NURSING ACTIVITY ANALYSIS IN THE CRITICAL AND NON CRITICAL AREAS

Internship Training
at
Wockhardt Hospital, Rajkot

By
Akanksha Chouhan

Under the guidance of
Dr. Suresh Joshi

MBA Hospital & Health Management
2013–15

Institute of Health Management Research
Jaipur
2015

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

IIHMR UNIVERSITY

TO WHOMSOEVER MAY CONCERN

This is to certify that Dr. Akanksha Chouhan student of MBA Hospital and Health Management from IIHMR University, Jaipur has undergone dissertation/internship training at Wockhardt hospital from 28 Jan'15 to 20 April'15

The Candidate has successfully carried out the study designated to him during dissertation/internship training and his approach to the study has been sincere, scientific and analytical.

The dissertation/internship is in fulfillment of the course requirements.

I wish him all success in all his future endeavors.

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WOCKHARDT HOSPITALS | LIFE WINS

11th May 2015

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Akanksha Chouhan** has undergone internship at Wockhardt Hospital, Rajkot unit from **28th January 2015 to 20th April 2015.** She has worked under **Ms. Sonymol K** and has completed the projects as under :

1. Nursing Activity Analysis.

During the tenure we found her to be sincere, dedicated and very hard working.

We wish her success in her future endeavors.

For Wockhardt Hospitals Limited

Amiya Kumar Sahoo

Joint General Manager - Human Resources

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

IIHMR UNIVERSITY

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled

.....

NURSING ACTIVITY ANALYSIS.....

..... and submitted by (Name) .Dr. AKANKSHA CHOUHAN..... Enrollment No. ....1408.....

under the supervision of

.....Dr. SURESH JOSHI..... for award of MBA Hospital and Health Management/MBA Pharmaceutical Management of the university carried out during the period from Jan. 28th '15 to April 20th '15..... embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Signature

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The internship was started with a vision to be able to learn about the practical aspects of healthcare delivery system in a detailed manner. I hereby take this opportunity to express my deep sense of gratitude to all those who have been instrumental in the successful completion of my internship. Any accomplishment requires efforts of various individuals and this work is no exception

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Staff has been extremely welcoming and supportive during my tenure.

I would also like to specially thank all the staff nurses for being cooperative and helping me with the information I needed for my study.

Finally, and most importantly, I would like to thank God for allowing me to complete my project, my beloved parents for their blessings and my friends for their help and wishes for the successful completion of this internship.

Dr.Akanksha Chouhan

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LIST OF FIGURES

LIST OF ABBREVIATIONS

NA – nursing activities

NNA – non nursing activities

IP – in patient

HIS – Hospital Information system

1.1 INTRODUCTION

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. The aim of this descriptive study was to describe and analyze nurses activities as they worked in three shifts day (8:00 am – 2:00 pm), evening shifts (2:00 pm – 8:00 pm) and night shift (8:00 pm – 8:00 am). The research site was a 150 bedded hospital in Rajkot. A time and motion observation method was used and sample of 30 nurses were observed. Out of which 15 nurses were observed in the wards divided amongst 4 wards with a nurse distribution of 6:1, 7:1 patient nurse ratios. And 15 were observed in the 4 ICU patient nurses ration 2:1, and 1:1. The observation was conducted over a month period. The work activities data was categorized and analyzed using Microsoft excel.

1.2 REVIEW OF LITERATURE

The identification of the nursing staff requirements in a hospital setting is relevant not only for nursing care planning but also for appropriate management of human resources. Under such circumstances, it is also important to be aware of the factors related to high patient care demands in order to help forecast staff requirements. (1)

A time and motion study was done to provide an evidence-based understanding of how nurses spend their time. Documenting the drivers of inefficiency 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 how nurses spend their time during their shift and to pinpoint environmental variables in the acute-care nursing workplace that

can be altered to positively affect the efficiency of nursing care and, ultimately, patient safety. Specifically, the study aimed to determine:

• The amount of time nurses spend on specific activities: nursing practice, unit-related functions, nonclinical activities, and waste

• The physiologic impact of the work environment on nurses. This study was also designed to provide baseline data regarding

Documentation activities undertaken by the nurses along with their patient care activities.(2)

1.3 PROBLEM STATEMENT

The nurses now a day are working on a "bundle of activities" in their duty hours, including activities which are nursing and non nursing, which affects the work load of the nurse, on discussion with the management in the hospital it was found that there is ambiguity in the activities undertaken by a nurse during the shift. To rule out the ambiguity and look at the clearer picture the time and motion study was done.

RATIONALE OF THE STUDY

Nurses are the primary care givers in a hospital, spending the maximum time with the patient, than any other care giver. As the hospitals getting involved more in the administrative processes this comes on the nurses to take care of the non patient care activities along with the patient care activities. So it gets important to analysis the time spent on the nursing and non nursing care activities so as to come up with alternatives to bring the nurses back to direct patient care, and patient services. And have a proper skill mix in the system to fulfill the requirements.

1.4 REASERCH QUESTION

What is the time taken by the nurse to carry out the nursing and non nursing activities during their Duty times?

What are the non nursing activities?

Which non nursing activity takes major chunk of time?

1.5 OBJECTIVES

- Find out the waste i.e. time taken by the non nursing activities.
- Finding out the time distribution over non nursing activities.

1.6 METHODOLOGY

Study Design A Descriptive observational study

S**tudy Location** Wockhardt Hospital, Rajkot

Study Technique Non participatory Observational technique

Study Subjects 30 Staff Nurses

Sampling

Random sampling

Methods

Time motion study, shadowing the nurses during their daily duty timings, divided into critical and non critical areas of the hospital. One nurse in one shift was followed making it 10 in the morning shift, 10 in the evening and 10 in the night.

The activities were noted on the paper with start time of one activity to the another and then further analyzed using excel to find out the time duration spent on activities

.

1.7 STATISTICAL TREATEMT

Data collected was analyzed using Microsoft excel. Collected data was then edited, coded, tabulated and organized into various frequency distributions.

1.8 ETHICAL CONSIDERATION

Proper Introduction was given to the nursing staff working in the ward during handover shift meeting and explained about the purpose of the study. This enabled me to familiarize with the nursing staff and enabled nursing persons to become comfortable with the observer which could potentially reduce the “Hawthorne effect” and lead to an accurate recording of nursing activities.

