Institute of Health Management Research

Jaipur

MBA in Hospital and Health Management

Batch- 19 (2014-2016)

Summer Training at-

Columbia Asia Hospital, Ghaziabad

Made by:

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INSTITUTE OF HEALTH
MANAGEMENT RESEARCH
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IIHMR UNIVERSITY

CERTIFICATE

This is to certify that Dr. Ishita Srivastava has undergone her Summer Training in Columbia Asia Hospital, Ghaziabad from 2nd April 2015 to 31st May 2015. The candidate herself carried out all the studies related to her Summer Training. Her approach to the study has been scientific and analytical.

The summer training is in partial fulfilment of the course requirement recommended for the award of Master of Business Administration-Hospital & Health Management.

I wish her success in all her future endeavours.

Col. (Dr.) Ashok Kaushik,
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COLUMBIA ASIA

1st June, 2015

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Ms. Ishita Srivastava** has completed **Two** months training in the department of **Human Resources and Operations (Pharmacy)**at **Columbia Asia Hospital-Ghaziabad.** W.e.f **2nd April 2015 to 31th May 2015.**

During this tenure with us we found her to be diligent and hardworking.

We wish her all the best in her future endeavors.

Yours Sincerely,

For Columbia Asia Hospital - Ghaziabad

Himanshu
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This project wouldn't have been completed without a substantial support from the staff of Pharmacy and various other departments of the hospital.

I express my gratitude and respectful regards to my mentor **Dr. Monika Chaudhary**, Associate Professor, IIHMR University, Jaipur for her able guidance and useful suggestions, which helped me in completing the project work effectively.

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Overview of the hospital

Columbia Asia Ghaziabad is a premier multi-speciality healthcare facility. The 100 bed hospital has been operational since September 2010 and is designed to cater to the daily needs of patients, from childbirth and internal medicine to minimally invasive surgeries and orthopaedics.

It has highly qualified medical personnel, technician and support staff to ensure the highest quality of care. It has full time specialists in:

- Obstetrics and Gynaecology
- Internal Medicine
- General Surgery
- Paediatrics
- Ophthalmology
- Ear, Nose and Throat
- Urology
- Gastroenterology
- Orthopaedics
- Dermatology
- Dental and Plastic Surgery

Mission

“Columbia Asia is pledged to deliver effective and affordable medical services in a clean and caring environment”.

Vision

“To build the best managed healthcare company in Asia”.

Our Motto

Customer First

Services and Facilities

- 24 hour services: Ambulance
  Emergency Room
  Intensive Care Unit
  Laboratory
  Labor and delivery suite
  Operation Theatre
  Radiology
  Pharmacy

- Laboratory: Biochemistry
  Clinical Pathology
  Cytology
  Histopathology
  Microbiology

- Diagnostic Imaging: Cath Lab
  Conventional Radiology
  CT Scan
  Digitized Mammography
  Digitized Radiography
  Echocardiography
  Teleradiology
  Ultrasound and color Doppler

- Operating Theatre: Central Sterile Services Department
  Major and Minor Surgery

- Ambulatory and Day Care

- Cafeteria: In patient Dining
  Outpatient Dining

- Special Clinics: 8AM to 8PM Outpatient Clinics

- Nursing Units: Intensive Care
  Isolation Care
  Labor and Delivery suite
  Neonatal Intensive Care
  Nursery
  Paediatrics

- Patient Accommodation: High Dependency Unit
  Intensive Care Unit
  Rooms

- Preventive Healthcare: Comprehensive Health Check -Below 30years
  -Between 30 to 40 years
  -Above 40years
  -Senior citizen

- Other Services: Audiology
  Physiotherapy

OBSERVATIONAL LEARNING:

The floor plan of hospital is as follows:

Basement Floor: Support service department, Human resource Dept, Biomedical and engineering, IT, Purchase, General Stores, Linen & Laundry, MRD.

Ground floor: Registration, OPD, Customer care department, Marketing, Cafeteria, Emergency, Laboratory, Radiology, Finance, General pharmacy, Billing, Dietary department, Internal audit.

