Compliance to Patient Safety Standards in a Tertiary Care Hospital

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Introduction

- Patient safety is the absence of preventable harm to the patient during the process of health care. The discipline of patient safety is to prevent patients from any severe harm or risks due to healthcare.

- Hospitals these days focus more on patient safety and increasing their attention on improving quality of healthcare and preventing the harm/chances of harm to the patients.

- There are guidelines on Patient Safety which basically are Standard Operating Procedure's given by NABH that needs to be adapted by all the hospitals and should be maintained time to time.

Introduction (cont.)

- According to Chapter No.8 of National Accreditation Board for Hospitals and Healthcare Providers (NABH), Patient safety devices are installed across the organization and inspected periodically. For example, grab bars, bed rails, sign posting, safety belts on stretchers and wheel chairs, alarms both visual and auditory where applicable, warning signs like radiation or biohazard, call bells, fire safety devices, etc.
- According to Chapter No.4 of National Accreditation Board for Hospitals and Healthcare Providers (NABH), Dose, quantity, route of administration, rate of administration, or instructions for use of a drug product ordered or authorized by physician (or other legitimate prescriber), illegible prescriptions or medication orders are the major reasons that lead to errors and can increase the risk of harm to patient.
- According to Chapter No.5 of National Accreditation Board for Hospitals and Healthcare Providers (NABH), Most of the infections in healthcare facility are caused via hands of workers, the major percentage of infections are transmitted in a hospital to a patient due to poor hand hygiene practices.

Research Question

- What are the Patient safety devices in a hospital and evaluating them considering the guidelines given by NABH and IPSG?
- What is the Compliance of medication charts/prescriptions in IPD files with policies and procedures to ensure the legibility?
- What is adherence of staff/employees of the critical care units towards hand hygiene practices in Asian Institute of Medical Sciences?

Objective

- To assess the hospital from a patient safety perspective and observe the compliance towards the patient safety standards.

Process for Assessment of Patient Safety Standards

- To analyse the following Patient Safety Indicators/Devices according to Patient Safety Goals in NABH Standards and IPSG-
  1. Patient Identification
  2. Nursing Call Bell
  3. Stretchers
  4. Wheelchairs
  5. Patient Beds
  6. Proper Disclaimer in Washroom
  7. Electrical Boards
  8. Emergency Call Bell
  9. Fire Extinguishers
  10. Refrigerators
- To audit the patient files for the appropriateness of prescriptions/medication charts in various inpatient departments of the hospital.
- To observe the Compliance with guidelines for hand hygiene given by WHO among hospital staff in critical care units of the hospital.
- To suggest the closures of the Non-compliance and giving recommendations for further improvement in the patient safety environment of the hospital.

Process of the Study

Step 1- Checklist was made for conducting the audits. (3 days)

Step 2 - The data collection was done from various departments of the healthcare facility according to the convenience. (8 weeks)

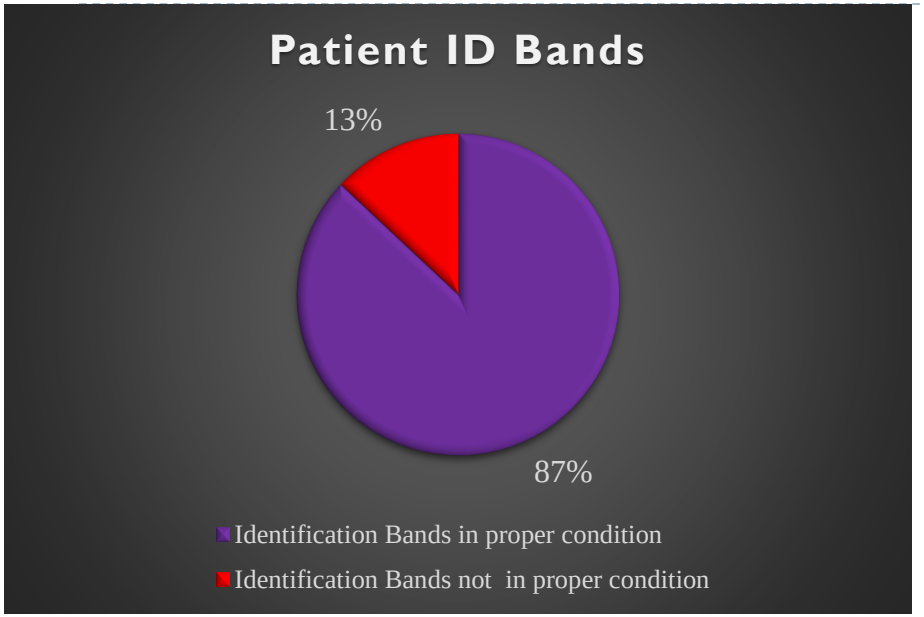
Step 3 - The data was analysed for all the parameters and further interpretations were done. (4 days)

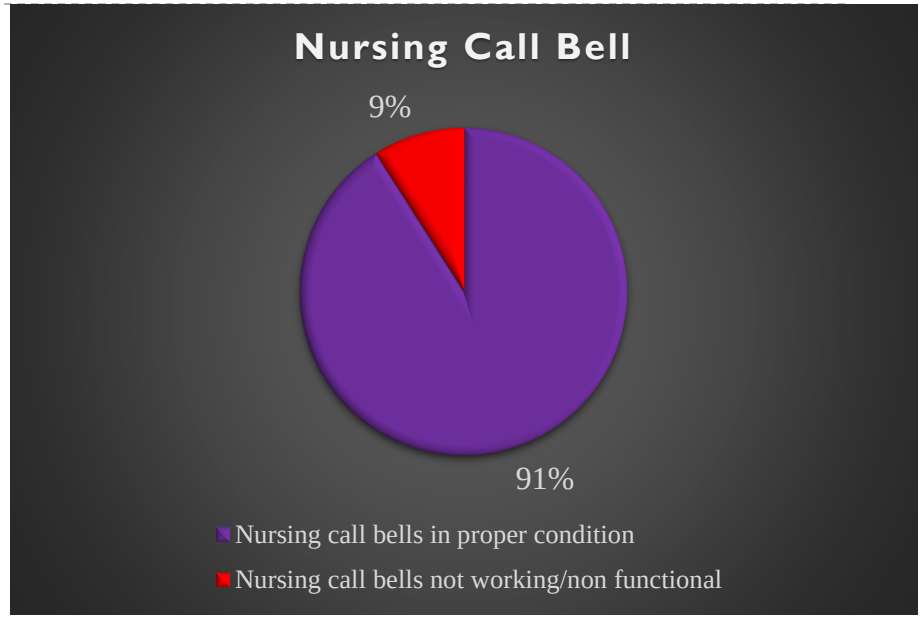
Step 4 - Recommendations for the improvements were suggested to the hospital and noted down in the report. (1week)

Research Methodology

- **Nature of this Study:** Descriptive
- **Sampling:** Convenient Sampling
- **Sample Size:** 697 (362&335) patient files for Prescription Audit and 1001 (489&512) hand hygiene opportunities. (Sample for Patient files has been taken as 10% of number of discharges per month and for hand hygiene it was 15 forms to be assessed per month as per hospital policy)
- **Study Duration:** 8 weeks (March & April)
- **Research Tool:** A Checklist was prepared to audit patient safety devices and prescriptions in IPD files, a checklist given by WHO was adapted for assessment of Hand Hygiene Compliance.
- **Data Analysis:** MS-Excel was used to analyze the data.