1.9 RESULTS

The study was undertaken to find out the “waste” for the profile

Two Types of wastes, identified:

Indenting/receiving medicine

HIS Indenting store

Phone calls

Call bells

Arranging bed/ supplies

Arranging instructing hsk

Updating file on HIS

File work

Sorting reports

Register

Talking

Resting

Washroom

Tea break

Shift transitions

Of the 240 i.e. 60 hours morning shift (8am -2pm), 60 hours evening shift (2pm -8pm) and 120 hours night shift (8pm -8am) the nurses were shadowed, the data showed that,

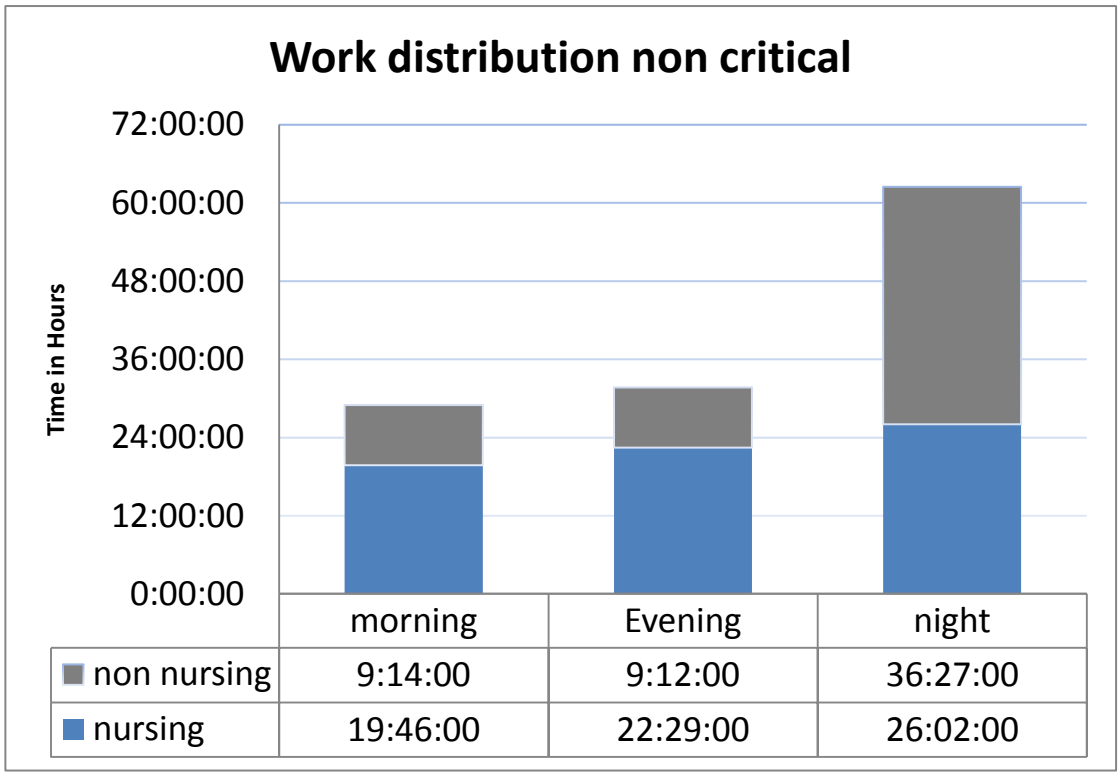
In a day in non critical area a total of 10+ hrs i.e. 41% were given out to non nursing activities. In a day in critical area a total of 6+ hrs i.e. 25% were given to non nursing activities.

Indenting medicines took the maximum time in every shift. Leaving the nurses with less time for the patient, and patient care. Affecting the efficiency and effectiveness of nursing profile

1.10.1 Non Critical area

1.10.1.1

Figure 1. Work distribution of nurses in non critical area



In the morning from a total of 29 hrs, 32%

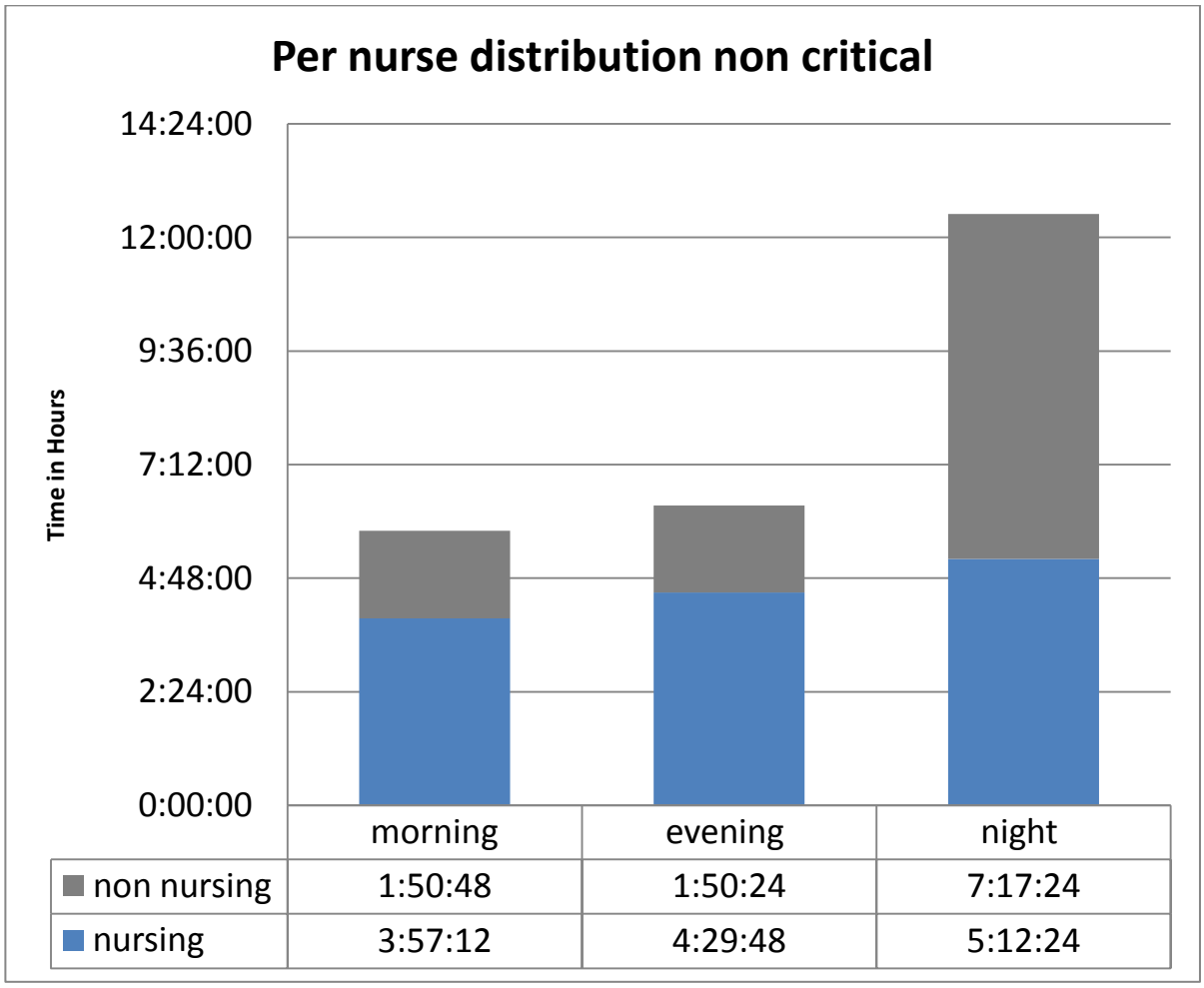
9 hrs 14 minutes were only allocated to non nursing activities,