First floor: Endoscopy, physiotherapy, Nursing station, Labour room, cath lab, NICU, IPD, Dialysis.

Second Floor: OT, ICU, CSSD

Learning of various departments:

REGISTRATION:

This department is segregated to following sub departments:

1) OP Billing: Timings is 7.30am to 7.30pm. Cash and credit billing for Registration, consultation, Investigation and procedure.

2) Admission billing: 24/7 services. Before admission patient and patient party is educated about billing charges by giving chart to them.

3) Corporate and Insurance billing: Timings is 9am to 6.30pm. Verification and documentation of mandatory certificates for hospitalization is collected. Explaining terms and conditions to patients about corporatement. Timely billing and submissions of final bills is done here.

OPD:

Timings: 9 am to 5.30pm.

Different department has different consult chambers with separate examination room, Procedure room , refraction room etc.

- New patients/Follow-up patients are guided to their respective OPDs.
- PRE (Patient Relation Executives) receive the patients check for bills and make record.
- The medical record of the follow-up patients are telephoned to MRD and retrieved.

- The nurses check each patient for BP, weight and height. Glucometer and dressing if needed.
- The patient's files are sent one by one on to the doctor's table.
- Consultation is completed and followed down for investigation if requested.
- All the files are collected back by the MRD staff at the end of the day.

IPD:

Floor managers take care of IP patients. They do daily IP guest rounds, Room wise round complaints and analysis, Feedback tracker and analysis, Discharge analysis tracker.

Roles of floor manager are:

- Ensure hygiene and cleanliness in wards, timely check off the same.
- Ensure discharges as early as possible.
- Every admitted patient has room orientation.
- Ensure all reports are available before doctor's rounds.
- Supervise the ward secretaries.

Quality indicators: Turnaround time at the time of discharge off the patient.

Feedback analysis given by patients.

PHARMACY: Located on the first floor. All required drugs were indented from user department and issued from pharmacy.

ACCIDENT & EMERGENCY: The hospital offers 24/7 ambulance services and have an ambulance control room.

All critical care emergencies

Road Traffic Accidents & Head Injuries

BILLING:

This department is segregated to following sub departments:

1) OP Billing: Timings is 7.30am to 7.30pm. Cash and credit billing for Registration, consultation, Investigation and procedure.

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OT: It is located in second floor. There are 3 OT's:

1) General OT

2) Cardiac OT

3) Orthopaedic OT

On an average two hundred surgeries are performed in a month.

Quality Indicators:

- Modification of anaesthesia plan
- Unplanned ventilation during anaesthesia
- Adverse anaesthesia event
- % of Adverse anaesthesia Mortality
- Re exploration
- Re scheduling
- Surgical site infection
- Haematoma at the puncture site
- % of infection by tube & catheter

CSSD: List of equipments: Steam sterilizer –big and small, ETO Sterilizer, washer disinfector, ultra sonic cleaner, hot air oven, sealing machine, flash sterilizer, LTSF (low temperature steam formaldehyde)

- All Single Use Devices & multi use devices (Consumables) receive from OT, cath lab, endoscopy, radiology, ICU & other user end.
- To be well pre-wash in water by user end.
- All pre-cleaned items are transported to CSSD by means of a closed trolley. Items are sent on Pre-fixed days of ETO or LTSF Sterilization in CSSD every day.
- Items are received by CSSD technician, it will go for final wash, dry with compressor air, wipe with isoprfol alcohol, color code for no. of time used, packing & batch monitoring label, then sterilized by ETO or LTSF.
- Sterile items are sent back on the next day to OT, cath lab, endoscopy, radiology, ICU & other user end.

ICU: It is located in second floor. There was one general ICU and one NICU.

RECEIVING THE PATIENT

- From A & E : (ADMISSION)
    - Critical patients are stabilized in A & E.
    - A & E in charge informs the Consultant and intensives about the patient condition.
    - A & E Nursing staff Informs the ICU nursing in charge to make the required arrangements to receive the patient.
    - At the time of shifting the patient, the ward staff will inform the ICU in charge or senior staff.
    - After shifting the patient to ICU, the nursing staff will hand over the patient IP file, Reports and explains about patient condition.
    - The A & E Doctor will explain the patient condition to the intensives.

