Summer Training at
Eternal Hospital, Jaipur
(April 3 to June 2, 2017)

Time-Motion Study on Nurses of Eternal Hospital

By
Amanullah Khan

Under the guidance of
Dr. Monika Chaudhary

MBA Hospital & Health Management
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Institute of Health Management Research
The IIHMR University, Jaipur
2017

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

IIHMR UNIVERSITY

CERTIFICATE

This is to certify that Mr./Ms. Amanullah Khan has undergone summer training in (Organization name ETERNAL HOSPITAL) from 3rd April to 2nd June 2017.

The candidate herself/himself completed the project assign to his/her during summer training. Her approach to the project was sincere and proactive. This summer training is in partial fulfillment of the course requirement recommended for the award of MBA in Hospital and Health Management.

I wish him/her success in all her future endeavors.

Col. (Dr.) Ashok Kaushik

Dean (Academic & Student Affair)

The IIHMR University, Jaipur

Name of the Mentor
Dr. Monika Chaudhary
Designation
Associate Professor.
The IIHMR University

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

EHCC ETERNAL HEART CARE CENTRE & RESEARCH INSTITUTE "Where good care leads... good health follows"

ETERNAL HOSPITAL

Unit of Eternal Heart Care Centre & Research Institute Pvt. Ltd.

3A, Jagatpura Road, Near Jawahar Circle, Jaipur - 302017, Rajasthan (India)
Phone : +91-0141-5174000, Website : www.eternalheart.org
CIN No. U85110RJ2007PTC023653

PATIENT SAFETY & QUALITY OF CARE NABH ACCREDITED

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Dr. Amanullah Khan** student of **IIHMR, Jaipur** has completed his internship at **"Eternal Hospital, Jaipur"** from **03rd April 2017 to 02nd June 2017**.

During this period, he has successfully completed his projects on **" A Time -Motion Study on Nurses of Eternal Hospital, Jaipur".**

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

We wish him all the best for future endeavours.

For **ETERNAL HEART CARE CENTRE AND RESEARCH INSTITUTE, JAIPUR**

Eternal Heart Care Centre & Research Institute JAIPUR

Ashok K Jeenwal
Manager - HR

ACKNOWLEDGEMENT

Apart from the efforts of me, the success of any project depends largely on the encouragement and guidelines of many others. I take this opportunity to express my gratitude to the people who have been instrumental in the successful completion of this internship project.

I would like to show my greatest appreciation to Mr. Subhrato Das (Vice President – Human Resources). I can't say thank you enough for his tremendous support and help.

I am heartily thankful to Dr.Vrajesh Shah (Medical Superintendent) and Kirti Hemkar (Quality Head) whose encouragement , guidance and support from the initial to the final level enabled me to develop an understanding of the subject , feel motivated and encouraged every time. Without her encouragement and guidance this project would not have materialized.

I would like to thank the staff of eternal hospital for sparing their precious time and providing me full cooperation in completing my task.

My sincere thanks to my mentor , Dr. Monika Chaudhary (Associate Professor) and also to Dr. Ashok Kaushik (Dean Academics) , and respected faculties for their guidance. Lastly, I offer my regards and blessings to all those who supported me in any respect during the completion of the project.

Dr. Amanullah Khan

MBA HM-21

THE IIHMR UNIVERSITY

Roll No: 438

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ABBREVIATIONS

ACC-According

Cath- catheterization

CEO-Chief executive officer

CSSD- Central sterile and supply department

CT-Computed tomography

CTVS-cardiovascular and thoracic surgery

EA-Executive assistant

ENT-Ear nose throat

HDU- High Definition Unit

HOD- Head of Department

HR- Human Resource Department

ICU-Intensive Care Unit

IPD-In Patient Department

IT-Information technology

IV-Intra-venous

MICU- Medical Intensive Care Unit

MRI- Magnetic Resonance Department

MS-Medical superintendent

NICU-Non Invasive Cardiac Unit

N:P ratio- Nurses to Patient ratio

NS-Nursing Superintendent

OPD-Out-patient department

OT- Operation Theater

SICU- Surgical intensive care unit

PC-Patient care

DOC-Documentation

TPA- Third party administrator

HR-Human resource

CHAPTER-1

ETERNAL HOSPITAL

(A UNIT OF ETERNAL HEART CARE CENTRE AND RESEARCH INSTITUTE PVT. LTD.)

1.1 INTRODUCTION

Eternal Hospital, Jaipur is the state of the art tertiary care hospital in Rajasthan embarking on the mission of redefining patient care with international clinical excellence and advanced technology. Eternal hospital is one of the most advanced tertiary care facilities under the visionary of Dr. Samin K Sharma and his wife Mrs. Manju Sharma boosted with great expertise in healthcare by leading clinician, astute management team supported by highly trained clinical and non-clinical staff.

Eternal Hospital states newest addition of tertiary care hospital which brings together the state-of the-art medical infrastructure, cutting edge technology and highly integrated and comprehensive information system along with quest for exploring and developing newer therapies. To serve the community at large we have energetic, enthusiastic, forward looking, devoted and able technical expertise of consultants from within and outside the country. Eternal Hospital is backed up by the trained supportive staff, efficient system procedures in affiliation with Mount Sinai Medical Centre, New York with an aim to cater the needs of Rajasthan and people across the globe promoting the international medical tourism.

1.2 ORGANIZATION PROFILE

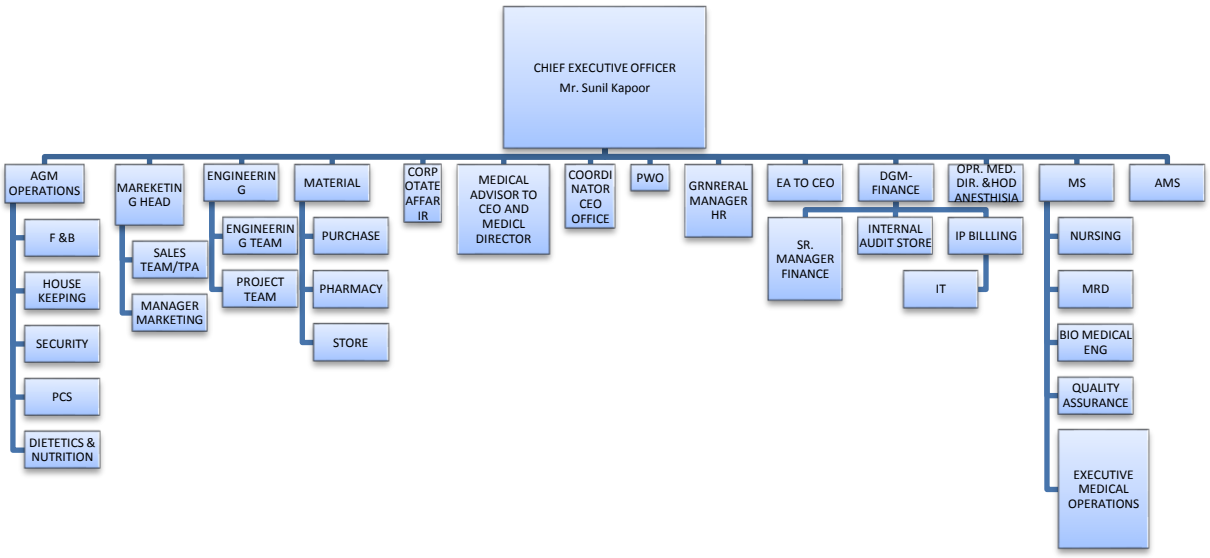
Vision

A Centre of excellence in area of medicine with highest international standard at affordable cost for the community around the globe.

Mission

To redefine healthcare by improving outcomes and experience of patients through cutting edge research and personalized clinical care including innovative, preventive, diagnostic, therapeutic and rehabilitation services.

