

INTERNSHIP TRAINING

at

Monilek Hospital and Research Centre

“A study on to analyze compliance for International Patient Safety Goals in Monilek
Hospital and Research Centre”

Manish Kaushik

Under the Guidance of

Dr. B. S. Singh

Post Graduate Diploma in Hospital and Health Management

2016-18



International Institute of Health Management Research, New Delhi

INTERNSHIP TRAINING

at

Monilek Hospital and Research Centre

**“A study on to analyze compliance for International Patient Safety Goals in Monilek
Hospital and Research Centre”**

A Report

By

Manish Kaushik

Post Graduate Diploma in Hospital and Health Management

2016-18



International Institute of Health Management Research, New Delhi



FIRST PRIVATE RENAL TRANSPLANT CENTRE OF RAJASTHAN (SINCE 1986)

Format No. : MHR/OFF/F1
Rev. No. : 01

Monilek Hospital & RESEARCH CENTRE

(A Wing Of Smt. Mohinidevi Lekhraj Odhrani Charitable Trust)

Completion of Dissertation from Monilek Hospital and Research Centre, Jaipur

The certificate is awarded to

Mr. Manish Kaushik

In recognition of having successfully completed his Internship in the department of

QUALITY

And has successfully completed his Project on

Compliance for International Patient Safety Goals

in Monilek Hospital & Research Centre, Jaipur

February 1st, 2018 to April 30th, 2018

Monilek Hospital and Research Centre, Jaipur

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

We wish him all the best for future endeavors

P. Chandra
19/5/2018
Director Medical
DR. PRAVEER CHANDRA
MEDICAL DIRECTOR
Monilek Hospital & Research Centre
Sec.-4, Jawahar Nagar, JAIPUR

Manish
Director Operations

SECTOR-4, JAWAHAR NAGAR, JAIPUR-302 004 Mob. : 09001994820-23
Ph. : (0141) 2651393/2653019/2653021/2653023 Fax : 0141-2652830/32 • E-mail : monilek.jpr@gmail.com • Website : www.monilekhospital.com

Certificate of approval

The following dissertation titled "COMPLIANCE FOR INTERNATIONAL PATIENT SAFETY GOALS at MONILEK HOSPITAL & RESEARCH CENTRE JAIPUR is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **Post Graduate Diploma in Health and Hospital Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination committee for evaluation of dissertation.

Name

Dr. M. Bhattacharya
Dr. Pradeep Panda
Dr. Preetika G S
Dr. VINAY

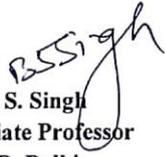
Signature

M. Bhattacharya
PK Panda
Dr. Preetika
Vinay

Dated: May 19th, 2018

Certificate from Dissertation Advisory Committee

This is to certify that **Mr. Manish Kaushik**, a graduate student of the **Post Graduate Diploma in Health and Hospital Management** has worked under our guidance and supervision. He is submitting this dissertation titled “**Compliance for International Patient Safety Goals in Monilek Hospital & Research Centre, Jaipur**” in partial fulfillment of the requirements for the award of the **Post-Graduate Diploma in Health and Hospital Management**. This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.


Dr. B. S. Singh
Associate Professor
IIHMR, Delhi


Medical Director
Monilek Hospital & Research Centre

DR. PRAVEER CHANDRA
MEDICAL DIRECTOR
Monilek Hospital & Research Centre
Sec.-4, Jawahar Nagar, JAIPUR

**INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH,
NEW DELHI**

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled **COMPLIANCE FOR INTERNATIONAL PATIENT SAFETY GOALS** at MONILEK HOSPITAL & RESEARCH CENTRE JAIPUR is submitted by **Mr. Manish Kaushik** Enrollment No. **PG/016/22** under the supervision of **Dr. B.S. Singh** for award of Postgraduate Diploma in Hospital and Health Management of the Institute carried out during the period from 2016 to 2018 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

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr. Manish Kaushik** student of Post Graduate Diploma in Hospital and Health Management (PGDHM) from International Institute of Health Management Research, New Delhi has undergone internship training at **Monilek Hospital & Research Centre, Jaipur** from 1th Feb 2018 to 30th April 2018. The Candidate has successfully carried out the study designated to him during internship training and his approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements.