- From OT :
    - OT Informs ICU in charge to arrange the requirements according to patient condition.
    - Equipments and accessories are taken from ICU to OT to shift the patient from OT to ICU with monitor.
    - OT staff, Technicians and Doctors will accompany during shifting till patient is transferred to ICU bed and stabilized
    - Post op orders, IP file and reports are handed over to the nursing staff by OT staff.
    - Anesthetists will hand over the details of the patient condition to the intensivist.

SHIFTING THE PATIENT

- TO OT :
    - According the pre op orders handing over the IP file, all the LAB reports , consent forms (Surgical, anesthesia, blood, high risk) by ICU nursing staff to OT staff.
    - Confirmation from ICU staff about the blood arranges, blood products are given to OT.
    - Patient attainders will be informed about the shifting of patient to OT.
- TO WARD:
    - The consultants and intensives will decide, explain the condition to the relatives and give the orders to for shift.
    - Once the information received from the intensives, the nursing staff will inform to the ICU in charge to arrange the bed in ward accordingly.
    - If the patient is self pay, patient party will decide the kind of bed, for Insurance and corporate patient concern department will allocate the bed.

- ICU in charge will inform to the billing department about the shift out and arrange the bed in the ward and pass the same information to the ICU staff.
- The ICU staff will coordinate with the ward staff and arrange the bed accordingly and shift the patient to the ward.

LABORATARY:

Accredited by NABL. It has 5 sub divisions:

1) Phlebotomy.

2) Hematology and clinical pathology.

3) Clinical biochemistry.

4) Microbiology and serology.

5) Histopathology and cytopathology.

Quality indicators: Reagents inventory, Quality control and calibration, corrective actions and documents.

CATHLAB: It is located in first floor. On an average ten cath procedures like Cardio angiogram, percutaneous trans arterial angioplasty etc were performed in one day.

MRD: Files are classified by MR (medical record) number.

Multiple admission files are maintained under one file only.

Death and normal files are color coded

Birth and death registration done both online and hard copy handing over to corporation.

Notifiable diseases are registered.

Quality indicator:

- %of medical record not having discharge summary.
- % of MR not having initial assessment
- % of MR without complete plan of care and proper consent.
- % of missing records of number of deaths and notifiable disease.

QUALITY DEPARTMENT: Pre and final assessment is done for NABH.

Factors involved to assess quality are: Patient factors, provider factor, Task, technology and tools factor, team work, environmental and organizational factors.

Research Study:

Gap analysis during Billing Procedure in Pharmacy department.

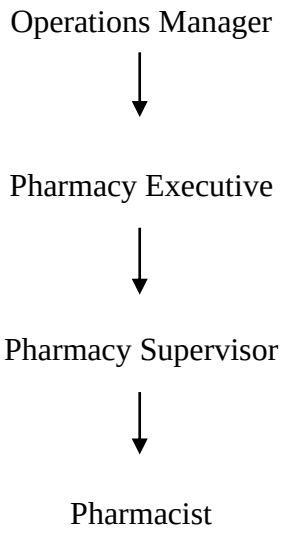
Introduction

Pharmacy is branch of the health sciences dealing with the preparation, dispensing and proper utilization of drugs.

DEPARTMENT PROCEDURES

- OP Dispensing
- IP Dispensing
- Medicine Refund
- Wing Transfer
- Procurement and return
- Inventory control
- Arranging medicines
- Stock Management

Organogram



Pharmacy Equipments

1. Prescription Case
2. Drug stock cabinets with proper shelves and drawers
3. Sectional drawer cabinets with cupboard bases
4. Cabinet for flasks, funnels and beakers
5. Refrigerator
6. Narcotic safe with individually locked drawers
7. Office desk with telephone connection
8. Shelf space for pharmacy library
9. Dispensing window

Quality Indicators

- Percentage of stock outs including emergency drugs, which affects customer satisfaction and patient care.
- Hospital revenue generation.

