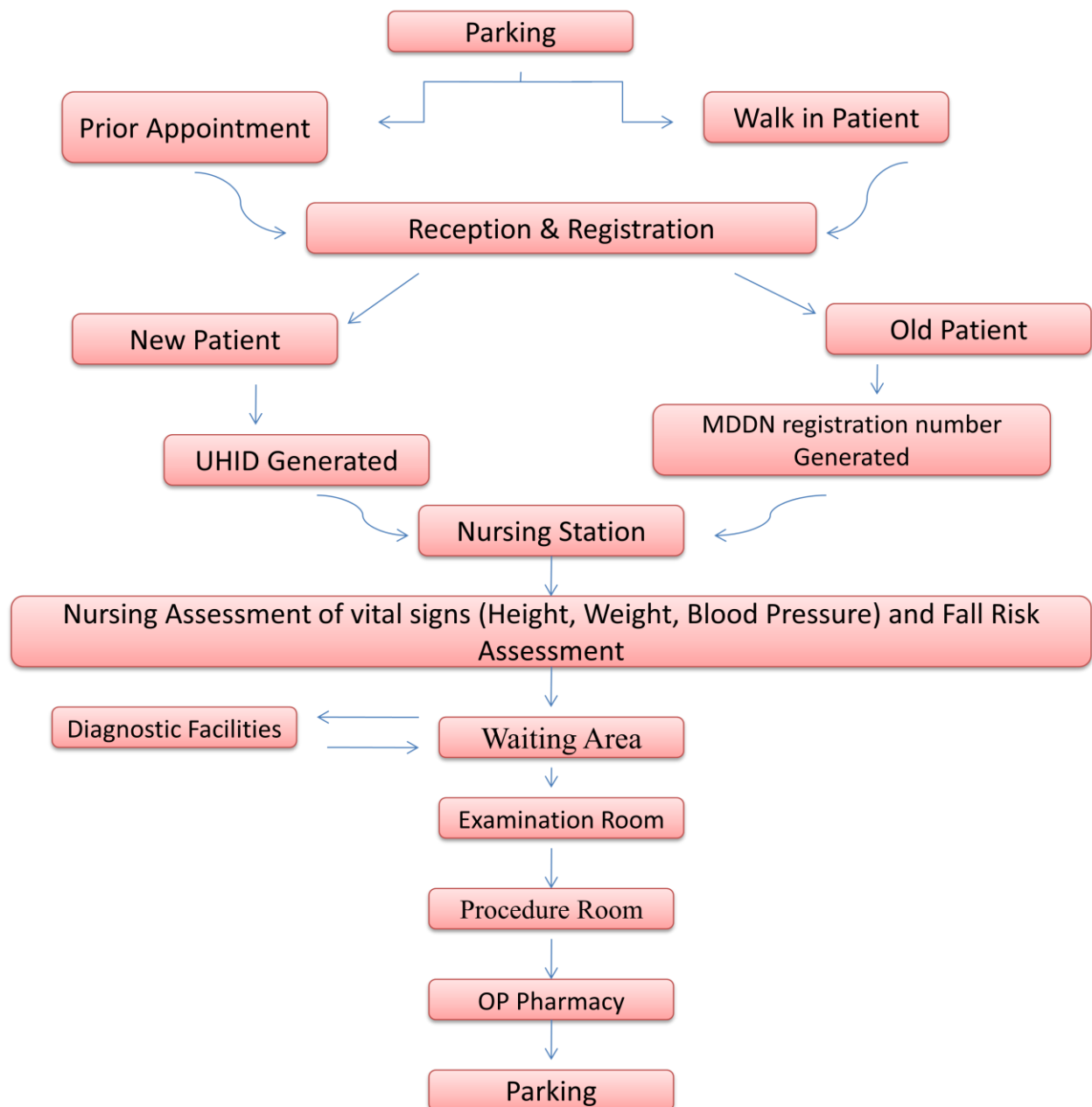
GENERAL FINDINGS

OUT-PATIENT DEPARTMENT

- Each INSTITUTE of Max Dehradun hospital has its own OPD area as well as IPD area / day-care area wherever applicable.
- Every OPD has a procedure room and its own Front Desk.
- Appointments are centralized and are recorded on the Hospital Information 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.
- OPD waiting area has the capacity to handle 70 -100 patients waiting.
- 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:



IN-PATIENT DEPARTMENT (IPD)

- IPD is distributed over three floors (1nd-3th) in the east wing of Max hospital including a total number of 205 beds.
- Every bedside has:
 - Bed number written at the top of every bed.
 - Room equipment checklist – side rails, Oxygen, Suction
 - Important Instructions

Outside the room :

- Consultant details and unit.
- The rooms available in IPD have the following structure of beds per room:
 - 4 in 1
 - 2 in 1
 - Single Room
- Every floor has a two nursing stations with
 - Information Board covering:
 - Designation & Contact numbers of
 - Duty doctor
 - Administration Staff
 - Support Staff
 - Nurses' names with shift timing and designation
 - 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
 - Medication rooms – 2 ;Pantry – 1
 - Records room
 - Biomedical Waste Disposal
- Process for admission & discharge of new patient to IPD:
 - IPD receives intimation call from the department from where patient is referred

- Duty doctor is informed
- Room is assigned by the front desk
- Patient is admitted and vitals are checked by the nursing staff
- Physical assessment is done
- History is taken
- Concerned doctor is informed and medications & instructions are entered in Computerized Patient Record System (CPRS), reviewed by IPD Pharmacy
- Patient bill is consolidated at IPD billing
- Discharge intimation given by doctor and processed by Nursing staff
- Clearance from pharmacy required
- Discharge process TAT = 40 minutes for cash payment patient
 - For corporate patients 2-3 hours
- Nurse to bed ratio = 1:4 or 1:6
- 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

EMERGENCY DEPARTMENT

Due to the unplanned nature of patient attendance, this department provide 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- 1 ACLS and 1 BLS.

Average length of stay of patients in Emergency is 4 hours. The shift time from Emergency to Ward, I.C.U. or to issue discharge is 65 minutes.

Response time:

- EMO response time <1 min
- Consultant response time <30 min
- Code blue response time <3min
- Ambulance response time <10 min

Infrastructure:

- Total 9 bedded Emergency
- Triage Area – 3 Beds
- Observation area – 6 beds
- One crash cart. Oxygen, Suction and Monitor attached with every bed, computer on wheels and one portable surgical light.
- Doctors work station-is located in the centre of the emergency area.
- One Store room- is located behind the reception. Medications are kept in another store room inside the Emergency Area (updated as per requirement). Narcotics are also available and kept in safe.
- Hospital information system and CPRS
- COWS(computer on wheels)
- Waiting area for patient's attendants is outside the department.

Staffing:

1. Consultant (Emergency medical officer)
2. 4 Junior Residents
3. Nurses : Male- 1 to 2
Female- 1 to 2
4. 2 personnel at reception
5. Paramedical staff for ambulance

6. 2 GDA(one male + one female)
7. Outsourced staff : security personnel.

OPERATION THEATRE:

The aim of department of anaesthesiology and OT facility is to provide the highest quality of care to patients undergoing various types of surgeries. The department is staffed with highly experienced and trained anaesthesiologist, surgeons, technicians, nurses and other support staff.. For each OT there are two scrub nurses and one circulating nurse. Protocols based on approach for quality pre-operative, intra-operative and post-operative and follow up care of the patients. The complex is divided into three zones: sterile, semi sterile and non-sterile zones. Complete services to the following surgical specialties are provided.

- Cardiac surgery
- Neuro surgery
- Onco surgery
- Orthopaedic surgery
- General surgery
- Gynaecology and obstetrics surgery
- Paediatric surgery
- GI surgery
- Uro surgery
- Plastic surgery
- ophthalmic and ENT surgery
- Transplantation surgeries

The OT complex has a pre and post-operative monitoring room for continuous monitoring of patients (recovery rooms). The facility includes 6OTs, 600 square feet area, pendants in all OTs and surgical control panels.

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
- Cath study

Other procedures are:

- Percutaneous Transluminal Coronary Angioplasty
- Peripheral Transluminal Angioplasty
- Radio Frequency Ablation
- Permanent Pacemaker Implantation
- Intra Cardiac Defibrillation
- Cardiac Resynchronisation Therapy Defibrillator Device
- Cardiac Resynchronisation Therapy Pacemaker
- Left and right sided pressure studies
- Closure of some congenital heart defect

Units of cath lab:

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

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

- Operation theatre's
- Cath recovery
- Coronary care
- I.C.U.'s (except M.I.C.U.)

Staffing:

- 4 interventional cardiologists
- 3-4- nurses
- 2-3 technicians
- 1 person from store

INTENSIVE CARE UNIT

The I.C.U. cater to patients with most severe and life-threatening illnesses and injuries requiring constant close monitoring and support from specialist equipment and medication to ensure normal bodily functions. The nurse patient ratio for critical patients is 1:1 and for stable patients is 1:2. The I.C.U. co-ordinates with CSSD, Laboratory and the Radiology department. Strict aseptic techniques are used. Pressure zones are created to control infection rate.

The I.C.U has highly dedicated and trained medical, nursing and allied staff. There is a system of closed I.C.U. The M.I.C.U. is located on the second floor, the other I.C.U.'s are located on the first floor at some distance with the operation theatre's.

Bed Capacity in each ICU

<u>I.C.U.</u>	<u>BED CAPACITY IN I.C.U.</u>
M.I.C.U.	10
N.I.C.U.	8
CTVS I.C.U.	5
G.I.C.U.	6
N.S.I.C.U.	8
C.C.U	7
POST OPERATIVE I.C.U.	5

Each I.C.U. has an isolation bed.

Staffing in – I.C.U.

- Critical care doctors
 - ✓ Junior Residents (12 hour shift)

- Intensive care nursing staff
 - ✓ Nurse in charge (8 hours shift)
 - ✓ Team leader (8 hours shift)
 - ✓ Junior nursing staff

- Allied staff
 - ✓ Physiotherapists
 - ✓ Dieticians
 - ✓ Biomedical Engineers
 - ✓ General Duty Assistants

Shift timings:**I.C.U. Consultants –**

Morning consulting is done directly from the OPD and for night shift – 8 pm to 8 am(one consultant) scheduled followed for all I.C.U.'s except M.I.C.U.

For M.I.C.U. - 2 shifts; 9 am – 5 pm and 5 pm – 9 am.

For JR's

- ✓ Morning : 8 am - 2 pm
- ✓ Evening : 2 pm - 8 pm
- ✓ Night : 8 pm - 8 am

For nurses, GDA and housekeeping staff

- ✓ Morning : 8 am - 2 pm
- ✓ Evening : 2 pm - 8 pm
- ✓ Night : 8 pm - 8 am

Visiting hours: 11 am – 11:30 am;5- 5:30 pm

- ✓ Only 1 relative at a time is allowed

Records and Registers

- Admission and discharge register
- Handing and Taking over/Team leader sheet
- Assignment book
- Leave book
- O.T booking register
- Critical care flow sheet
- Narcotic drug register.

Equipment's:

MONITORING EQUIPMENT	CARDIOVASCULAR THERAPHY	RESPIRATORY THERAPY	LABORATORY EQUIPMENT
Bed side and Central Monitors	CPR Trolley	Ventilators	Blood gas Analyser
ECG Recorder	Defibrillators	Intubation/ Tracheostomy Trolley	(only n N.I.C.U. and M.I.C.U.)
Pulse Oximeter	Infusion Pumps and Syringes	Nebulisers	
Spirometer			
ECG Monitor			
Blood Glucose Meter			

Miscellaneous Equipment

- Crash Cart
- Dressing trolley
- Procedure trolley

ONCOLOGY DEPARTMENT

Oncology is a branch of medicine that deals with cancer.

Oncology in MAX is concerned with:

- The diagnosis of any cancer in a person (pathology)
- Therapy (e.g. surgery, chemotherapy, radiotherapy and other modalities)
- Follow-up of cancer patients after successful treatment.
- Palliative care of patients with terminal malignancies.
- Ethical questions surrounding cancer care.

The Oncology Day Ward/Day Care (ODW) as the word implies, provides care for people who need to receive treatment as day cases and do not require staying in hospital as inpatients. Its main function is to assess and treat the patients who are receiving chemotherapy.

In the Oncology Day Care 4 beds and 4 for admission purpose are available. Before chemotherapy is commenced, the patient is assessed to make sure that he/she understands and consents to the planned treatment. Blood tests are performed to ensure that their levels are at the required limits. The patient's weight and height needs to be measured as most chemotherapy doses are calculated according to one's body surface area.

DEPARTMENT OF LAB SERVICES

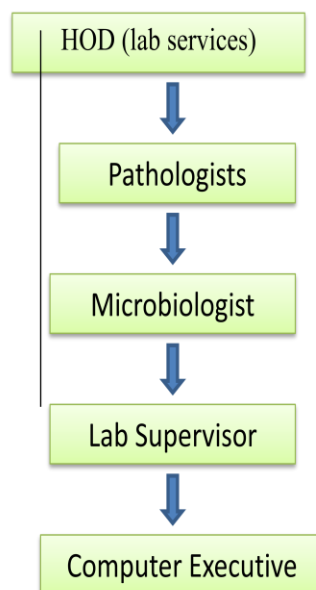
INTRODUCTION-

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***. The sample collection room is located in the blood bank department whereas the tests are conducted in pathology department located in the basement.

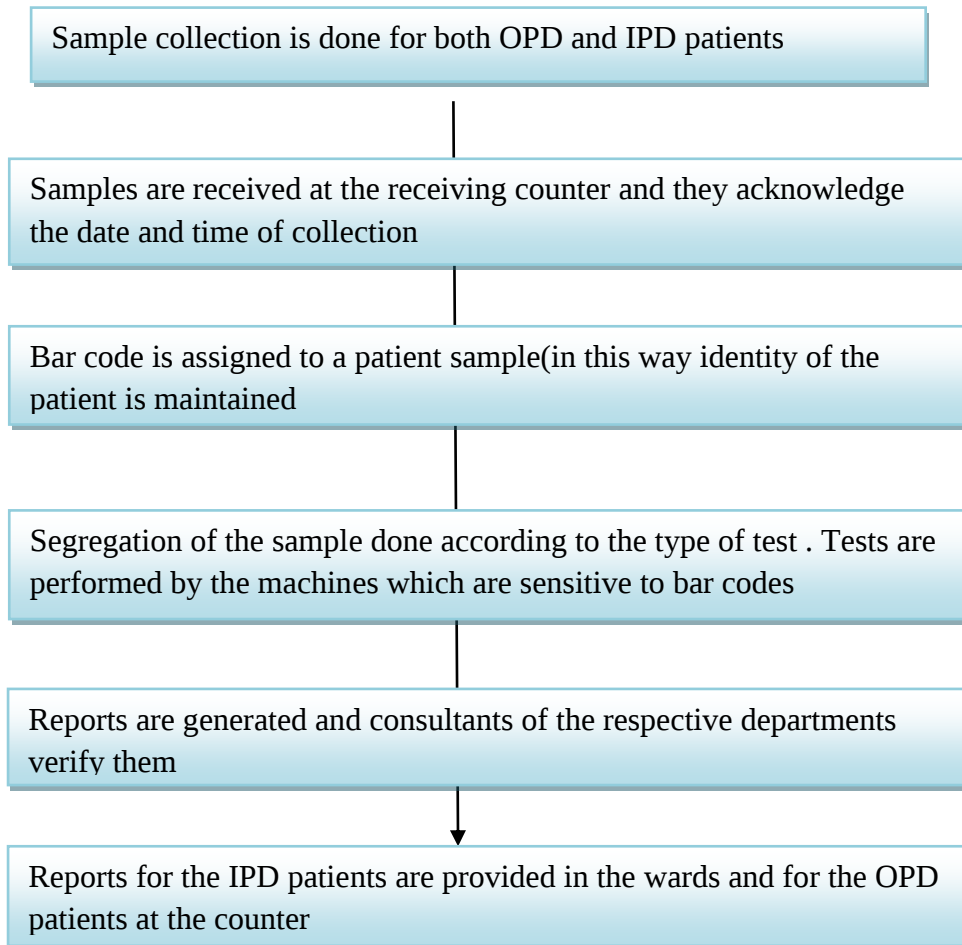
LABORATORY COMPRISES OF THE FOLLOWING DEPARTMENTS-

- Biochemistry-is covered from Saket branch.
- Haematology
- Histopathology- is covered from Saket branch.
- Clinical pathology
- Serology
- Microbiology

HIERARCHY-



PROCESS FLOW-



- The receiving of the sample to the department is maintained in the register when sent from other departments such as IPD and Emergency etc, record is also maintained in the HIS for each and every test performed. The reports are sent to the OPD counter from where they are received by the patients. the billing is also done at the OPD.

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 in the basement of the hospital, except nuclear medicine which is located on the ground floor.

Procedures conducted -

(1) Routine X-Ray studies

- (a) Plain - e.g. chest, spine, etc
- (b) Routine fluoroscopic procedures e.g. Barium studies

Number of procedures done per day – 40-50 (approx)

(2) Routine ultrasound studies

- (a) Ultrasonography - e.g. Abdomen, Pelvis
- (b) Doppler studies peripheral (B/W & colour) e.g. 2 D echo, vascular studies, etc

Number of procedures done per day – 10-15 (approx)

3) Mammography

4) Dexascan

5) Special imaging techniques

(a) CT Scan (Computerized Axial Tomography) -10 per day (approx)

(b) MRI (Magnetic Resonance Imaging) -10-12 per day (approx)

Consist of:-

1) Reception:-Counter for appointment and billing and report collection

2) Waiting area

3) Diagnostic room

4) Changing room

6) Film processing room

7) Radiologist room

There is 1 MRI and one CT scan machine in the department.

Timings for OPD patients:- 8:00 am to 8:00 pm

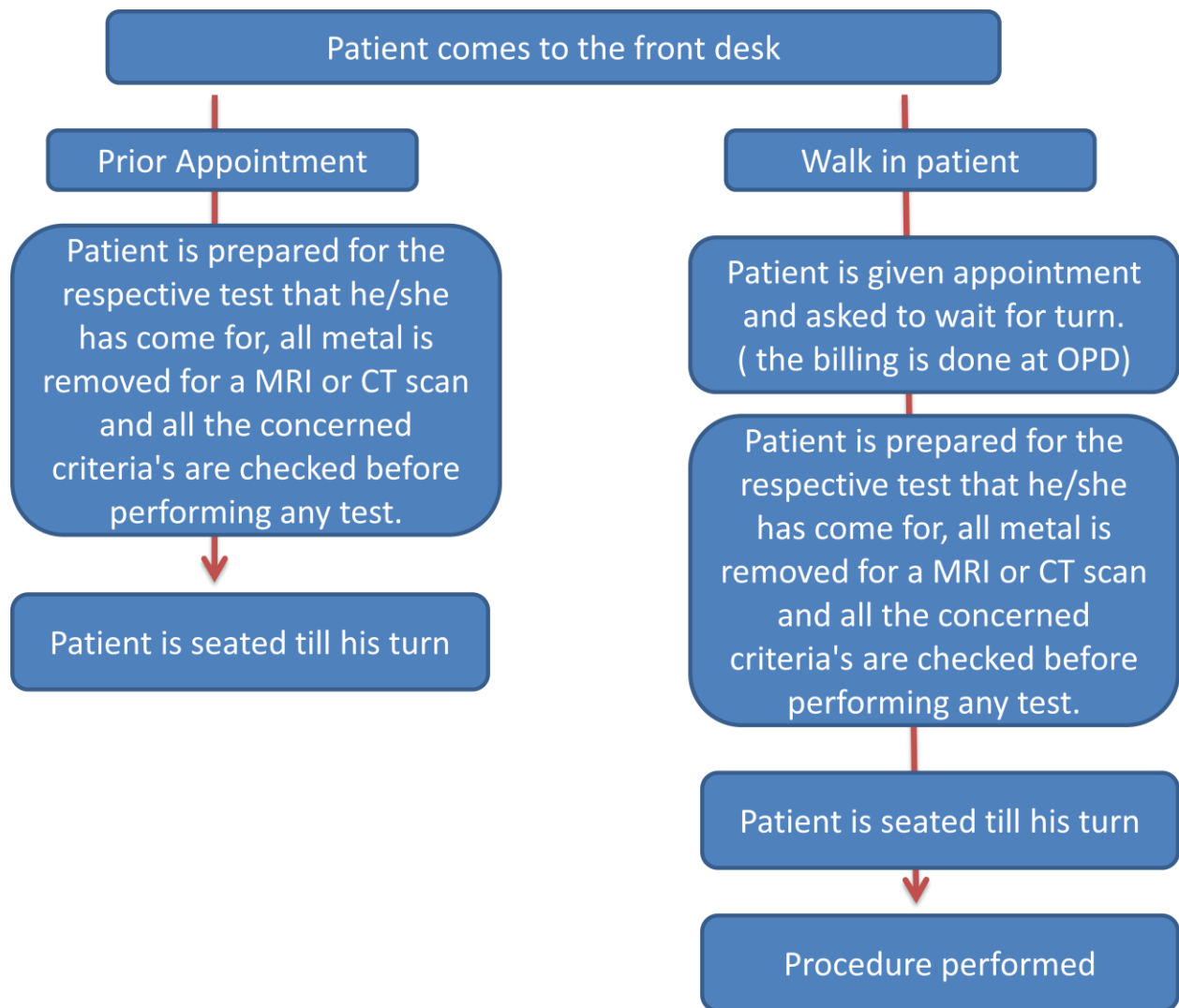
In between this IPD and Emergency patients are also taken.