EHCC THE LEADERSHIP TEAM



1.3 SERVICES OFFERED BY THE HOSPITAL

SPECIALITIES

- Anesthesia
- Dentistry
- Dermatology and Venerology
- Ear, Nose and Throat
- General Surgery
- Gynecology and Obstetrics
- Internal Medicine
- Orthopedics & Joint Replacement
- Pediatrics
- Physiotherapy
- Pulmonology

SUPER SPECIALITIES

- Cardiothoracic & Vascular Surgeries
- Cardiac Anesthesia
- Clinical Psychiatry
- Diabetes and Endocrinology
- Gastro-Intestinal Surgery
- Interventional Cardiology
- Noninvasive Cardiology
- Nephrology
- Nuclear Medicine
- Neuro and Spine Surgery
- Pediatric Cardiology

- Plastic Surgery
- Urology

SUPPORTIVE SERVICES

- Department of Dietetics
- Physiotherapy

DIAGNOSTIC AND IMAGING SERVICES

- Blood Bank
- Pathology
- Critical Care
- Emergency and Ambulance Services

24 X 7 SERVICES

- Ambulance
- Pharmacy
- Emergency
- Laboratory
- Radio diagnosis

A QUICK TOUR

- 225 Bedded Super Specialty Hospital (Operational Beds-175)
- Modular “class 100” Operational Theatre
- 24 X 7cath lab
- 24 X 7 emergency with fully equipped ALS/BLS Ambulances
- Blood storage bank
- Nuclear medicine (gamma camera with stress thallium)
- Radio- diagnosis & Imaging sciences (MRI, CT scan, CT Angiography, bone densitometry, x-ray)

- Clinical Pathology-Biochemistry & Microbiology
- Pneumatic chute for quick sample transportation
- Transfusion medicine
- Non-invasive cardiology
- Environment friendly: use of solar energy, green building &recycled water
- Café lounge
- Library
- Seminar hall and conference roof

FLOOR PLAN

Basement 2

- Parking
- Medical record department
- Bio medical plant

Basement 1

- Dialysis department
- Dietician
- Kitchen
- Staff cafeteria
- Laundry
- IPD pharmacy
- Mortuary

Ground floor

- OPD

- Reception
- OPD pharmacy
- Billing and discharge
- TPA
- Radiology
- Cafeteria
- Prayer room
- Emergency department
- Nuclear medicine

M floor

- HR department
- CEO
- Finance department
- Library
- Auditorium
- IT department
- Quality Assurance Department
- Wellness lounge
- Blood bank
- Reception
- Plastic surgery
- Physiotherapy
- Pathology department
- Dental department
- Ophthalmology department

First floor

- ICU
- Consultants

Service floor

- CSSD

Second floor

- OT area
- Pre-Operative Ward
- CTVS ICU
- Surgical ICU
- MICU
- 6 OT
- 2 Cath lab

Third and Fourth Floor

- Wards

Fifth Floor

- Marketing Department

1.4 CLINICAL SERVICES

Those services are which are directly related to medical practice. These include

1. Outpatient department
2. Inpatient department
3. Accident and emergency department
4. Pathology department
5. OT
6. Dialysis unit
7. Physiotherapy department
8. CSSD

Out Patient Department

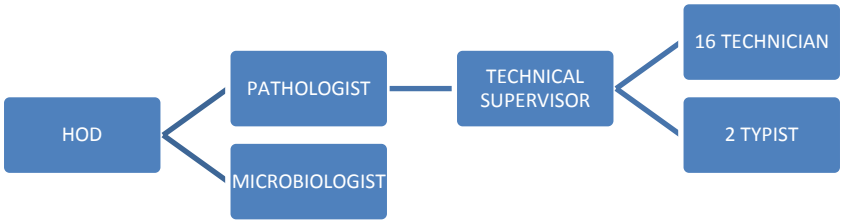
Patient who in the considered view of a competent professional do not immediately require hospital admission and who can satisfactorily treated on a domiciliary basis are classified as ambulatory patients and commonly called as out patients. Hence the department of ambulatory care is also known as outpatient department.

Inpatient Department:-

Inpatient department deals with inpatient care of patients whose condition requires admission to a hospital. Progress in modern medicine and the advent of comprehensive outpatient clinics ensure that patients are only admitted to a hospital when they are extremely ill or have severe physical trauma.

Pathology Department:-

All types of diagnostic test are performed here under the guidance of pathologist. There are fully automatic machines with provide the specific results. Some services are outsourced from different companies.



Operation theatre

All type of surgeries are performed here. There are SICU, MICU, NICU, HDU, CTVS and General ward. The services include invasive monitoring, patient assessment (physician, nursing, dietary and physiotherapy).

Dialysis unit

It deals with the artificial replacement of the lost kidney function in patient with renal failure to remove excess water and waste products from the blood

Physiotherapy:-

The department provides facilities such as Electrotherapy, Diagnostic, Manual, Mechanical mobilization Therapy, Exercise therapy etc.

CSSD:-

The department provides clean and sterile supplies which help in reduction of infection and improving the quality of care. The department provided infection control by educating staff on different topics

1.5 NON- CLINICAL SERVICES

Those services are which are related to administrative and non-medical side of the hospital. These include

1. Admission And Billing
2. Quality Assurance Department
3. Human Resource Department
4. Medical record department
5. Pharmacy
6. Housekeeping
7. Marketing
8. Finance
9. Information technology
10. Dietician
11. Food and beverages
12. Purchase department
13. Engineering
14. Patient welfare department
15. Bio medical engineering
16. Security
17. Laundry

Admission and Billing:-

This is the department involved in the counselling to the patients, admission process and guiding them while billing is done after final discharge of the patients.

Quality Assurance Department:-

Headed to maintain and perk up the standards. Quality assurance (QA), the activity of providing evidence needed to establish quality in work and the activities that require good quality is being performed effectively. It included all those planned or systematic actions necessary to provide enough confidence that a product or service will satisfy the given requirement for quality.

Human Resource Department

The department helps to ensure the availability and retention of quality talent to meet organization goals and objectives and to provide overall growth and development of employee's orientation and functional training. The department looks into the matter like attendance and leave management, appraisal and promotion process ,medical benefits, employee welfare programs, payroll management , grievance handling.

Medical record department

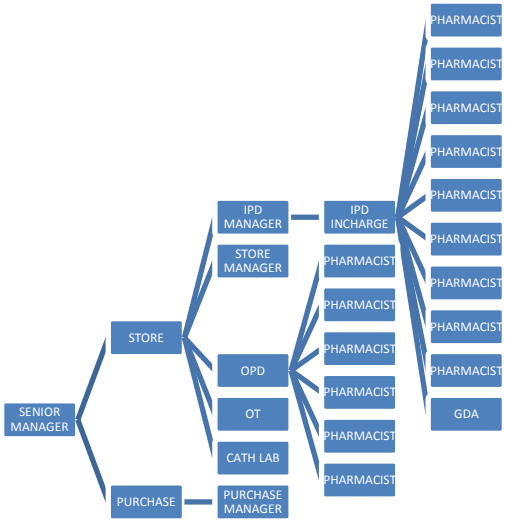
MRD is the custodian of all the discharged/expired health records documents. The MRD staff ensures the confidentiality, preservation, storage and retention of the documents.

The department deals with record collection, codification, storage, analytical evaluation and retrieval of record if needed.

Pharmacy

The goal of the pharmacy is to procure and provide medicines and surgical items to the patients. The pharmacy serves various areas of the hospital like customs, special wards .The Department services include procurement and providing medicines to the patients.

The department also provides medicines to the wards if needed and give details to the billing department at the time of discharge of patients.