Staff in the Pharmacy Department

1Pharmacy executive

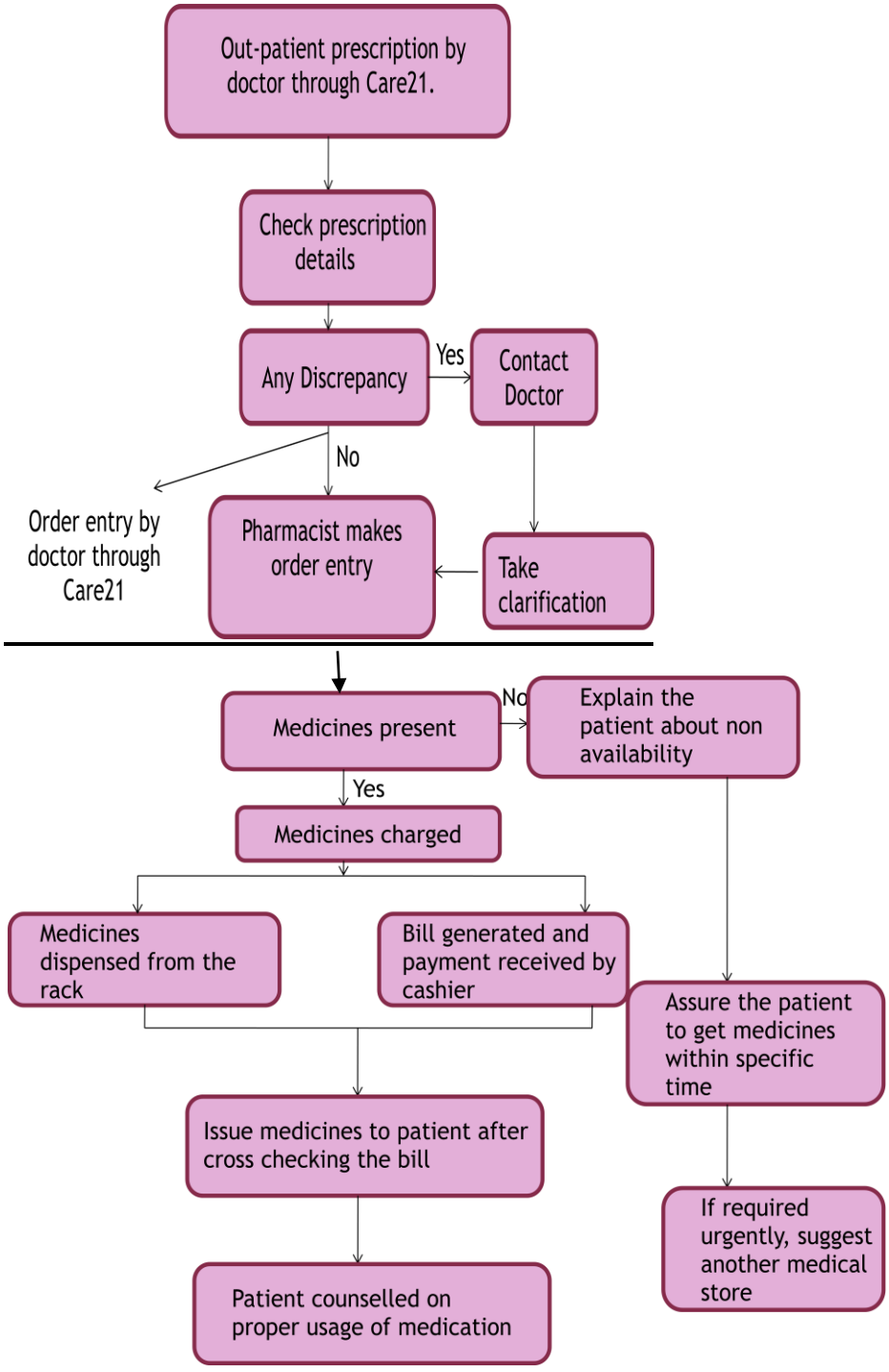
1 Pharmacy Supervisor

2 Pharmacists and 1 intern

Timings:

24 hours service

Billing Process flow



Rationale

The goal of the project is to analyse the gaps in process flow of pharmacy billing and thus improve the satisfaction among patients. The following information may support management to improve the process flow of billing in Pharmacy department.