Evening 22 hrs 29 minutes, 29% 9 hrs 12 minutes were consumed in carrying out the non nursing activities.

Night 62 hrs 29 minutes, 58% 36 hrs 27 minutes were consumed by the non nursing activities.

1.10.1.2 Per nurse distribution

Figure 2. Per nurse distribution of work



If we look at how much one nurse is giving in non nursing activities

1hr 50 minutes in the morning only goes out to the non nursing activities

1 hr 50 minutes in the evening

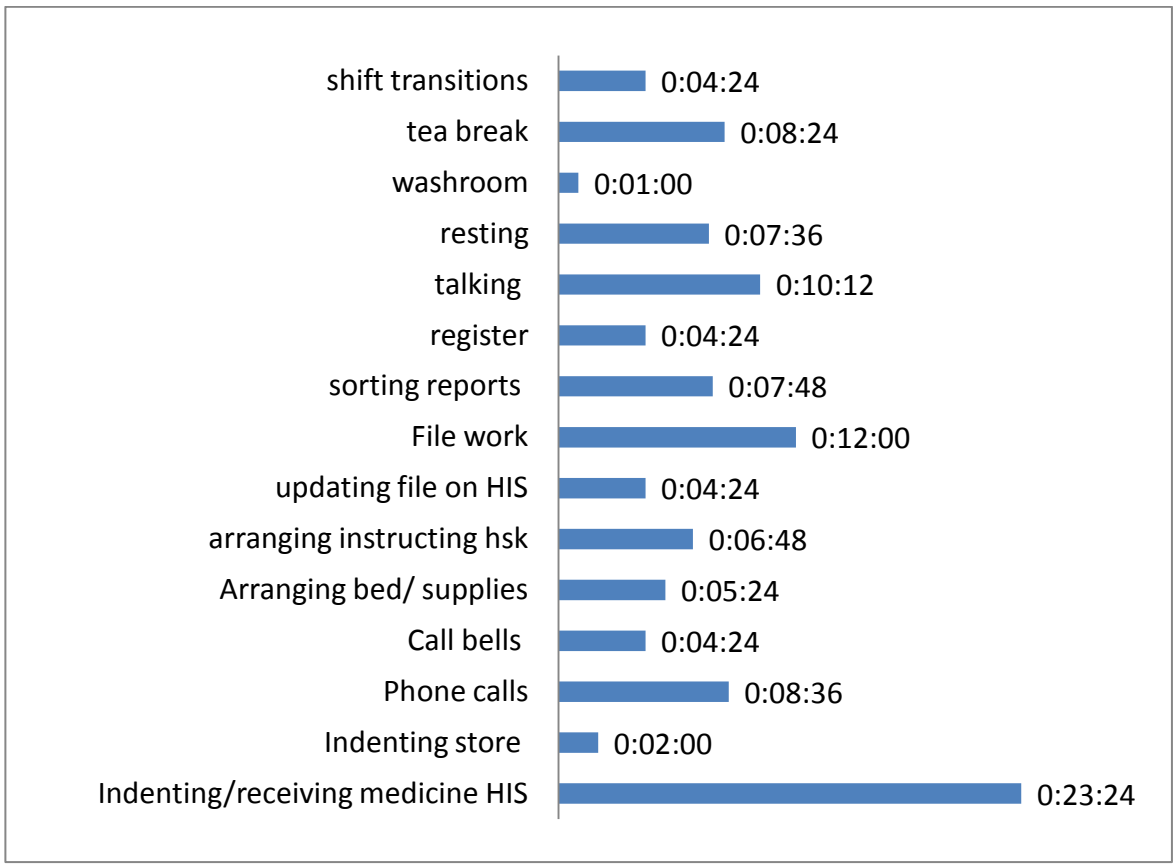
And 7 hrs 17 minutes in the night.

1.10.1.3

MORNING

Now if we further divide the non nursing activities into analyzing which activities take up major chunk of time