Main OPD hours: - 8:00 am to 8:00 pm and after that only IPD and Emergency patients are taken

Report collection: - If the scan is done before 12pm, reports are ready by the evening and can be collected in the same evening. And if done after 12pm, report will be delivered next day.

Emergency patients as well as I.C.U. patients are given priority.

Process flow in Radiology Department –



BLOOD BANK

Max super specialty hospital has its own blood bank. All blood groups are available. Patient arranges blood through his relatives or any friend to give replacement (in most of the cases). Blood bank consists of sample collection area too at MSSH, DDN.

Blood bank area is divided into following sections :

- The front desk- Where the patient's record is maintained and entry is done for any new patient. The height, weight etc. is checked here. Blood is also issued from here.

- Diagnostic room – Where the collected sample is tested further so that in case of impurity can be discarded.
- Blood collection room – The donor is seated here on a donor chair attached with the necessities while donating blood.
- Storage room – All the components are separated and stored here at a specific temperature and maintained by the supervisor.
- Dirty room- All the discarded items are thrown here including blood as per the bio medical waste management ways, cleaned by the house keeping in every two hours or as per requirement.

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

CENTRAL STERILE SUPPLY DEPARTMENT

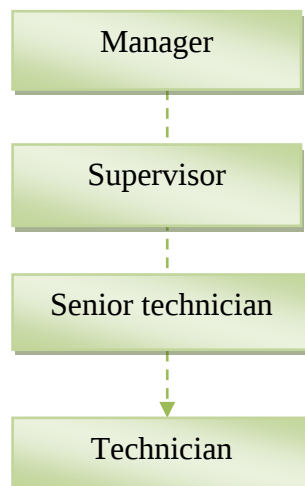
The central sterile supply department (CSSD) plays a key role in providing the items required to deliver quality patient care. Centralizing the reprocessing of reusable devices helps ensure uniform standards of practice, while also providing for improved workflow (soiled, to clean, to sterile). CSSD is the heart of hospital infection control and the most important unit of clinical support services. CSSD's main functions are cleaning and drying, assembly, packing, sterilizing, storing and distributing instruments (both multi use and single use devices), as per well delineated protocols and standardized procedures.

INFRASTRUCTURE

It is divided into 3 zones

- Decontamination/ dirty Zone
- Clean/ Semi Sterile Zone
- Sterile Zone

HIERARCHY OF THE DEPARTMENT-



- The CSSD department has a lift connection, it sends the kits and equipments as per the requirement through lift on each floor.
- There is also an attached linen room in which the kits are assembled and clean linens are kept.

- Process flow –



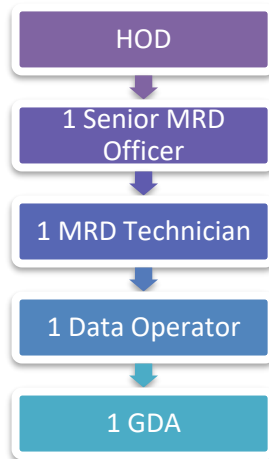
- Instruments used for the washing of the instruments are fully automated and according to the European standards.
- For packing of the instruments medical grade paper and cloths are used which are specifically designed for the purpose(they have a zig -zag pattern)
- Once sterilized and packed instrument can be used within 6 months.

EQUIPMENT LIST-

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

MEDICAL RECORD DEPARTMENT

- The main functions of the department are :
 - 1) Storing file for future reference.
 - 2) Research.
- Staff:



- Open and close audit is done of all files before keeping them storage.
- The arrangement of files is done in following ways-
 - ✓ Year wise and UHID wise.
 - ✓ Also on the basis of their type :
 - a) Regular files
 - b) LAMA files
 - c) MLC files
 - d) OT recovery files
 - e) Chemotherapy files
 - f) Dialysis files
- All types of forms and certificates are stored in this department along with the patient files.

- All files are stored in the department for the following time period:
 - ✓ LAMA- 5 Years
 - ✓ Death & MLC files 10 years
 - ✓ Regular files-3-5years
- ICD- coding is done for storing files followed from the ICD manual.(no colour coding is used).
- This department has to notify Malsi Gaon about following things on regular basis:
 - ✓ Birth and death report (once in 21 days)
 - ✓ Notifiable disease which includes cholera, dengue, plague, yellow fever, TB, polio, meningococcal meningitis, leptospirosis, viral encephalitis (once in a week) to the CMO and Head Office, Delhi.
 - ✓ Maternal mortality (once in a month) to the CMO and Head Office, Delhi.
 - ✓ MTP &PNDT (once in a month) to the CMO and Head Office, Delhi.
- For retrieval of files hospital norms and procedures are followed.

PHARMACY -

Max pharmacy is self-owned with Central Pharmacy situated at corporate office, Okhla. There is 1In-patient pharmacy store and 1Out-patient store in the hospital.

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 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 coloured sound alike and pink coloured 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)
- V. BULK MEDICINE.

HOUSE KEEPING:

The objective of housekeeping is exceptional standards of cleanliness, sanitation and hygiene of the entire hospital. Housekeeping services are outsourced to PEFMS services.

The staffs include:

- Housekeeping manager
- Assistant manager
- Housekeeping executives
- Supervisors
- Houseboys & house girls

Functions of housekeeping department are:

- General facility cleaning
 - ✓ Routine cleaning of patient's rooms
 - ✓ Patient's common areas
 - ✓ Washrooms
 - ✓ OT
 - ✓ Laboratory
 - ✓ Consultant's office
 - ✓ Glass windows and doors
 - ✓ Ceiling etc.
- Handling of biomedical waste.
- Pest control-It includes spraying every 24 hours for mosquitoes, cockroaches, flies, rats, lizards and termites.
- Garbage disposal- The housekeeping staff collects garbage collected in specified color coded bags from all garbage bins existing inside the hospital premises and disposes the garbage at the designated area within the hospital, which is the biomedical waste room. The general waste is sold to the junk dealer and healthcare waste is handed over to government approved vendor "synergy waste management".
- Horticulture- It is responsible for maintenance of in house plants & terrace gardens, flower arrangement during hospital functions.

BIOMEDICAL ENGINEERING

- The department of biomedical engineering deals with the purchase, installation & commissioning, training on operating, handling and maintenance of all the medical equipments in all the areas and departments of the hospital.
- Also deals with the in-house calibration of equipments.
- Gas manifolds are also handled by the biomedical department.

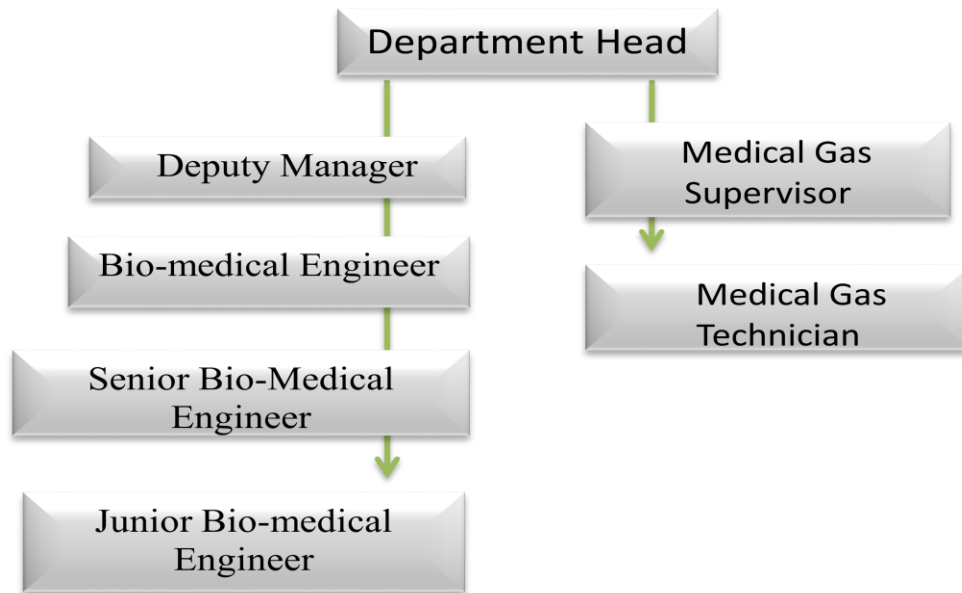
The areas included are:

- All wards
- All operation theatres
- All ICUs
- Patient rooms
- Radiology
- Triage
- Blood Bank
- Nuclear medicine
- Cardiac non invasive diagnostics
- Medical Gases
- Medical Furniture
- LINAC

Objectives:

- To maintain assets list
- To conduct preventive maintenance for biomedical equipments.
- To ensure timely repair of biomedical equipments medical furniture.
- To conduct calibration/validation of biomedical equipments.
- Preventive maintenance for Medical Gas equipments.

Organizational 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 in the basement Max.

The security is outsourced at Max DDN.

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
- Handling bodies from the mortuary to either the family or to the police (in case of MLC).

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.

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.

CALL CENTRE

Call centre of Max hospital, DDN operates at 24*7. 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: 0135-6673000

FOOD AND BEVERAGES

Introduction

Food and beverages department deals with supply of food to the patients sometimes to the patients attendant and during the various conferences and meeting in the organization.

Although food and beverages dept at the max healthcare centre is outsourced to the Sodexo food services but controlling power is with **max employee**.

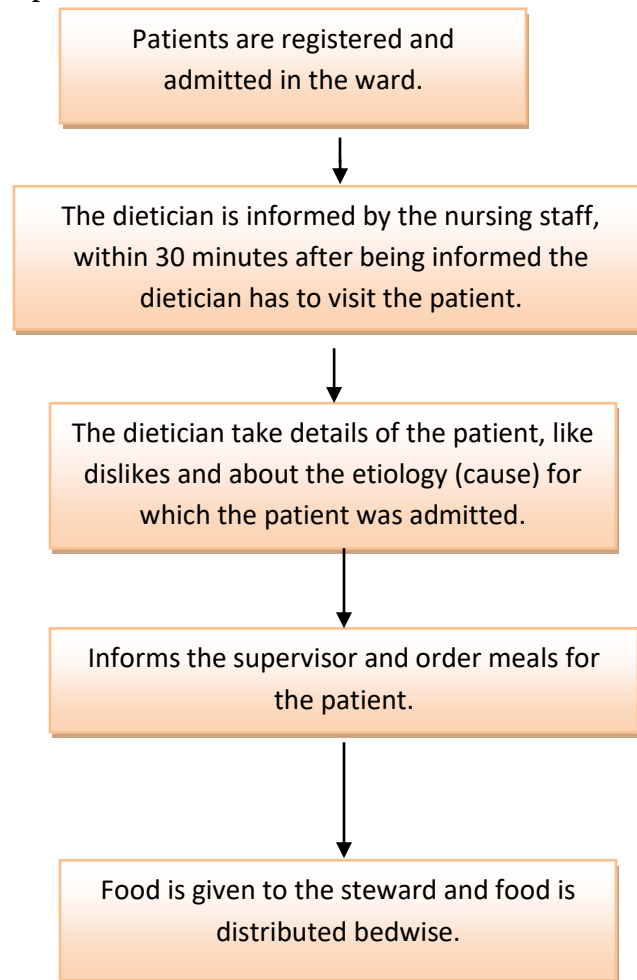
- The department consist of 15 chefs are from sodexo,35 stewards from sodexo.?
- There are 5 Supervisors in DDN Max.
- Dietician -3 dietician 1 on pay roll.
- The task of the sodexo is to provide food to ipd patients, max staff and visitors.
- Other then sodexo there are various food outlets which are as follows
- Café coffee day

- Cafe prez

Royalties are being charged from these outlets

Process flow

Supply of food to the patients



Time table for the diet of the patient

7-8AM	Breakfast
10:30-11:30AM	Soup/Beverages
1-3PM	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 want to have something extra, those can be provided to the patient after consulting dietician, but for an extra charge.

Different menu offered are –

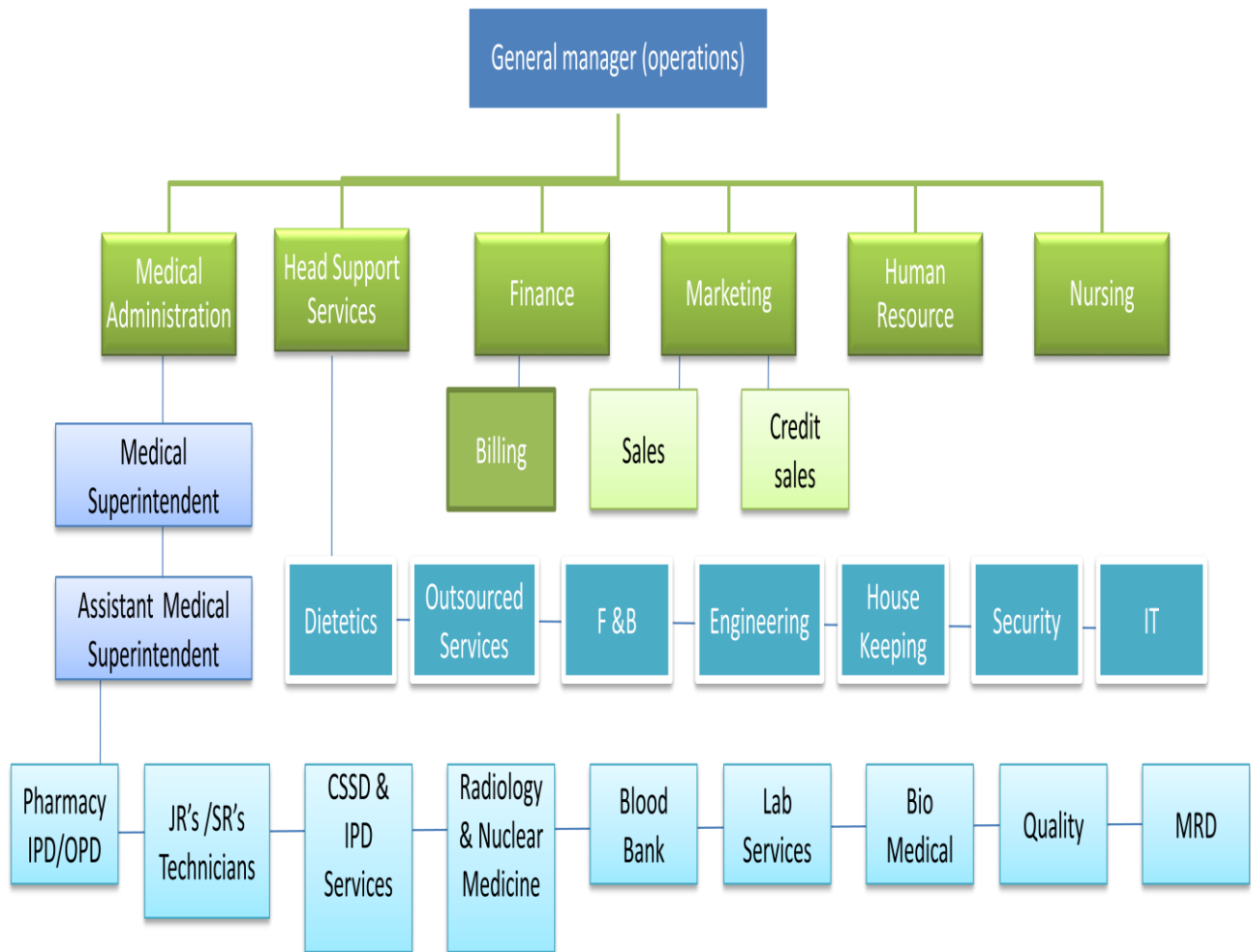
- Indian menu
- Afghani menu for middle east patients.
- Continental menu
- No onion and no garlic menu for Jain patients

ADMINISTRATION –

Health Administration or **Healthcare Administration** is the field relating to leadership, management, and administration of public health systems, health care systems, hospitals, and hospital networks. Health care administrators are considered health care professionals.

Health systems management ensures that specific outcomes are attained, that departments within a health facility are running smoothly, that the right people are in the right jobs, that people know what is expected of them, that resources are used efficiently and that all departments are working towards a common goal.

Hierarchy



Project Topic

Quality Care Indicators

Emergency department MSSH-Dehradun



BACKGROUND –

An **emergency department (ED)**, also known as **accident & emergency (A&E)**, **emergency room (ER)**, or **casualty department**, is a medical treatment facility specializing in emergency medicine, that is, acute care of patients who present without prior appointment, either by their own means or by ambulance. The emergency department is usually found in a hospital or other primary care center.

Due to the unplanned nature of patient attendance, the department must provide initial treatment for a broad spectrum of illnesses and injuries, some of which may be life-threatening and require immediate attention. In some countries, emergency departments have become important entry points for those without other means of access to medical care.

The emergency departments of most hospitals operate 24 hours a day, although staffing levels may be varied in an attempt to reflect patient volume.

Accident services were already provided by workmen's compensation plans, railway companies, and municipalities in Europe and the United States by the late mid-nineteenth century, but the first specialized trauma care center in the world was opened in 1911 in the United States at the [University of Louisville](#) Hospital in [Louisville, Kentucky](#), and was developed by surgeon Arnold Griswold during the 1930s. Griswold also equipped police and fire vehicles with medical supplies and trained officers to give emergency care while en route to the hospital.

The emergency department has total of 9 beds, 3 in the triage area and 6 as observational beds each with the bed side monitors and oxygen supply. Has one crash cart, two defibrillators , 2 portable ventilators and one portable surgical light. Has a nursing station and doctors desk inside the emergency area and a front desk management outside the department.

.

Review of literature -

Emergency Department congestion is a crucial phenomenon that provokes serious problems in the performance of healthcare systems. Researchers have tried to bring into light the causes of these problems and aim to find solutions to this important issue. This survey summarizes the articles that propose ways to improve the key performance indicators related to the emergency departments with the use of operations research tools. The key performance indicators offer the ability to evaluate the system in a way that responds to the basic questions posed by the most significant stakeholders, such as healthcare policy makers, patients and employees. Operations research tools are divided into two categories: simulation and analytical methods (queuing and game theory, linear programming, statistical analysis, etc.), which differ mainly in their applicability in certain systems and in their ability to capture the data of a system. The articles studied either propose a method that ameliorates the performance of the ED (e.g. decreasing the waiting time of patients by a certain percentage or time period) or introduce a formula that can assist policy makers to optimize the quality of service of EDs in general.

One of the medical sectors that have been seriously damaged are the Emergency Departments (EDs). The inability of the ED resources to cope with the rapid changes observed in demand leads to high levels of congestion in the ED waiting rooms. Scarcity is observed both in resources able to change in the short term, such as nurses and physicians, as well as resources that are rather fixed, such as bed capacity. The above problem is caused because of the random arrivals of patients in the EDs as well as the random treatment duration; in an ideal world with perfect information about patients' arrivals and treatment times, it would be feasible to allocate the exact amount of resources required for the above service. (Shari J. Welch)

Need to address emergency department performance -

There are several reasons why addressing emergency department (ED) performance should be at the forefront of the organization's improvement efforts:

1. ED performance compromises care quality.
2. Affects patient satisfaction.
3. Influences patient flow to the organization.
4. Influences community trust.
5. ED crowding becomes one problem with minimum ED performance.

Emergency Protocols :

The department of Emergency, Max Hospital provides urgent care to acutely ill patients. The department has been designed to deliver emergency services clearly and persistently and measurably to ensure :

- Easy accessibility
- Professional delivery of services
- Consistent information and response at each stage of treatment.
- Confidentiality and privacy.
- Or : if the centre has inadequate facilities to treat the condition, provide stabilization and prompt and safe transfer to facility that can.

GOAL –

The goal of Max Emergencies into integrate but clinical practices given in best possible setting and rapidly to safeguard the health of patient.

The measures of standards of best care will hinge on :

- Reduction of overall patient journey time.
- Reduction of process variability within the emergency department.
- Improve the patients, relatives, careers and staff experience.

The Emergency treatment guidelines provide a framework and reference point for EMS personnel. The intent is to establish an acceptable standard for managing patients who are ill or injured. The guidelines have been reviewed by a variety of physicians. EMS personnel's and others involved in care of patients in the EMS environment. While every effort has been made to ensure the guidelines are medically sound, it is inevitable that medical care will evolve. Every effort will be made to maintain these guidelines so they reflect sound paramedical practice.

- Different emergencies have different protocols for treatment:

- **Cardiac arrest**

Cardiac arrest may occur in the ED/A&E or a patient may be transported by ambulance to the emergency department already in this state. Treatment is basic life support and advanced life support as taught in advanced life support and advanced cardiac life support courses. This is an immediately life-threatening condition which requires immediate action in salvageable cases.

STEMI	NON - STEMI
• Cardiologist and Cath lab informed.	• Cardiologists informed.
• Blood sample taken.	• Disprin 325mg, Clopidogel 600mg.