I wish him all success in all his future endeavors.



Dr Supten Sarbadhikari
Dean, Academics and Student Affairs
IIHMR, New Delhi

Dr. B S Singh
Associate Professor
IIHMR, New Delhi



**INTERNATIONAL INSTITUTE OF HEALTH
MANAGEMENT RESEARCH (IIHMR)**

Plot No. 3, Sector 18A, Phase- II, Dwarka, New Delhi- 110075
Ph. +91-11-30418900, www.iihmrdelhi.org

CERTIFICATE ON PLAGIARISM CHECK

Name of Student (in block letter)	Dr./Mr./Ms.: MANISH KAUSHIK		
Enrollment/Roll No.	Pe/16/022	Batch Year	16-18
Course Specialization (Choose one)	Hospital Management ✓	Health Management	Healthcare IT
Name of Guide/Supervisor	Dr./Prof.: B. S. Singh		
Title of the Dissertation/Summer Assignment	COMPLIANCE FOR INTERNATIONAL PATIENT SAFETY GOALS .		
Plagiarism detect software used	"TURNITIN"		
Similar contents acceptable (%)	Up to 20 Percent as per policy		
Total words and % of similar contents Identified	14%		
Date of validation (DD/MM/YYYY)	22/05/2018		

Guide/Supervisor

Name: Dr B. S Singh

Signature:

Student

Name: Manish Kaushik

Signature:

Report checked by

Institute Librarian

Signature:

Date: 23/05/18

Library Seal



Signature: Sushant Kumar
Dean (Academics and Student Affairs)

Signature:

Date: 23/05/18

(Seal)

FEEDBACK FORM

Name of the Student : Mr. Manish Kaushik

Dissertation Organization : Monilek Hospital & Research Centre, Jaipur

Area of Dissertation : Compliance for International Patient Safety Goals in
Monilek Hospital & Research Centre, Jaipur

Attendance : 71 days/ 75 days (94.66%)

Objectives achieved : Yes

Deliverables :

Strengths : Hardworking

Suggestions for Improvement : Computer Skills

Date: 19/5/2018

Place: Jaipur



Medical Director
DR. PRAVEER CHANDRA
MEDICAL DIRECTOR
Monilek Hospital & Research Centre
Sec.-4, Jawahar Nagar, JAIPUR

Contents

Acknowledgement	11
Abbreviations	12
Organization Profile	13
Introduction	14
History	16
Project Report	23
Introduction”	24
Literature Review	28
Methodology	31
Objective	32
Findings / Data analysis: Analysis was done using Microsoft excel	32
Discussion	39
Recommendations/ Suggestions:	40
Conclusions	41
References	42

Acknowledgement

At the outset, I would like to articulate this project as small journey which was a remarkable learning experience for me. The successful completion of this project is only because of the extraordinary support, guidance, counselling and motivation from my respectable staff, of IIHMR University and my organization Monilek Hospital and Research Centre.

This journey could not be completed without support of my family and friends. I express my deep gratitude to Dr. B. S. Singh, Mentor for this project. His directions in making me think about unique conceptual and practical aspects of Health & Safety which has lifted this project at this stage of successful completion.

I extend my gratitude to my Manager and all my colleagues, friends for their encouragement, support, guidance and assistance for undergoing industrial training and for preparing the project report.

Abbreviations

- **IPSG:** International Patient Safety Goals
- **HAM:** High Alert Medications
- **HAI:** Hospital Acquired Infections
- **ID:** Identification
- **LASA:** Look Alike Sound Alike
- **WHO:** World Health Organization

Organization Profile

Introduction

MONILEK HOSPITAL AND RESEARCH CENTER, JAIPUR

“A Multi-Specialty and Super-specialty Hospital in Rajasthan”

Monilek Hospital and Research Centre is one of the reputed 100 bedded Multi-Specialty and Super-specialty Hospitals in Rajasthan, equipped with ultramodern and state-of-the-art facilities for Comprehensive Care – from OPD Consultations and routine health check-ups to Intensive Care and Specialized & Super-Specialized Surgeries. It is unique in the region in terms of facilities as well as patient care. The Hospital is equipped with most advance technologies and equipment. The hospital was named “MONILEK” to give humble tribute to trustee’s parents Shri Mohini Odhrani and Shri Lekhraj Odhrani.