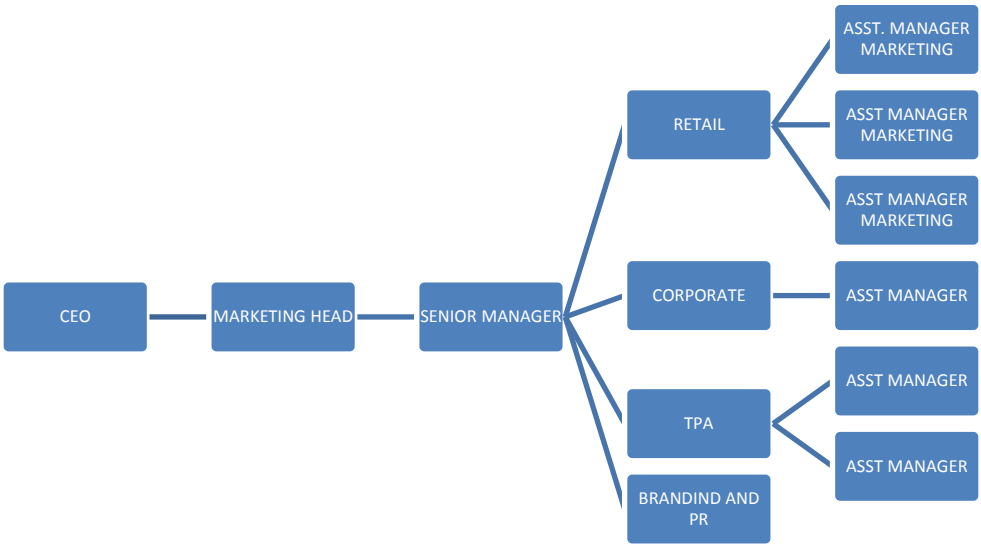
Housekeeping

The aim of the department is to achieve defect free room with 100% hygiene and cleanliness to maximize patient's satisfaction along with minimum cost. The department performs activities like cleaning providing room amenities, pest controlling and waste disposal.

Marketing

The department is responsible for the revenue generation through brand building, retail sales, cooperate marketing, PR and media communications and liaison with the

government. Some activities of the department are brand awareness, events management, cooperate social responsibility and ensure business and growth in line with organizational objectives.



Finance

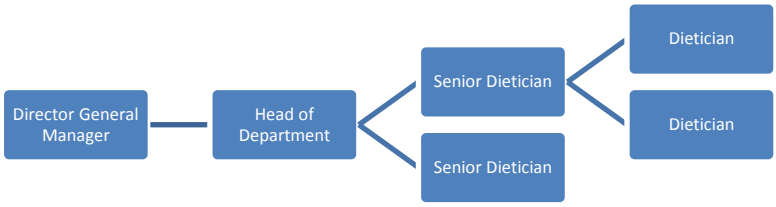
The department provides accurate relevant and timely financial information necessary in making the right business plan and decisions. The finance department looks into the business building insight, areas for lowering cost and improving profitability, updating of bills on daily basis for IPD patients. The billing staff has overall responsibility for coordination of various functions and daily basis report for the admission and provide the necessary solution to daily problems as deemed proper and reasonable.

Information technology

It department provides it values to the end users with respect to their day to day function. The department serves various departments for IT infrastructure, hardware and network, anti- virus services, internet services, upgradation of software, telecommunication between various departments, auditorium functioning.

Dietician:-

The department provides the food and beverages to the esteemed customers. The department performs daily audits of the store and kitchen areas, take round of the entire service area with and after the service timings, monitoring of services.



Engineering:-

The department manages all the engineering and machines, supervising day to day hospital maintenance work and ensuring smooth functioning of facilities of the hospital. The department coordinates with various department non-medical so that there is no hindrance in day to day work of all facilities. The department is responsible for managing plant engineering equipment, utilizes spares and consumables like diesels generators, plumbing, pipelines, ventilation, air conditioner, water treatment plants etc.

Patient welfare department:-

The departmental goal is to make and position the hospital as a center of excellence by ensuring customer satisfaction through personalized customer care. The department manages patients attendants expectations as well as keeping the interests of organization alive, improves the quality of the services for the patients through feedback given by the, networking within the organization for the benefit of the patient and attendant.

Bio medical engineering:-

The department installs commission and maintains all the medical equipment in an efficient and cost effective way and makes technical appraisal and recommendation for purchase of new equipment. The department provided inputs to commercial department about new/renew of contract with equipment supplier including annual maintenance contracts.

Security:-

The department provides proactive, competent services, to protect the life and property of every individual present in the primases, to prevent any action or situation that might result in an injury or death when a patient/attendant/visitor/employee are lawfully on the hospital premises.

Laundry

The department delivers spotlessly clean and hygiene linen and uniforms to the users of different departments. The department maintains records for issued linen, received linen, new linen and alteration if needed. The department treats infected/contaminated linen, treats heat labile linen.

CHAPTER-2

"A TIME-MOTION STUDY ON NURSES OF ETERNAL HOSPITAL"

2.1 INTRODUCTION

The INDIAN hospital system is in a state of transition. Hospitals face daunting challenges, such as evolving technologies and reimbursement policies, demographic trends, competing fiscal demands , and a worsening workforce shortage. This point in time also affords a unique opportunity, as India is in the midst of one of the largest hospital-building and renovation booms in history. A reconsideration of hospital design and work processes holds the potential to affect the efficiency and effectiveness of care delivery for the foreseeable future.

Nurses are the linchpin of hospital care delivery. These frontline caregivers represent a critical and costly resource; maximizing the efficiency and effectiveness of nurses is essential to the integrity of hospital function and the promotion of safe patient care. A growing evidence base links more nursing care time per patient per day with better patient outcomes.

However, increased nurse workload and the growing nursing workforce shortage reduce the amount of nursing time available for patient care activities. How nurses spend their time is a key driver of bold changes in the hospital work environment. An understanding of how nurses spend their time will target opportunities for nursing care effectiveness through improvements in management, workforce, work processes, and organizational culture.

I undertook a time and motion study to provide an understanding of how a nurse spend their time in corresponding wards or units. Documenting the turn-around time of different activities in nursing practice will allow for targeted changes to the work environment to positively influence patient safety and quality of care. The primary objectives of the study were to identify the time taken by nurses for various activities during their shift hours. This study was also designed to provide a baseline data regarding various documentation activities.

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2.2 REVIEW OF LITERATURE

Zhihua Tang et al in his study on stated that, "Utilizing advanced information technology, Intensive Care Unit (ICU) remote monitoring allows highly trained specialists to oversee a large number of patients at multiple sites on a continuous basis. In his research, he conducted a time-motion study of registered nurses' work in an ICU remote monitoring facility. Data were collected on seven nurses through 40 hours of observation. The results showed that nurses' essential tasks were centered on three themes: monitoring patients, maintaining patients' health records, and managing technology use. In monitoring patients, nurses spent 52% of the time assimilating information embedded in a clinical information system and 15% on monitoring live vitals. System-generated alerts frequently interrupted nurses in their task performance and redirected them to manage suddenly appearing events. These findings provide insight into nurses' workflow in a new, technology-driven critical care setting and have important implications for system design, work engineering, and personnel selection and training."

"A Time-Motion Study of Registered Nurses' Workflow in Intensive Care Unit Remote Monitoring" AMIA 2006 Symposium

Ann Hendrich et al in her study divided the nurses time into categories of activities (nursing practice, unit-related functions, nonclinical activities, and waste) and locations (patient room, nurse station, on-unit, off-unit). Total distance traveled and energy expenditure were assessed. Distance travelled was evaluated across types of unit design.

The time and motion study identified three main targets for improving the efficiency of nursing care: documentation, medication administration, and care coordination. Changes in technology, work processes, and unit organization and design may allow for substantial improvements in the use of nurses' time and the safe delivery of care.