Primary PTCA protocol.	Nitroglycerine if there is no Hypotension.
Part prepared.	Injection Morphine 2-4mg IV, Injection Perinorm Metaclopramide Beta Blocker.
In consultation with cardiologist.	Blood samples Cardiac Enzyme Troponin-I.
Total 20 – 30 minutes.	Echo Cardiography, JC Cardiology Consultant.
	Admission in CCU (45-60 minutes)

- STROKE Management –**

- Assess ABC's and vital signs and stabilize. Note the time of onset of first symptom either from the patients or attendants examination of the head and neck may reveal signs and symptoms of trauma or seizure activity(contusions, tongue lacerations), carotid diseases (bruits), congestive heart failure (raised JVP-jugular venous pressure). Cardiac examination may identify Myocardial infarctions Valvular problems, Arrhythmias.
- Provide oxygen if Hypoxemic.
- Check RBS(random blood sugar) and treat if indicated.
- Obtain IV(intra venous) access & obtain Blood sample (CBC-complete blood count,Electrolytes,BUN-blood urea nitrogen, Creatinine, PT-prothrombin time, PTT-partial thromboplastin time, fibrinogen).
- Insert two large peripheral IV lines.
- Activate STROKE TEAM.
- Order emergent CT(computerized tomography) scan of Brain.
- Obtain 12 lead ECG's.
- Obtain urine for b-HCG in all women of child bearing age.

- **Trauma**

Physical trauma

Major trauma, the term for patients with multiple injuries, often from a road traffic accident or a major fall, is initially handled in the Emergency Department. However, trauma is a separate (surgical) specialty from emergency medicine (which is a medical specialty, and has certifications in the United States from the American Board of Emergency Medicine).

Trauma is treated by a trauma team who have been trained using the principles taught in the internationally recognized Advanced Trauma Life Support (ATLS) course of the American College of Surgeons.

The services that are provided in an emergency department can range from x-rays and the setting of broken bones to those of a full-scale trauma centre. A patient's chance of survival is greatly improved if the patient receives definitive treatment (i.e. surgery or reperfusion) within one hour of an accident (such as a car accident) or onset of acute illness (such as a heart attack). This critical time frame is commonly known as the "golden hour".

- **Asthma and COPD**

Acute exacerbations of chronic respiratory diseases, mainly asthma and chronic obstructive pulmonary disease (COPD), are assessed as emergencies and treated with oxygen therapy, bronchodilators, steroids or theophylline, have an urgent chest X-ray and arterial blood gases and are referred for intensive care if necessary. Noninvasive ventilation in the ED has reduced the requirement for tracheal intubation in many cases of severe exacerbations of COPD.

FIRST RESPONDER –

- a) Start O₂ to keep SPO₂ > 90%.
- b) Call for help (RRT in ward / senior physician if in ED/ ICU)
- c) Initiate Monitoring : Cardiac (HR,BP, ECG) and pulse oxymetry.
- d) Ensure Intravenous Access.
- e) Obtain ABG and call for CXR.
- f) Airway trolley – Brought to bedside.
- g) Focused resp, cardiac and neurological examination.
- h) Optimize Airway, Breathing and Circulation – Resuscitate if required.
- i) Search for rapidly reversible cause (Tension pneumothorax, foreign body)
- j) Do acute intervention if required – Nebulisation.
- k) Relieve tension Pneumothorax.
- l) BNV/ NIV
- m) Intubation and ventilation.
- n) Move patient to ICU if in ward(once optimized enough to be shifted).
- o) Documents : events/ provisional diagnosis/ treatment plan.

The main aim remains to stabilize the patient and seek for best healthcare. The upper limit of time to ensure attend and stabilize the patient remains 30 minutes in the emergency departments for each case, later varies from the degree of seriousness, also the upper limit of stay if patient in emergency at Max Hospital, DDN remains 65 minutes.

Research Questions –

- How to improve the turn around time of cross consultation in ER department?

Objectives –

- To assess the time lag between ordering and consultation of the cross referral in emergency department.
- To make necessary recommendations in improving the same.

Research Methodology –

Area of Study – Emergency Department, MSSH-DDN

Study Period – April 20,2015 – 20,May2015

Study Type – Descriptive study

Sample Size – Sample of 50 patients were taken between the study time period.

(exclusion – only patients in which consulting department were needed were recorded, patient sent LAMA or DOPR were not recorded, if the patient left the hospital before the specialty department reviewed them the entries were not recorded, if the patient was brought dead entries were not recorded.)

Data Collection – Data was collected via direct observation in the Emergency Department of MSSH,DDN in between the time of 10:00 am to 6:00 pm.

Data analysis – Done with the aid of MS-Excel sheets. The data was entered in sheets equipment wise and then analyzed with the help of graphs.

Data Analysis and Interpretation –

Data was collected on the following parameters :

- a) Time when the patient entered the hospital was recorded.
- b) Time when the specialty department was informed was recorded.
- c) Time when the patient was seen by the specialty department was recorded.
- d) Time when patient was shifted to ward, I.C.U. or discharged from the time specialty department had reviewed the patient was recorded.
- e) Time taken by in between procedures when patient had stayed in Emergency Department such as diagnostic tests, digital entry of the patient or any other procedure involved were observed to get a detailed knowledge in the study topic.
- f) The data was recorded from 10:00 am to 6:00 pm of working hours.

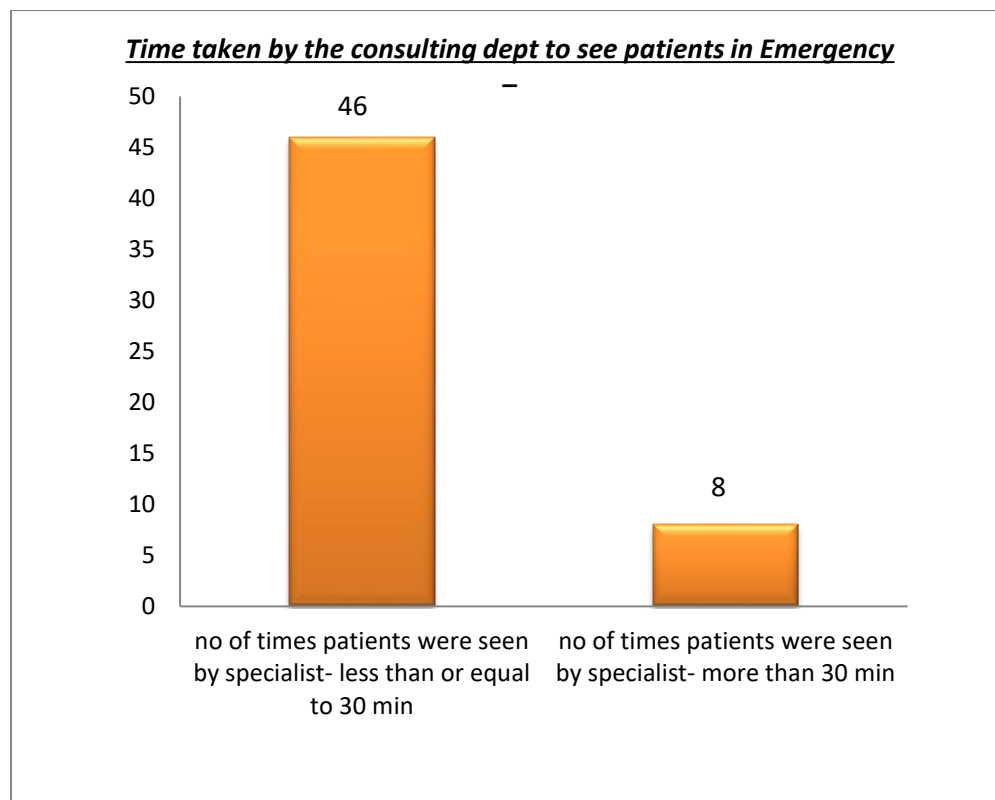
Data was analyzed on the following parameters :

- I. Minimum, Average and Maximum time taken by the specialty department to review the patient in the emergency department.
- II. The policy followed in MSSH Dehradun for a specialty department to review a patient is that – the specialist should see the patient in 30 minutes from the time informed. So data was analyzed on two basis –
 - Less than or equal to 30 minutes
 - More than 30 minutes.
- III. The policy followed in MSSH Dehradun in ER department - time taken to shift a patient to the respective category i.e Ward, I.C.U. or to discharge a patient is 65 minutes. So data was analyzed on two basis –
 - Less than or equal to 65 minutes
 - More than 65 minutes.

- IV. Minimum, Average and Maximum time taken by the ER department to shift the patient to the respective category i.e Ward, I.C.U. or to discharge a patient.
- Following is the representation of data in graphs charts and pie charts according to the given points for analysis.

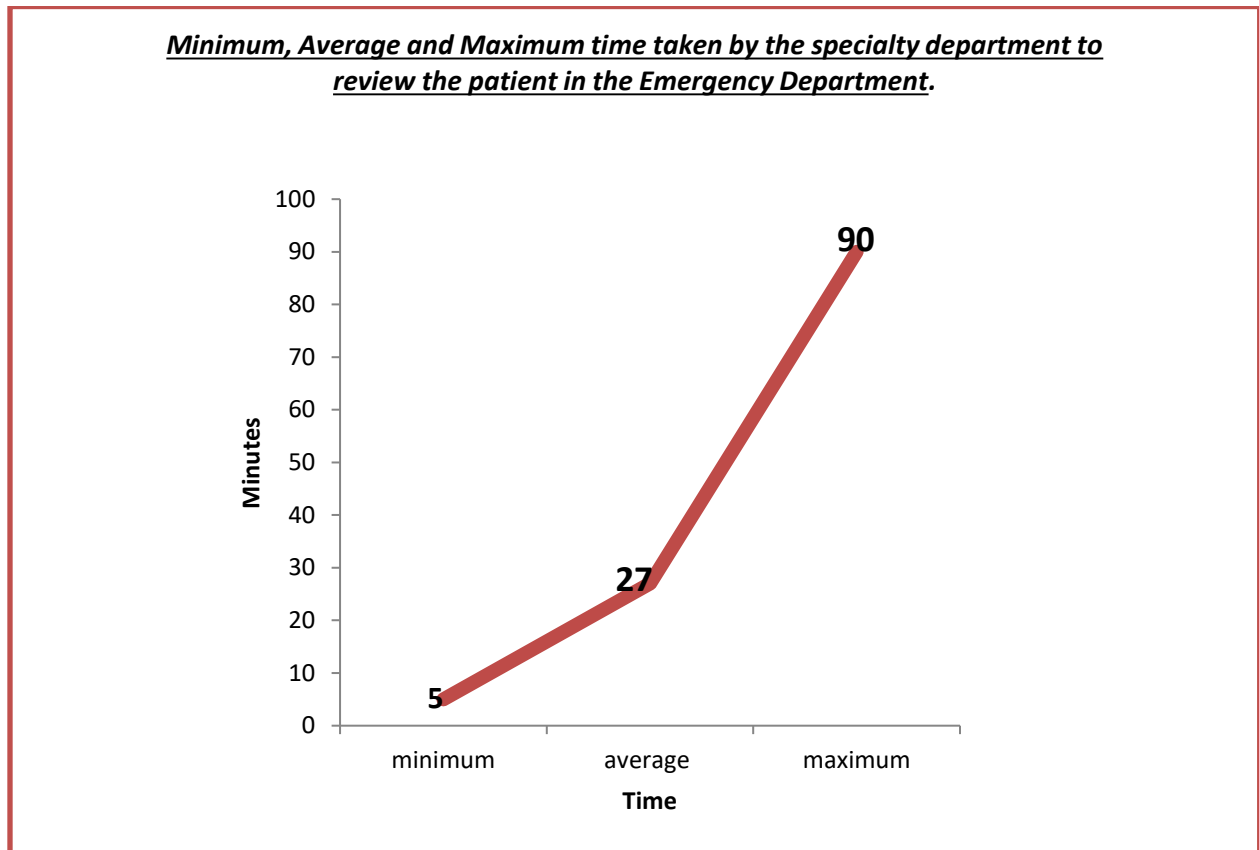
Fig: Time taken by the consulting dept to see patients in Emergency –

- In the total study period 54 times the specialty department were consulted.



- On observation it was found out that out of 54 times 46 times the specialist reviewed the patient in less than or equal to 30 minutes whereas 8 times the need was not met.

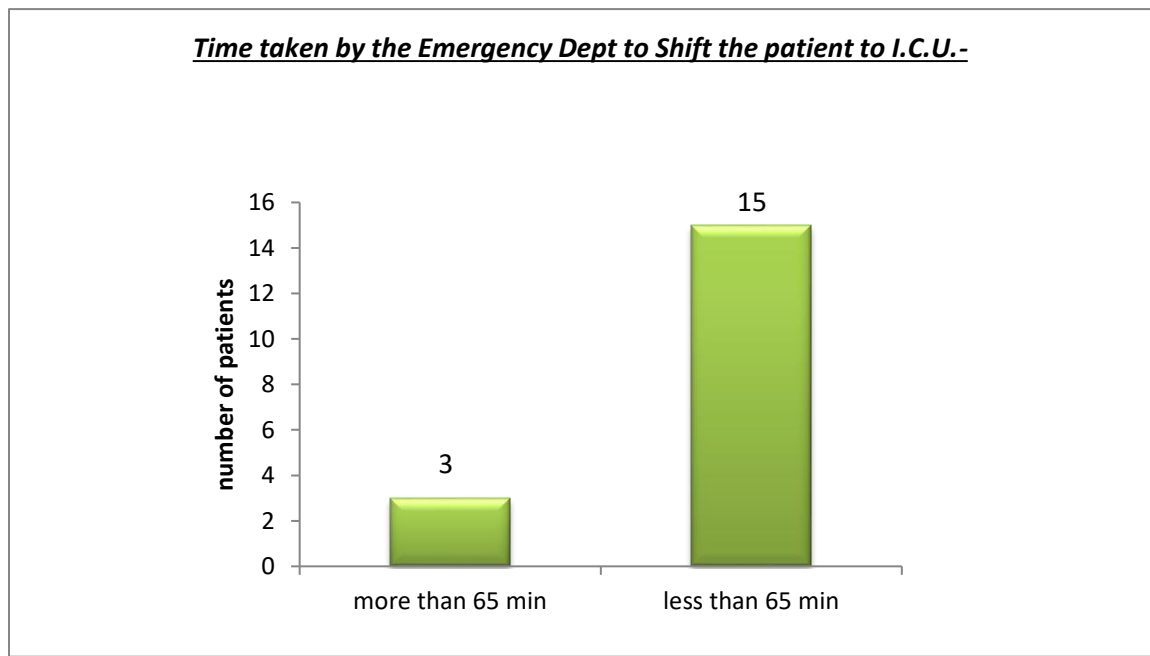
Fig :Minimum, Average and Maximum time taken by the specialty department to review the patient in the Emergency Department.



- On observation – the least or the minimum time taken by the specialty to review the patient was 5 minutes, average came out to be 27 minutes and the maximum time taken was 90 minutes to review the patient.

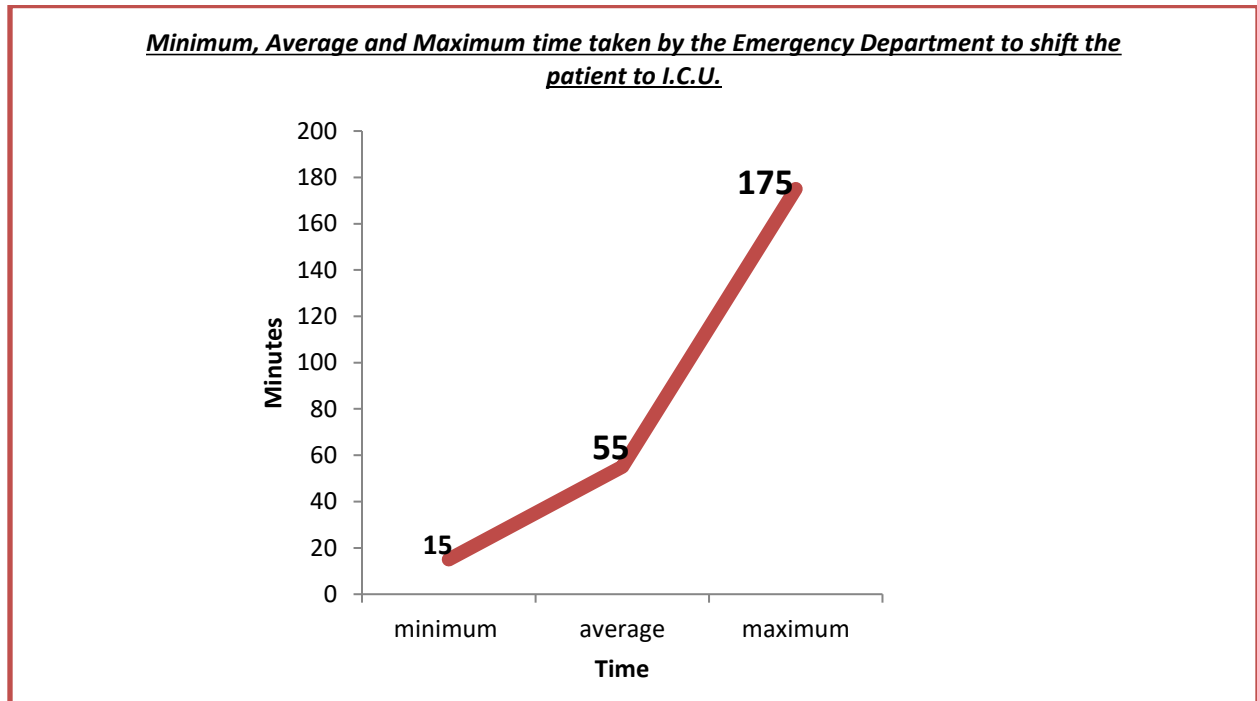
Fig :Time taken by the Emergency Dept to Shift the patient to I.C.U.-

- Total 18 patients out of 50 were shifted to I.C.U.



- On observation – out of 18 patients 15 were shifted to the I.C.U. in less than equal to 65 minutes whereas delay was observed only in 3 patients.

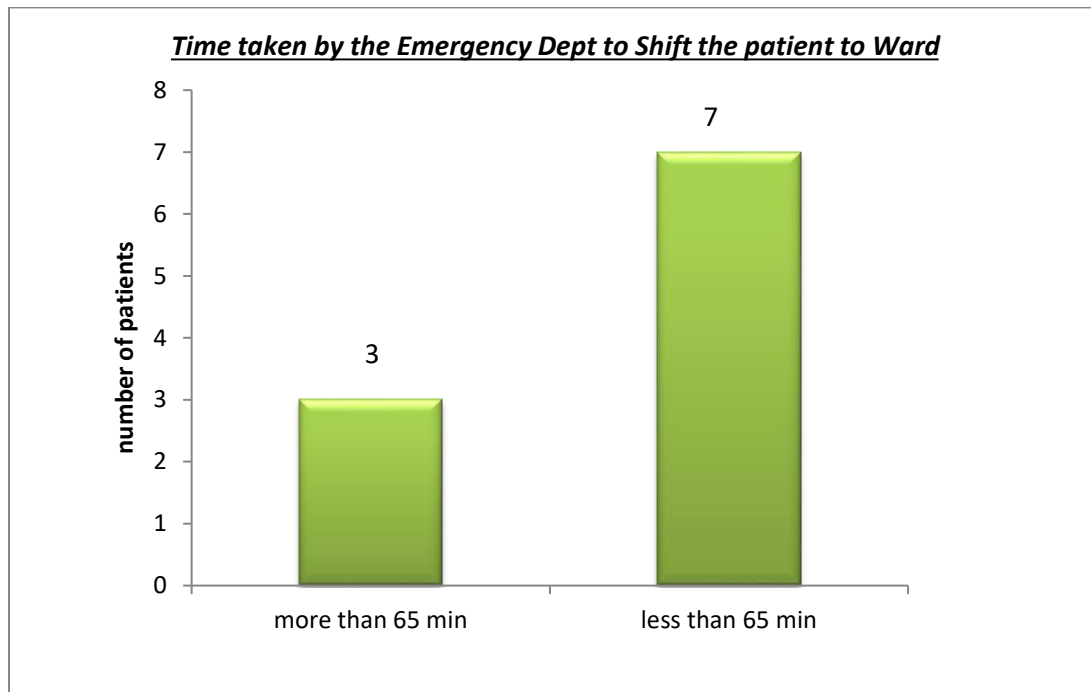
Fig: Minimum, Average and Maximum time taken by the Emergency Department to shift the patient to I.C.U. –



- On observation – The minimum time taken by the ER department to shift the patient to I.C.U. was 15 minutes, average came out to be 55 minutes whereas 175 minutes was the maximum time taken.