This hospital was started in Jaipur in the year 1986 by an experienced team of Physicians and Surgeons and the Trustee – an eminent philanthropist, Mr.Lekhraj Odhrani. With their dedication and vision, the hospital has grown to induct a number of specialties, culminating in, this first private Renal Transplant Centre in Rajasthan, to become a multispecialty tertiary care hospital. The total bed strength has reached to 100 beds and is growing. It is continuously growing under the visionary of CEO. Dr S.L Tolani , Mrs Kavita Kaushik, Dr. Praveer Chandra , Mr. B. A. Manwani boosted with great expertise in healthcare by leading clinician, astute management team supported by highly trained clinical and non-clinical staff. . It is known for its world class treatment and patient satisfaction. To serve the community at large the hospital have energetic, enthusiastic, forward looking, devoted and able technical expertise of consultants from within and outside the country. The Monilek

Hospital is backed up by the trained supportive staff, efficient system procedures with an aim to cater the needs of Rajasthan.

Mission

The hospital is committed to provide quality and affordable healthcare using cutting edge technology with transparent modern clinical practices aimed to achieve patient satisfaction.

Vision

To build an ethical healthcare institution that will be a benchmark in providing advanced healthcare services to the masses.

Value

Patient's Satisfaction at affordable prices.

Quality Policy

We are committed to provide timely & cost-effective healthcare services to achieve patient satisfaction by ensuring continual improvement in quality management system.

History

Mr. Ashok Odhrani(Trustee) had started a Company – **Supertech** in Dubai in 1973 with the help of moral support given by his father Mr. Lekhraj Odhrani. The business was later joined by his brothers Mr. Narendra Odhrani and Mr. Murli Odhrani. Mr. Lekhraj Odhrani had suggested his sons to create a charity fund from the yield of the business as it was his wish to pay back to the society. At this juncture, odhrani family met with **Dr. S.L. Tolani (CEO)**. **Together they came forward to extend a helping hand for society in the form of healthcare services that led to the creation of Monilek Hospital and Research Centre in Jaipur 1986.** They set-up a small hospital unit in a rented building on Shanti Path, Jawahar Nagar to cater needs of the society. The hospital was named "MONILEK" to give a humble tribute to their parents Smt. Mohinidevi and Shri Lekhraj. The main goal was to blend technology with human skills and ingenuity by providing state of the art equipment, assembling a team of talented and committed professionals and creating an atmosphere of quality health care. Under leadership of Dr. S.L. Tolani, team of a few motivated doctors was formed. In 1989 the trust purchased a plot of land in Jawahar Nagar and the Monilek Hospital was shifted in 1993 to a new two storeyed building constructed on this.

Specialties Offered

- Urology
- Prostate Surgery
- Ear, Nose, Throat
- Gastroenterology
- Cardiology
- General Surgery
- Plastic Surgery
- Ophthalmology
- Kidney Transplant
- Joint Replacement
- Nephrology
- Gynaecology & Obstetrics
- Orthopaedics
- Skin & V.D
- Paediatrics & Neonatology

Supportive Services Offered

- Diet & Nutrition
- Physiotherapy
- Ayurveda
- Homeopathy

Out of Scope Services

- MRI
- Cardio Thoracic & Vascular Surgeries(CTVS)
- Mammography
- Psychiatric IPD
- Burn cases > 20% (Adult) and >10% (Pediatric)

Diagnostic & Imaging Services

- Blood Bank
- Pathology
- Hematology
- Histopathology
- Biochemistry
- Digital X-Ray
- CT Scan
- USG
- CTMT
- 2D-Echo
- Endoscopy

24*7 Services

- Ambulance
- Pharmacy
- Laboratory
- Emergency
- Radio diagnosis

A Quick Tour

- 100 Bedded Multi Specialty Hospital functioning since 1986, inclusive of Radio-diagnosis & Imaging sciences, NABL laboratory, Blood Bank.