Figure 3. Distribution of non nursing activities in morning



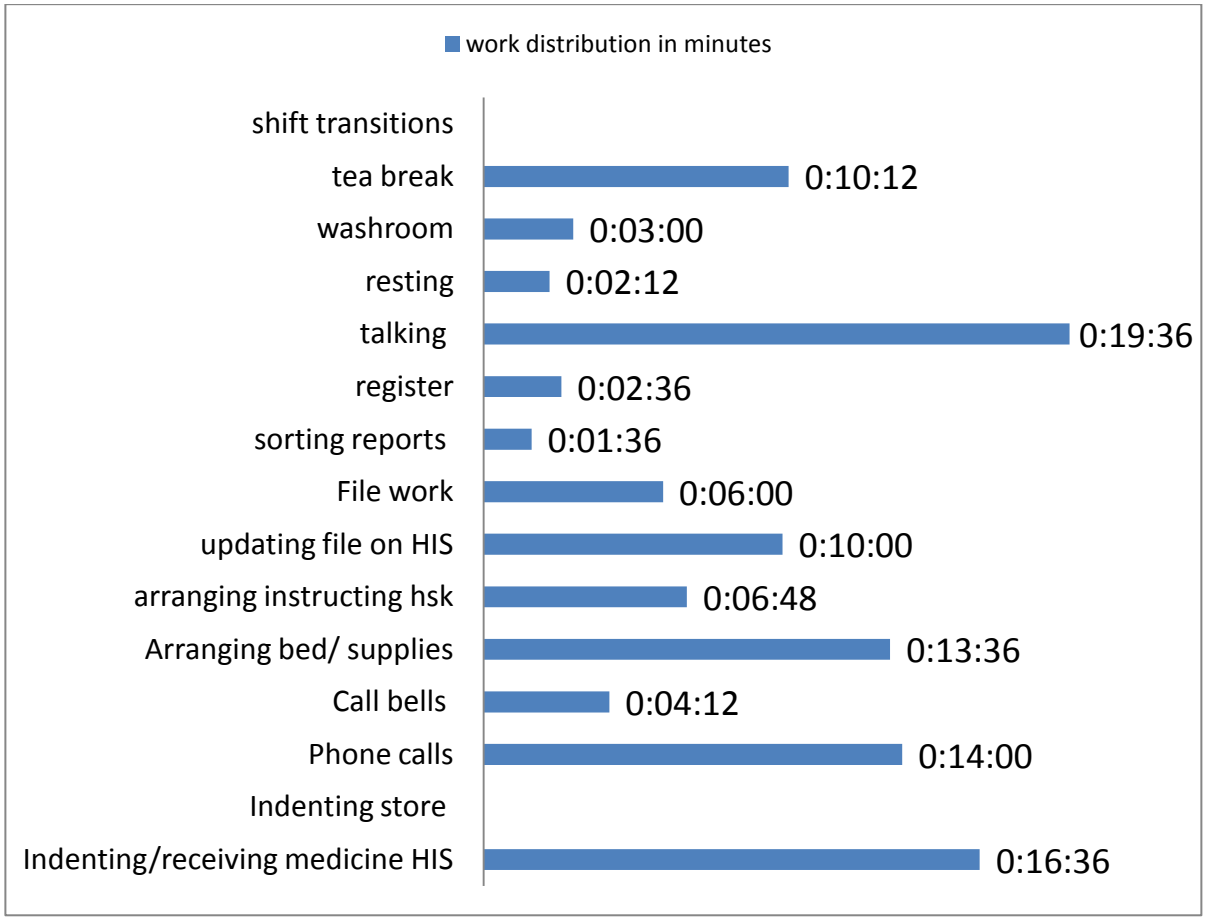
Indenting and receiving medicines, took up major time,

Then File work

Then making and taking phone calls

EVENING

Figure 4. Distribution of non nursing activities in Evening



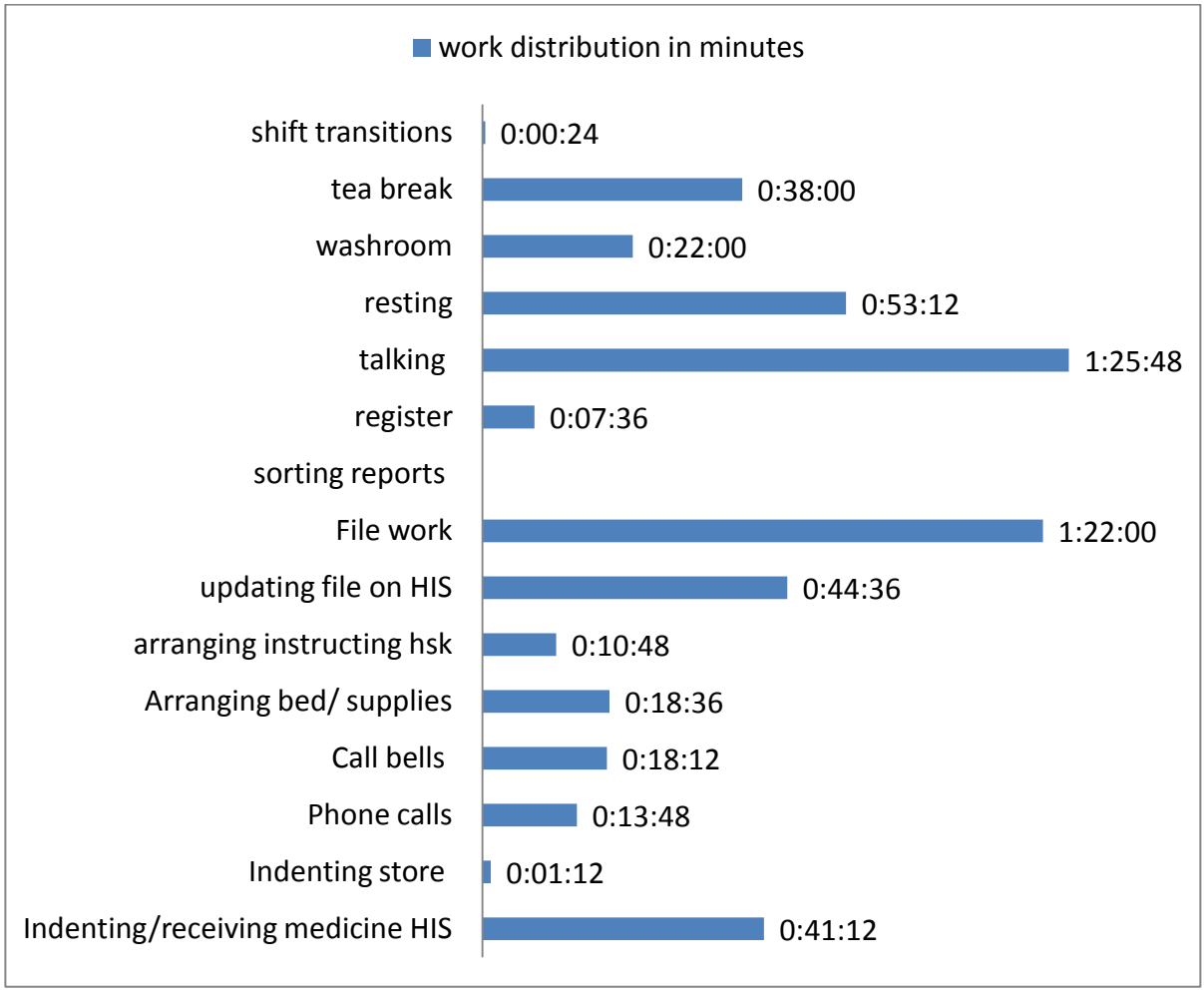
Talking with the family of patients, to the nurses, Housekeeping staff took major time.

Indenting was the second most done work

And phone calls

NIGHT

Figure 5. Distribution of non nursing activities in Night



Talking and File work took almost the same time during the night.