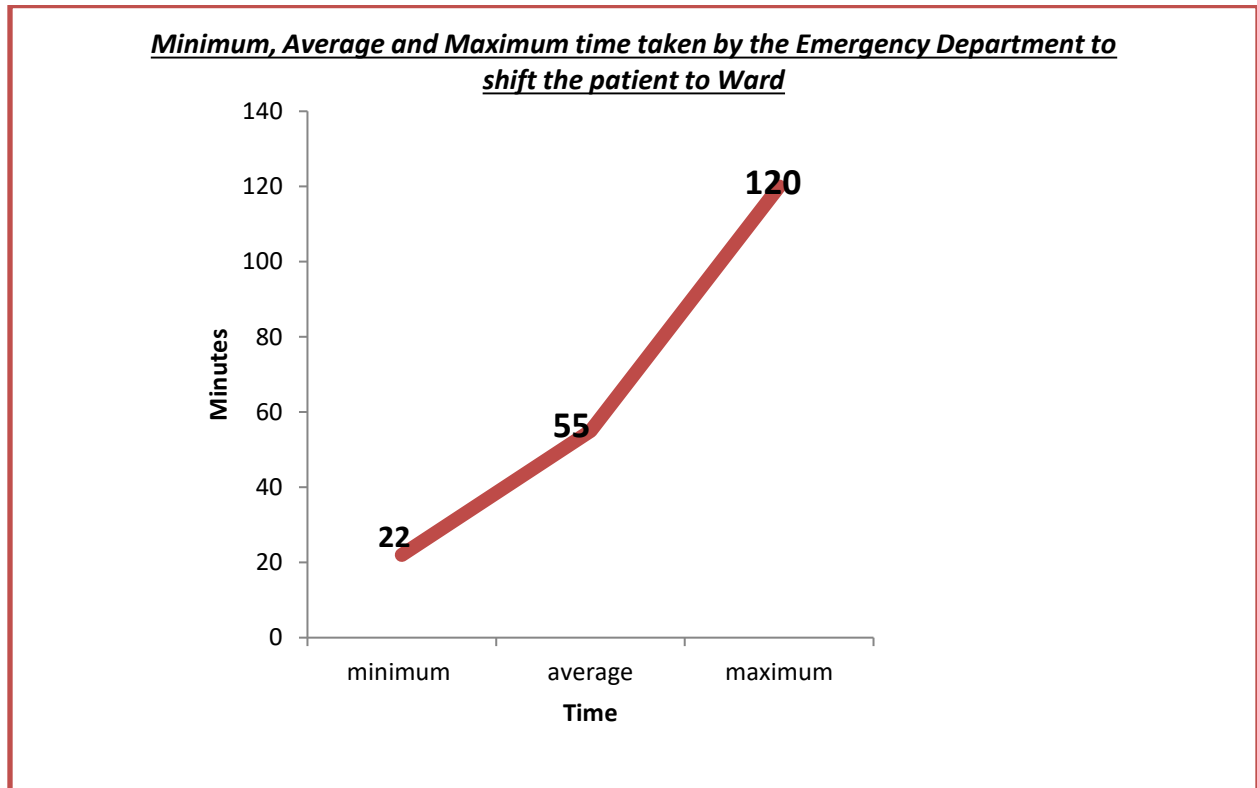
Fig :Time taken by the Emergency Dept to Shift the patient to Ward –

- Total 10 patients out of 50 were shifted to Ward.



- On observation – out of 10 patients 7 were shifted to the Ward in less than equal to 65 minutes whereas delay was observed only in 3 patients.

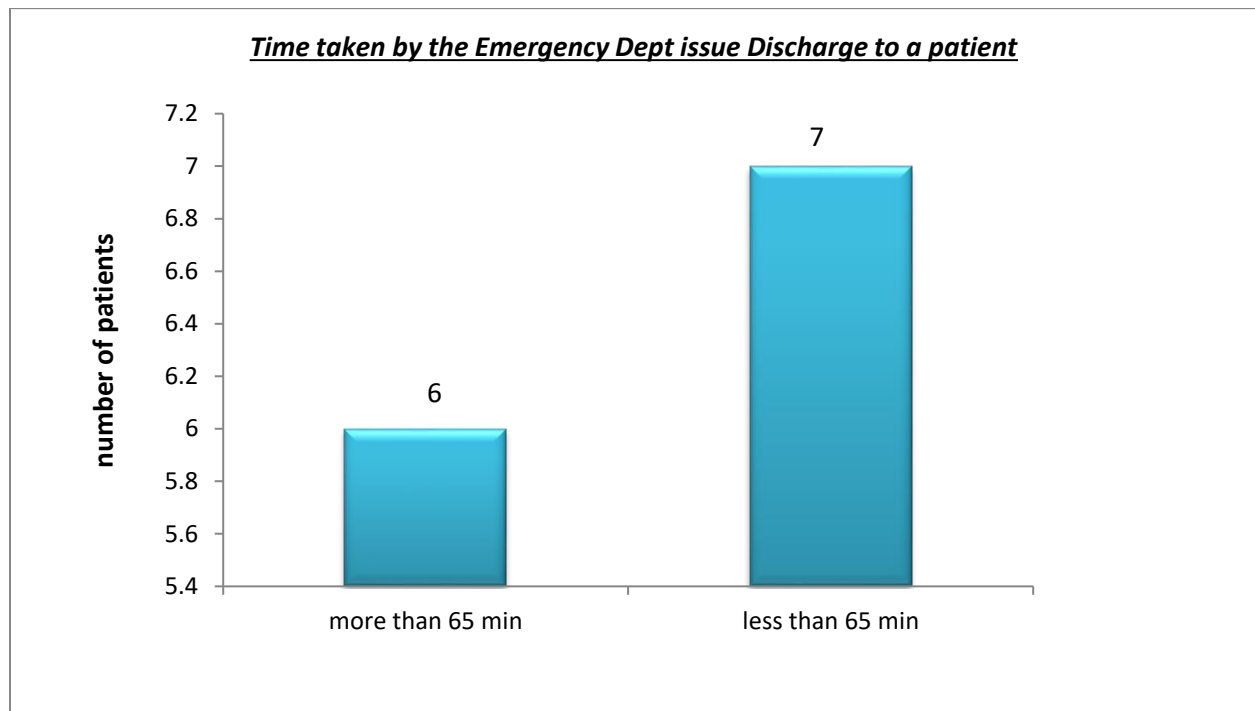
Fig :Minimum, Average and Maximum time taken by the Emergency Department to shift the patient to Ward –



- On observation – The minimum time taken by the ER department to shift the patient to Ward was 22 minutes, average came out to be 55 minutes whereas 120 minutes was the maximum time taken.

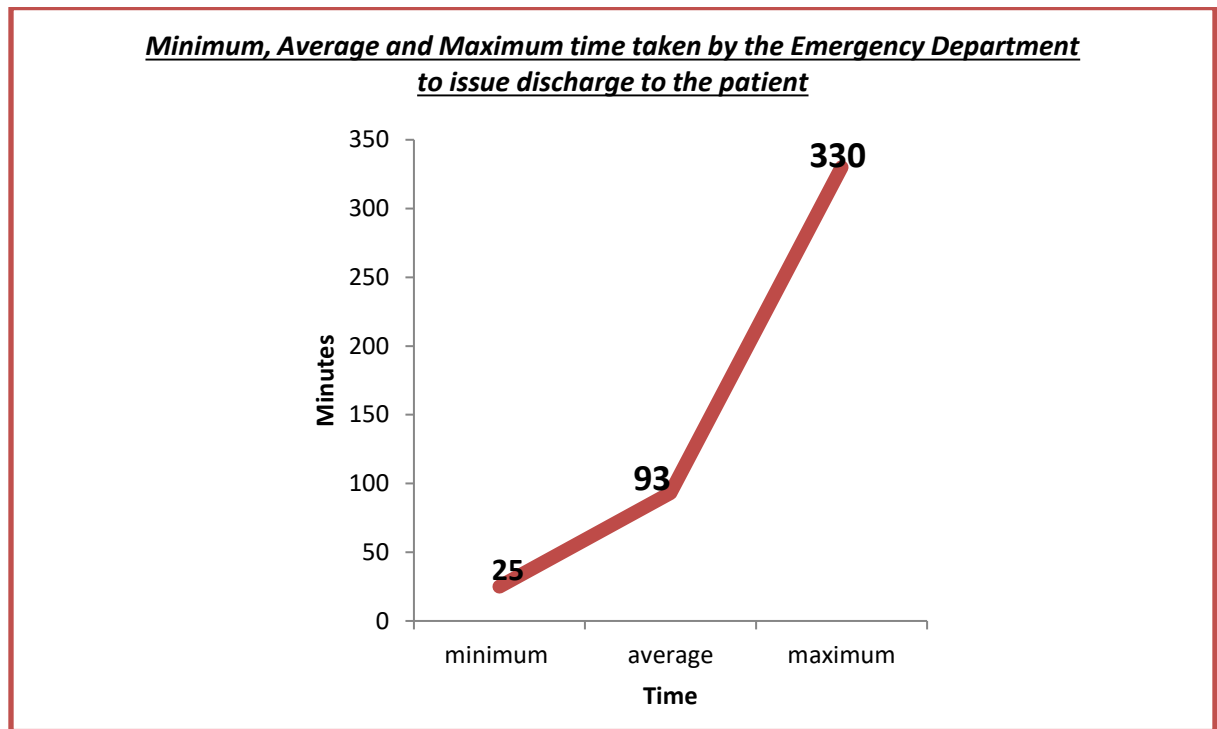
Fig :Time taken by the Emergency Dept issue Discharge to a patient –

- Total 13 patients out of 50 were issued discharge .



- On observation – out of 13 patients **6** were shifted to the Ward in less than equal to 65 minutes whereas delay was observed only in **7** patients.

Fig :Minimum, Average and Maximum time taken by the Emergency Department to issue discharge to the patient –



- On observation – The minimum time taken by the ER department to issue discharge to the patient was 25 minutes, average came out to be 93 minutes whereas 330 minutes was the maximum time taken.

Overall observation :

A) The observation for the time taken by the specialty department to review the patient according to the policy followed at MSSH, Dehradun i.e. 30 minutes was GOOD.

- 85% reported in time.

B) The observation for the time taken to shift the patient from ER department according to the policy i.e. 65 minutes were –

- To I.C.U. – 83% were shifted within 65 minutes.
- To Ward – 70% were shifted within 65 minutes.
- To issue Discharge – 54% were issued discharge within 65 minutes.

C) Points of Delay -

- Presently the patient entry is from the front desk where the doctors enters the tests recommended as well as writes a summary so that speciality can take an overview. Since there is only one JR who does both; that is preliminary check-up and history taking as well as recommends speciality check-up there is a delay.
- The standard recommended patient to nurse ratio is 2:1 in emergency, total man-hours available currently is 24 hours as against 30 hours.
- Due to lack of manpower during crowding, delay in sending reports as well as receiving results.

Limitations of the Study –

- Study was conducted in working hours of 10:00 am to 6:00 pm excluding weekends.
- Not each and every patient was recorded, study parameters restricted the data entries.
- Diagnostic test report timings as well as front desk entry timings were not recorded, only observed.

Recommendations :

- Increase the number of man- hours in the emergency department for a better flow of work. A floating nurse could be considered at the time of crowding.
- Decrease TAT (turn around time) associated with the diagnostic test/ blood reports /ancillary services.
- Use protocols and order sets for uniformity and to ensure all needed tests and interventions occur at the earliest possible point in the patient's stay.
- Define response time for reassessment to admit/discharge.
- Only emergency cases should be addressed in ER department to reduce crowding.

Checklist to record data –

So. No.	Inter Hospital Patient (Time at which arrived)	Intra Hospital Patient (Time at which arrived)	Time taken to Discharge the patient	Time taken to shift the patient to I.C.U.	Time taken to shift the patient to Ward	Time the specialty Department was informed by Emergency	Time taken by the specialty Department to review Patient in Emergency

References –

- Improving Patient Flow and Reducing Emergency Department Crowding: Megan McHugh, PhD Kevin Van Dyke, MPP Mark McClelland, MN, RN Dina Moss, MPA October 2011 -AHRQ Publication No. 11(12)-0094.

- Improving Patient Flow & Reducing Emergency Department (ED) Crowding -Robert Wood Johnson Foundation-Supported Learning Network of Hospitals Measure ED Performance and Improve Quality.
- Data Retrieved from-https://en.wikipedia.org/wiki/Emergency_department
- Emergency manual of Max Healthcare Dehradun.

PROJECT TOPIC

Assessing Employee Turnover- Strategies to improve Retention



Background-

Employee attrition is the rate at which organizations and/or company's hiring and fire employees to either represent their firm or leave their firms. It is also referred to the employee turnover rate.

Employee attrition rate is also known as employee turnover. This rate shows how often the employees at a place of business change over the course of a month. Usually companies prefer a low attrition rate, but the rates differ based on the industry .The attrition rate has always been a sensitive issue for all organizations.

Importance of measuring attrition rate is reducing the following in the organization:

A. Recruitment cost: The cost to your business when hiring new employees includes the following six factors plus 10 percent for incidentals such as background screening- Time spent on sourcing replacement, Time spent on recruitment and selection, Travel expenses, if any, Relocation costs, if any n Training/ramp-up time, Background/reference screening.

B. Training and development cost- The cost of training and developing of new employees. Direct and indirect costs, and can be largely classified under the following heads – training materials, employee benefits and technology.

C. Administration cost- The per-employee cost to set up communication systems, Add employees to the HR system, Set up ID-cards, access cards, etc.

Review of Literature –

High turnover in any industry can be a concern, especially those that are customer-centric. Industries that deal with people's health are in an even more precarious position. Institutions with high attrition must consider how a “revolving door” of care providers affects the quality of care an institution is able to provide, and the satisfaction of patients with their overall experience. High turnover in the healthcare industry seems to be par for the course. In fact, many healthcare leaders view turnover as just part of the cost of doing business. While it is monetarily costly on its own, there are other implications that need to be considered. Based on the combination of these direct and indirect costs, the argue is that healthcare leaders must not accept turnover as a necessary evil. Rather, the industry as a whole needs to find and adopt proven methods of addressing the challenge of high turnover.

“Work force instability, as demonstrated by high rates of staff turnover and lingering vacancy rates, continues to be a major challenge facing health care organizations. The impact is manifest in workflow inefficiencies, delays in delivering patient care, and dissatisfaction among patients and staff, all of which can have significant negative effects on quality of care and patient safety. In addition, the staggering administrative

costs created by a transient work force threaten health care organizations financial viability. *(vha journal of Research and Innovation, 2012)*

To further explore and investigate issues related with high turnover rate on hospitals a retrospective study has been conducted to observe the turnover rate of the employees at MSSH, DDN.

Rationale of the study-

- To identify percentage of employees that left the organization from 2012-2015.

Research Question-

- What strategy can be implemented to improve retention of the organization?

Objectives-

1. To identify the percentage of attrition by MSSH.
2. To identify the major reasons of attrition in the organization and mend them to improve retention.

DATA COLLECTION & METHODOLOGY

Data Collection:

The procedure followed is enumerated below:

- i. The study was performed on previously compiled data by Max Super Specialty Hospital on employee attrition.

Methodology:

Study Type – Retrospective study.

Study Unit – Previously compiled Data on employee attrition from year 2012 – 2015.

Data analysis – Done with the aid of MS-Excel sheets. The data was entered in sheets equipment wise and then analyzed with the help of graphs.

Ethical Considerations- The confidentiality of the data given by MSSH was maintained.

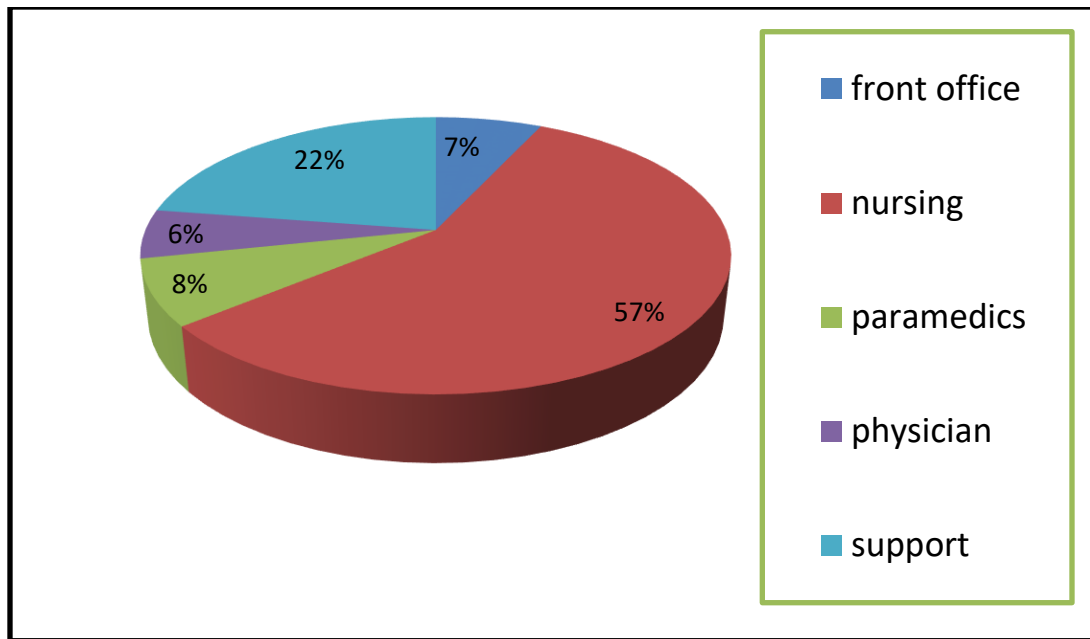
DATA ANALYSIS AND INTERPRETATION :

The data was analyzed on the following , as per asked by the organization.

- i. Attrition was analyzed category wise i.e – Front Office, Nursing, Paramedics, Physicians, Support.
- ii. Attrition tenure-wise - sequencing of time period was done as, less than 3 months, 3 – 6 months, 6months – 1 year, 1year – 2 years, 2 – 3 years, 3 – 5 years, 5 + years.
- iii. Reason: category wise.
- iv. The category Support was then simplified further Department wise and with Reasons for each Department.

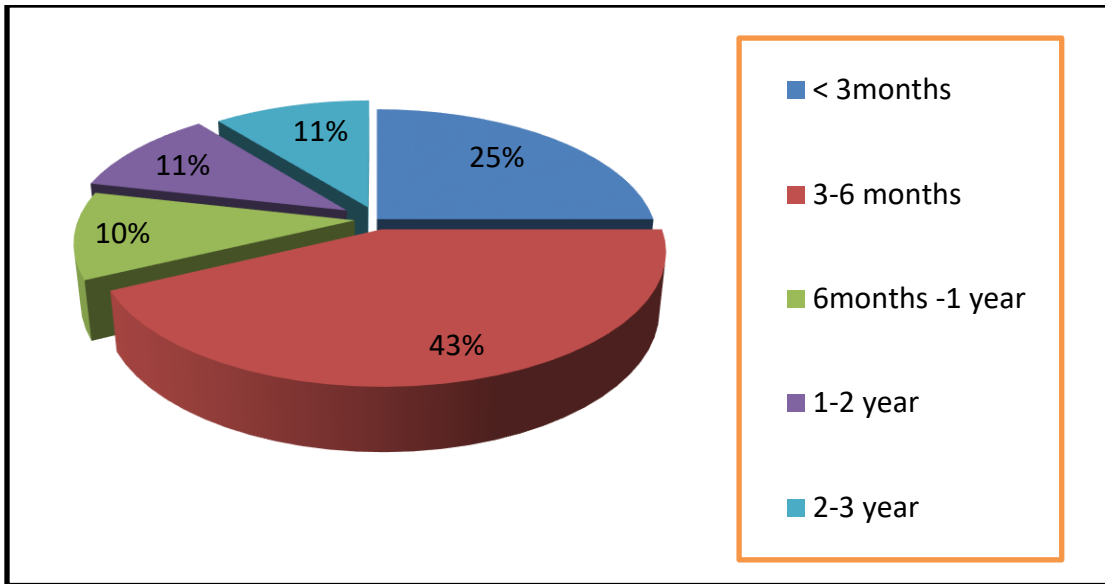
- Following is the representation of data in graphs charts and pie charts according to the given points for analysis.