Floor Wise Design of Monilek Hospital, Jaipur

FOURTH FLOOR

- ❖ Director's Office
- ❖ Trustee Office
- ❖ Accounts Department
- ❖ Quality Department
- ❖ HR Department

THIRD FLOOR

- ❖ Modular Operation Theaters
- ❖ ICU
- ❖ Transplant Room
- ❖ Cath Lab

SECOND FLOOR

- ❖ Private Wards
- ❖ NICU

FIRST FLOOR

- ❖ TPA, BSBY Counter
- ❖ Dialysis Unit
- ❖ Male General Ward
- ❖ Female General Ward

GROUND FLOOR

- ❖ IPD Counter
- ❖ OPD Counter
- ❖ Emergency
- ❖ Minor OT
- ❖ Doctor's Duty Room
- ❖ Cafeteria
- ❖ OPD Pharmacy
- ❖ Billing & Discharge

BASEMENT

- ❖ Blood Bank
- ❖ Laboratory
- ❖ Radio-Diagnosis
- ❖ Marketing Department

- ❖ IT Department
- ❖ Store
- ❖ Housekeeping Department
- ❖ Electric Maintenance Department
- ❖ Bio-Medical Engineering Department

Clinical Services

These services are directly related to the medical practice. These include-

- Accident and emergency department
- Laboratory
- OT
- Dialysis unit
- Physiotherapy department
- CSSD

Non-Clinical Services

These services are related to administrative and non-medical face of the hospital. These include-

- Admission And Billing
- Quality Assurance Department

- Human Resource Department
- Medical record department
- Pharmacy
- Housekeeping
- Marketing
- Finance
- Information Technology
- Food and beverages
- Purchase department
- Engineering
- Patient Welfare department
- Bio medical engineering
- Security
- Linen & Laundry

Project Report

**“A study on to analyse compliance for International Patient
Safety Goals in Monilek Hospital and Research Centre”**

Introduction

Patient Safety is the absence of preventable harm to a patient during the process of healthcare [15]. It has been defined as the reduction and mitigation of unsafe acts within the healthcare system, as well as through the use of best practices shown to lead to optimal patient outcomes. Emphasis is placed on the system of care delivery that (1) prevent errors, (2) learns from the errors that do occur, (3) is built on a culture of safety that involves healthcare professionals, organizations and patients [1].

National Patient Safety Goals are a series of specific actions that accredited organizations are required to take in order to prevent medical errors such as miscommunication among caregivers, unsafe use of infusion pumps and medication mix-ups.

The purpose of International Patient Safety Goals is to improve patient safety, is to promote specific improvements in patient safety. They highlight problematic areas in healthcare and describe evidence and expert based solutions to these problems. The goals focus on problems in healthcare, safety and how to solve them.

International Patient Safety Goals are necessary:

- To improve specific improvement in patient safety.
- To focus on problems in health care safety and how to solve them.

There are six International Patient Safety Goals. These goals are as follows:

- Identify Patient correctly.
- Improve effective communication.
- Improve the safety of high alert medications.
- Ensure correct site, correct procedure, and correct patient surgery.
- Reduce the risk of health care – associated infections

- Reduce the risk of patient harm resulting from falls.

The above given goals are been explained as:

IPSG 1- Identify Patient Correctly

- To reliably identify the individual as the person for whom the service or treatment is intended.
- To match the service or treatment to that individual.
- The identifiers can be:
 - a) Patient complete name.
 - b) Patient medical record number.
 - c) Birth date.
- Patients are identified before providing treatments and procedures/ diagnostics, administering medication, serving restricted diet, during time out-before a procedure, etc.

IPSG 2- Improve Effective Communication

- Process of conveying critical information in a way that is timely, accurate, complete, clear and understood by recipient.
- Complete verbal and telephone test results from wards must be “**read back**” by recipient and must be confirmed by the conveyer.
- Standardize abbreviation, acronyms, and symbols used throughout the organization, including a list of those not to be used.