"A 36-Hospital Time and Motion Study: How Do Medical-Surgical Nurses Spend Their Time?" PURDUE UNIVERSITY , RCHE PUBLICATIONS ,6-1-2006.

2.3 OBJECTIVES

- To learn and observe various activities performed by nurses in their shifts.
- To track turn-around time for each and every activity.
- To analyze what type of documentation activities , nurses most indulge in.
- Grouping of all kind of activities into 3 groups :
    - Patient care
    - Documentation
    - Others
- Analyzing these data across various wards depending on :
    - Critical/Non Critical Wards
    - Surgical/Medical Wards
    - N:P ratio

2.4 RESEARCH METHODOLOGY

- **Type of study** **:** Observational study.
  This study was purely based on observations done primarily on nurses on what kind of activities they indulge in and what amount of time is taken for that particular activity.
- **Study population** **:** Staff nurses of all wards
  All nurses from all critical or non critical wards were included in this study except those who were included in management or any kind of teams for eg-Infection control team.
- **Study area** **:** ETERNAL HOSPITAL ,JAIPUR
- **Duration of study** **:** 45 days
- **Type of data** **:** Quantitative
  Quantitative data was acquired in form of minutes as Turn-around time for each activity.
- **Technique** **:** Direct observation of nurses
- **Sample size** **:** 30
- **Sampling technique** **:** Non probability/purposive sampling
  Sampling of nurses in each ward was done according to ease of availability and if they were fitting the criteria of N:P ratio on that particular day. For eg:- If a general ward have 10 patient beds and 2 nurses, so N:P ratio must be 1:5; but in case of only 7 patients on that day, nurse with N:P ratio of 1:4 was included as it was more close to what was expected.
- **Exclusion criteria** **:** All nursing incharges, superintendents were excluded
- **Data collection** **:** Primary and Quantitative
- **Data entry** **:** Manual

- **Data analysis** **:** Primary data collected in Microsoft excel and then analysed in excel sheet using pie and bar graphs.

For the analysis all the wards were divided a1cc to 3 different criteria's:-

I. According to type of care provided
    i. Non-critical care wards (general wards)
    ii. Critical care wards

II. Critical care wards were further divided according to kind of specializations
    i. Critical care wards MEDICINE
    ii. Critical care wards SURGERY

III. Furthermore wards were divided according to average N:P ratio

MEDICINE: MICU- 1:1.75

HDU- 1:3

SURGERY: CTVS ICU - 1:1.25

SICU - 1:2

So, total of 5 wards were distributed according to various specialities , care provided and N:P ratio's , which are:-

1. GENERAL WARDS
2. MICU
3. HDU
4. CTVS ICU
5. SICU

LISTING AND GROUPING OF ACTIVITIES

After observing all activities, they were grouped in 3 major groups of activities:-

a) PATIENT CARE
b) DOCUMENTATION
c) OTHERS

- PATIENT CARE

All the activities related to patient care Direct or Indirect were included in this group , which were:-

i. Medication
ii. Doctor's rounds
iii. Consulting attendants
iv. Consulting patient
v. Consulting with in-charge
vi. Consulting with resident
vii. Checking all IV's , drains and tubes
viii. Checking equipments attached to the patient.
ix. Feeding the patient
x. Positioning of the patient
xi. Taking blood sample of the patient
xii. Checking medicines if present
xiii. Consulting dietician
xiv. Helping other nurses on patient
xv. Mobilizing the patient
xvi. Transfer of patient IN or OUT
xvii. On call with different departments for patient care

- DOCUMENTATION

Nursing documentation is essential for good clinical communication. Appropriate legible documentation provides an accurate reflection of nursing assessments, changes in conditions, care provided and pertinent patient information to support the multidisciplinary team to deliver great care. Documentation provides evidence of care and is an important professional and medico legal requirement of nursing practice.

There are various types of documentation which are necessary for a nurse to comply with. They are:-

1) Handover:

a) Taking handover at start of shift

b) Giving handover at the end of shift

2) File work:

a) Vitals recording.
b) Recording of medications
c) Attaching reports
d) Nursing care plan
e) Initial nursing assessment
f) Daily nursing assessment
g) Surgical safety checklist
h) Diabetes chart
i) Investigation flow chart
j) Fluid input/output chart

3) Station side paper documentation:

a) TPA register
b) Radiology register
c) Communication register
d) Daily billing register
e) Transfer out register
f) Bed statement
g) Pathology register

h) Tentative discharge register
i) Diet register
j) Oxygen refilling register
k) Biomedical complaint register
l) Linen register
m) Glucose strip register
n) Staff attendance

4)Other documentation:

a) Medication indent

b) Taking out lab and diagnostic reports of patients

- OTHERS

All the activities done by nurses other than those listed above came under this category. They were:

1) Checking Inventory.
2) Hand-wash.
3) Collecting medicines.
4) Talking with staff (matters except patient care).
5) Off-station (except transfer in or out of patient).
6) No work/ Sitting Idle/ Rest.
7) Advising Housekeeping staff.
8) Arranging/Organizing files properly in nursing station

2.5 DATA ANALYSIS

GENERAL WARD (NON-CRITICAL WARDS)

GENERAL WARDS comprised of total 5 wards which were situated in 3rd and 4th floors. They were:-

i. 3rd floor 'A' wing ROOMS
ii. 3rd floor 'C' wing ROOMS
iii. 3rd floor general ward
iv. 4th floor 'A' wing ROOMS
v. 4th floor 'c' wing ROOMS

Total number of nurses posted in these wards were 80. Out of those 10 nurses were taken for our study; 2 nurses were taken from each ward. 1 from morning and 1 from evening shift.

TOTAL TIME OBSERVED	3782 minutes
TOTAL PATIENT CARE TIME	1593 minutes
TOTAL DOCUMENTATION TIME	1398 minutes
TOTAL OTHER TIME	791 minutes

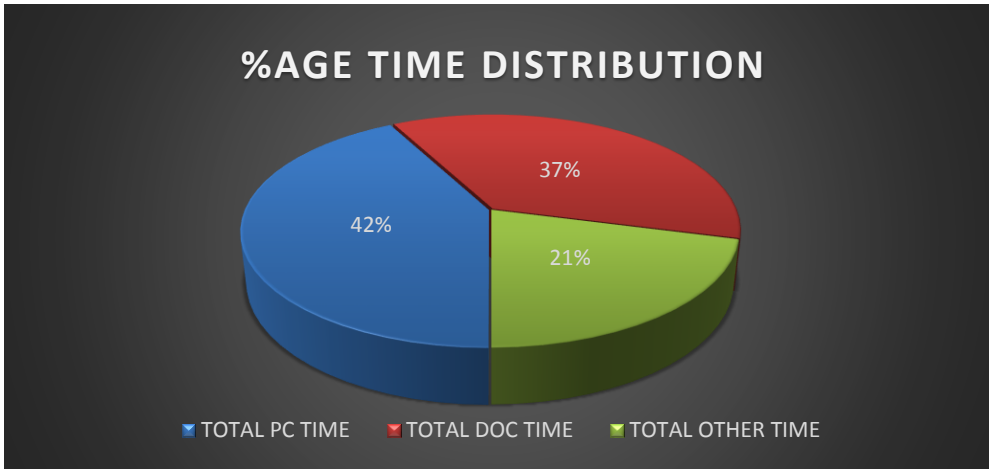

Fig.1.1-Shows percentage time distribution of various activities in general Wards

Out of total documentation time that was observed most of the time was occupied by file work (38%), followed by handover time(25%) and time for other activities(26%). Least amount of time was occupied by station side documentation(11%)