Results & Inference

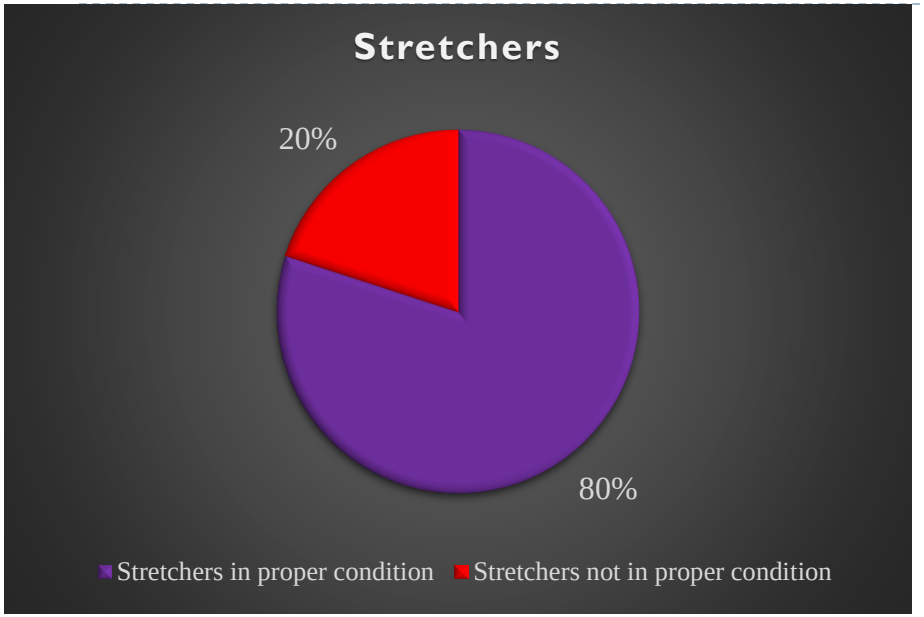


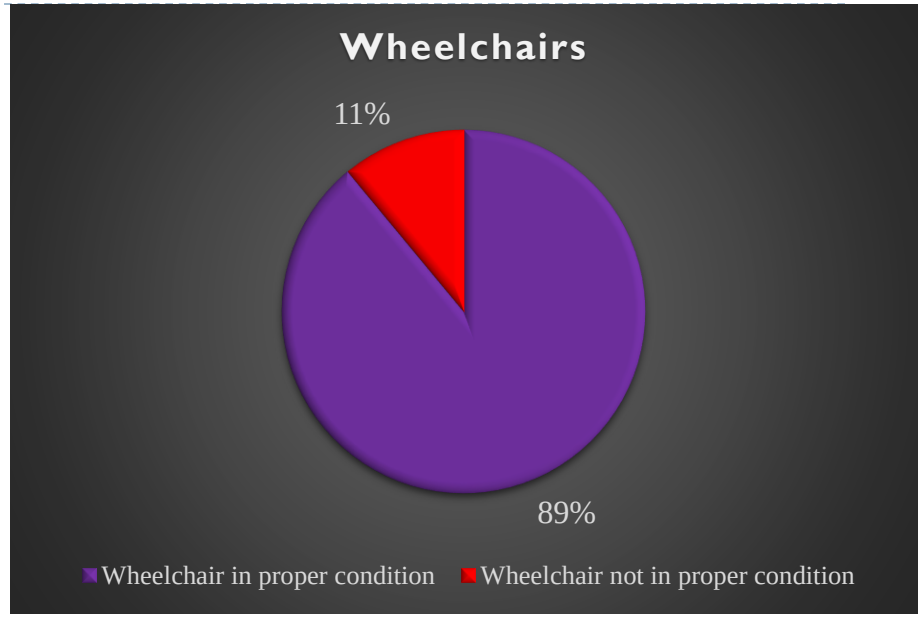


Patient ID Bands is an important patient safety device. Patient ID bands are very necessary for identification and it comes under International Patient Safety Goal 1. The chart depicts that 13% of the total IPD patients had issues with their ID band which were either not printed properly or else the information was blurred on the band.

Nursing call bell is essential for effective communication between the patient and nurses. It was found that about 9% of patient beds, as shown in the chart, had issues with nursing call bell button which were broken and some of them were not functioning properly

Results & Inference

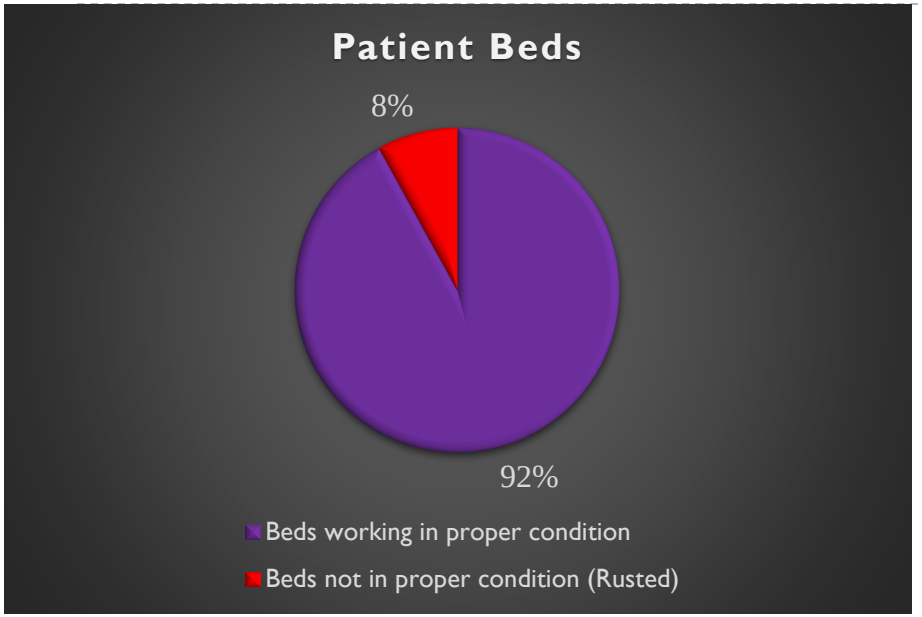




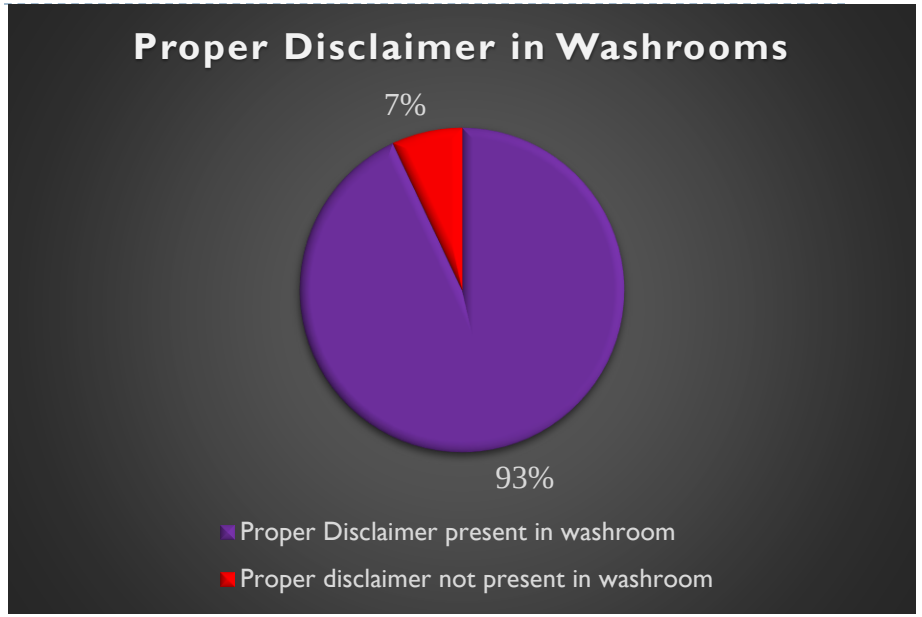
Patient safety is also related to properly working of stretchers which also helps in transferring of patients. As shown in the chart, about 20% stretchers were not functioning smoothly with issues like broken belts, brakes not working properly, broken belt buckle and rust was present.