Literature Review

- Article on “Bridging the gaps in patient care in pharmacy department” stated various gaps which leads to dissatisfaction among patients.
- Euthopia University published an article on gaps in pharmacy services.
- Article on gaps in out patient services by wiley.

Research Questions

- What are the gaps in the billing procedure of pharmacy department?
- What are the main reasons of patient’s dissatisfaction during pharmacy billing procedure?

Objectives

- To study and streamline the pharmacy billing process.
- To identify the gaps associated with the process.
- To identify their underlying causes.
- To study the patient’s satisfaction during billing procedure.

Research Methodology

- Study Design: Descriptive study (Cross Sectional)
- Study Area: Pharmacy Department in Columbia Asia Hospital
- Study Respondents: Patients coming to pharmacy department for purchase of medicines
- Study Duration: 1 month
- Sample Size: 100
- Sampling Method: Simple Random sampling
- Source of Data: Primary data
- Data collection tool: Semi-structured Questionnaire

Data Processing and Analysis

The collected data is tabulated, grouped and organized according to the requirement of study.

Data analysis is done in excel sheet with the help of various graphs and charts.

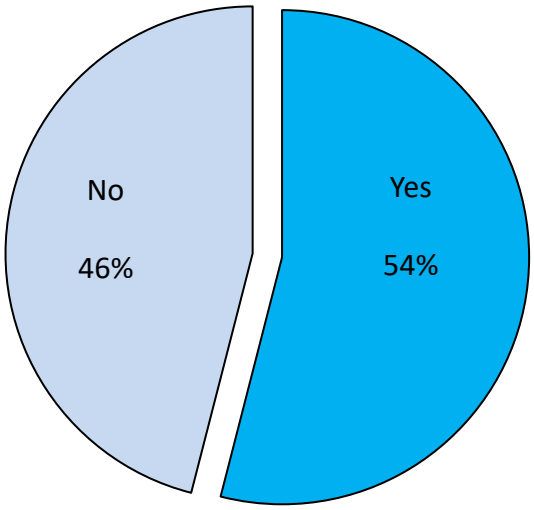
Limitations of Study

- Time constraints for various activities of the project.
- Some patients were not willing to give the feedback.

Interpretation

FEEDBACK RESULTS

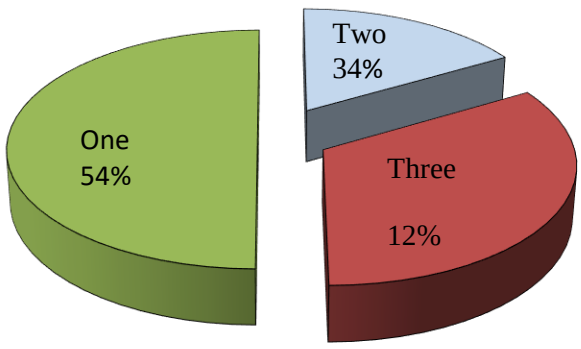
Figure 1: Availability of all the prescribed medicines



In 54% cases, patients got all the medicine which were prescribed by the doctor whereas in 46% cases,

One or more medicines were missing.

Figure 2: Number of medicines not available in pharmacy

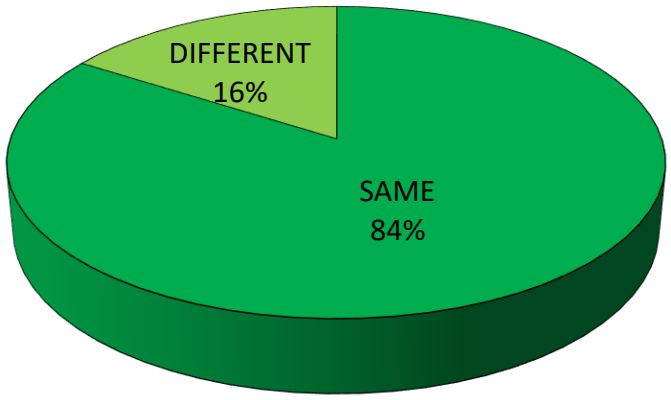


62%-outside formulary
38%-within formulary

In 54% cases, out of all the prescribed medicines one medicine was not available. In 34% cases, two medicines were not available whereas in 12% cases, three medicines were not available.