IPSG 3- Improve the Safety of High Alert-Medications

- **HAM-** High alert medications are those which are involved in a high percentage of errors and/or sentinel events, medications that carry higher risk for adverse outcomes as well as look alike, sound alike medications (LASA).
- High alert categories/ HAM list should be available on the notice board in each clinical department.
- High alert medicines are kept in separate, secured cabinet and labeled by special warning label.

IPSG 4- Ensure correct site, correct procedure, correct patient surgery

- Use a checklist, including a “**Time-out**” just before starting a surgical procedure, to ensure the correct patient, procedure and body part.
- Develop a process or a checklist to verify that all documents and equipment needed for surgery are on hand and correct and functioning properly before surgery begins.
- Mark the precise site where the surgery will be performed. Use a clearly understood mark and involve the patient in doing this.

IPSG 5- Reduce the risk of health care-associated infections

- Comply with current published and generally accepted hand hygiene guidelines.
- Implement an effective hand hygiene program.
- Develop policies and procedures that address reducing the risk of health care associated infections.

IPSG 6- Reduce the risk of Patient harm resulting from falls

- Develop and implement a process to reduce the risk of patient harm resulting from fall.
- The risk of patient harm resulting from falls can be reduced by assessing and reassessing all inpatients and those out patients whose condition diagnosis, situation or location identifies them as at high risk for fall.

Literature Review

Work to establish a safety program must start at the top and target the organization's leadership. Leaders establish organizational goals and values, set and role-model behavioral expectations, and hold individuals accountable [5]

In general, the events of wrong-site surgery occur rarely [1-3].

When it does occur, however, it is considered a sentinel event which may cause severe damages to patients and physicians physically as well as mentally. In spine surgery field, as with other fields of specialty, it is understood that the right surgery is done to correct the patient. However, wrong-site surgery is still an ongoing problem in spine surgery, just as in other surgery fields [1, 4]

When the incidents of wrong-site surgery occurred in the past, they were often resolved in the name-blame-shame tradition on the surgeon or the surgical team, without any cause analysis and monetary rewards. These methods are not helpful today in resolving problems [6].

Some authors have introduced the "pre-pre-" and "post-post-" analytical phases to identify activities associated with the initial selection of tests and with the interpretation by clinicians respectively, to differentiate them for the pure collection/transport activities (pre-analytical phase) and reporting (post-analytical phase) [7,8]

Identification errors are particularly common amongst inpatient samples [9]

Several methods have been developed to define and classify medical errors, adverse events, near misses, and other patient safety concepts and terms [10, 11]

At a time when institutions are focused heavily on achieving "meaningful use" requirements, we propose that clearer guidance be provided so that these institutions can align activities

related to patient safety with the activities required to support a safe EHR-enabled health care system. [12]

The use of technology to monitor health care processes and outcomes and identify potential safety issues before they can harm patients. [13]

All health care systems have the potential to unintentionally harm the people they are trying to help through inappropriate decisions and medical errors. Since the 1990s, a powerful body of scientific evidence analyzing the occurrence and impact of adverse events occurring worldwide has accumulated [14]

Nursing has clearly been concerned with defining and measuring quality long before the current national and State-level emphasis on quality improvement. Florence Nightingale analyzed mortality data among British troops in 1855 and accomplished significant reduction in mortality through organizational and hygienic practices [16].

Effective communication is central to patient safety and quality. Inadequate communication consistently appears as a factor contributing to medical errors, across settings and practitioners. These span from an incident with a single patient¹to broader communication issues between physicians and nurses [17].