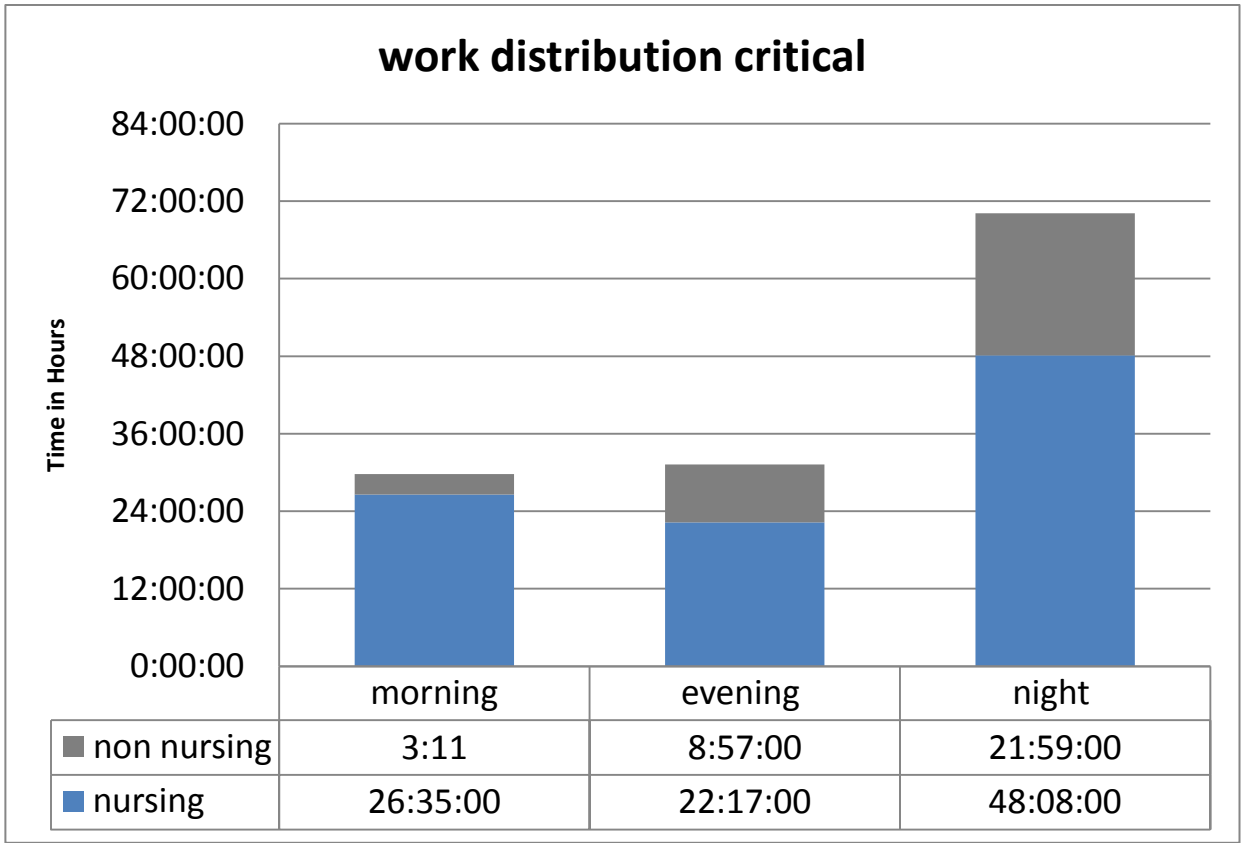
Working on the Information system

Indenting and receiving medicine took the major time in the night

1.10.2 Critical area

1.10.2.1 over all distribution

Figure 6 . Work distribution of nurses in critical area



	morning	evening	night
non nursing	3:11	8:57:00	21:59:00
nursing	26:35:00	22:17:00	48:08:00

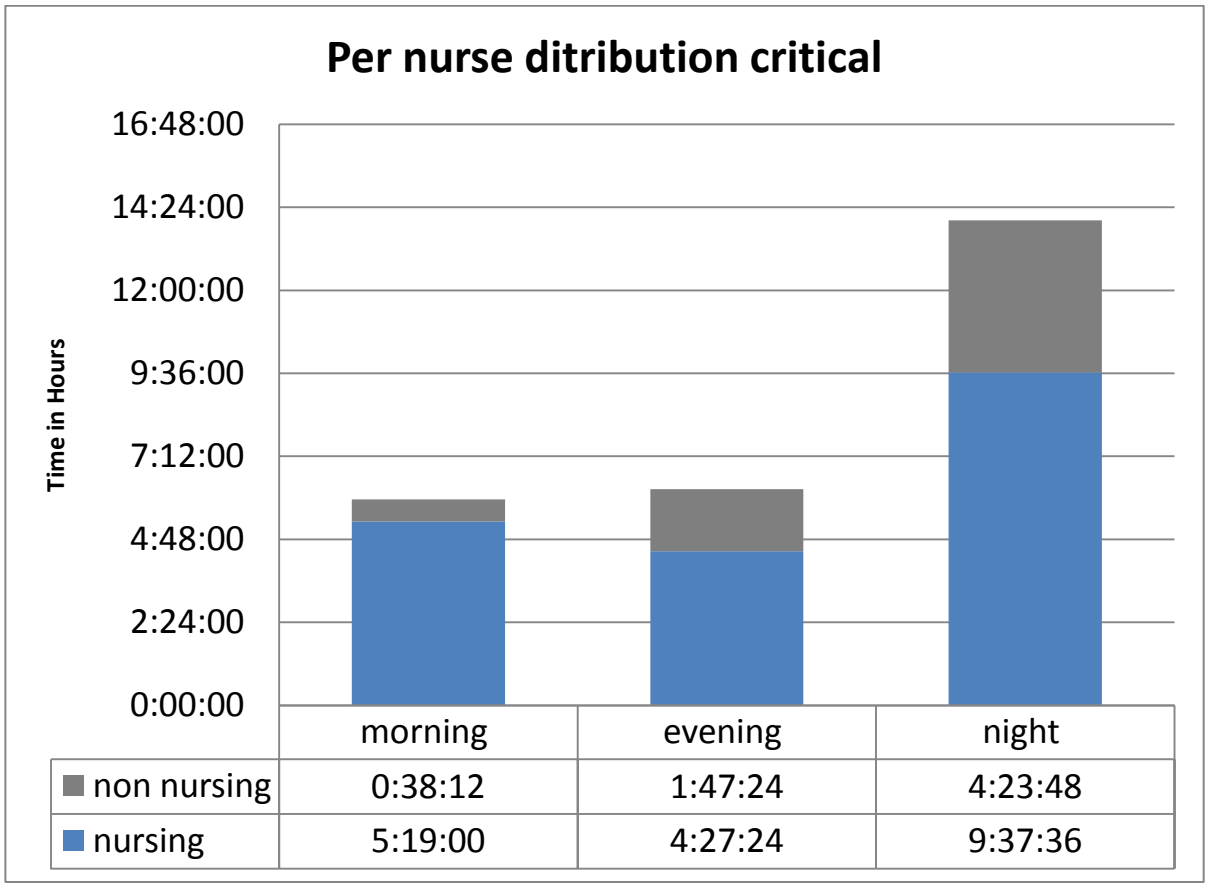
Of all the 29 hours in the morning only three hours were allotted to the non nursing activities 11%

Evening the non nursing activities 8 hrs 57 minutes of the total 31 hrs 29%

And 21 hrs 59 minutes of total 61 hrs 31%

1.10.2.2 Per nurse distribution of work

Figure 7. Per nurse distribution of work



In the Morning only 38 minutes is for non nursing activities.