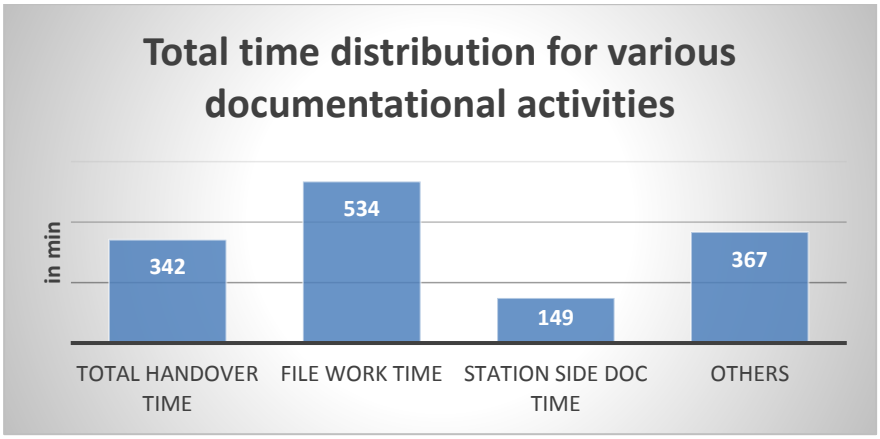

Fig.1.2- Shows the amount of time spent in particular group of activities in general wards out of total time spent in documentation

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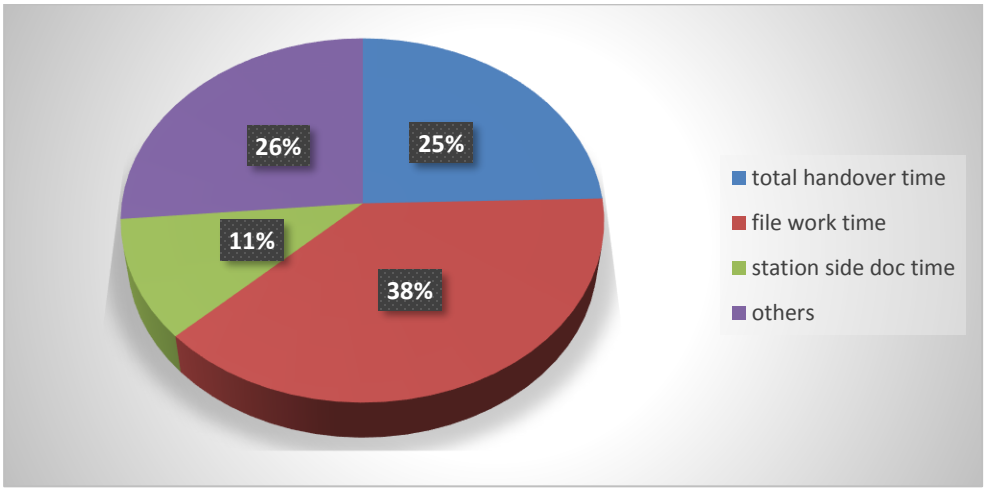

Fig.1.3-Shows percentage time taken for each documentation activity in general wards.

MICU (MEDICAL INTENSIVE CARE UNIT)

Eternal hospital being the critical care centre of Jaipur lays great emphasis on medical ICU. They have 2 wards dedicated as Medical ICU i.e.MICU-1 and MICU-2 which were situated in 1st floor of the hospital

Total nurses posted in MICU were 60 ; among which 40 were males and 20 females. Out of these nurses 8 samples were taken for the observation ; 4 from each MICU. 2 nurses were taken from each shift

TOTAL TIME OBSERVED	2980 minutes
TOTAL PATIENT CARE TIME	1243 minutes
TOTAL DOCUMENTATION TIME	1300 minutes
TOTAL OTHER TIME	437 minutes

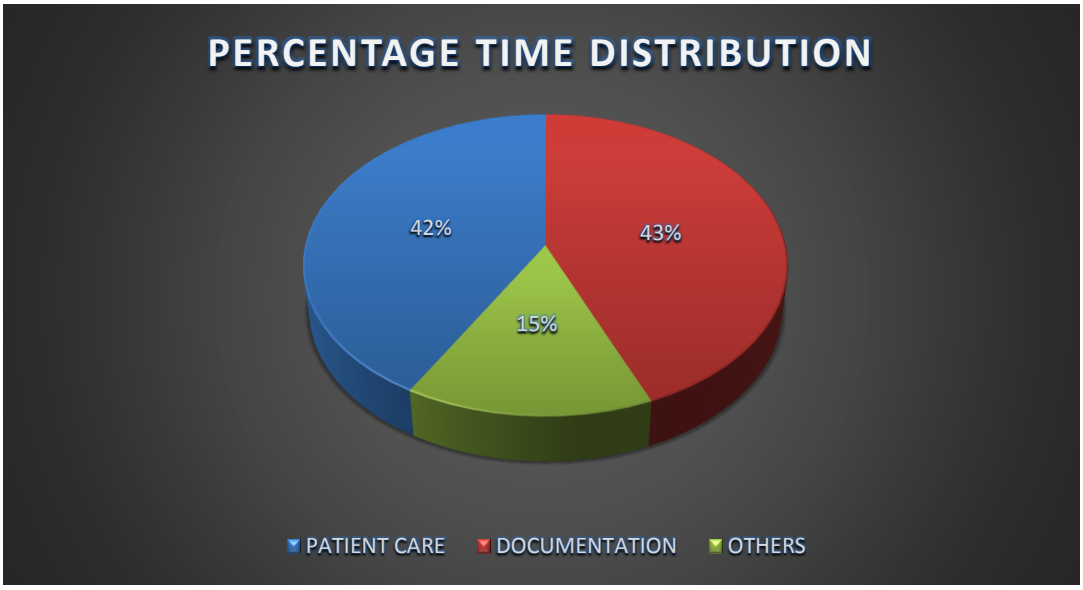

Fig.2.1-Shows percentage time distribution across every group of activity in MICU

Out of Total documentation time majority of time were taken by file work (50%) which was followed by handover time (23%) then station side documentation (16%) and lastly time spent on other activities(11%) only.

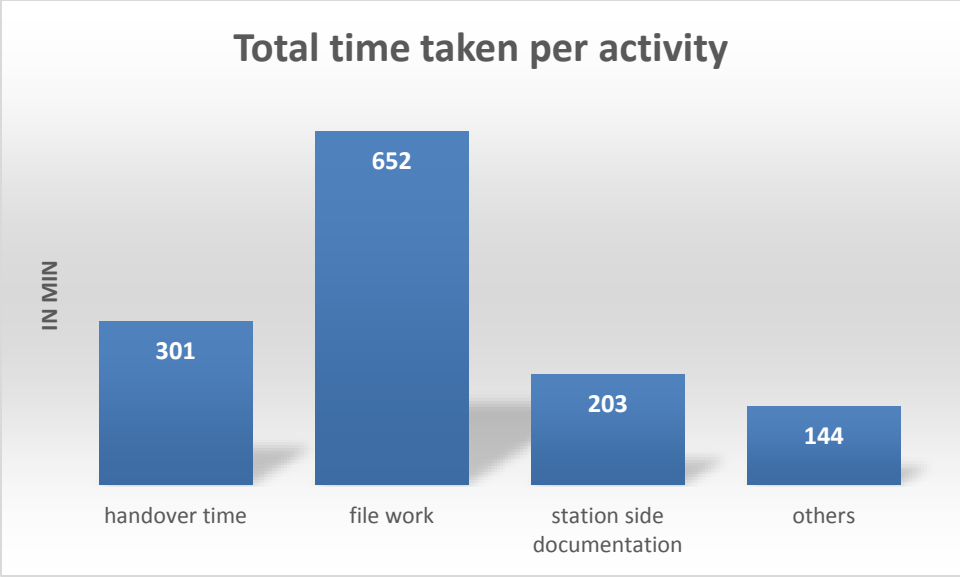

Fig.2.2.Shows total time spend in each type of documentation out of total observed hours