1) EMPLOYEE ATTRITION CATEGORY WISE (For Year 2012-2015)



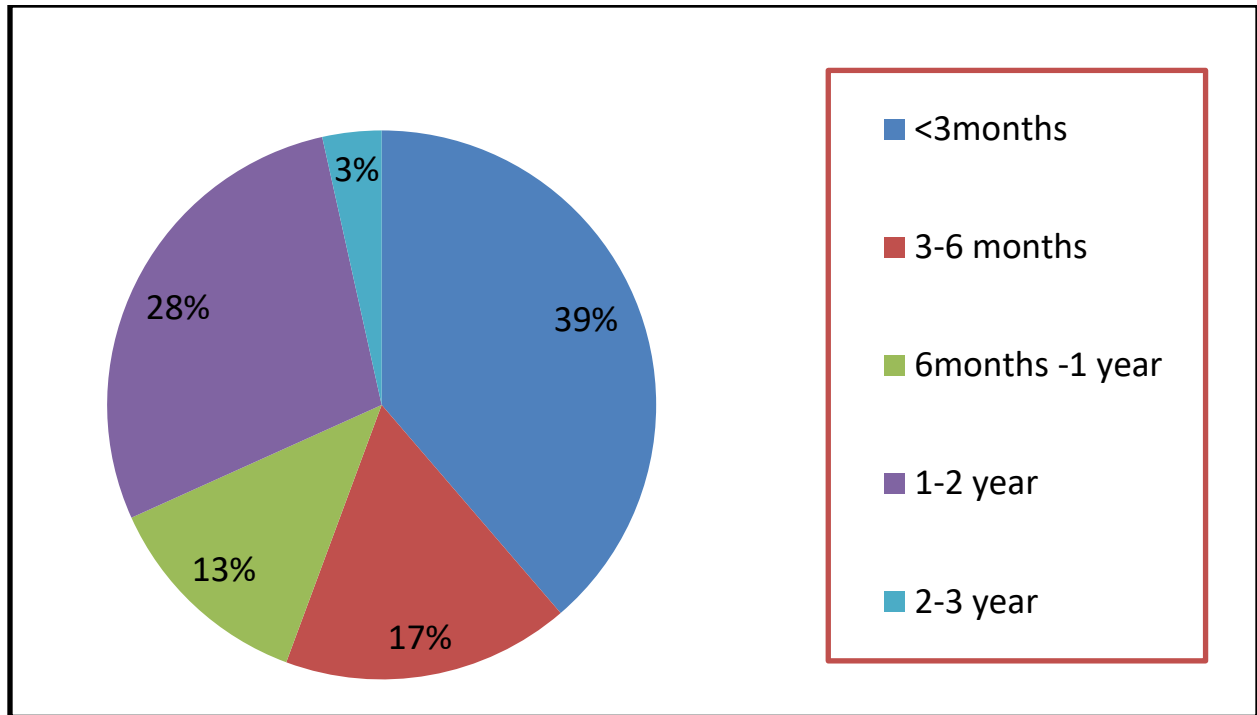
- It was observed that highest percentage was of **Nursing Staff**, 57% of the Nursing staff left the organization during the time span year 2012 to year 2015. The second department which had higher attrition was the Support category i.e. 22%, followed by 8% by the Paramedics, 7% by the Front Office and 6% by the Physicians.
- Further the data was filtered in individual category to find out the attrition Tenure wise for which was sequenced as - >3months , 3-6 months, 6months-1 year, 1-2 years, 2-3 years, 3-5 years, + 5 years.

i. CATEGORY – FRONT DESK



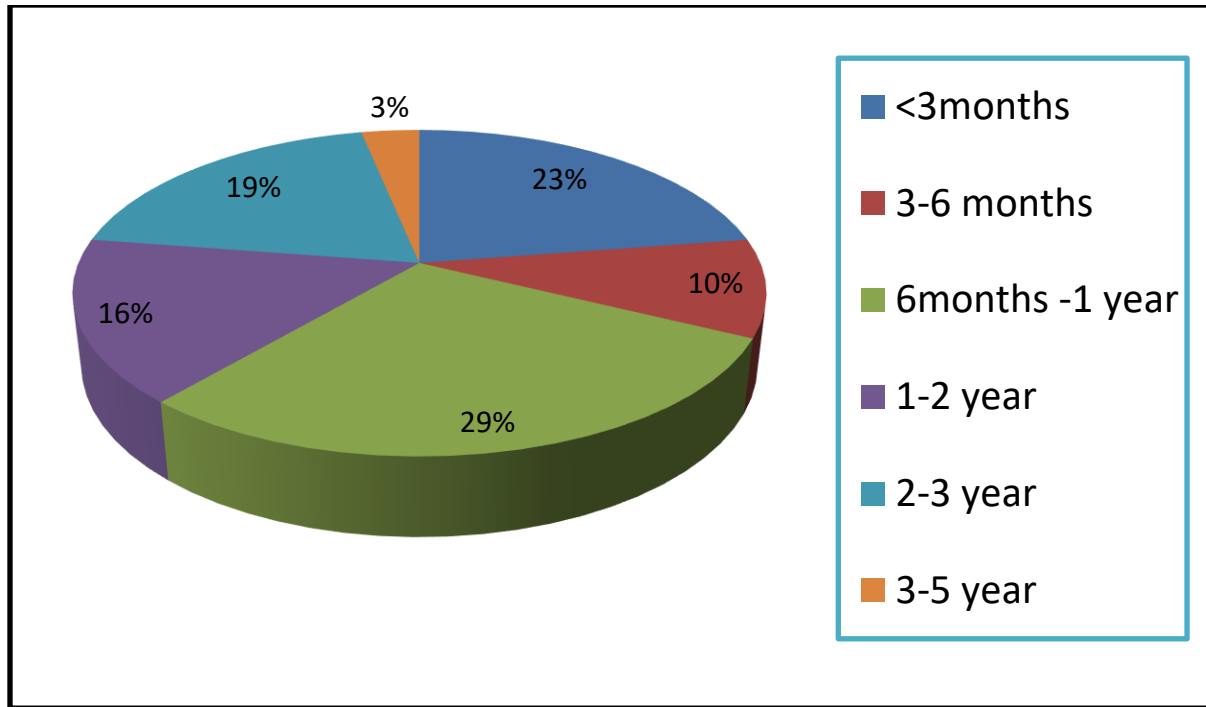
- It was observed that the highest percentage of turnover was reported in the time span of **3 months – 6 months** for the Front Desk category from year 2012 to year 2015 i.e 43%. The second highest percentage was observed for - less than 3 months(25%), followed by 1 year to 2 year, 2 years to 3 years with 11% of turnover and 6 months to 1 year with 10%.
- The observation interprets that maximum employees who left the organization worked for **less than 6 months or 6 months** in the Front Desk category.

ii. CATEGORY - NURSING



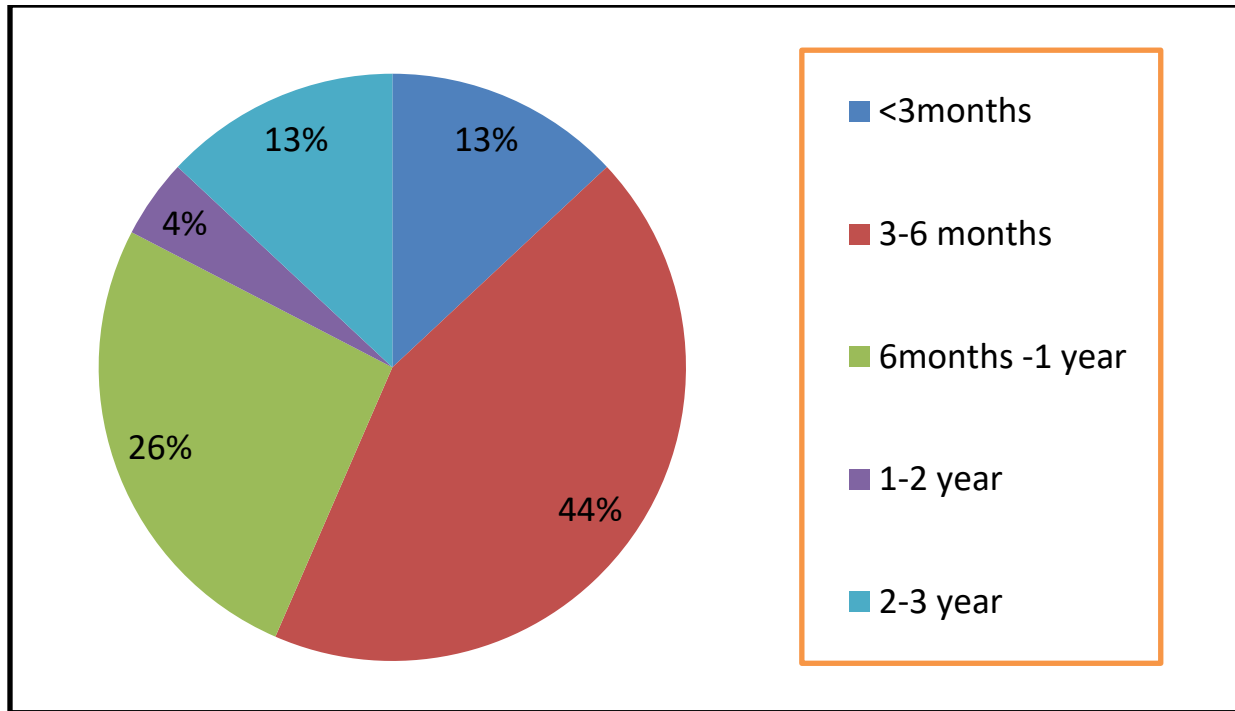
- It was observed that the highest percentage in the Nursing category who left the organization were **less than 3 months i.e. 39%**, followed by staff who worked for 1-2 years- 28%, 3 months to 6 months-17%, 6 months to 1 year 13% and the lowest percentage seen in sequence 2 to 3 years,3%.

iii. CATEGORY – PARAMEDICS



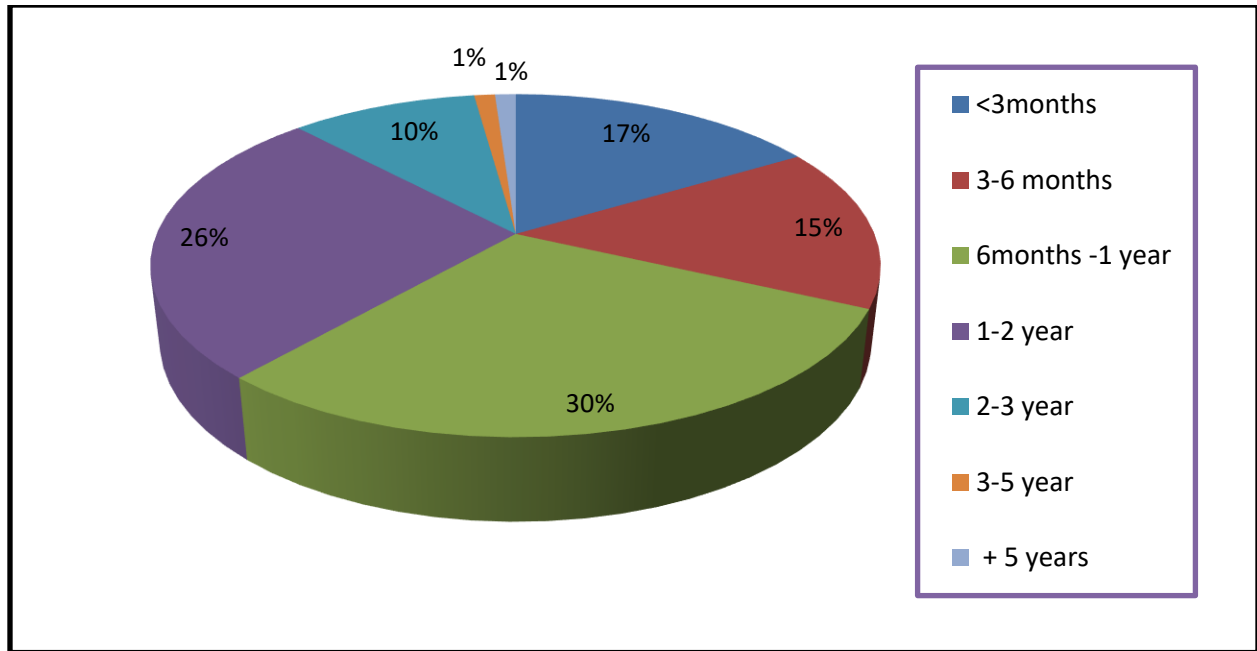
- It was observed that attrition percentage was highest in **6 months to 1 year** in category Paramedics i.e. **29%**, followed by less than 3 months 23%, 2-3 years-19%, 1-2 years- 16%, 3-6 months-10%.
- The employees who served the organization the maximum (**3-5 years**) scored the **least** percentage in attrition i.e.-**3%**.

iv. **CATEGORY – PHYSICAIN**



- It was observed that in category Physicians the highest percentage of turnover was seen in time span 3 months- 6 months i.e. 44%, second highest score was of time span 6 months to 1 year-26%, followed by less than 3 months and 2-3 years at- 13% and least score is reported in employees who worked for 1-2 years- 4%.

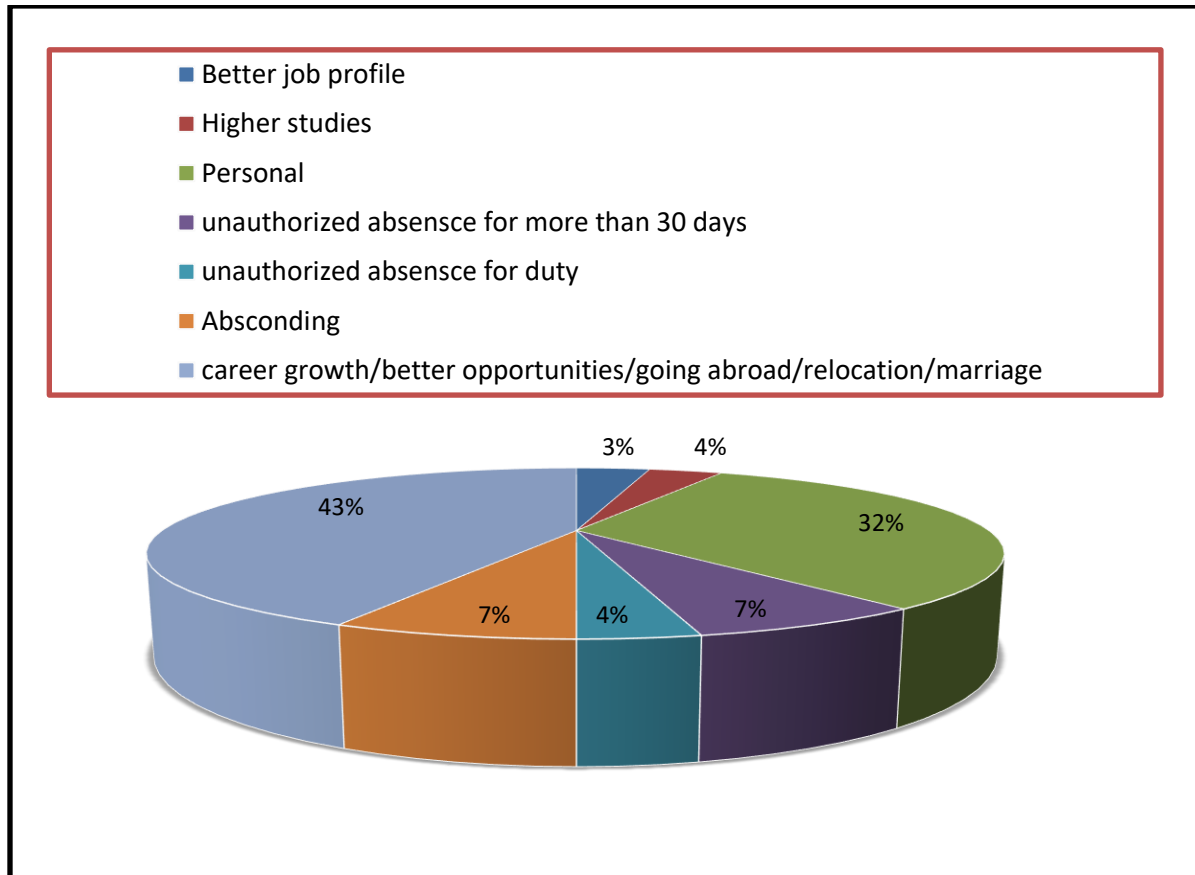
V. CATEGORY – SUPPORT



- It was observed that the highest turnover in category Support is seen the time span of **6 months- 1 year i.e.,30%**, followed by 1-2 year- 26%, followed by less than 3 months-17%, 3-6 months-15%, 2-3 years-10% and **least** is seen for employees working **for 3-5 years and more than 5 years i.e.1%**.

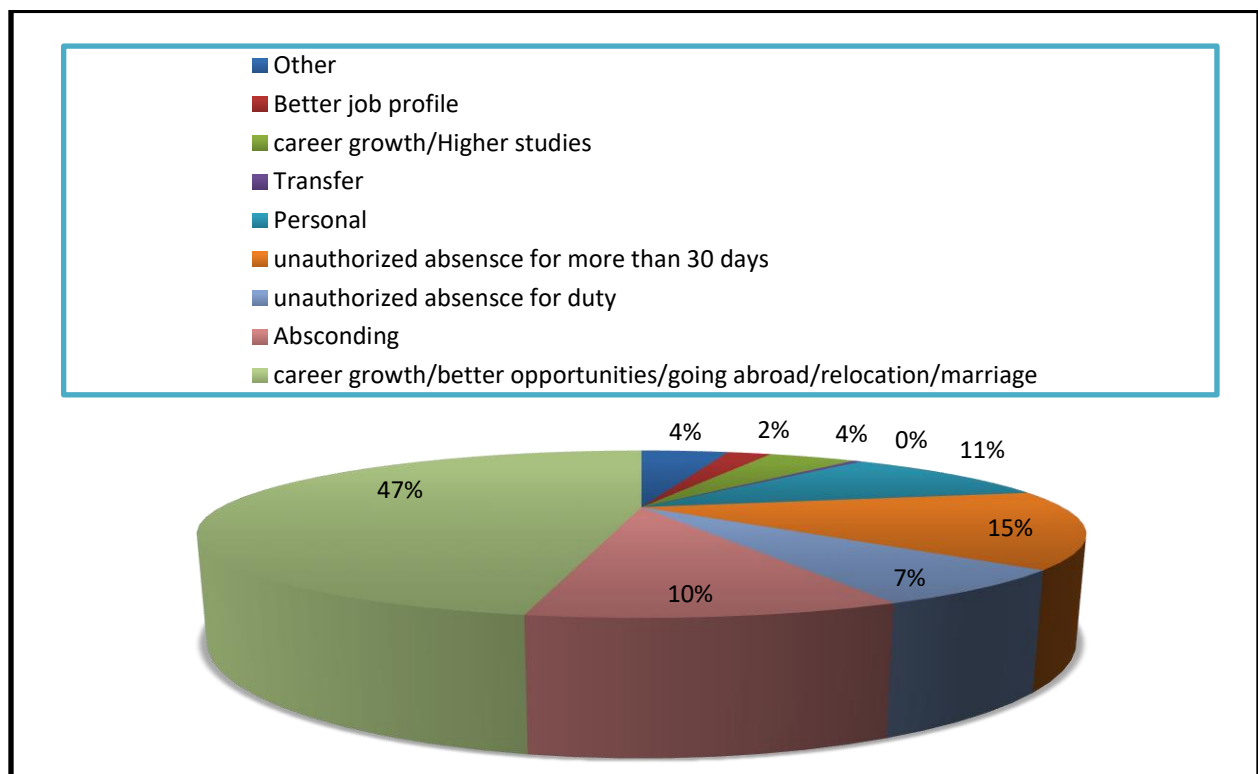
Further the data has been simplified according to the reasons given by the employee in the exit interview before departing from the organization. Each category has been observed individually with the reasons given to terminate the job. The following is the representation of the data :

I. CATEGORY – FRONT DESK



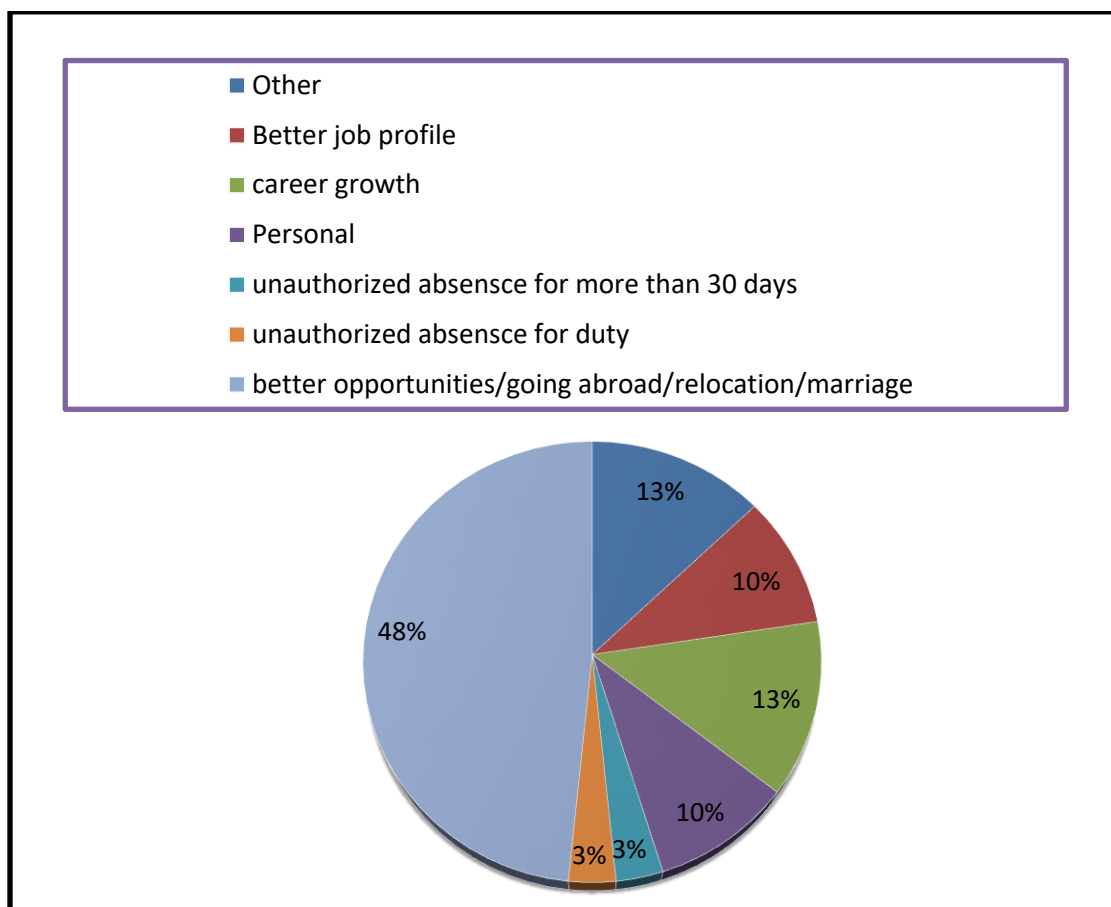
- 43 % Of the employees reported with a the reason **career growth/ better opportunities/ going abroad/ relocation/ marriage**, 32% had personal reasons (with no specifications), 7% are observed with reasons absconding and unauthorized absence for the job for more than 30 days, followed by 4% observed with reason unauthorized absence for duty, 4% with reason higher studies and 3% with reason better job profile.