Handoffs, the transfer of patient care from one health care provider to another, are known to be vulnerable to communication failures and have been called “remarkably haphazard.” As defined by the Joint Commission, handoff communication refers to a standardized process “in which information about patient/client/resident care is communicated in a consistent manner.” [18]

There is little evidence for asserting the importance of any individual, group, or structural variable in error prevention or enhanced patient safety at the present time.[19]

Among the most prominent themes in communication research in healthcare are the effects of interruptions and tensions on effective team functioning. For example, ethnographic studies showed that tensions in team communications in the operating room often evolve around the issues of time, safety and sterility, resources, and work roles. [20]

Coordination is essential to teamwork because different team members routinely perform multiple interdependent tasks simultaneously. Ethnographic research in anesthesia has highlighted that teams coordinate not only through verbal communication but also through their work environment (i.e. the precise alignment of team member's bodies, tools, and the patient's body). [20]

Gaps currently exist in relation to knowledge on the extent and nature of the role of nurses in patient safety improvement. [18]

Patient handovers, defined as “the transfer of information and professional responsibility and accountability between individuals and teams,” are high-risk, error-prone patient care episodes. Handover failures are common and can lead to diagnostic and therapeutic delays and precipitate adverse events. [21]

Methodology

Study type: Descriptive Observational study

Study Area: Clinical and Non-Clinical departments of Monilek Hospital & Research Centre

Duration of study: 1st February 2018 to 30th April 2018

Sample size: 216

Data Collection:

Primary data was collected with the help of structured checklist enumerating different types of parameters for patient safety namely,

- Patient with ID band
- Verbal Order Registers
- Handover Registers
- Legible handwriting
- No abbreviation
- High risk medicine with inventory
- All other medications with inventory
- Opened bottles labeled with date/time
- Side rails
- WHO Surgical Safety Checklist

Hand hygiene practice

The scoring pattern for the analysis used was 1 for compliance, 0 for non-compliance. It means if any of the given parameters was found complying, the score 1 was given. On the other hand, if it was not complying then 0 was given.

Objective

- To analyze compliance to patient safety goals.
- Represent proactive strategies to reduce the risk of medical error.
- To provide clear priorities and solutions for improving patient safety.

Findings / Data analysis: Analysis was done using Microsoft excel.

1.