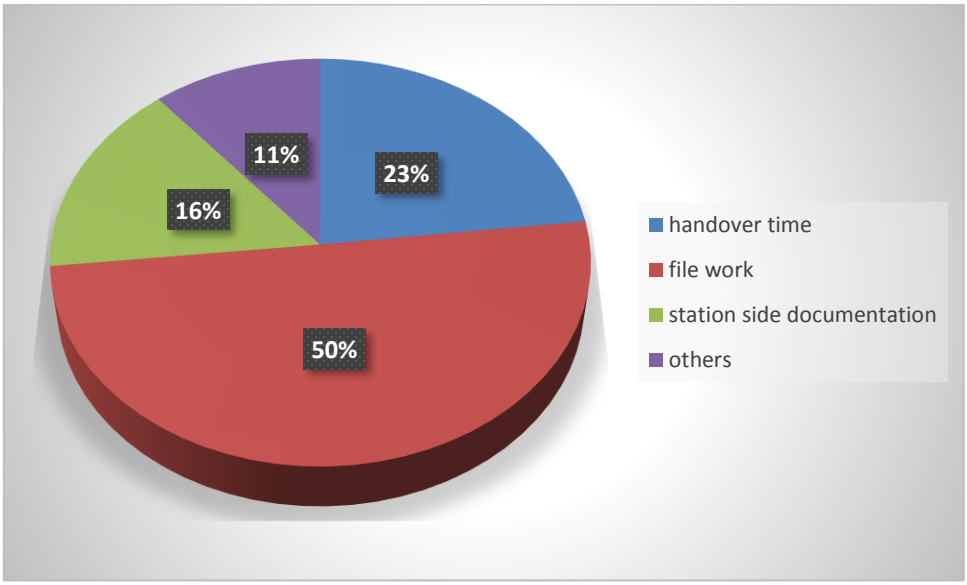

Fig.2.3. Shows percentage time distribution in each documentation activity

HDU (HIGH-DEPENDENCY UNIT)

HDU is a kind of step down ICU for MICU which had 10 beds and a total of 20 nurses in which13 were male and rest 7 were female. Critical care in this ward was less than MICU but more than general wards so accordingly nurses to patient ratio was1:3.

Total of 4 nurses were taken as sample size; 2 from each shift.

TOTAL TIME OBSERVED	1511 minutes
TOTAL PATIENT CARE TIME	622 minutes
TOTAL DOCUMENTATION TIME	578 minutes
TOTAL OTHER TIME	311 minutes

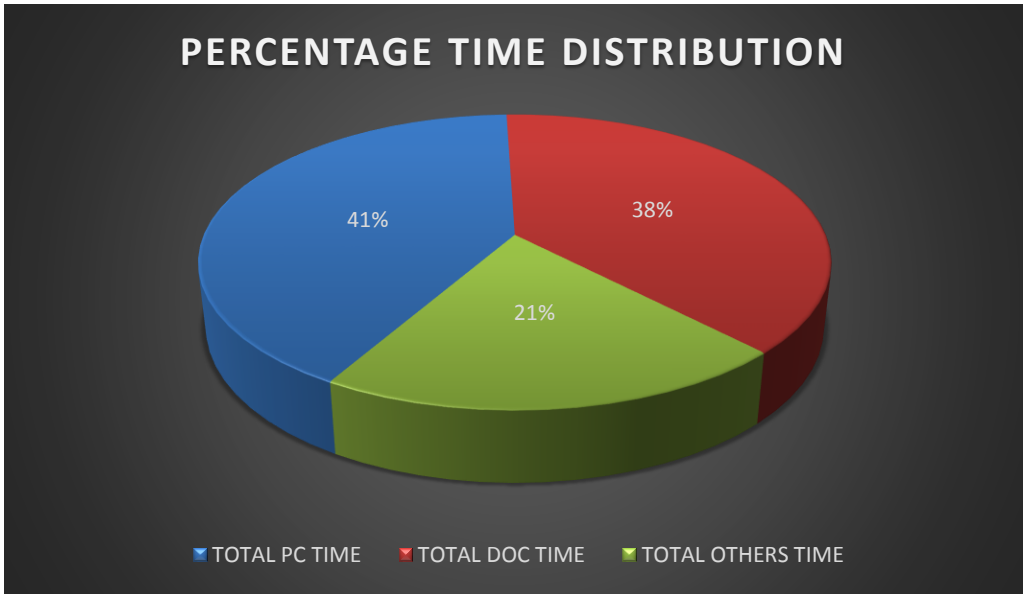

Fig.3.1.Shows percentage time distribution of various group of activities in HDU

Out of various documentation time file work was taking most time with a total of 355min out of 578 min i.e.61%. total handover time , other documentation and station side documentation were at 21%,11% and 7% respectively.

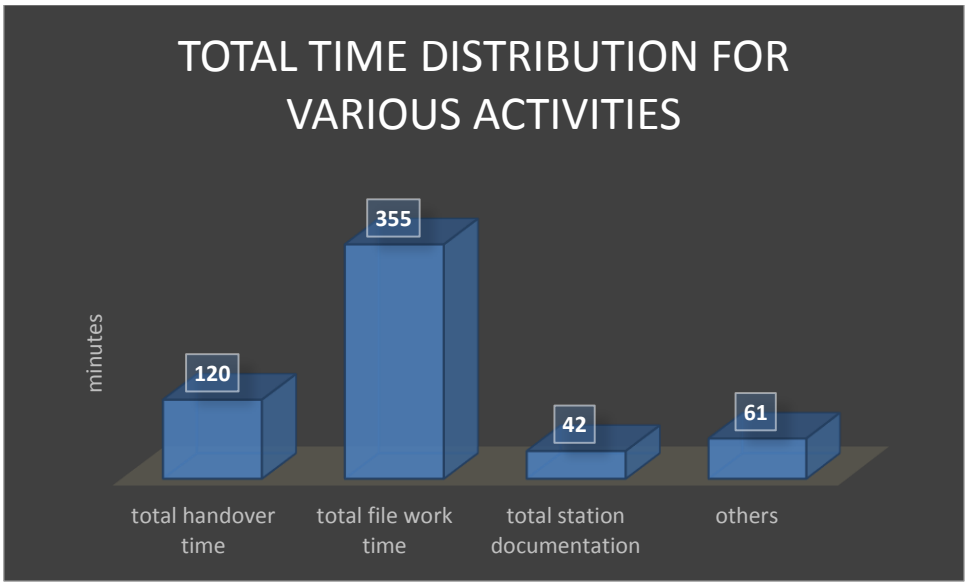

Fig.3.2. Shows total time consumed in each documentation activity from total documentation time

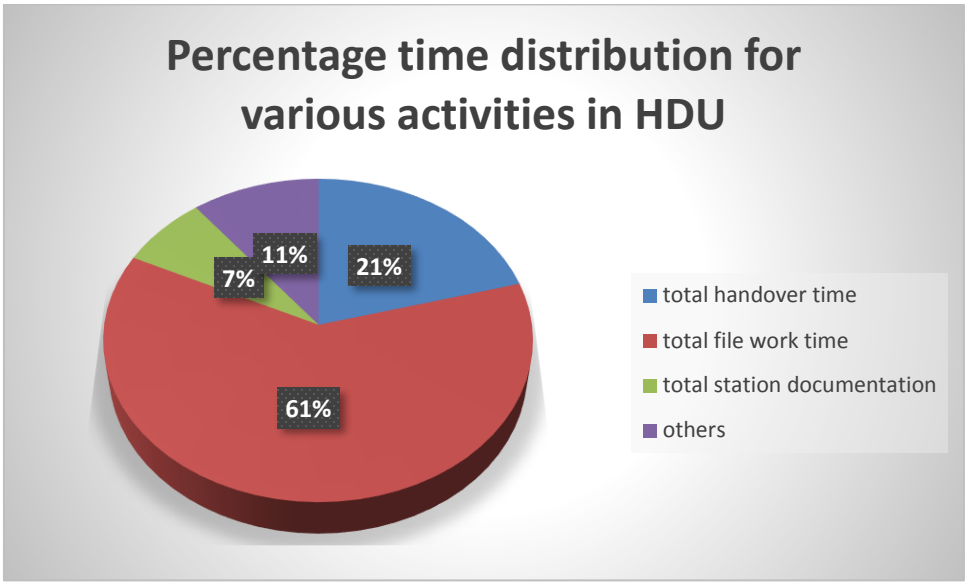

Fig.3.3. shows percentage time distribution for various documentation activities

CTVS ICU (CARDIO-THORACO-VASCULAR SURGERY ICU)

One of the specialities of ETERNAL HOSPITAL is cardiac surgeries which is in majority among all of the hospitals in rajasthan.after being established already 2 cardiac transplants have taken place and the patients are healthy who come to regular checkup.