II. CATEGORY – NURSING



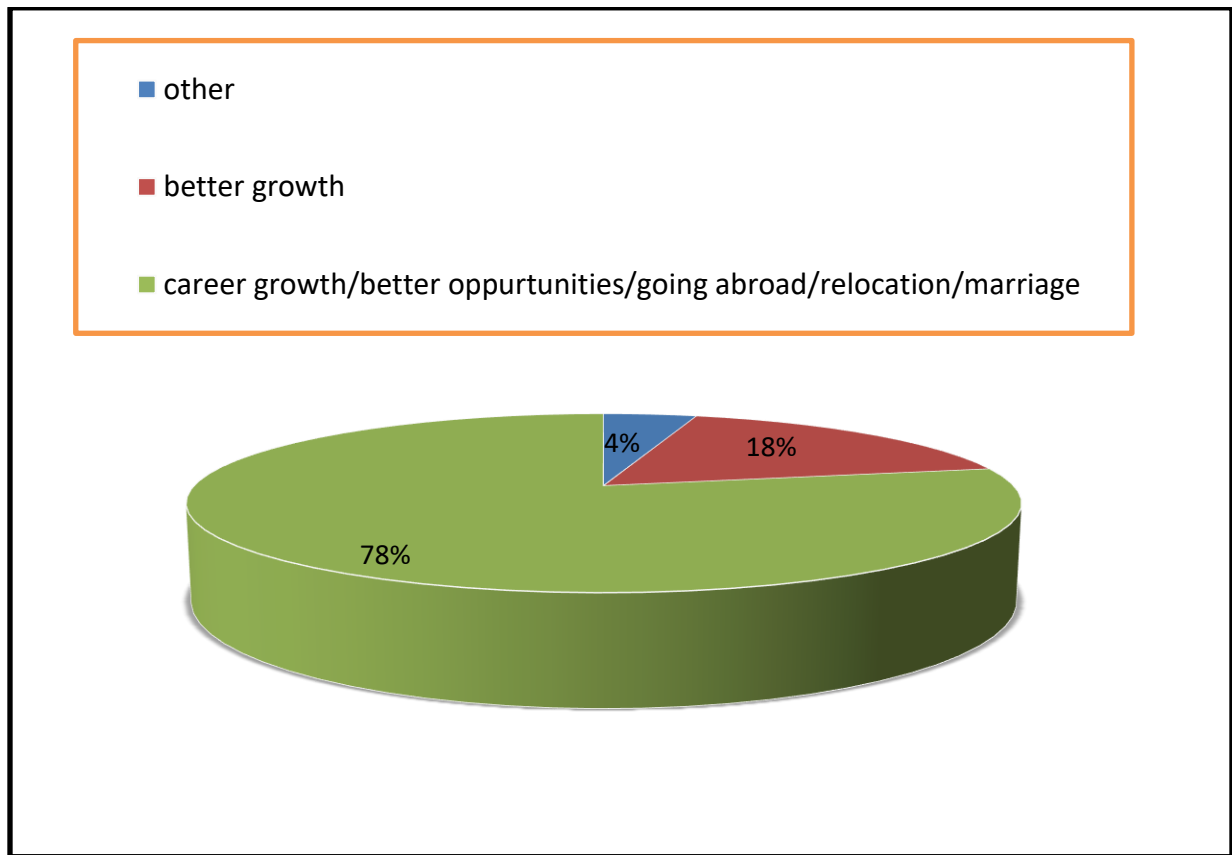
- 47 % Of the employees reported with a the reason **career growth/ better opportunities/ going abroad/ relocation/ marriage**, 15% reported with unauthorized absence for job for more than 30 days, 11% reported with personal reasons (with no specification), 10% were reported absconding, 4% observed with reasons career growth and higher studies and other reasons (with no specification) respectively, 2% observed with reason better job profile.

III. CATEGORY- PARAMEDICS



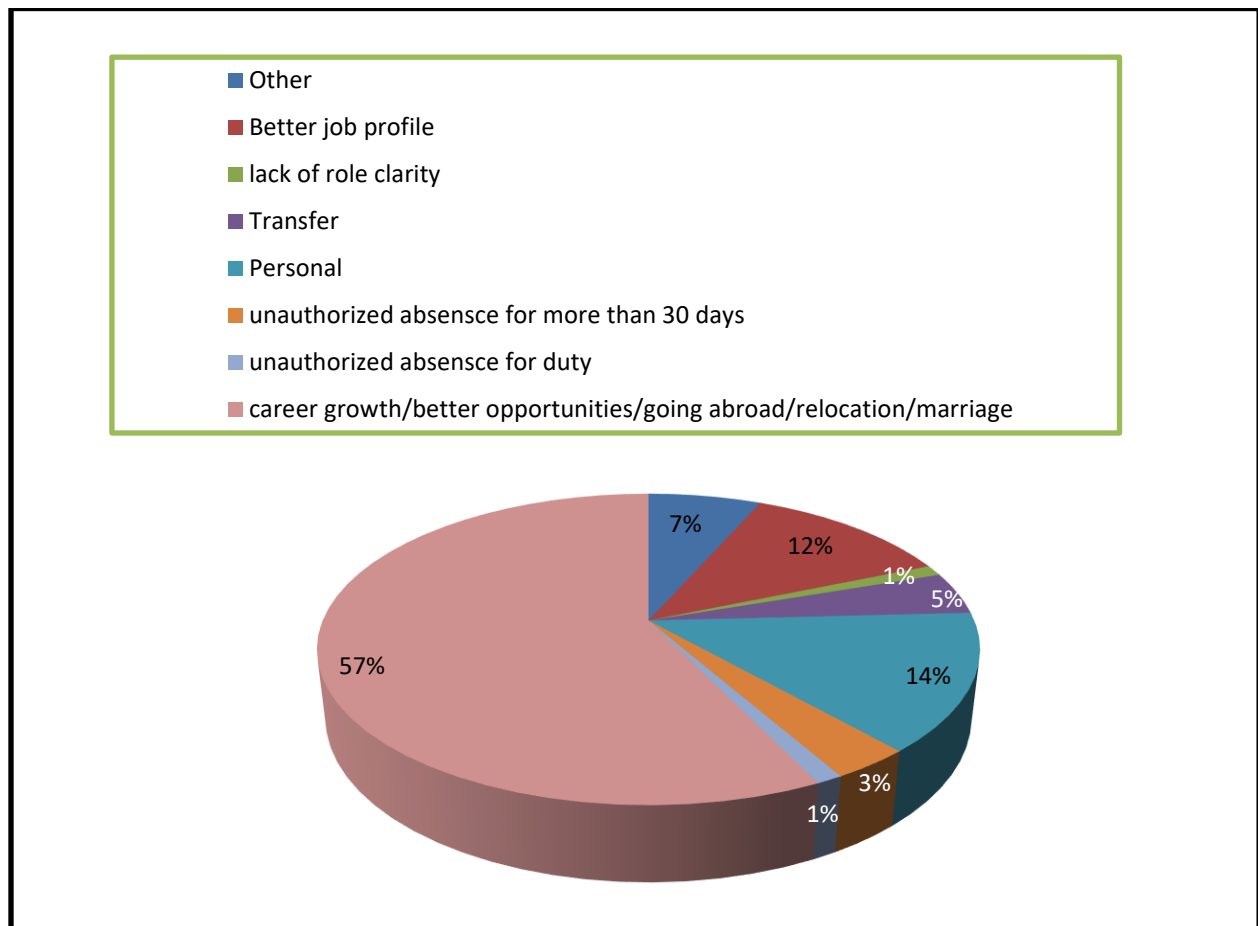
- 48 % Of the employees reported with a the reason **career growth/ better opportunities/ going abroad/ relocation/ marriage**, 13% Observed with reasons career growth and others (with no specification) respectively, 10% observed with reasons better job profile and personal (with no specification) respectively, 3% observed with unauthorized absence from job for more than 30 days and unauthorized absence from duty respectively.

IV. CATEGORY – PHYSICIANS



- 78% Of the employees gave the reason- career growth/ better opportunities/ going abroad/ relocation/ marriage, 18% left with reason of better growth and 4% had others as the reason (with no specification).

V. CATEGORY – SUPPORT

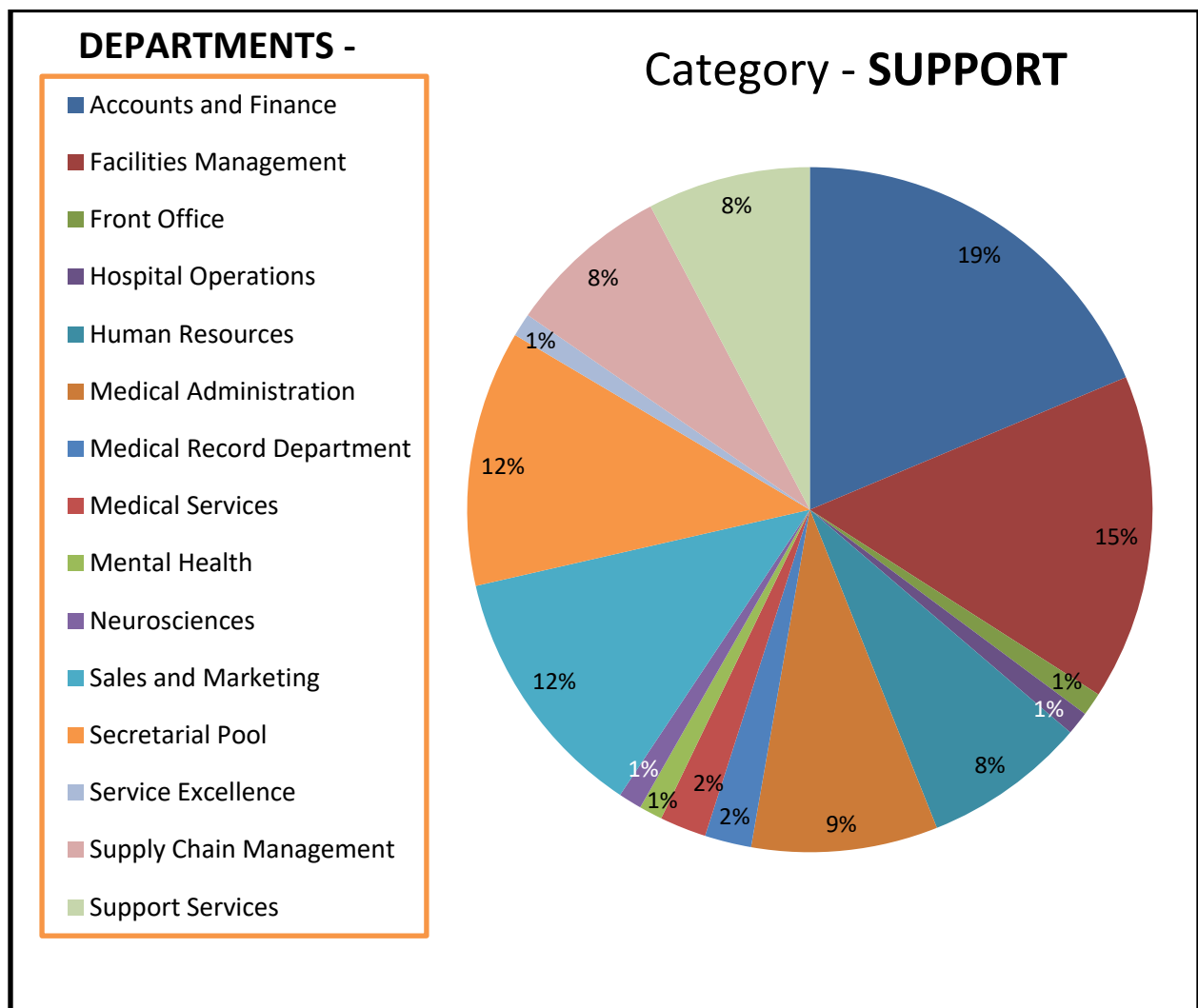


- 57% Of the employees gave the reason- **career growth/ better opportunities/ going abroad/ relocation/ marriage**, 14% left with Personal reasons (with no specification), 12% left the organization for better job profile, 7% for other reasons (with no specifications), 5% had a transfer, 3% with unauthorized absence from job for more than 30 days, and 1% with lack of role clarity and unauthorized absence from duty respectively.

Lastly ,the category SUPPORT was simplified department wise to observe the turnover percentage in each department under support category, also each department was then simplified with **number of employees left** and **reasons** for leaving the organization.

Following is representation of the data :

i. **DEPARMENT WISE ATTRITION –**

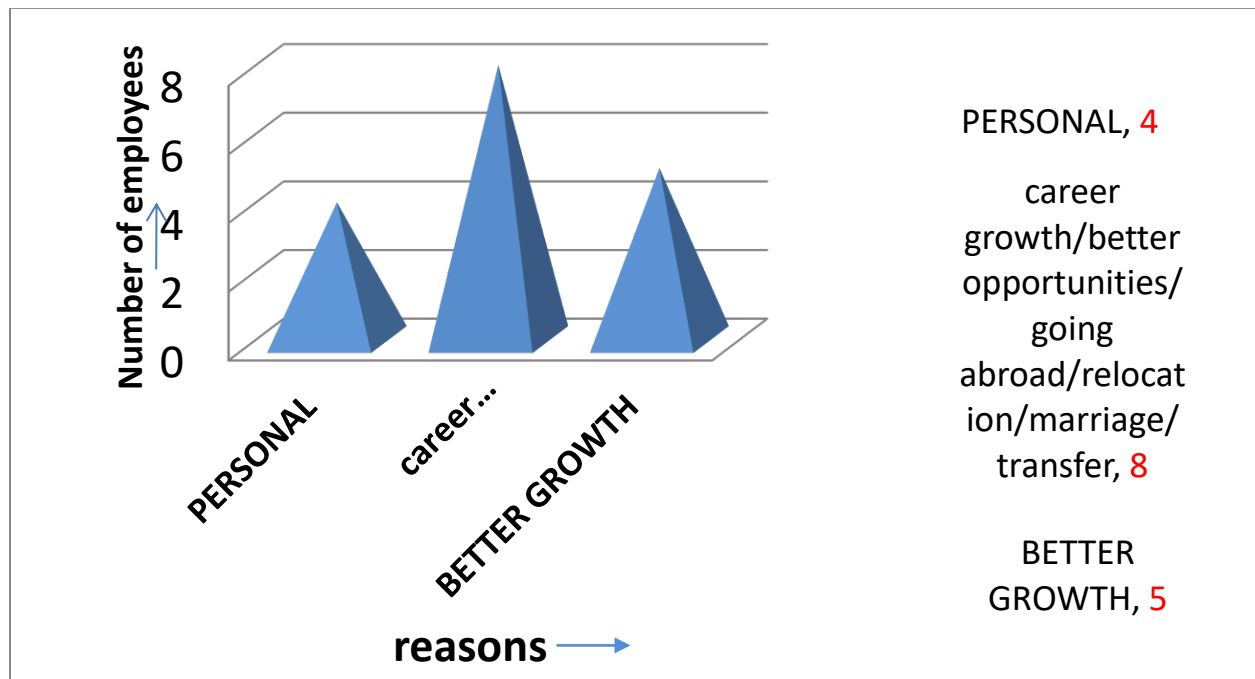


- There were 15 departments under the support category :

- 1) Accounts and Finance
- 2) Facilities Management
- 3) Front Office
- 4) Hospital Operations
- 5) Human Resources
- 6) Medical Administration
- 7) Medical Record Department
- 8) Medical Services
- 9) Mental Health
- 10) Neurosciences
- 11) Sales and Marketing
- 12) Secretarial Pool
- 13) Service Excellence
- 14) Supply Chain Management
- 15) Support Services

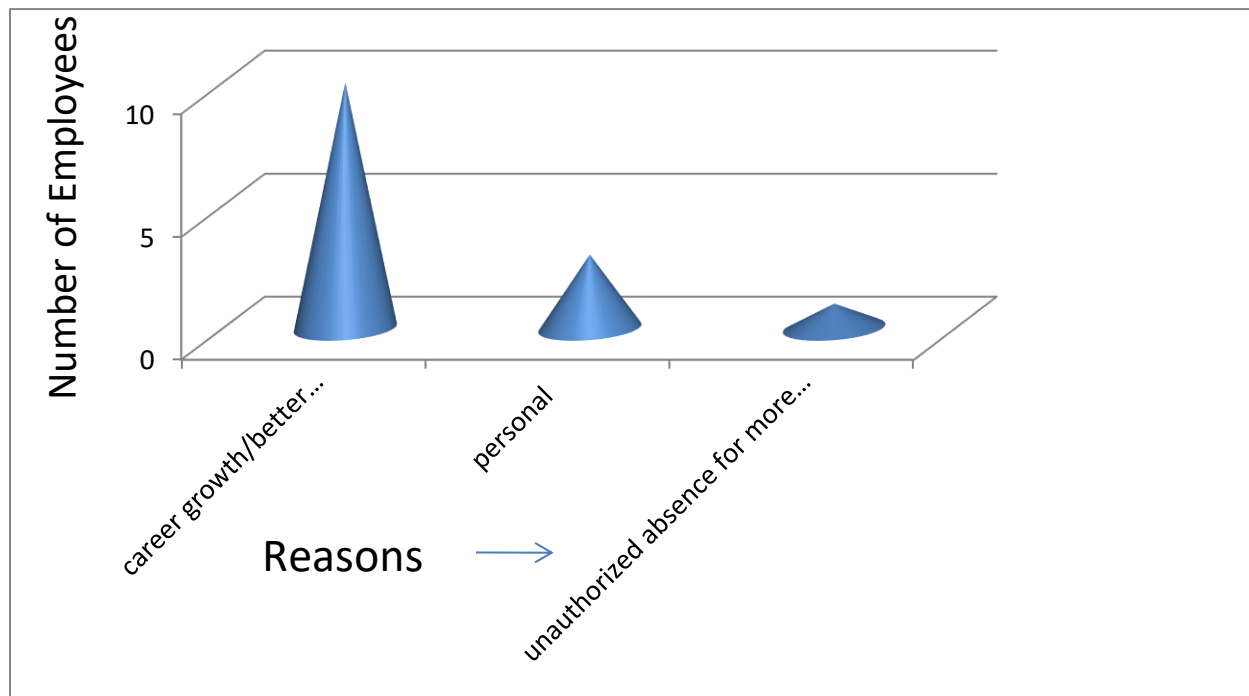
- It is observed that the highest turnover percentage was observed in the department of **Accounts and Finance- 19%**, followed by **Facilities Management- 15%** and **Sales and Marketing and Secretarial Pool - 12%** respectively, followed by Medical Administration- 9%, Human Resource, Supply Chain Management and Support Services at 8%, Medical Record Department and Medical Services – 2% and least observed in Front Office, Hospital Operations, Mental Health, Neurosciences and Service Excellence at 1%.

Accounts and Finance Department – Observation was done on how many employees left the department of Accounts and Finance with their reason to leave the organization.



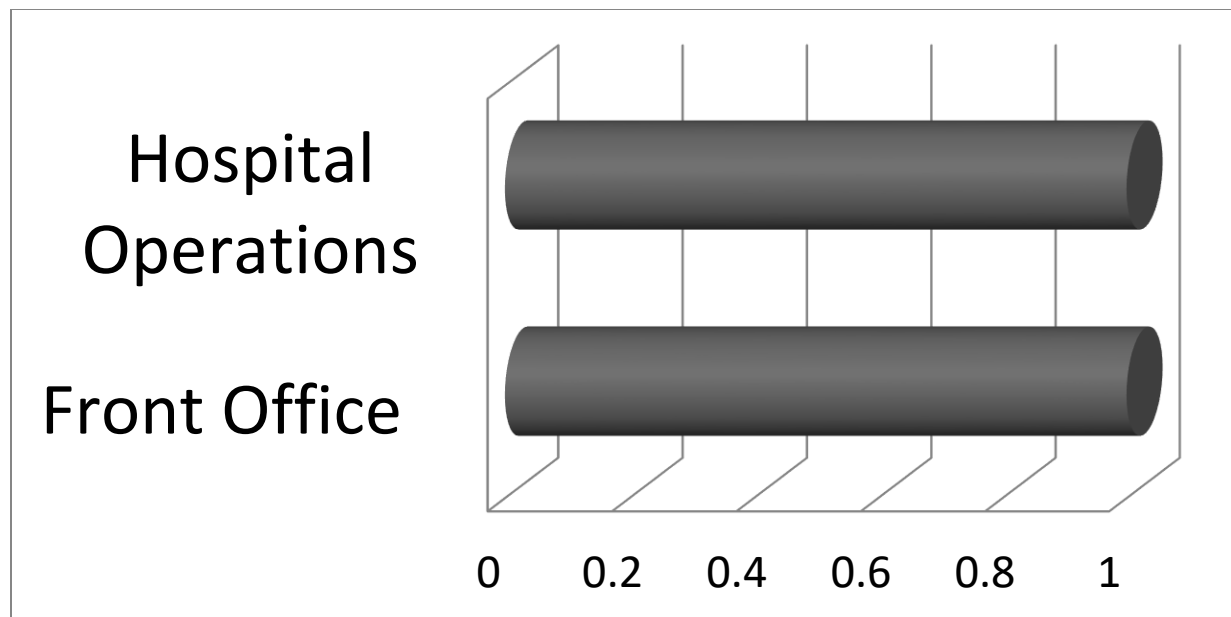
- On analysis it was observed that out of **17** employees, 4 left for a personal reason(with no specification), 5 left for better growth and **8** employees left for: **career growth/ better opportunities/ going abroad/ relocation/ marriage/ transfer.**

Facilities Management Team -



- On observation – out of **15** employees, **10** left the organization for: **career growth/ better opportunities/ going abroad/ relocation/ marriage/ transfer**, 5 left for a personal reason (with no specification) and 1 was terminated for reason: unauthorized absence from work for more than 30 days.