The movement of patients across the hospital is dependent on wheelchairs when he/she is unable to move physically. It was found that around 11% of the wheelchairs were rusted and had issues with them.

Results & Inference

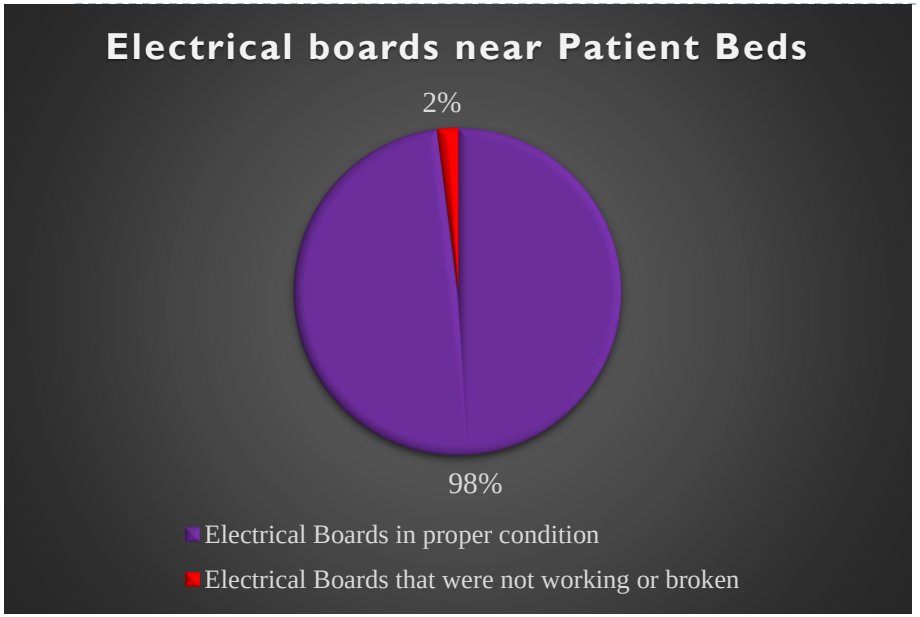


Patient beds are important concern while considering patient safety, patients have risk of fall from bed & if the side rails are not in working condition or the bed is not in proper condition can lead to harm. The chart depicts that 8% beds were not in proper condition due to non-functional rotator of beds as well as rust on them.

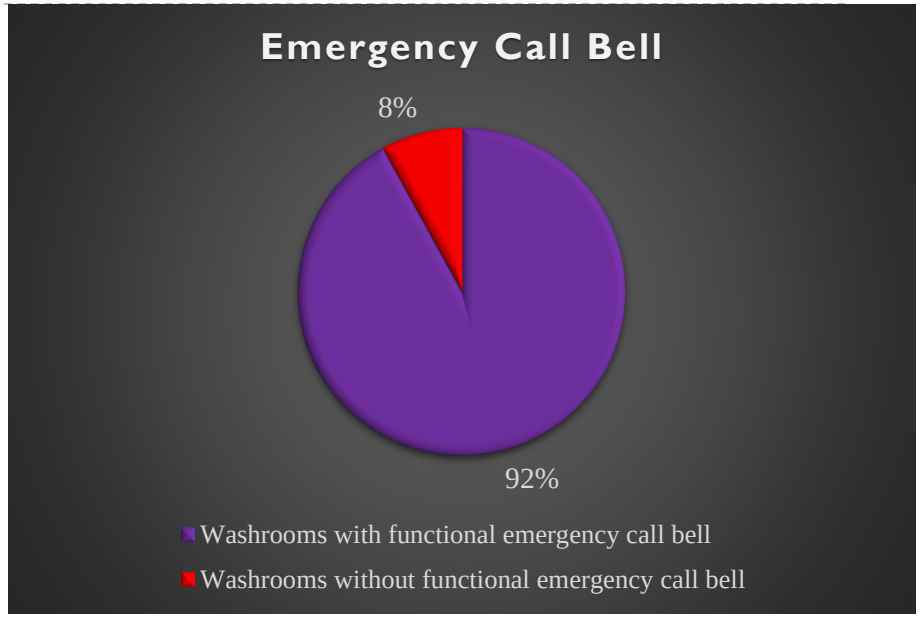


All the private washrooms should have 'DO NOT LOCK THE DOOR' sticker. During the time of the audit, it was found that 7% of the private washrooms did not have the sticker at the back of the door. (General Wards and Public Washrooms were excluded)

Results & Inference

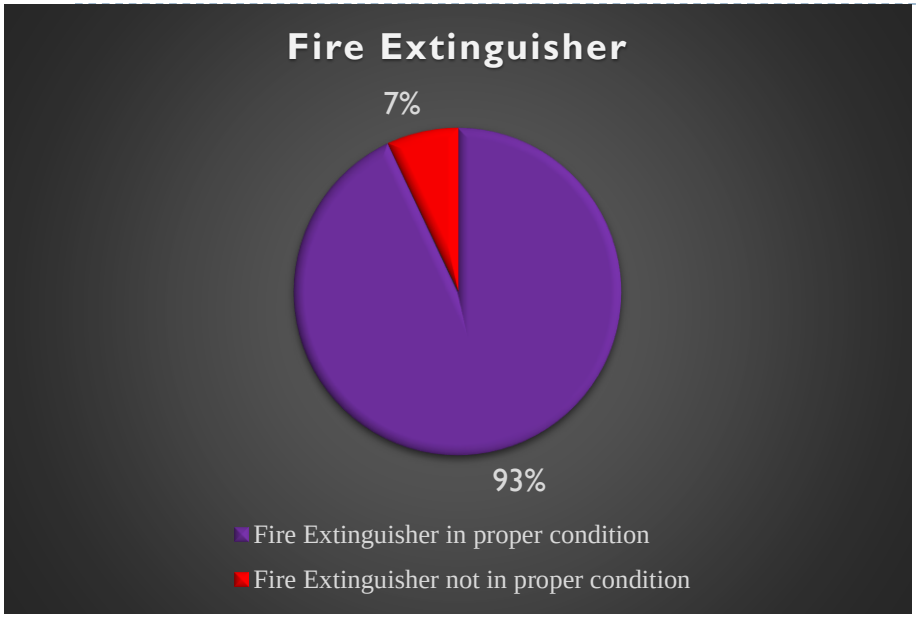


Broken boards should be repaired as they are near the patient beds and can change into a disadvantage for the patient as it can lead to electric shocks to the patients. The chart depicts that 2% of the electrical board near the beds were broken and 98% were in proper condition.

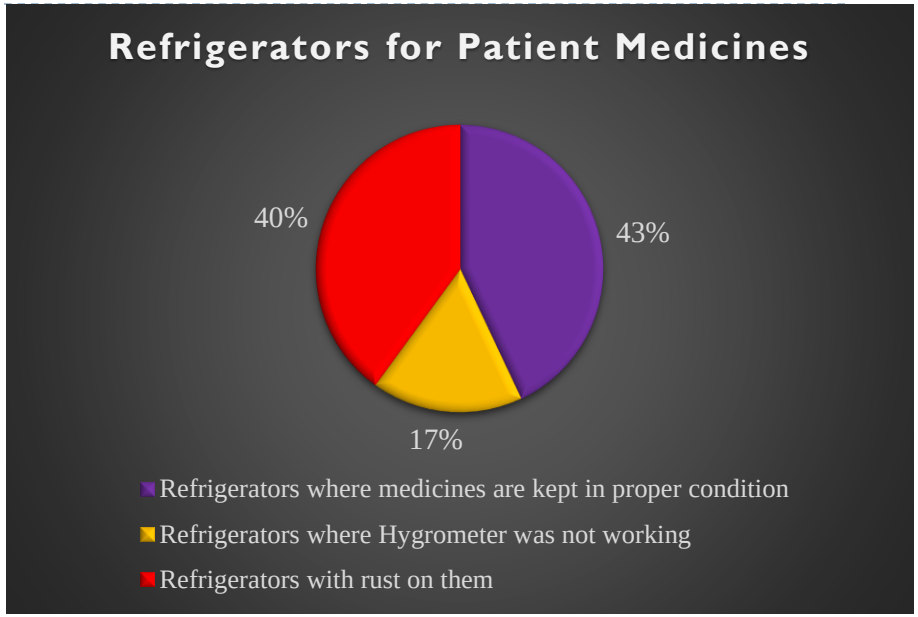


The private washrooms are present in the semi cabins and private wards. the call bell is important if the patient gets stuck in the washroom and needs help from the nurse. all the emergency call bells were audited and according to the graph below 15% of the washroom have defective call bell or did not have call bell.