CTVS surgeon Dr.Ajeet Bana take great emphasis on patient care being the primary work for nurses. So under strict order of the doctor incharge the nurses were asked to not spend their time in documentation unless it is most necessary. This shows in these analysis as well.

As many as 40 nurses were posted in CTVS ICU occupying 18 beds having average N:P ratio 1:1.25 . A total of 4 nurses were taken as sample; 2 from each shift.

TOTAL OBSERVED TIME	1514 minutes
TOTAL PATIENT CARE TIME	820 minutes
TOTAL DOCUMENTATION TIME	409 minutes
TOTAL OTHER TIME	285 minutes

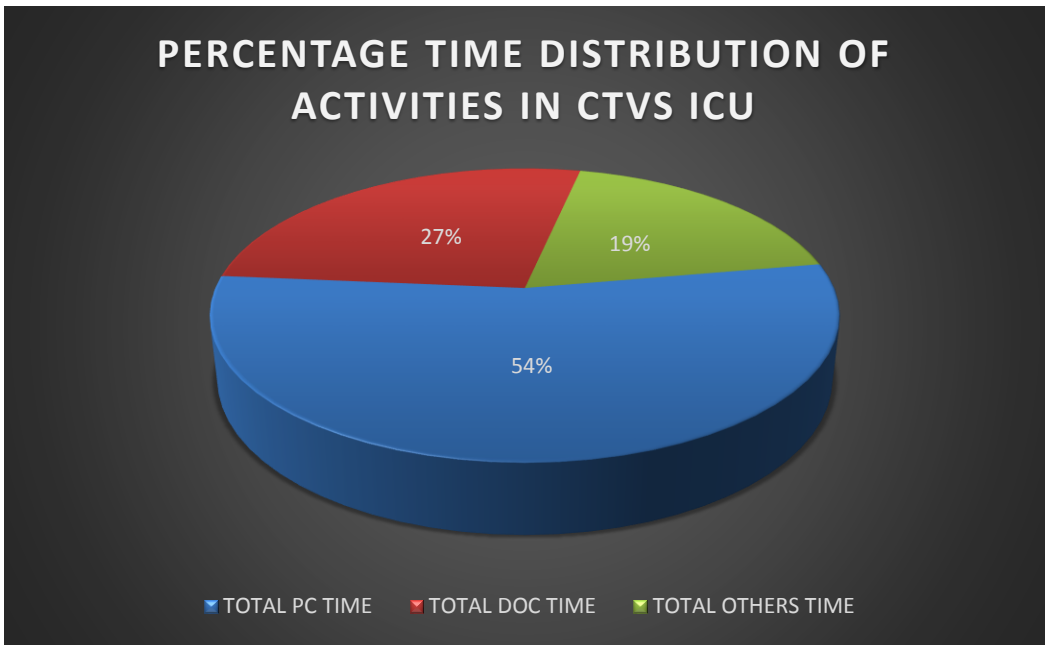

Fig.4.1.shows percentage time taken in each group of activity in CTVS ICU

As described above majority i.e. 54% of time is consumed in patient care leaving only 27% of time for documentation.

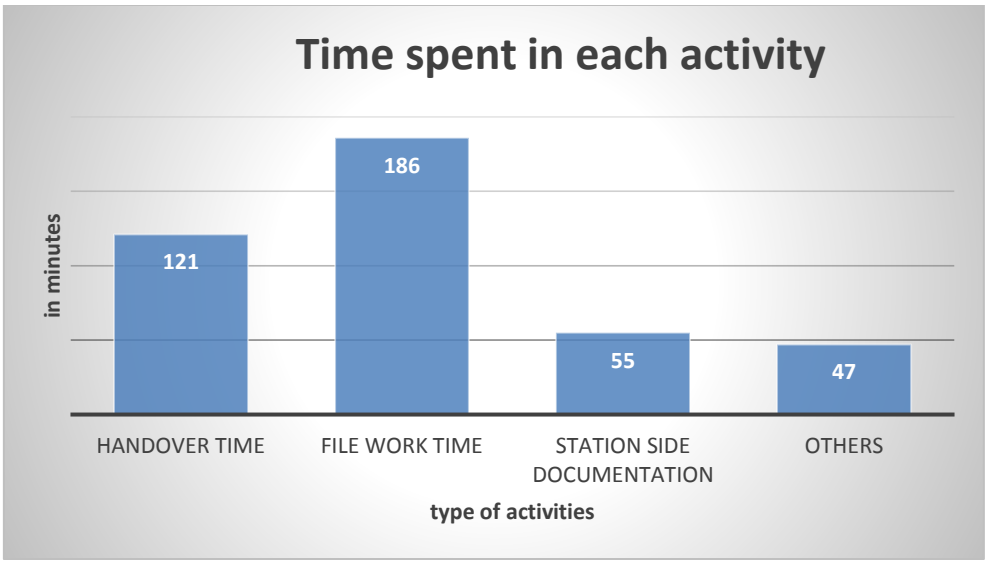

Fig.4.2.shows total time taken in each documentation activity from total documentation time

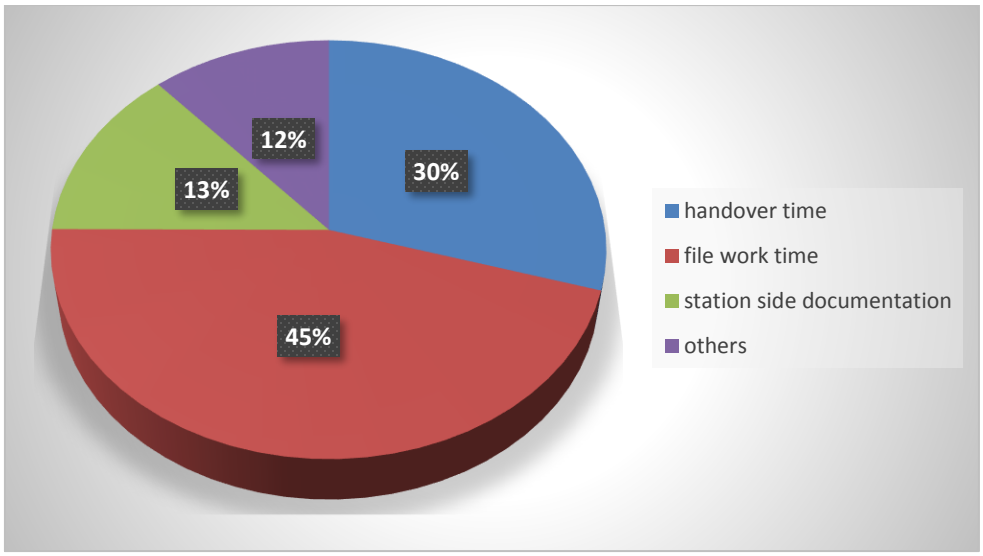

Fig.4.3 shows percentage time taken for each kind of documentation activity

Out of total documenting activities file work consumes the major chunk of documentation with 45% of time and handover time with 30%. Rest 13% and 12% were filled up by station side documentation and other documenting time respectively.