In Evening 1 hr and 47 minutes for non nursing activities

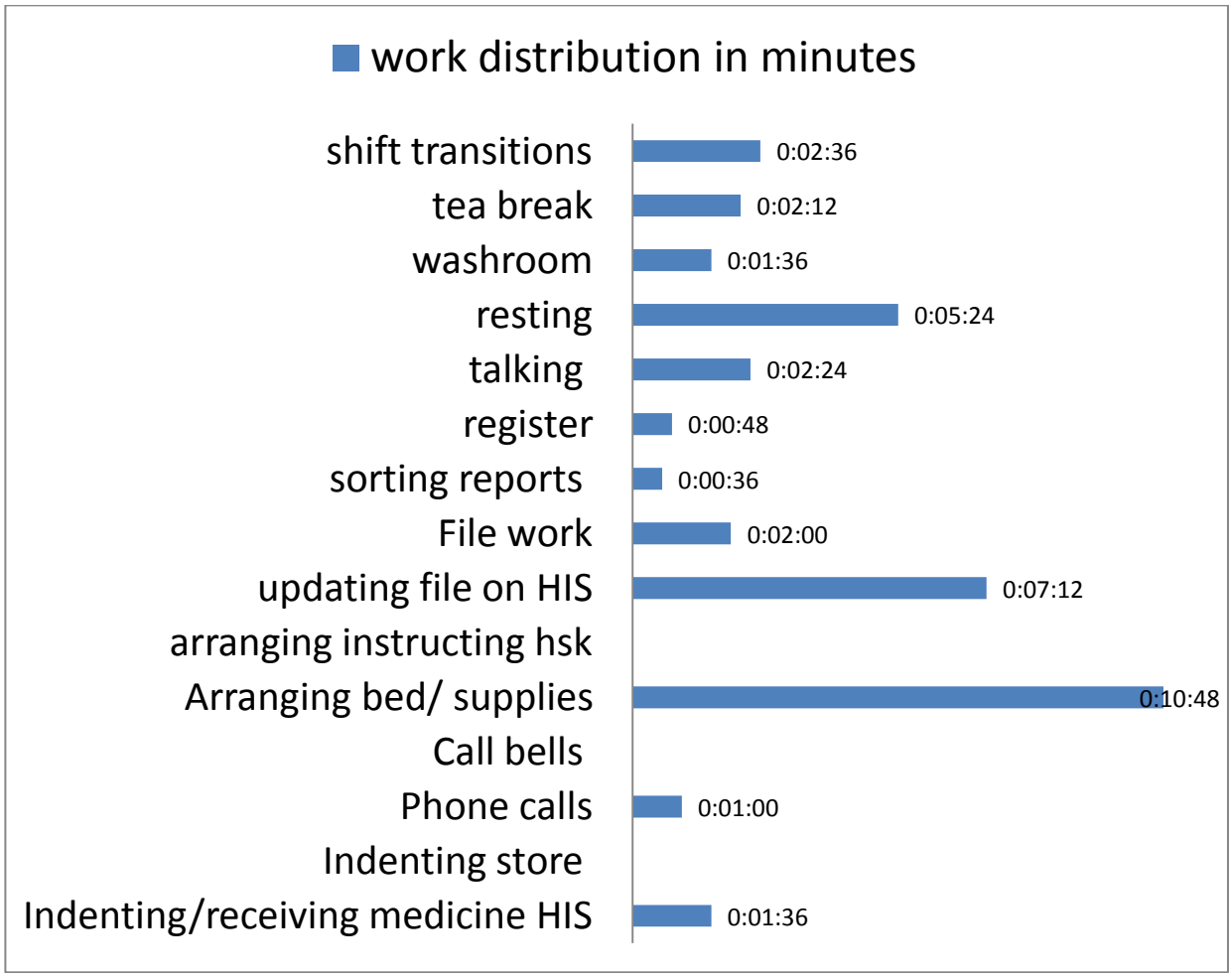
In Night 4 hrs 23 minutes are non nursing activities