Results & Inference

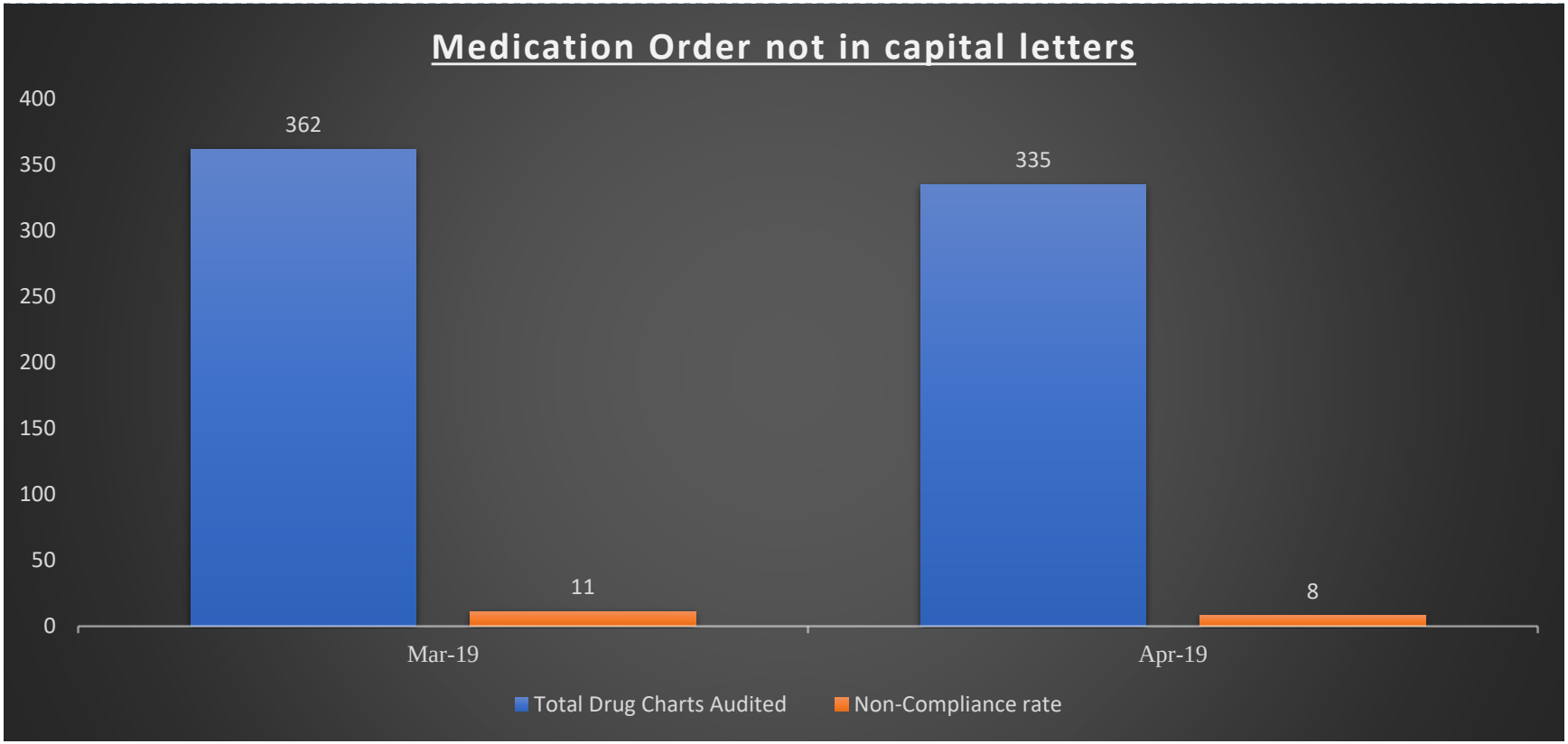


Fire Extinguisher acts as a support for patients as well as the employees and the attendants of the patients in case of fire. The chart depicts that around 7% extinguisher were not in proper conditions (I was not properly installed, 2 didn't had safety pins with them and 2 of them were expired) and 93% had proper condition with tag and date of expiry and were specified with their capacity and type of cylinder.



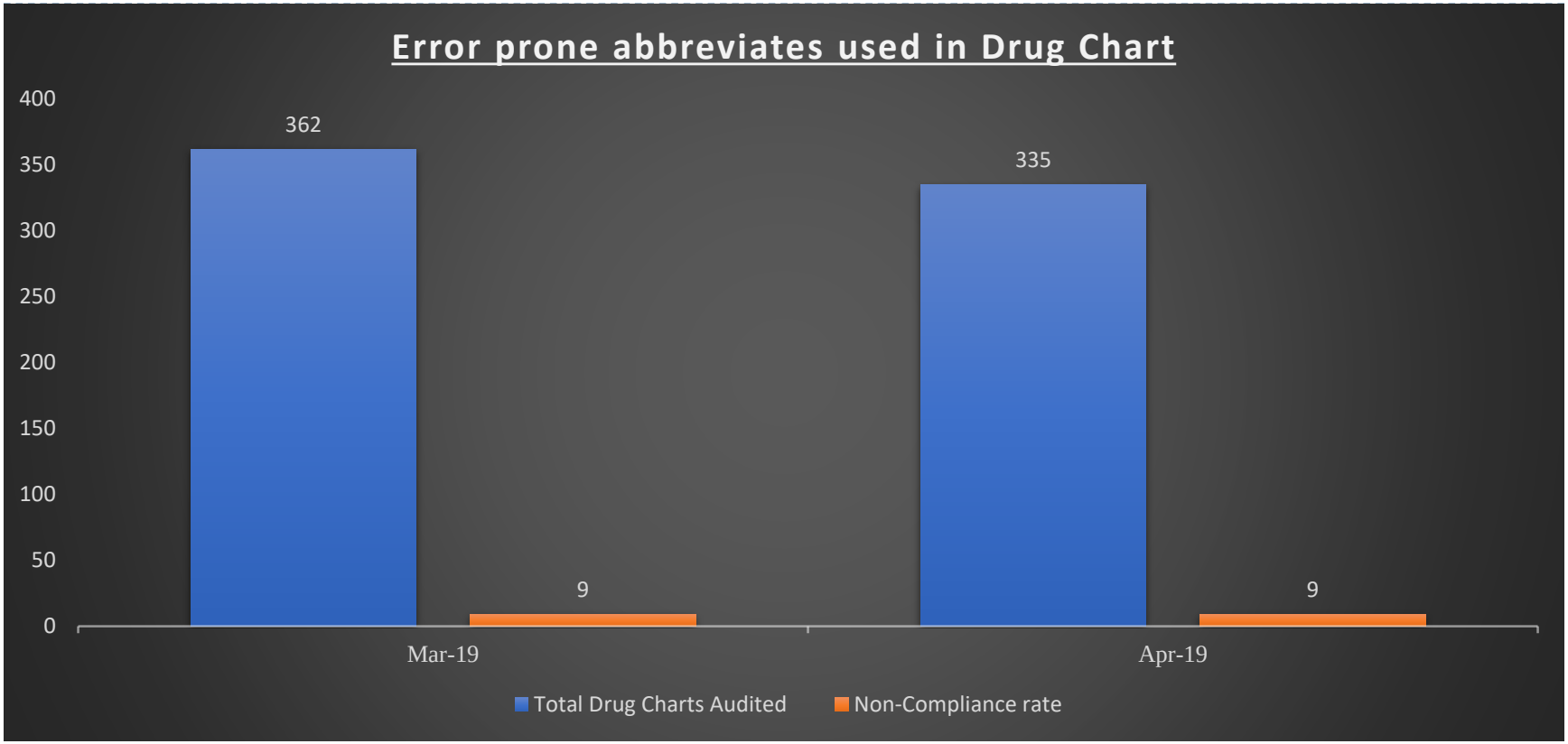
Refrigerators used for keeping the medicine should be maintained as they help the drugs to increase their durability and life, with working of refrigerators, the medicines will be effective for certain time frame, the chart depicts that around 43% were in proper condition and 40% had rust on them, for 7% the hygrometer was not functioning properly.