SICU (SURGICAL INTENSIVE CARE UNIT)

SICU in ETERNAL hospital is not a very big unit as only 6 beds are given to them but the workload is quite huge when we see it from inside. Since the beds are not in accordance with the daily OT chart, they need to manage their beds very efficiently. They have to quickly transfer out the patients from SICU to make room for the patients coming in from OT.

Total number of nurses in SICU are 14 from which 4 nurses were taken for the study; 2 from each shift.

TOTAL OBSERVED TIME	1512 minutes
TOTAL PATIENT CARE TIME	729 minutes
TOTAL DOCUMENTATION TIME	575 minutes
TOTAL OTHER TIME	208 minutes

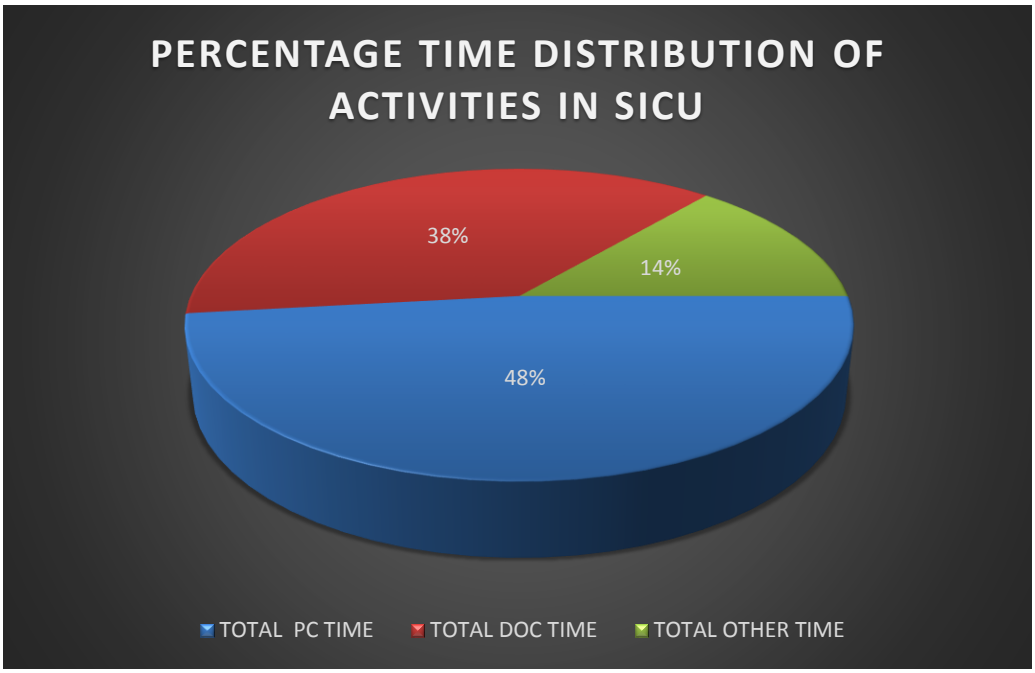

Fig5.1.shows percentage time distribution for various group of activities in SICU

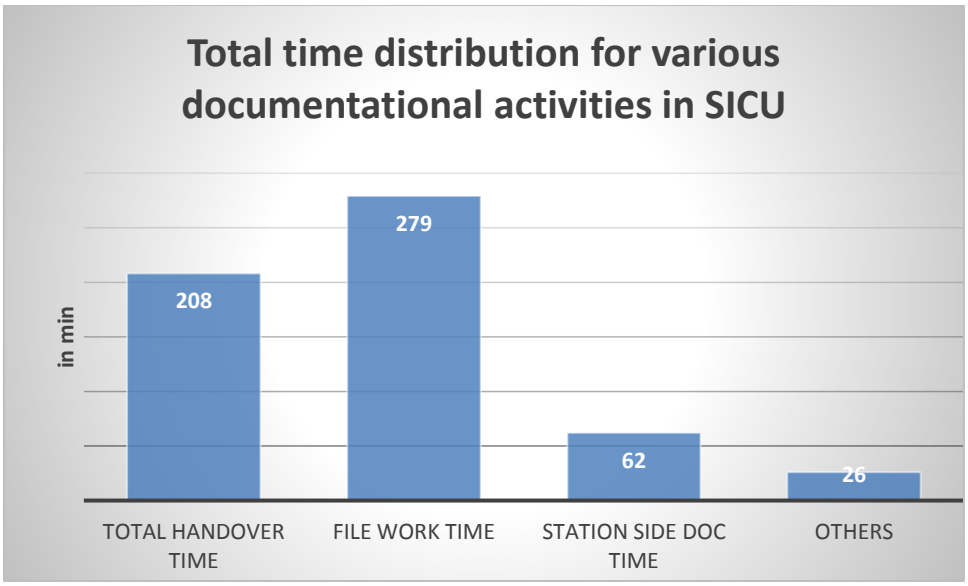

Fig5.2.shows total time taken in each documentation activity out of total time observed

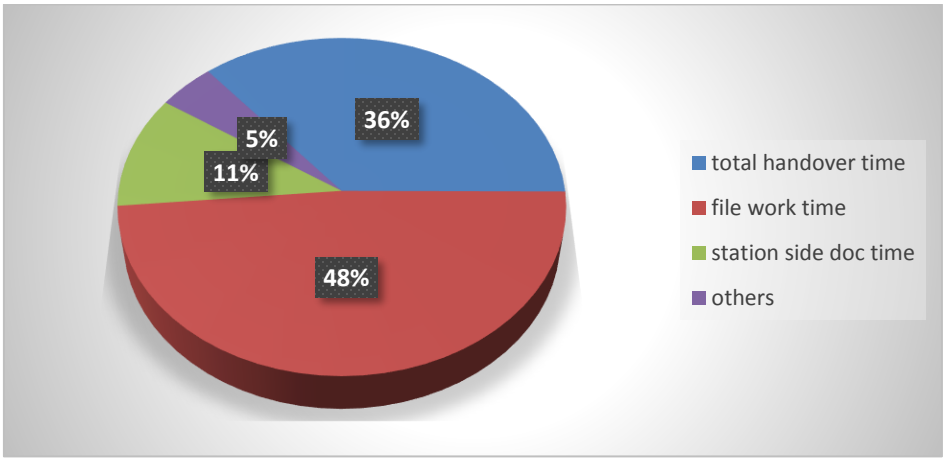

Fig.5.3.shows percentage time distribution for various documentation Activities

Again among all documenting activities file work consumes most time with 48% with handover time being in 2nd lead with 36% followed by station side documentation and other with 11% and 5% respectively.

2.6 INTERPRETATION

- All wards are securing more than 40% of total time to patient care, with highest being 52% of CTVS ICU followed by 48% of SICU.
- SICU , HDU and general wards are dedicating 1/3rd of their total time to documentation.
- CTVS ICU spent least time in documentation with 27% and MICU have the highest documentation time with 43% of total time
- MICU is the only ward where documentation time is more than patient care time by 1%
- Average percentage time spent in OTHER activities across all wards are 18%, with highest being 21% of HDU and General wards each; and lowest being 14% of SICU
- Average Handover percentage time across all wards is 28% ; with highest being 36% of SICU (1/3rd of total time) and lowest being 21% of HDU
- HDU is spending most time in file work with 61% of total documentation time
- General wards dedicate 38% of their total documentation time to file work which is least among all wards.

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