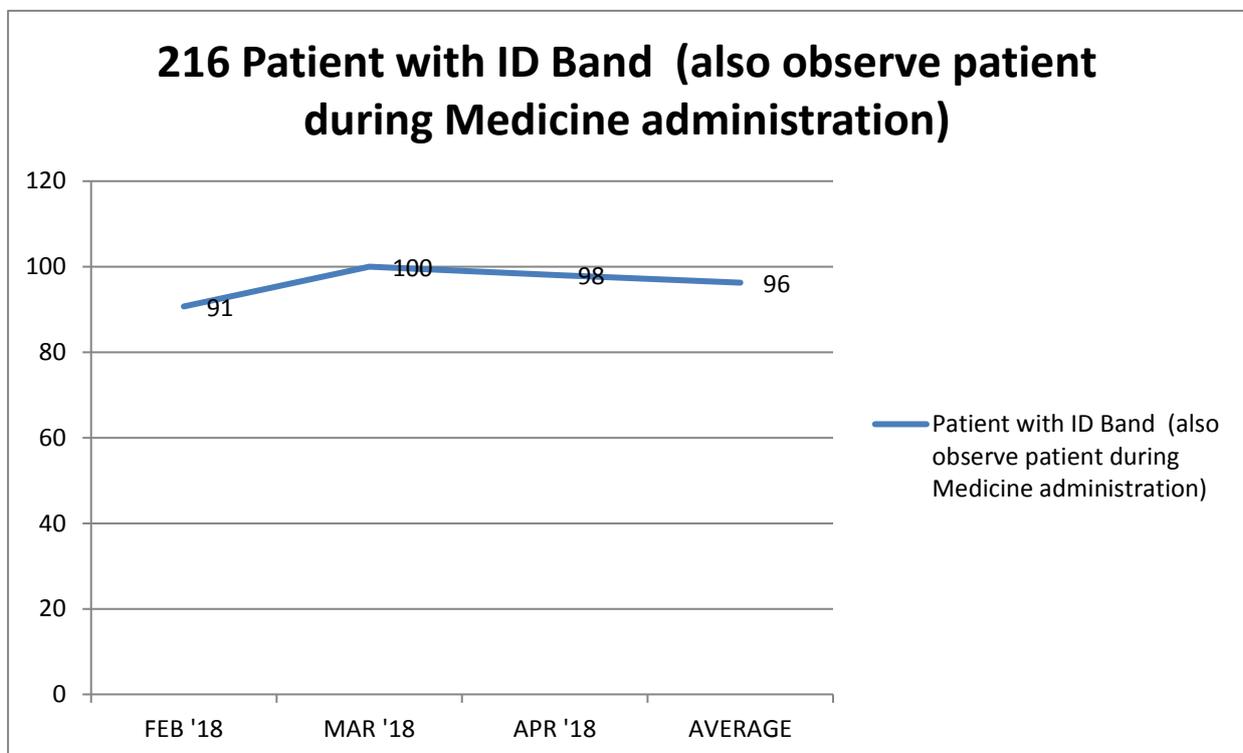


Fig:-1 shows the IPSG 1 that is to identify patient correctly.

Interpretation: From the above graph it is interpreted that compliance of patient with ID Band increased suddenly from February to march by 9%, but again in April it was observed that it again reduced to 98% from 100%.

2.

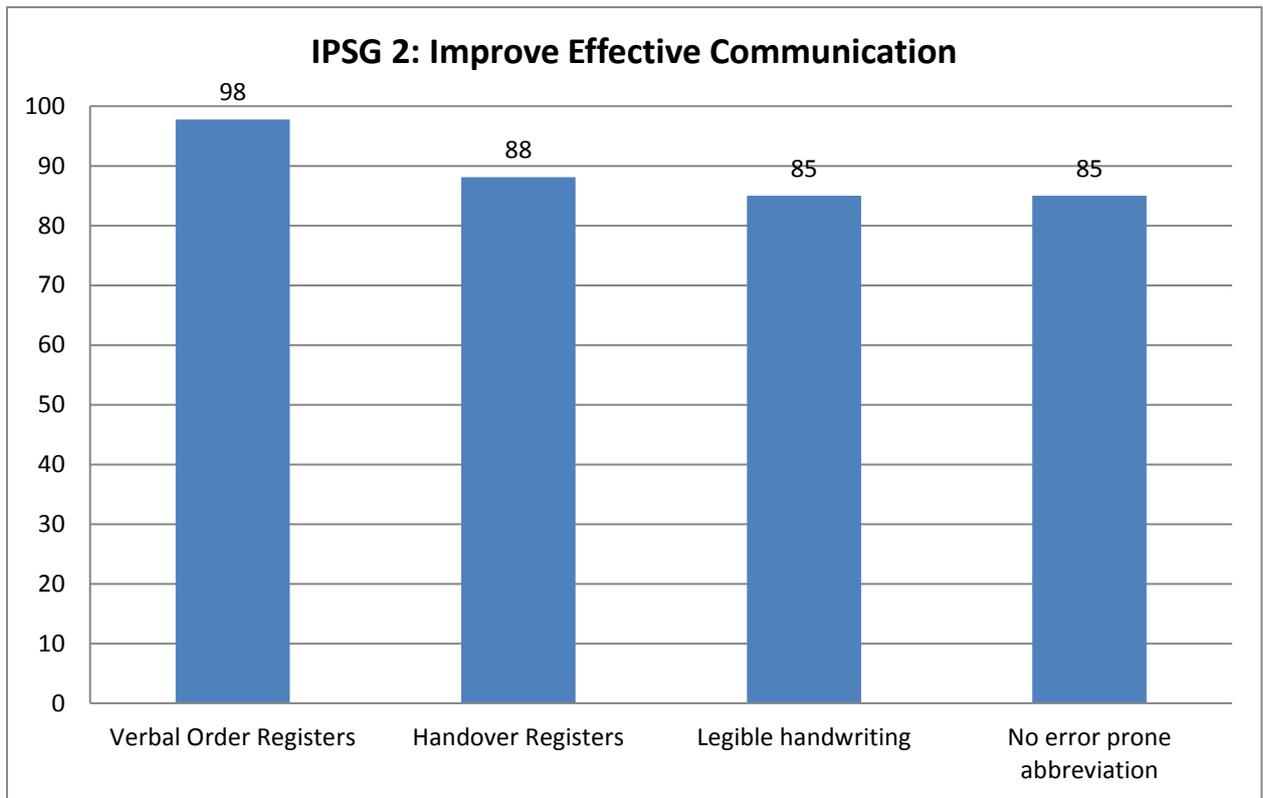


Fig 2: shows the IPSG 2, which is to improve effective communication.