Results & Inference



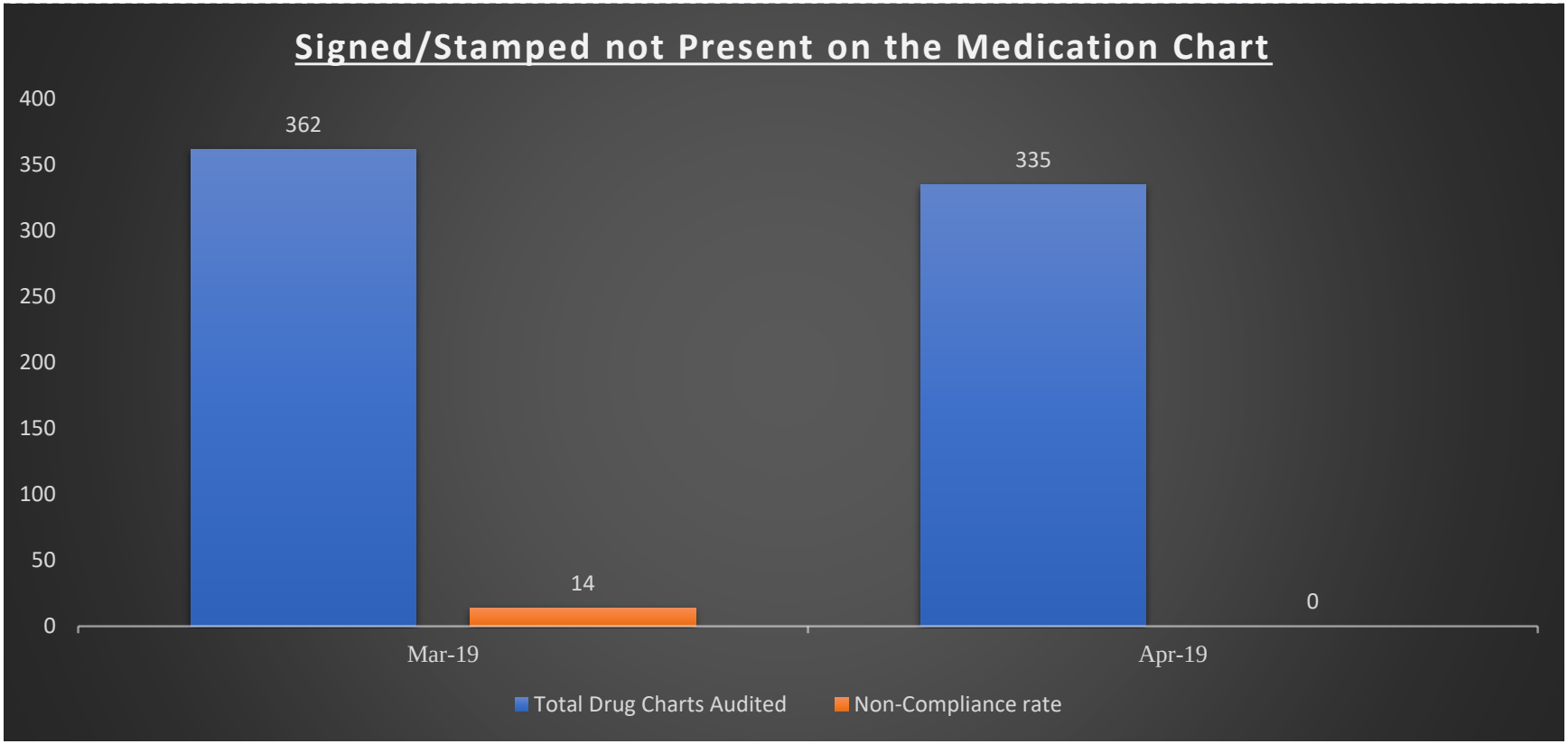
It is mandatory to mention the medicine in capital letters in the prescription as it increases the legibility of the medicine for other doctors and staff to prevent any medication error, out of 697 prescriptions that were audited, 19 prescription didn't had the names written in capital letters.

Results & Inference



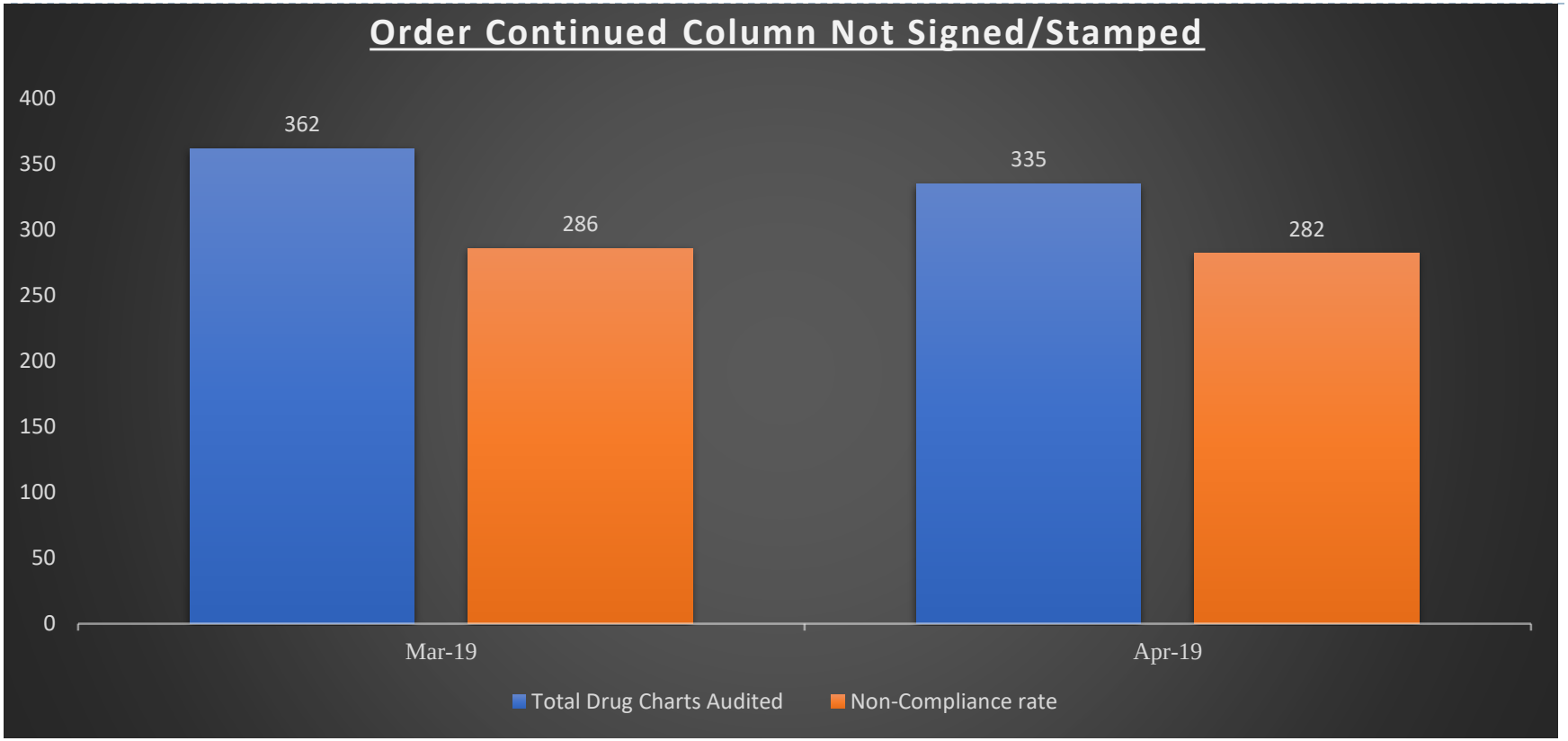
There are abbreviations that were adopted by the hospital from **Institute for Safe Medications Practices (ISMP)** which should not be used as it can create confusion for the nursing staff during the administration of drug. It was found that out of 697 prescriptions, 18 prescriptions had error prone abbreviations mentioned in them.