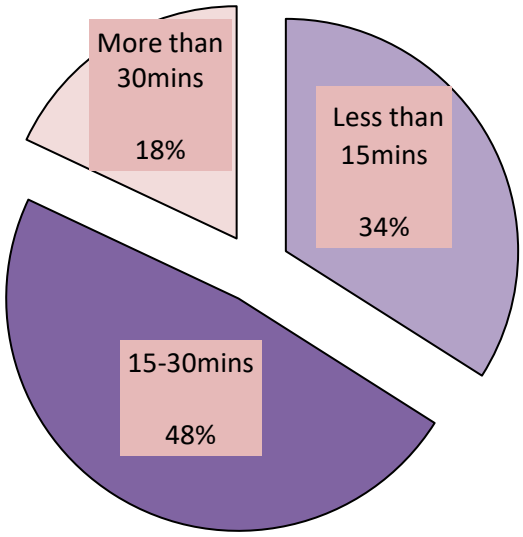
Out of all the medicines which were not available, 62% medicines were out of the formulary whereas 38% medicines were listed in the formulary but were out of the stock.

Figure 3: Brand Availability



In 84% cases, patients received medicines of the same brand as were prescribed by the doctor. In 16% cases, medicines of a different brand were given, which led to dissatisfaction amongst them.

Figure 4: Time consumed during the process



Less than 15minutes were taken in 34%cases.48% cases took time ranging from 15 to 30 minutes whereas 18% cases took a time of more than 30 minutes

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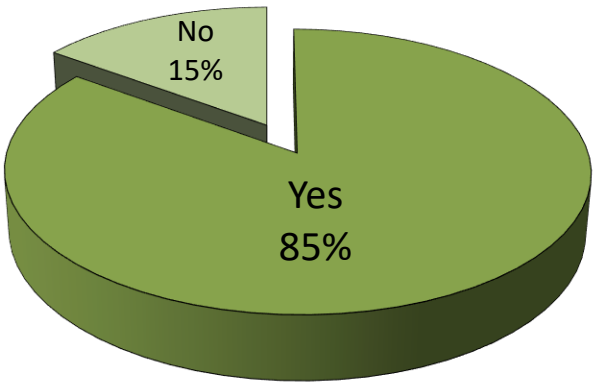
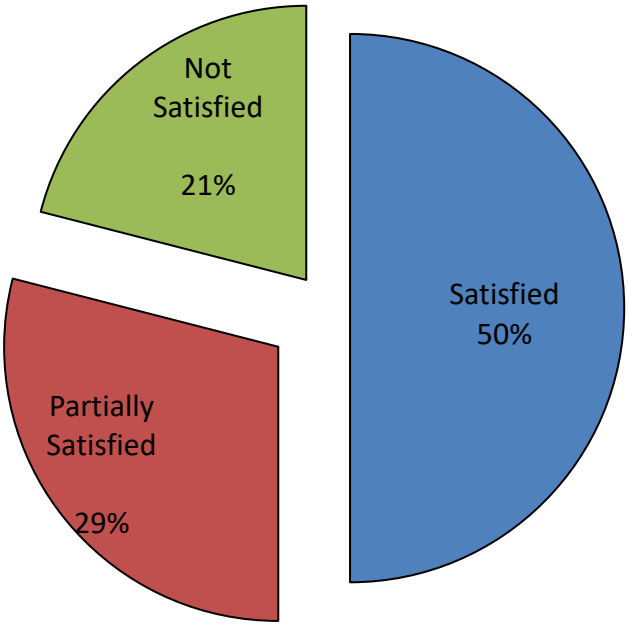
Figure 5: Counselling on proper usage of medicines



85% patients were explained about the proper usage of medicines. In 15% cases, no such counselling was done.