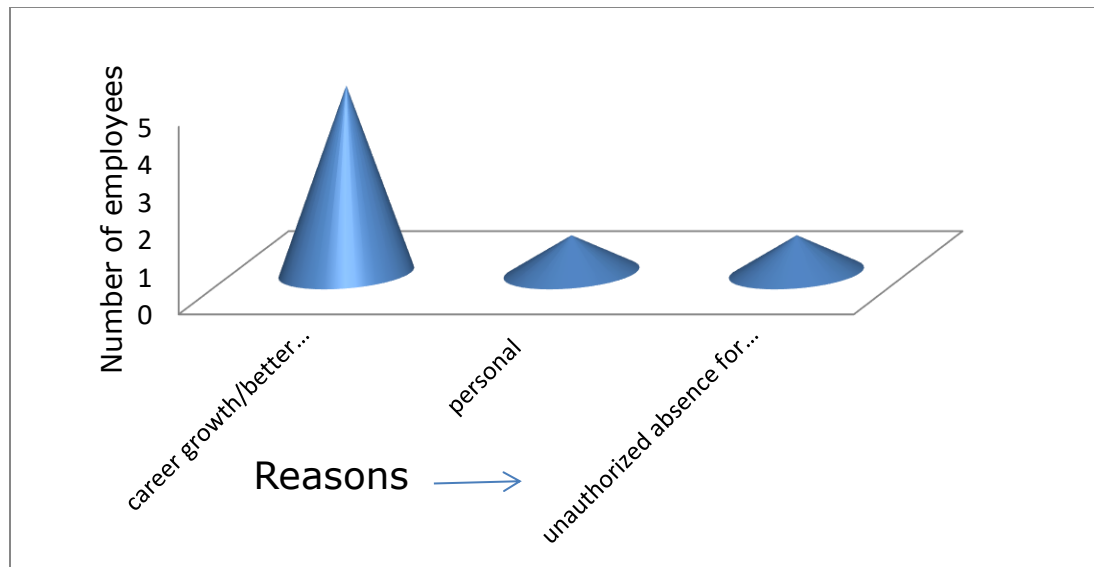
Front Office and Hospital Operations -



Reason- Career growth/Better Opportunities
/Going Abroad/Relocation/Marriage/Transfer

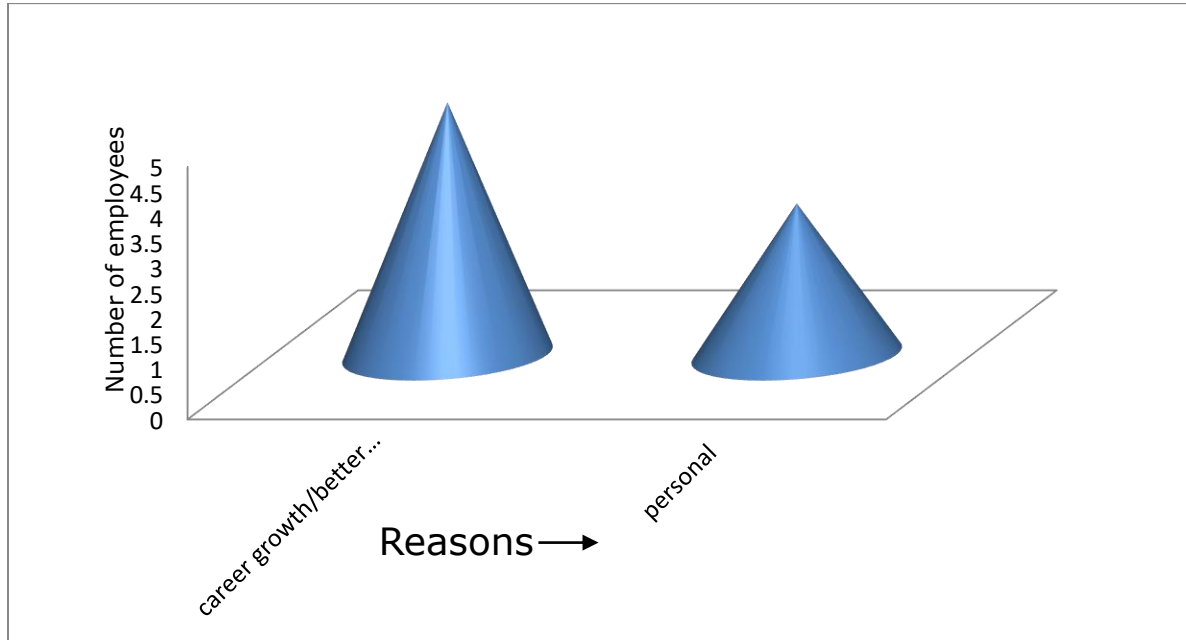
- From both the departments **1** employee left the organization for the reason as mentioned above.

Human Resources –



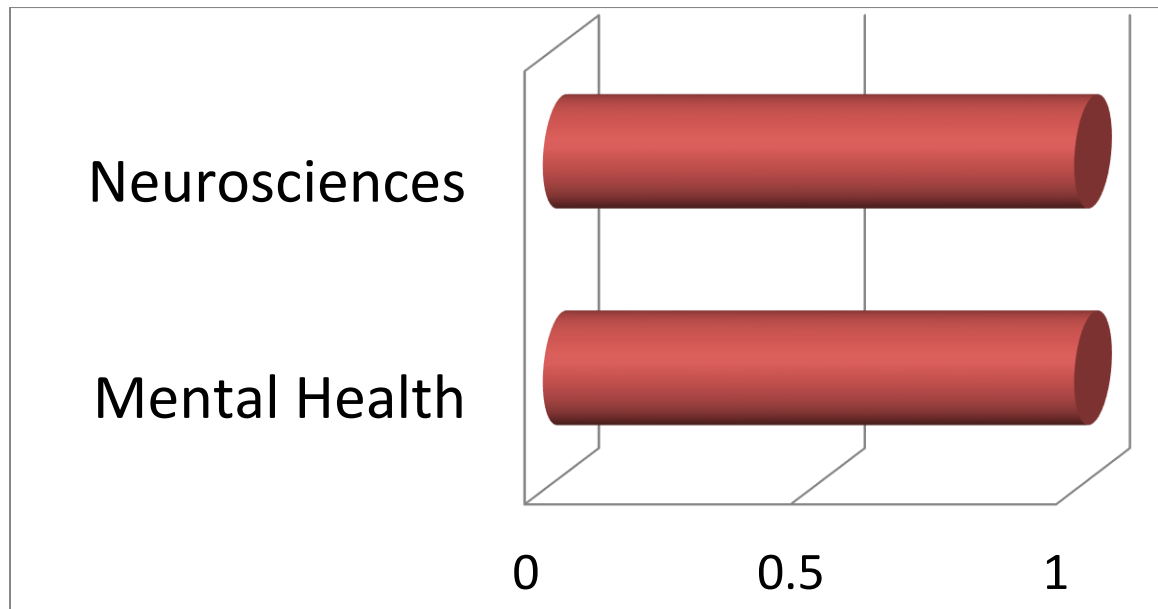
- It is observed that out of **7** employees 5 left for **career growth/ better opportunities/ going abroad/ relocation/ marriage/ transfer**, 1 employee left with personal reason (with no specification) and 1 was terminated for reason: unauthorized absence from work for more than 30 days.

Medical Administration –



- On analysis it is observed that out of **8** employees, **5** left the organization for the reason - **career growth/ better opportunities/ going abroad/ relocation/ marriage/ transfer**, 3 left with a personal reason (with no specification).

Neurosciences and Mental Health -

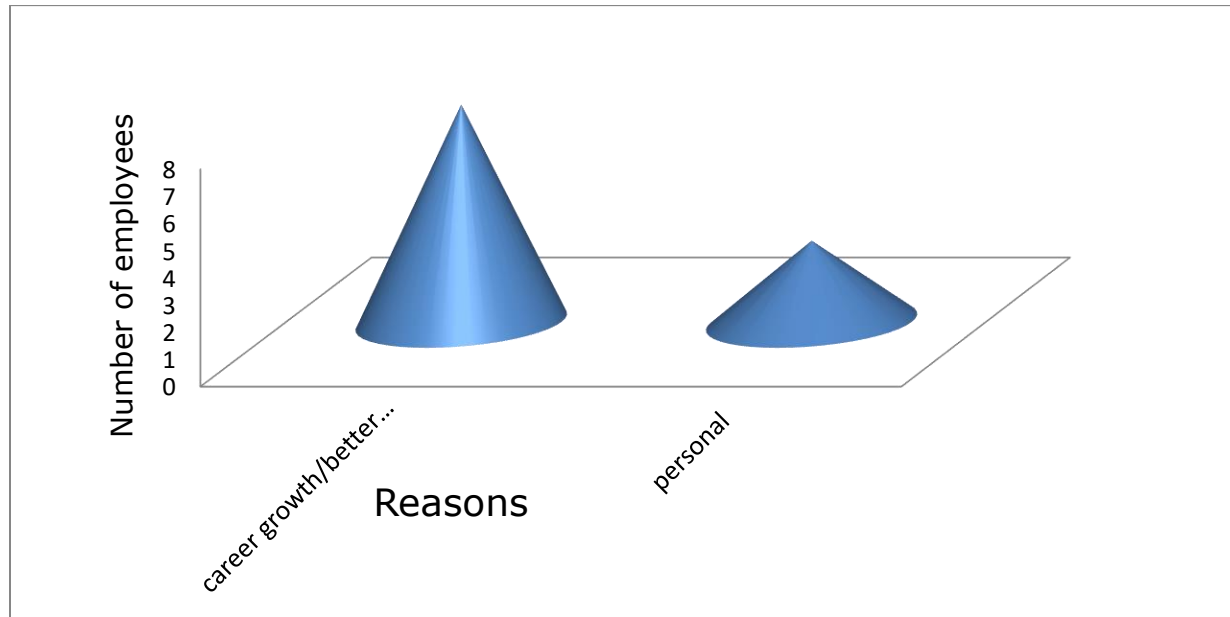


Reason-

- a) Neurosciences- Personal
- b) Mental Health- Career Growth

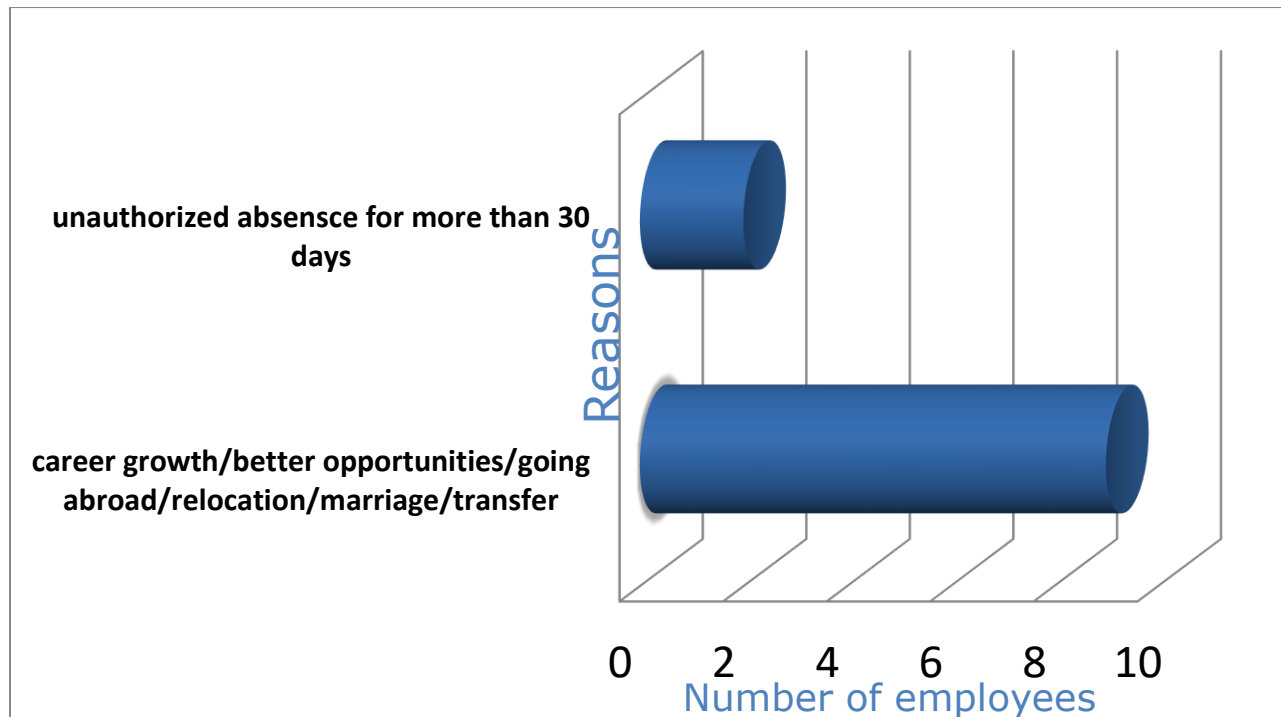
- From the above mentioned data, 1 employee left the organization from each department with the reasons mentioned above.

Sales and Management –



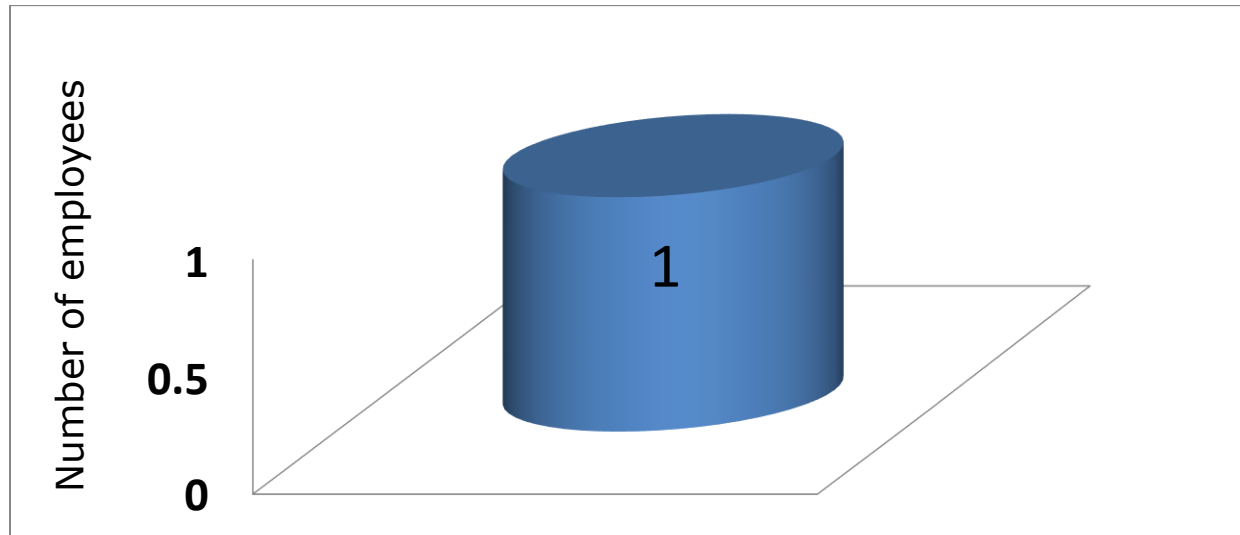
- On observation out of **11** employees, **8** left the organization for the reason - **career growth/ better opportunities/ going abroad/ relocation/ marriage/ transfer**, 3 left with a personal reason(with no specification).

Secretarial Pool –



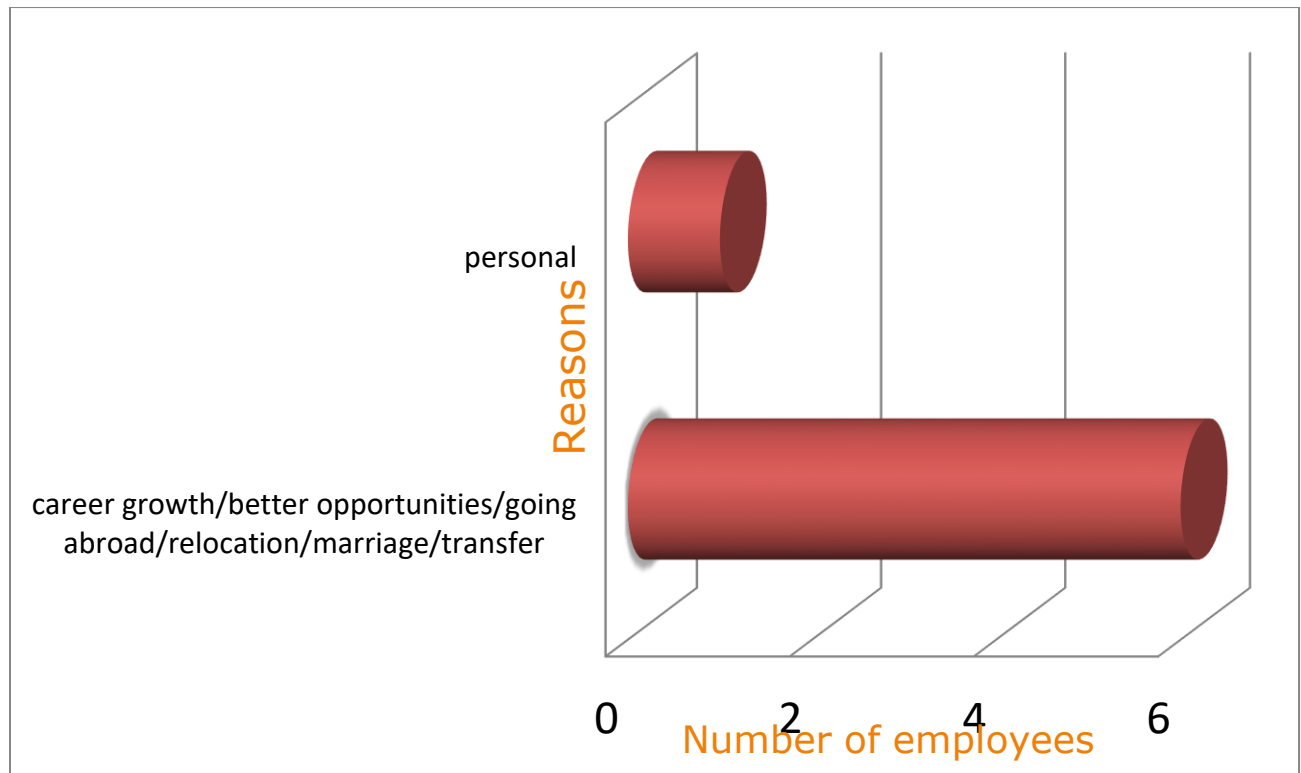
- On analysis it was observed that out of **11** employees, **9** left for the reason **career growth/ better opportunities/ going abroad/ relocation/ marriage/ transfer** and 2 were terminated from the organization cause of unauthorized absence from work for more than 30 days.