Results & Inference



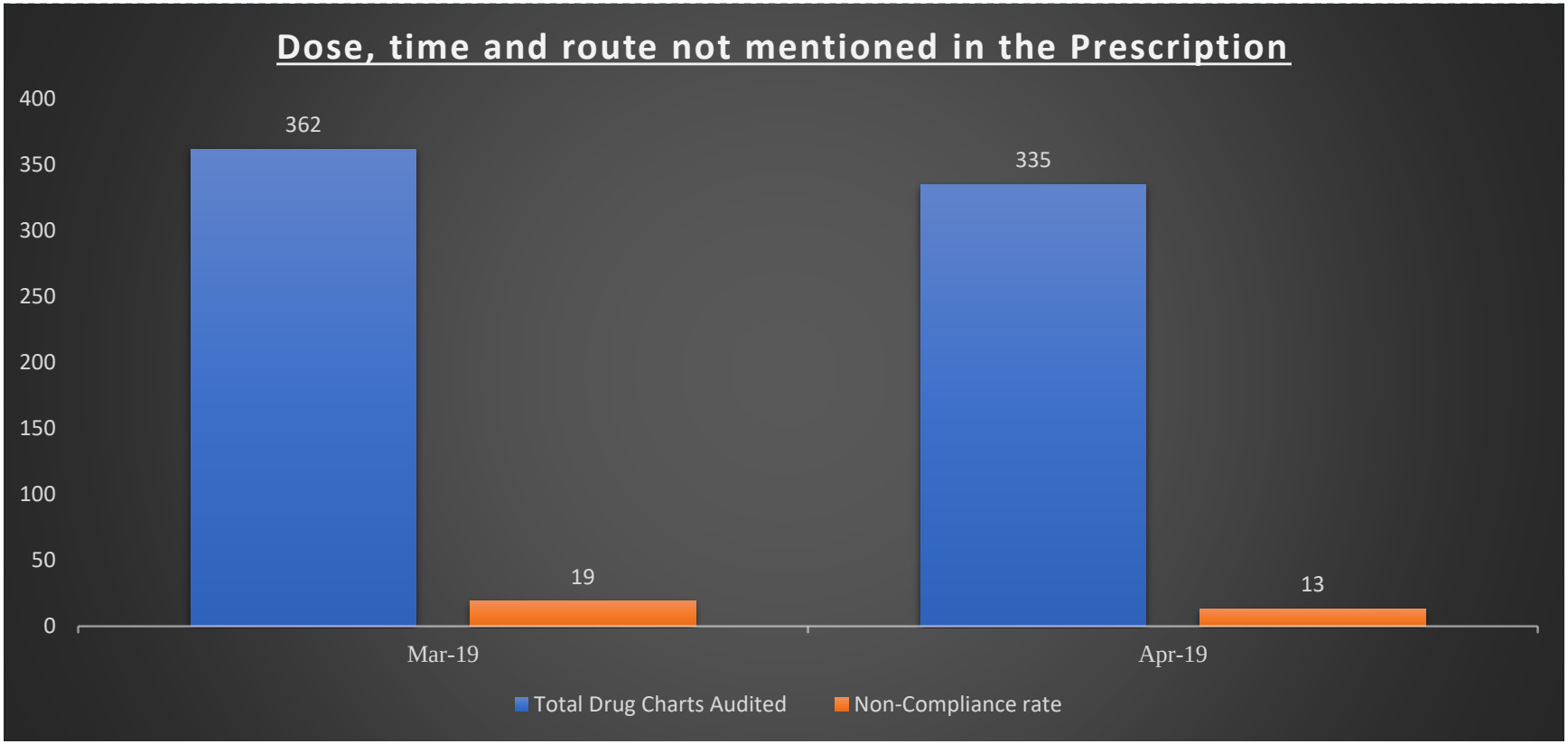
The need of Signature and Employee ID is necessary to ensure the authenticity of doctor who are filling the prescriptions/drug chart. Out of 697 prescriptions that were audited, 14 prescriptions had the non-compliance for Doctor Signature and Employee ID of the personnel.

Results & Inference



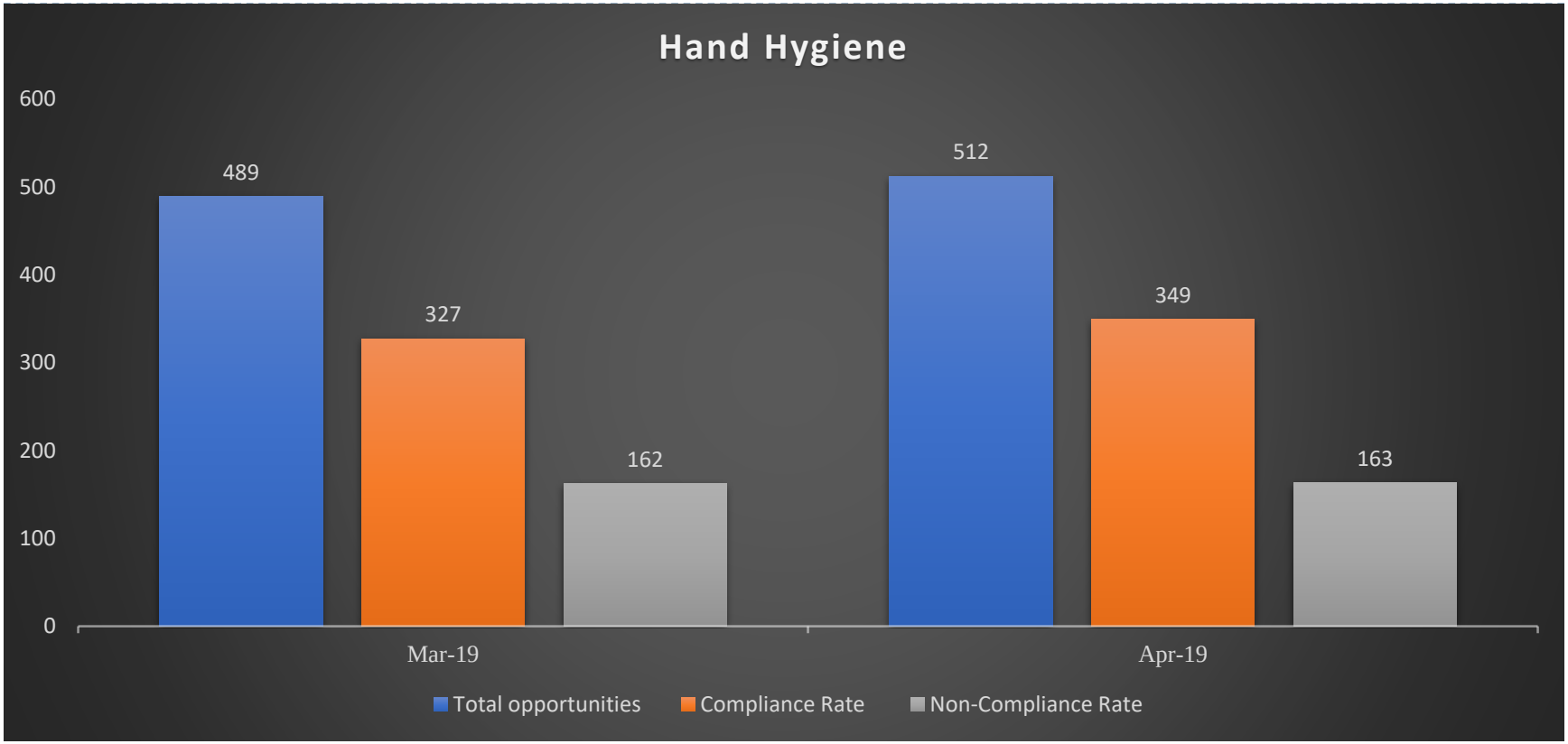
The treatment chart of every patient needs to be reviewed by treating clinician daily who needs to sign and stamp the order continued column. Out of 697 files, 568 files had non-compliance in them as the order continued column was not signed..