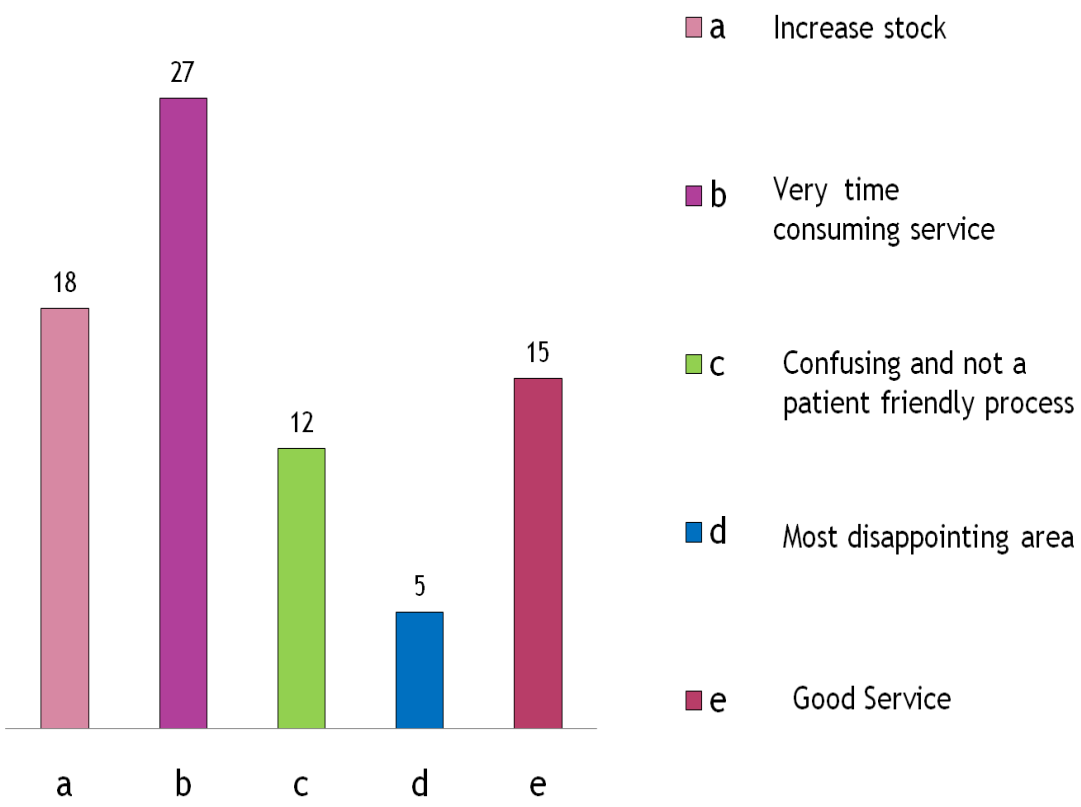
Figure 6: Satisfaction among patients regarding pharmacy services



Only 50% patients were completely satisfied with the pharmacy services.29% patients were partially satisfied whereas 21% patients

were not at all satisfied with the services.

Figure 7: Suggestions/Comments to improve the services



Most of the patients said the service was very time consuming. 12 patients found the process flow very confusing and inconvenient.

18 patients suggested that the stock of medicines should be increased so that they don't have to go out for medicines.

5 patients commented that pharmacy department was the most disappointing area of the the hospital

Only 15 patients said that the services were good.

GAPS

Based on the feedback results and observation, following gaps were observed:

- Time consuming and cumbersome process-

  The whole billing process is very time taking and hectic. It is a very confusing process which creates dissatisfaction amongst patients.

- Delay in services-

  Since the process itself is time consuming, it leads to delay in the medicines dispatch.

  Even if the medicines are dispatched timely, the time taken at billing counter is far too much which eventually frustrates the patient.

- Inadequate stock-

  The stock available in the pharmacy was inadequate. Many essential drugs were missing.

- Patients not in queue.

- Improper handover-

  Staff employed at night does not properly handover the drug shortage report to the morning staff. Thus, the shortage is not intimated timely.