1.10.2.3

Non nursing work distribution

Morning

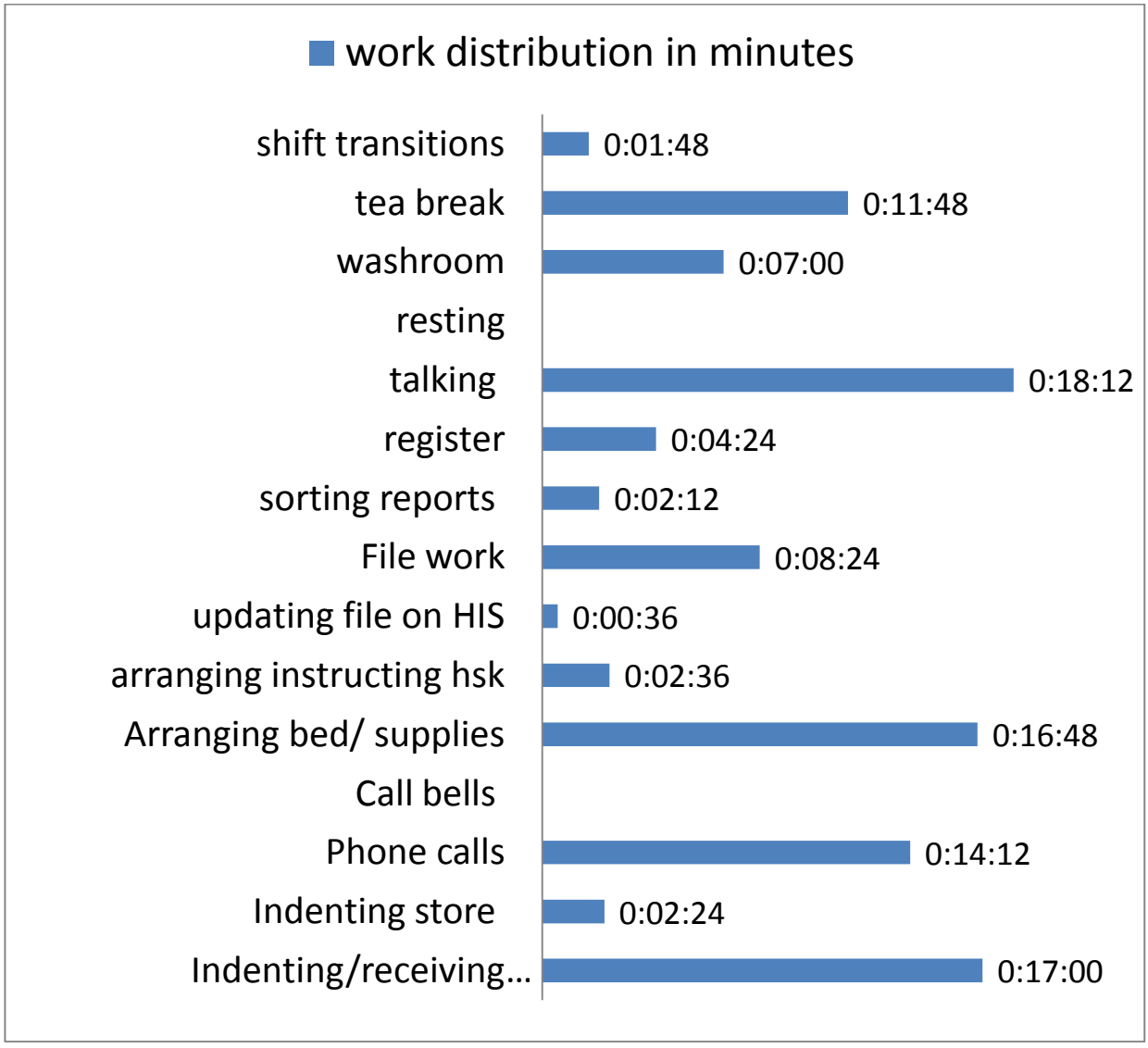
Figure 8. Distribution of non nursing activities in morning



In the critical area the maximum time taken was only for the arranging beds and supplies
Next the work on HIS