Results & Inference



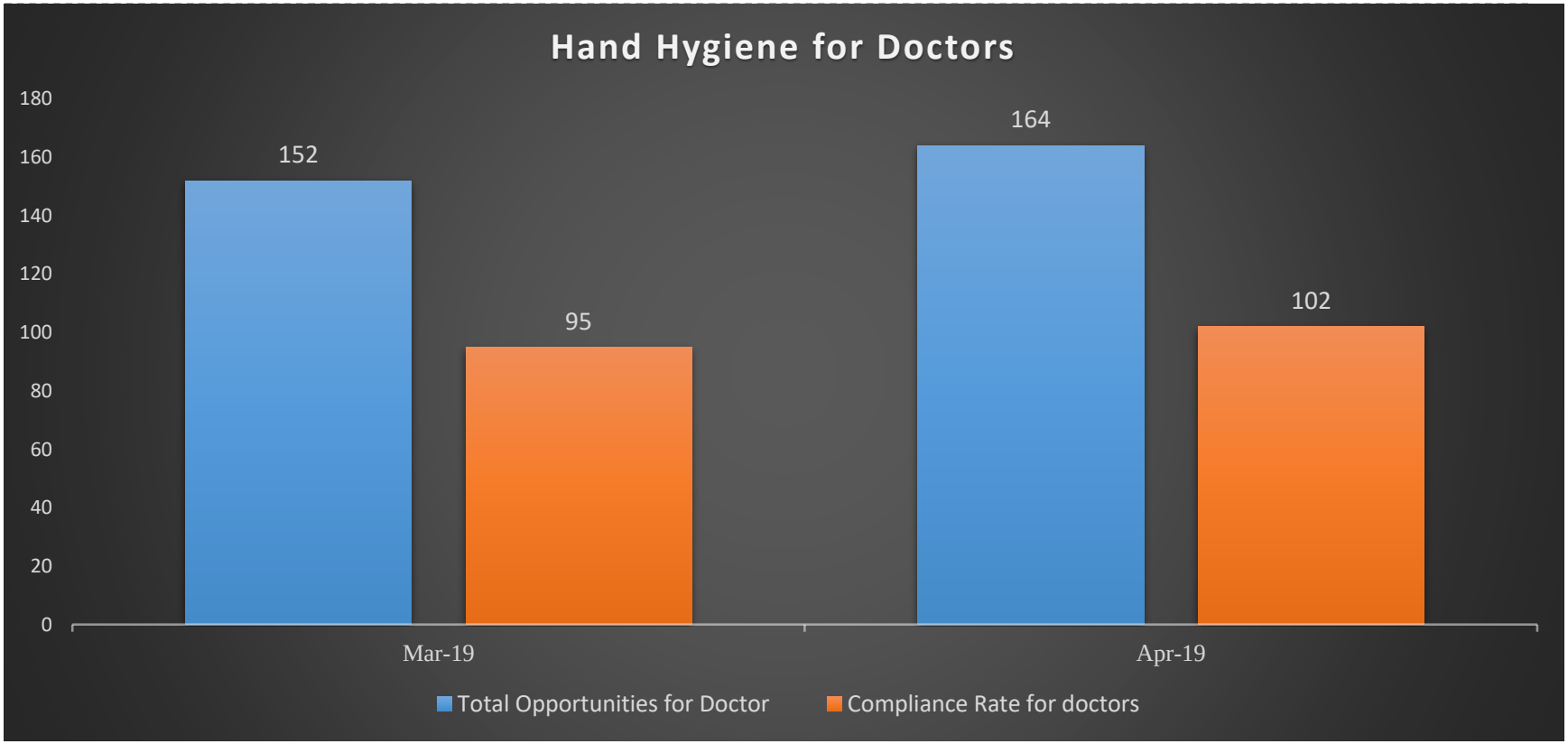
It is necessary to mention dose, route and time in the prescriptions as it is very necessary during the administration of drugs, As the need to administer drugs will be based upon the health needs of the patient such as on what duration, by which route and in how much dose the drug needs to be given Out of 697 prescriptions that were audited, 32 prescriptions had issues with the dose, time and route not mentioned in the prescriptions.

Results & Inference



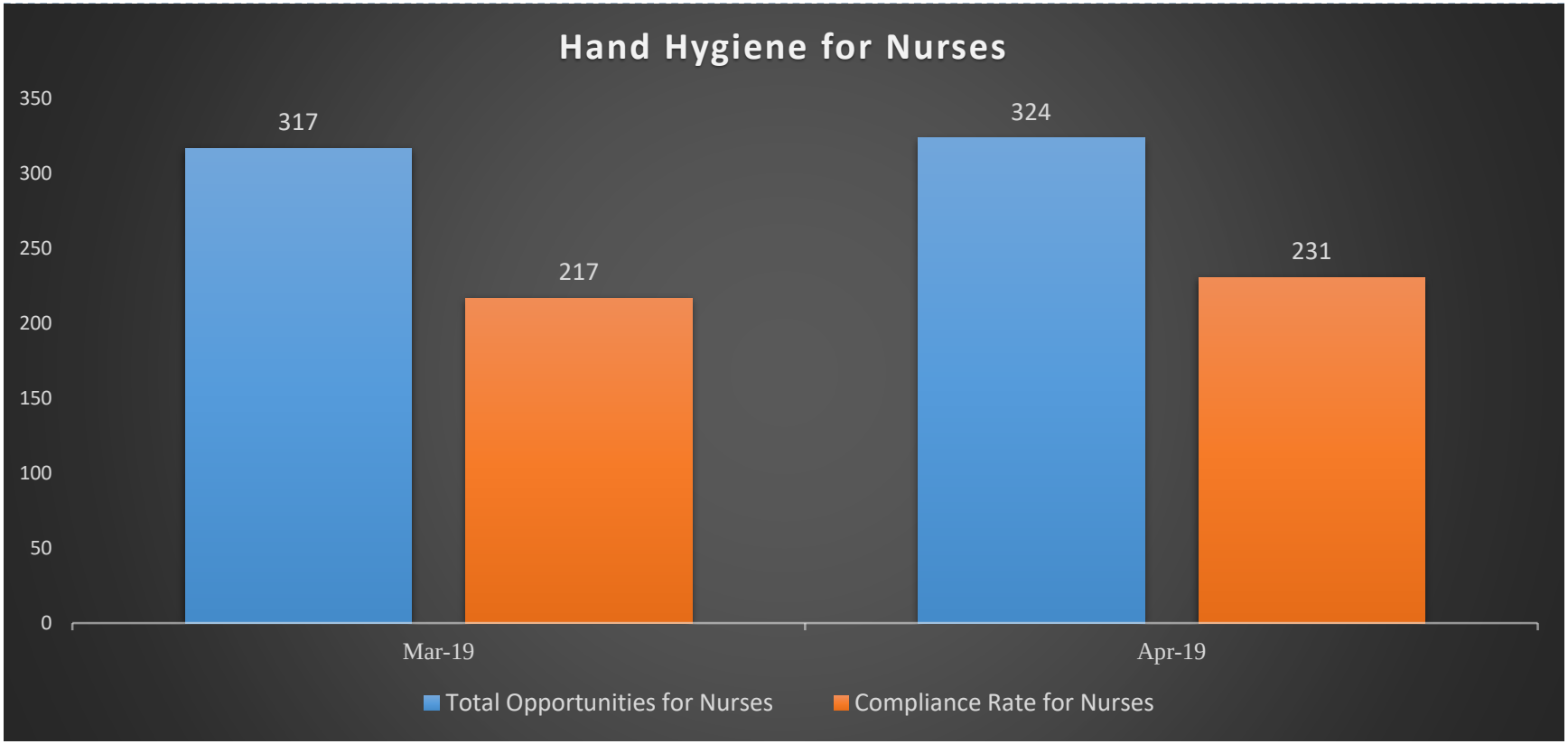
The hand hygiene data has been collected with the help of the checklist and hence the following opportunities has been counted and further analysed into compliance and non-compliance. Study has been carried out for 2 months in which total of 1001 opportunities were observed, the compliance was observed in 676 opportunities.