- Lack of coordination-

  There is a communication gap between the staff. Hence, the problems are not communicated and corrective actions are delayed.

  There is a lack of coordination with the purchase department too which affects timely purchase of drugs.

Causes:

Reasons for Delay:

- There are different counters for medicine dispatch and bill payment. Hence, patient has to wait at two counters.

- The billing process is not patient friendly : Ask for medicines at first counter (Pharmacy)--- go to second counter (Cashier) for bill payment---- come back to first counter and collect the medicines.

Following activities occur at the Cashier counter:

Procedure	Average time consumed	Range
Visit open	2 minutes	1-4 minutes
Investigations	3 minutes	2-6 minutes
Final billing	5 minutes	3-12 minutes
Pharmacy billing	3 minutes	2-5 minutes
Others (refund, any query for tests etc.)	3 minutes	2-8 minutes

- *According to my study, patient who has to take only medicines has to wait for additional 10 minutes on an average (Range-3 minutes-15 minutes) at the cashier counter, due to the other processes being carried out. In peak hours, this time extends up to 15 minutes on average and ranges up to a maximum of 25 minutes.*

- Though 3 cashier counters are present but most of the times, only 1 is functional (i.e cashier at the pharmacy).Thus increases work load, which delays the process even more.

- ***Peak Time***:

  Generally Monday and Saturday are the busiest days.

  Time: 11-2:30 PM is the busiest time slot.

  Situation worsens at this time.

- Many doctors don't send online prescriptions, which delays the billing process.

Other Causes

- Many times doctors prescribe drugs out of the formulary. Hence, patients have to buy one or more medicines from the other pharmacy stores which dissatisfies the patients.

- Due to lack of coordination between staff, problems of handover and shortage of medicine arises.(not intimated timely)

- Patients stand haphazardly, which leads to confusion and further delay the whole process.

Recommendations

To overcome delay at the counter:

Possible Solutions	Associated Challenges
Increase counters	Limited Space
Only pharmacy billing and final billing for the same at the cashier counter next to pharmacy. Rest procedures at the other 2 cashier desks.	Would require more man power.
Separate pharmacy from the final bill. And allot both the counters for pharmacy and its billing.	Patient would have to take final bill for other procedures from the other cashier counters.

General Recommendations

- Online prescription by doctor should be made mandatory. In case of online prescription, doctors make the order entry themselves. Hence time taken at pharmacy counter reduces.

- At least 2 cashier desks should be functional all the time.

Other Recommendatons:

- Doctors should be intimated periodically regarding the formulary so that they don't prescribe the drugs out of formulary and if any medicine seems important it should be added in the formulary.

- There should be proper coordination among staff so that there is proper handover and shortage of any medicine is timely noted and fulfilled.

- Increase coordination with the purchase department to ensure proper and timelystock.

- It should be ensured that patients are in queue

Conclusion

Pharmacy department forms an important part of the hospital. It is one of the major revenue generating department in the hospital. For the successful management of hospital, it is important to ensure smooth running of the pharmacy department. Major reasons responsible for dissatisfaction among patients include time taking billing procedure and inadequate stock. Because of these two reasons, many patients prefer to buy medicines from outside the hospital which leads to loss of revenue and more importantly leads to dissatisfaction among patients. During the study it was found that the One Door step service which was thought to be beneficial for the patients was, on the contrary causing delay in the services. Thus, the process itself needs to be amended.

By overcoming the loopholes in the pharmacy services, we can ensure a higher level of satisfaction among the patients and thus add to the success of hospital.

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Annexure

QUESTIONNAIRE

1) Did you get all the medicines ? (if not how many are missing along with their name.)

-Yes

-No (number, name)

2) Are the medicines of same company as prescribed by doctor or different.

-Same

-Different

3) How much time did it take to get the medicines?

-Less than 15 minutes

-15-30 minutes

- More than 30 minutes

4) Were you described how to take medicines?

-Yes

-No

5) Are you satisfied with the pharmacy services?

- Satisfied

- Partially Satisfied

- Not satisfied

6) Any suggestion/comment.