Service Excellence –



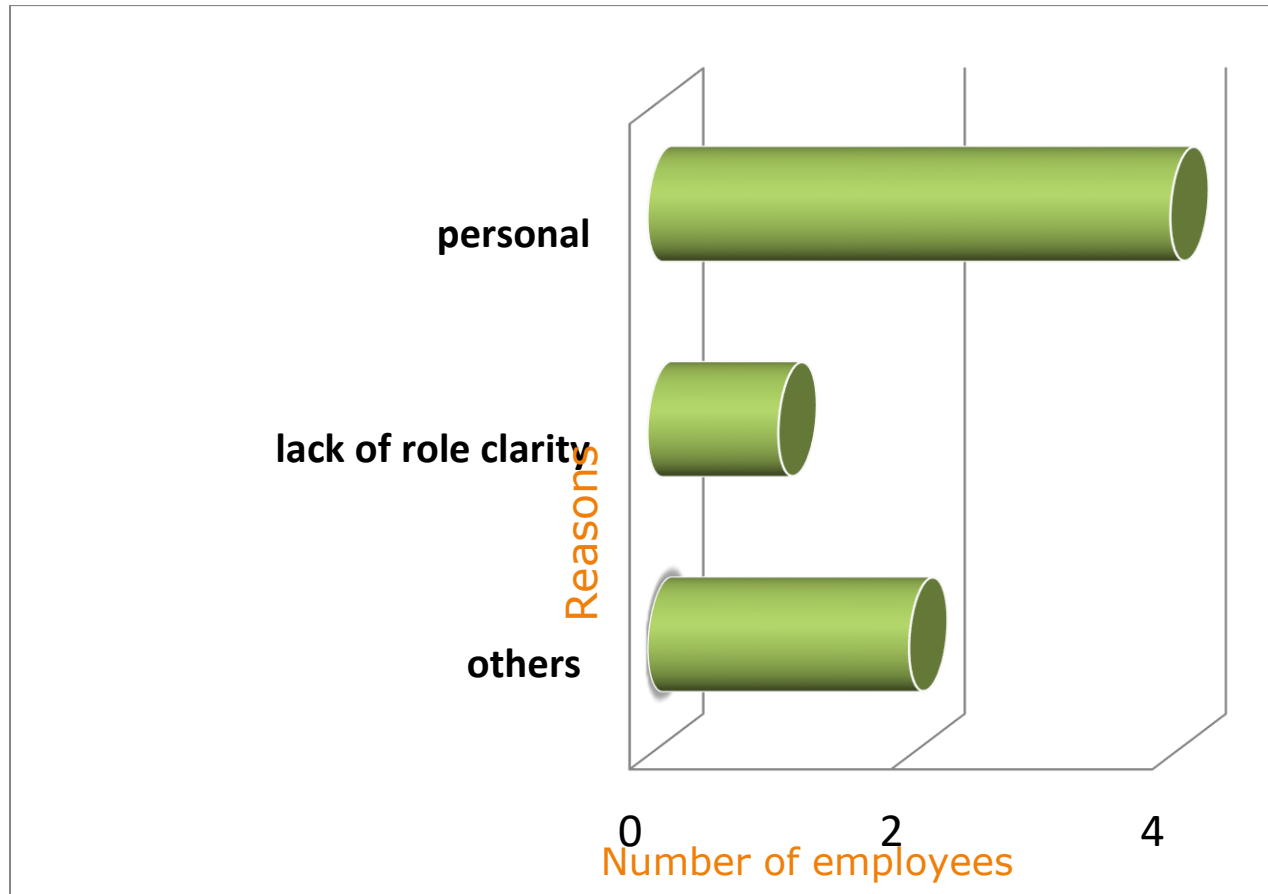
- From the above mentioned data it is observed that only one employee left the organization from this department for the reason transfer.

Supply Chain Management -



- It was observed that out of 7 employees, 6 left the organization for the reason **career growth/ better opportunities/ going abroad/ relocation/ marriage/ transfer** and 1 left with a personal reason(with no specification).

Support Services –



- On observation out of 7 employees, 4 gave personal reason(with no specification) to leave the organization, 2 with other reasons(with no specifications) and one left due to lack of role clarity.

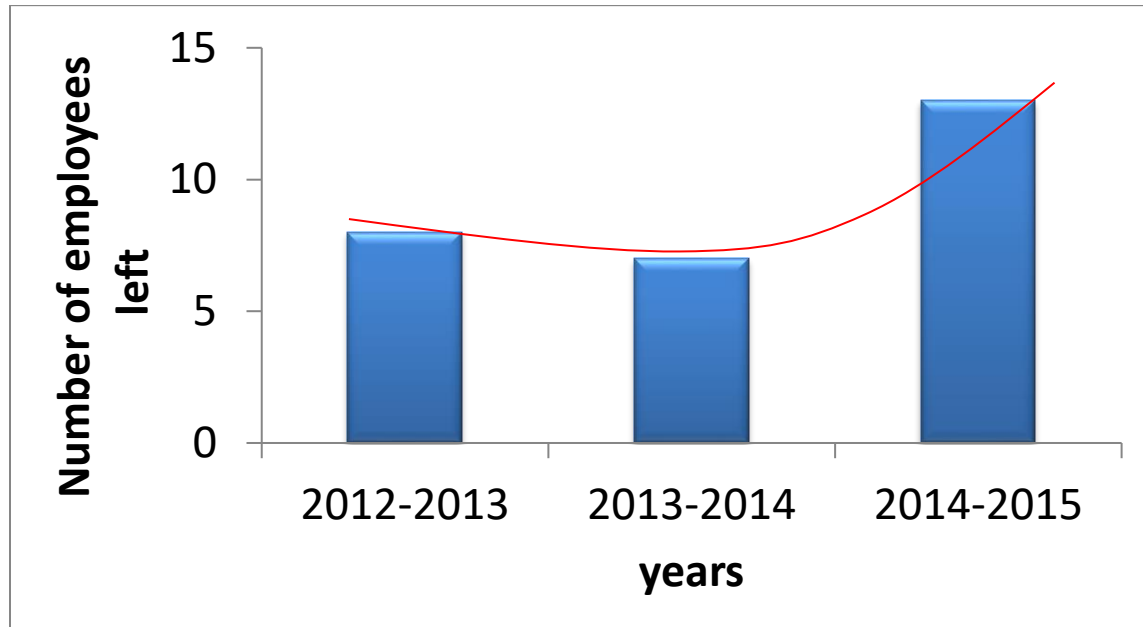
Further the data on attrition was analyzed Financial year wise i.e. (a fiscal year or sometimes a budget year) a period used for calculating annual financial statements of business or other organization.

The year from which the organization started till 2015 the year period becomes-

- 2012-2013 March
- 2013 April – 2014 March
- 2014 April – 2015 March.

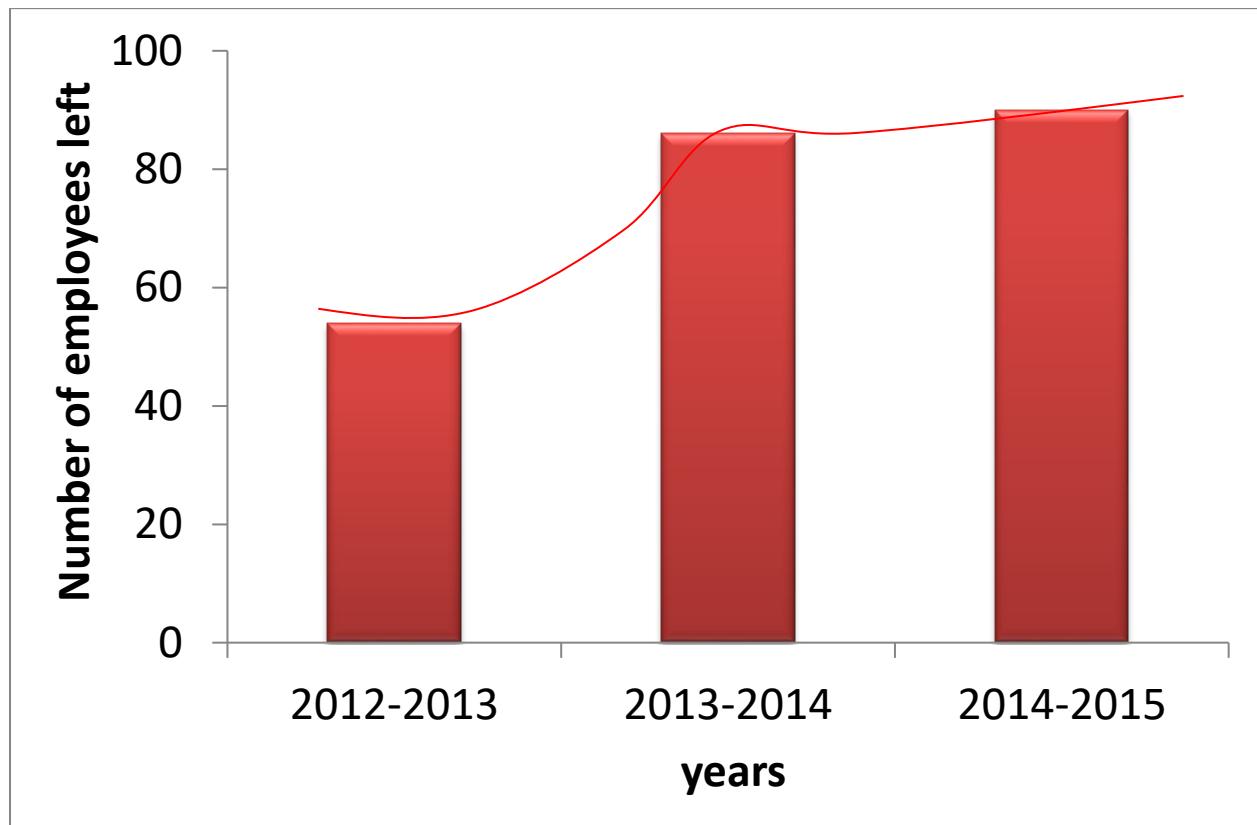
- Attrition was observed in these year periods.
- Each category was observed for attrition year wise i.e. Front desk, Nursing, Paramedics, Physician and Support.

FRONT DESK-



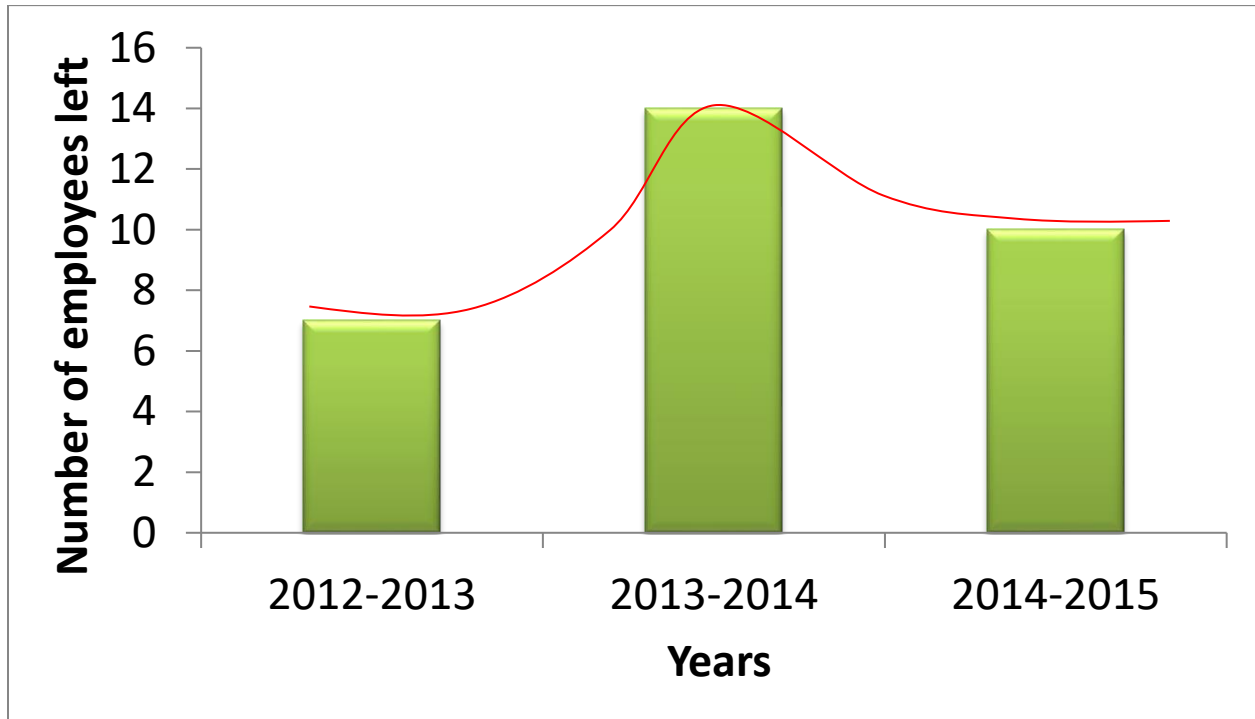
- On observation a decrease was seen in financial year 2013-2014 as compared to 2012-2-13 and 2014-2015.
- The highest percentage of attrition was reported in financial year **2014-2015**.

NURSING –



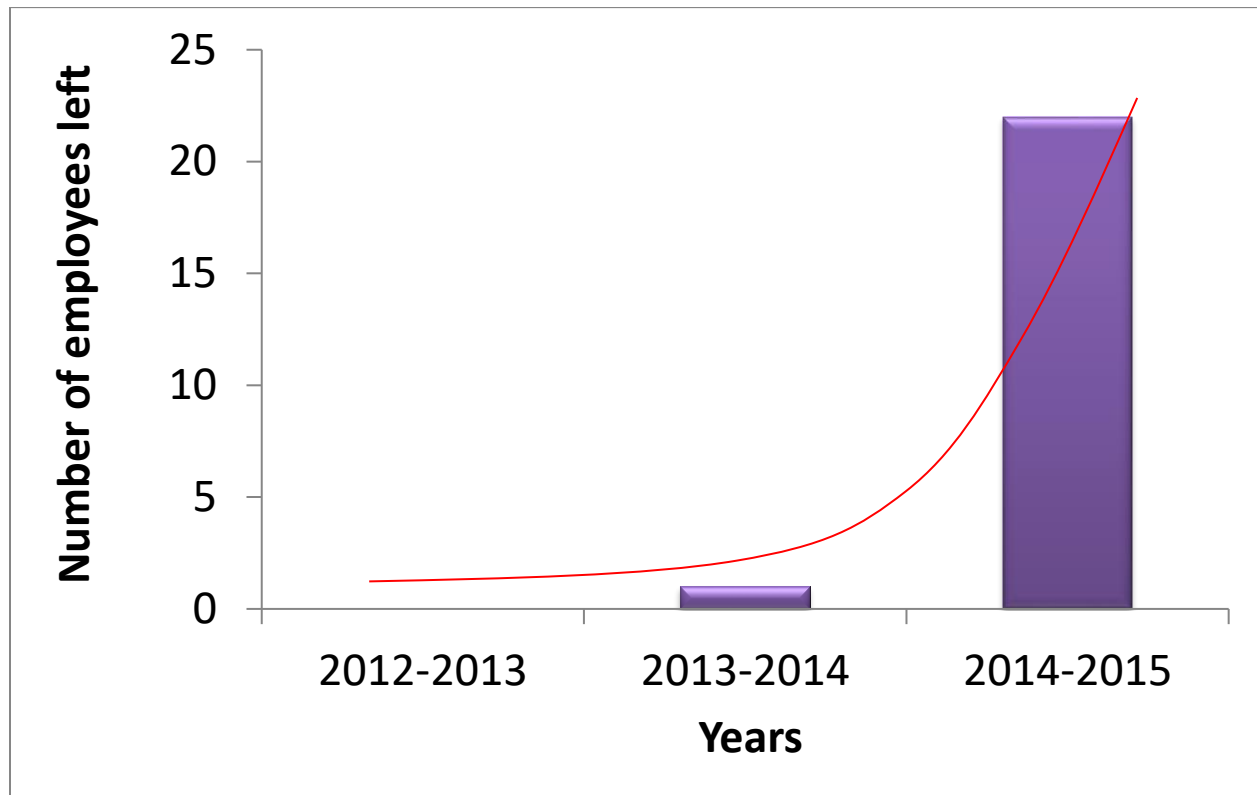
- There was a **continuous increase** reported from 2012 to 2015 in the nursing category.

PARAMEDICS –



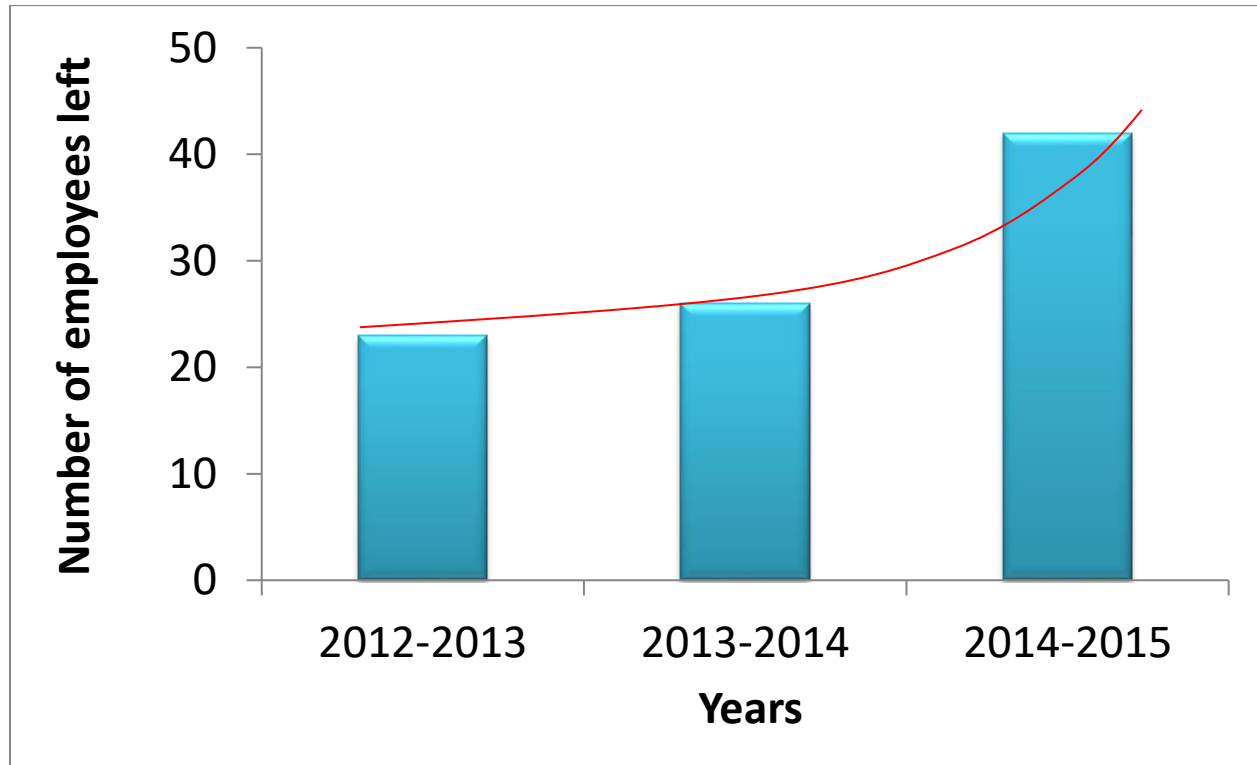
- In year 2012 -2013 there was least attrition reported, whereas a hike in number was seen in 2013-2014 with a significant fall in attrition in the financial year 2014- 2015.

PHYSICIANS –



- There was no attrition seen in year 2012- 2013 for the category physician where as the highest number is reported in financial year 2014- 2015.

SUPPORT –



- On observation a **continuous increase** has been reported from year 2102 to 2015 in attrition for support category.

OVERALL OBSERVATION –

- On overall observation of data provided, the major reasons of attrition covered at MAX SUPER SPECIALITY HOSPITAL were found to be –
 - a. Career growth
 - b. Better job profile
 - c. Better opportunity
 - d. Personal (with no specification)

RECOMMENDATIONS -

- a. Sponsorship for training programs or courses related to the employee's profiles to improvise their knowledge and competencies. This may enable them to grow within the organization.
- b. Market survey can be held to benchmark compensation & other benefits and map it to the best industry practices.
- c. Employee engagement survey can be held so as to keep the best of the staff at work also to reduce the cost of recruitment and training.
- d. Exit interviews should be brief so that an exact cause of attrition can be monitored and elided.

Also an exit interview questionnaire is used to define the exact cause of job termination and gives a better information for retention purposes.

Questionnaire designed at MSSH is given below:

Exit Interview Questionnaire

Q1. Were there any company procedures or policies that made the job difficult? y/n (please explain)

Q2. . Is there anything that the company or the manager could have done to prevent you from leaving? Y/n (please explain)

Q3. Did the job match your expectations? Y/n ,If no why?

Q4. Any suggestions for betterment of MHC?

Q5. Anyone you would like to refer at the same position?

Part I1: Factors Affecting Departure -In deciding to leave your most recent position at MHC, how did each of the following influence your decision? Please respond by circling one number below for each item.

	Strong influence to stay	Slight influence to stay	No effect	Slight influence to leave	Strong influence to leave
A. Work Load	1	2	3	4	5
B. Relations with co-workers	1	2	3	4	5

C. Job security	1	2	3	4	5
D. Quality of supervision received	1	2	3	4	5
E. Flexibility of work hours	1	2	3	4	5
F. Salary	1	2	3	4	5
G. Benefits	1	2	3	4	5
H. Geographic location of MHC	1	2	3	4	5
I. Commuting distance	1	2	3	4	5
J. Family concerns	1	2	3	4	5
K. Non work-related personal life	1	2	3	4	5
L. Your overall perception of the Company's ability to deal fairly with staff	1	2	3	4	5

Part IV: (Please indicate your response.)

- A. If a friend asked, would you recommend employment a MHC? **YES / NO**
- B. Would you work for MHC again in the future? **YES / NO**
- C. In the same department/office you are leaving? **YES / NO**

References –

- **Data retrieved from- <http://guides.wsj.com/small-business/hiring-and-managing-employees/how-to-retain-employees/>**
- **http://en.wikipedia.org/wiki/Turnover_%28employment%29**
- **<http://www.slideshare.net/satturvinay/employee-attribution>**
- **<http://www.citehr.com/56501-ppt-attribution-power-point-presentation.html>**