Results & Inference



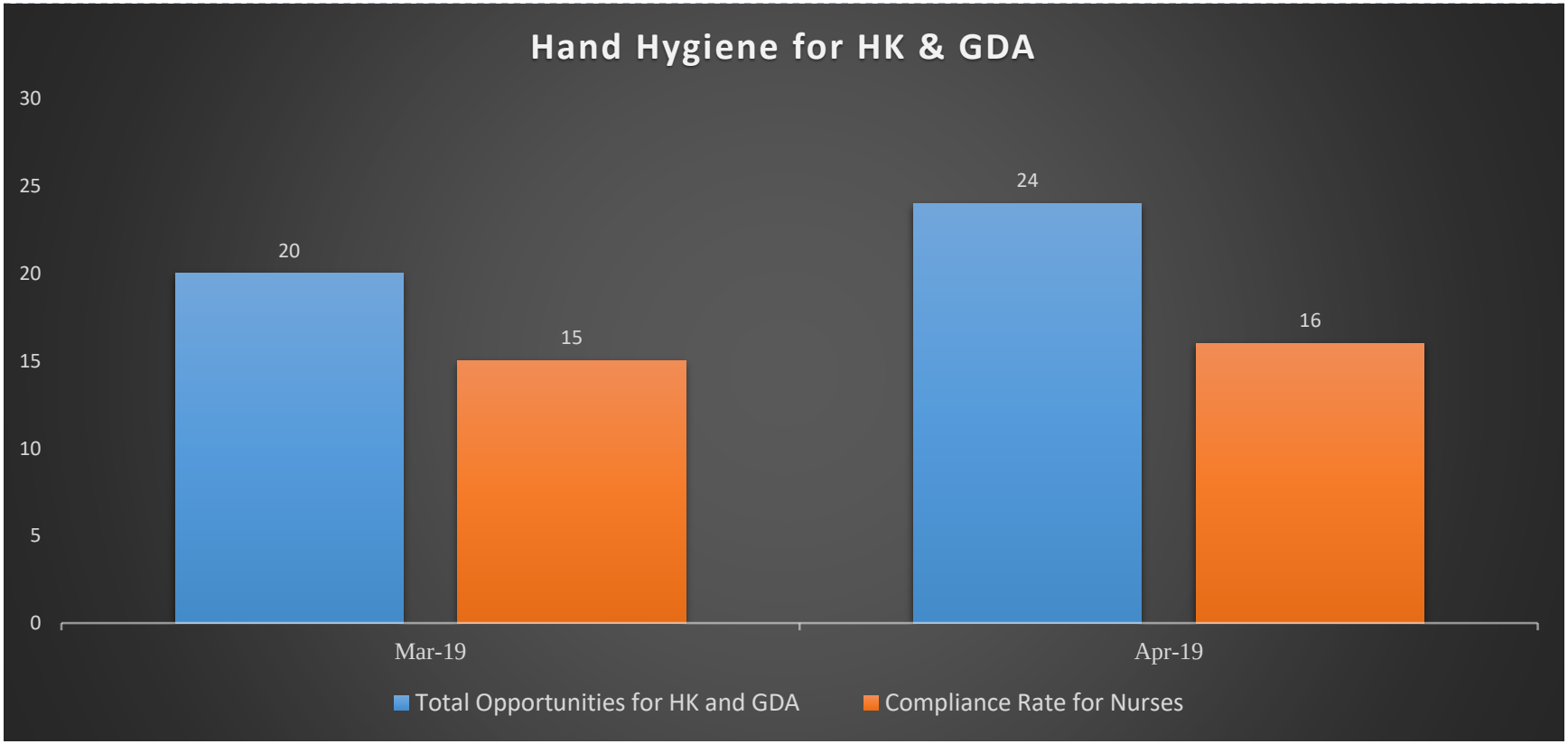
The Hand hygiene for the study period has been further segregated into analysing the compliance rate for Doctors. It was found out that out of 316 opportunities observed for doctors only 197 had compliance present.

Results & Inference



The Hand hygiene for the study period has been segregated to find out the compliance rate for Nurses following 5 moments of hand hygiene. Out of 641 hand hygiene opportunities, 448 opportunities had compliance present in them.

Results & Inference



The Hand hygiene for the study period has been analysed to find out the compliance rate for housekeeping and GDA towards hand hygiene practices, out of 44 opportunities 31 were found to have compliance present.

Recommendations

- The audits should be done on frequent basis as it will help the organization to maintain the to maintain the quality and standards they have promised to be deliver.
- There were times that the patient files found incomplete or partially filled, the CAPA (Corrective Action & Preventive Action) should be done at the sight to prevent any misunderstanding.
- There were lots of issues in the identification of patients, IT Department were instructed to implement better alternatives like Barcoding for preventing issues of errors with patient details.
- All the Emergency bells in the rooms as well as the washrooms should be audited when new patients get admitted in the rooms/wards.
- Proper Orientation of patients should be done during the time of admissions of patients and they should be aware of all the patient safety devices installed in the room.

Recommendations (cont.)

- There should be more focus on the documentation part and briefing of staff should be done on medication charts/prescriptions to prevent any harm to patient as well as for the employees.
- Proper de-briefing to be done for the clinicians in order to make them sign the order continued column in the drug charts.
- The nursing staff and allied health workers should be trained on monthly basis for the importance of hand hygiene and the practices for fulfilling the 5 moments of hand hygiene.

Conclusion

Healthcare organizations are now focusing on the improvement organizational environment for patient safety. Safe environment has been priority for various hospitals with respect to the patients as well as the staff

- This study analysis was done for improving the patient safety. All the audited parameters were related to the patient and work staff safety. After auditing, measures were taken to keep a check on the patient safety devices in the hospital.
- The IPD files were audited on a regular basis for the period of 2 months, Mainly 5 parameters were assessed for evaluating the appropriateness of documentation part in the Drug charts which shows almost the same compliance rate as time progresses..
- Maximum number of prescriptions were complying with the prescribe standards, it was found that compliance with order continued column being signed/stamped was low even though the clinicians were reviewing the treatment during the daily rounds.
- The 5 moments of hand hygiene were closely monitored and the compliance rate has increased with the time with increase in the practice of staff and other employees.

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