Evening

Figure 9. Distribution of non nursing activities in Evening



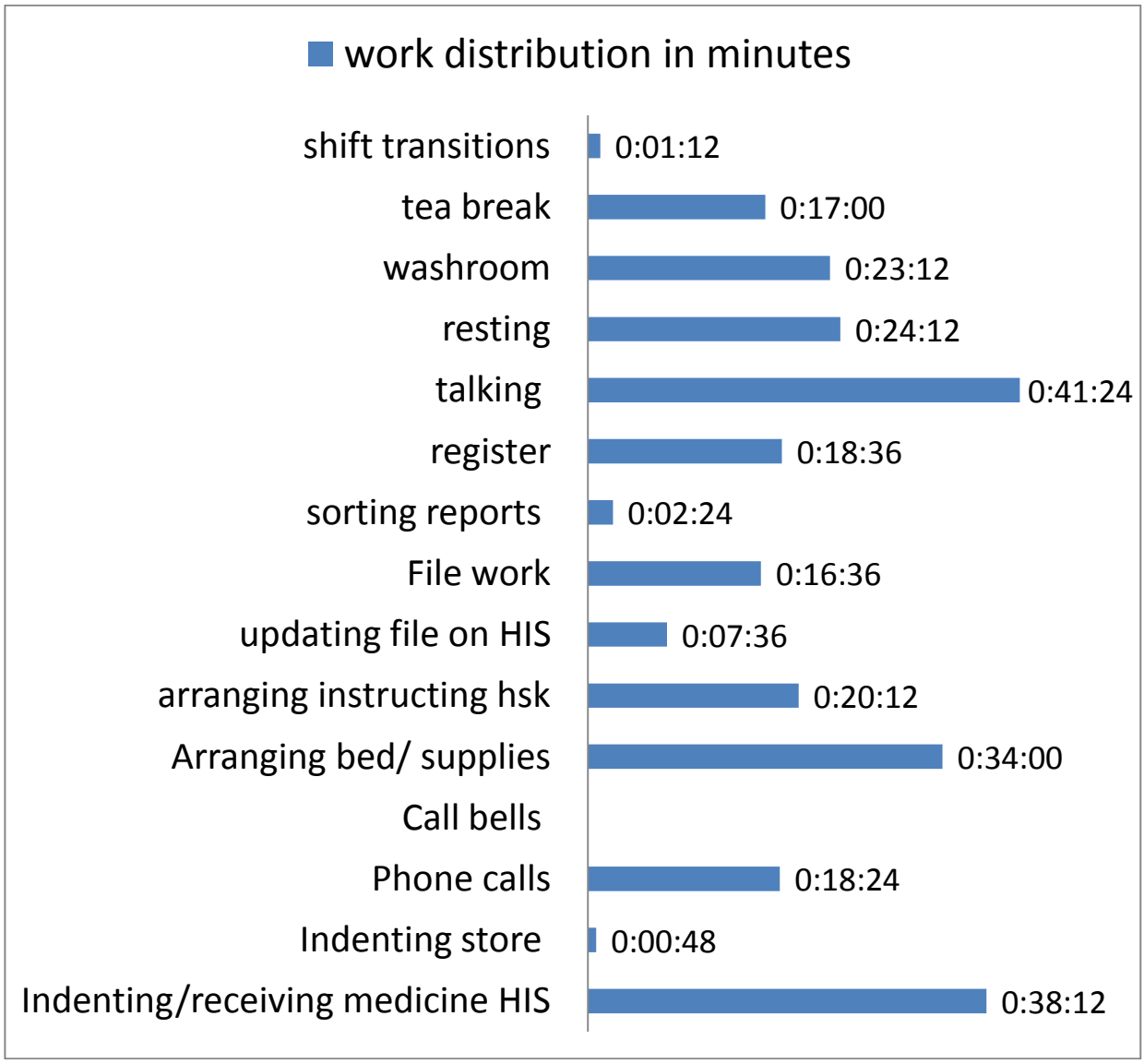
Talking took maximum time

Then attending making phone calls

And indenting receiving medicines

Night

Figure 10. Distribution of non nursing activities in Night



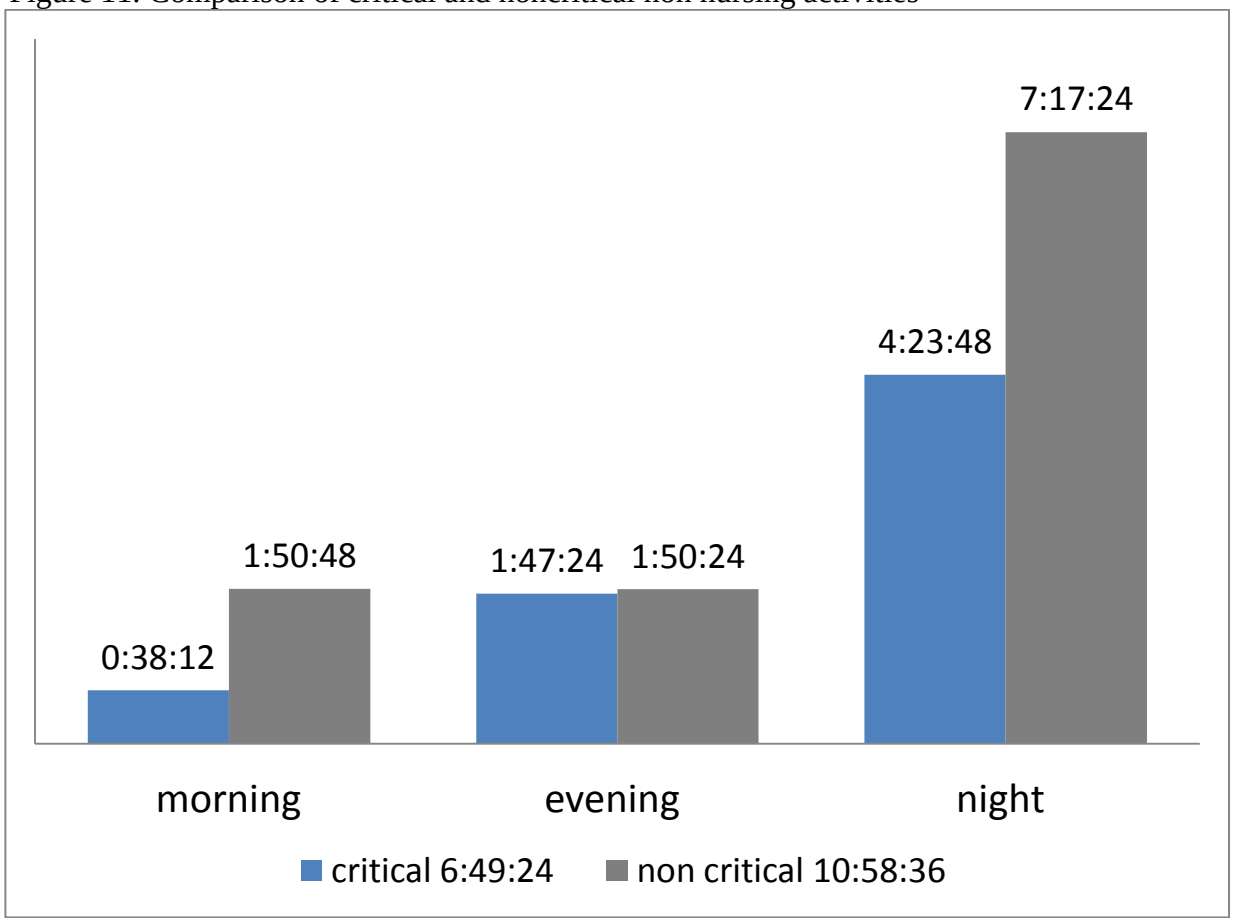
Maximum, time taken was by Talking

Then arranging beds and supplies

Indenting receiving medicines

1.10.1 Comparing the non nursing activities of critical and non critical areas

Figure 11. Comparison of critical and noncritical non nursing activities



On comparison it was found that the amount of non nursing activities were much more in the non critical area than critical area, as the critical area has an in charge till evening, who takes care of all the administrative work in the ICU and after he leaves, is the time when there is increase in the non nursing activities in the critical area as well.

1.11 DISCUSSION

The objective of the study was to find out the real waste in the process, i.e. analysis the duty hours with time given to nursing activities and non nursing activities, and again further classification of non nursing activities so as to have a clear picture what and how to eliminate from the nurses work.

The standards say that the nurses can give out only an hour or less to non nursing activities as they are necessary as well. But anything more than that affects the nursing care to the patients. Defying the very reason for nurses are present in the hospital.

Of all the 240 hours of shadowing of 30 staff nurses for three shifts. The data was collected from the critical and non critical areas. Equally without any bias of the work areas.

The non nursing activities increase more by the evening and night both in the critical and non critical areas as there is more patient care activities needs to be looked at in the morning, still then there is about 30- 40% of times in the morning as well which goes out in doing the non nursing activities, which even stress out the nurses more, as they have to work hard to bring that balance.

In the non critical area everything is given to the staff nurses from filling, to documentation (other than the nursing notes), to talking, counseling the family or the patients regarding their procedures, then any calls that were received on the nursing station is the duty of nurses irrespective of the fact that it may not necessarily be for the nurses.

Another major chunk of duration seen in the non critical area is indenting and receiving medicine on the HIS, or updating files on the HIS which takes major time mostly in every shift.

Other than that, just arranging things, or calling for the housekeeping staff, waiting for the other staff to finish their work, so the nurses can take over is one of the major problem in providing time for direct patient care.

The data showed that the critical area has less of non critical work on the heads of staff nurses only 6 hours as opposed to 10 hours in the non critical area.

There is nursing In charge who takes care of all the administrative and documentation work.

1.12 CONCLUSION

The allotted time for a nurse 6 hours of duty, the 5 hours of it should be given out to the nursing activities and rest can be given out to non nursing activities, necessary but waste, or just waste ful activities.

If anything more than that is taking up time, then the direct patient care gets affected.

As about two third of their time in the morning and evening are going out for carrying out the non nursing activities, and more than half during the night in the non critical areas.

And about one third of the time in the morning, which increases to one forth In the evening and about half by the night in the critical area.

On breaking down of the non nursing activities, Indenting and receiving medicines, file work, and liasoning takes the maximum time during any shift.

1.13 LIMITATIONS

Following the nurses into the OT or CATH Lab needed authorization, and hence the observation was done only of the time taken, not the processes that went on inside, Then the information the nurse provided was the one had to be relied on.

Sometimes there were activities shadowed by another making it difficult to segregate the activities and getting the real duration for the two

1.13 REFRENCES

1.Nursing Activities Score in the intensive care unit:
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2. A 36-Hospital Time and Motion Study: How Do Medical-Surgical Nurses Spend Their Time?