Interpretation:

- Handovers where nursing staff was not communicating the other staff of the next shift.
- Secondly, in medication charts where the writing of the resident doctors was not legible enough to be understood as they were not using the capital handwriting while prescribing the medicines.
- Error prone abbreviations were used during the prescription which made it difficult for nursing staff to understand.

3.

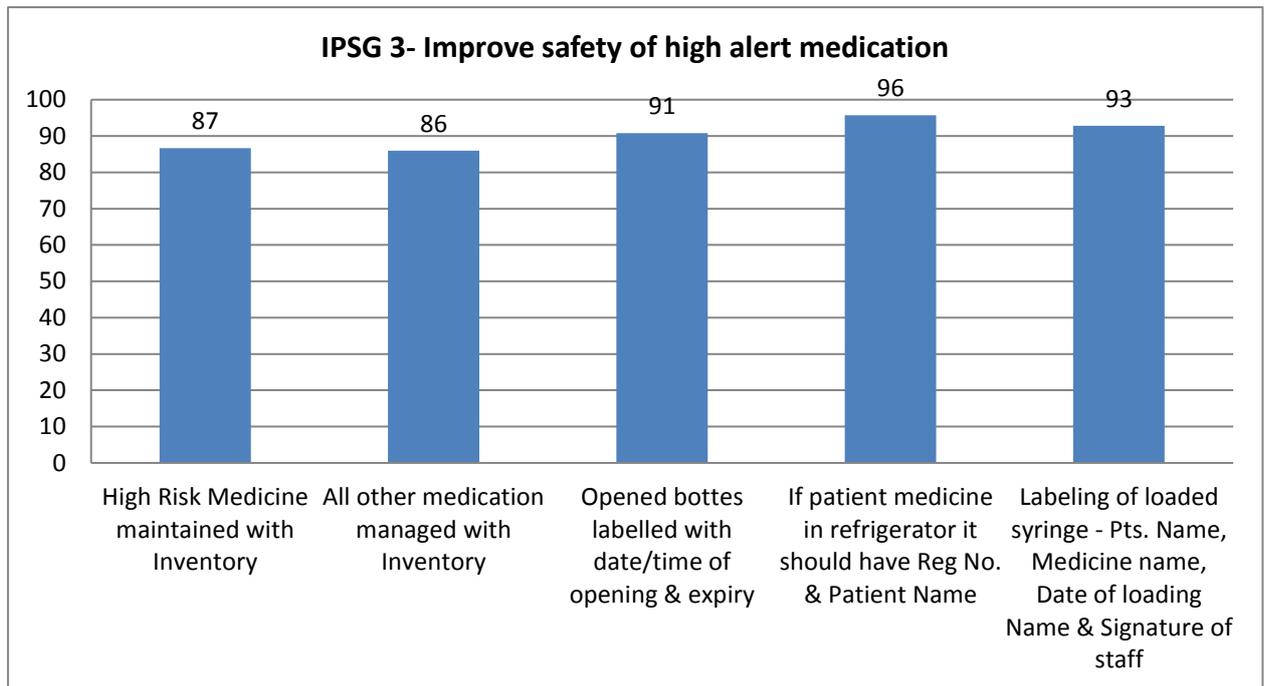


Figure 3: The above graph depicts the IPSG 3, which is to improve safety of high alert medication

Interpretation:

- There was no inventory and record of the high risk medicines before which sometimes used to make difficult for nursing staff to differentiate them from other medications as the other medicines were too not having any inventory and record.
- Sometimes opened bottles were not found to be labeled with date and time of opening thus could not differentiate between the used one and the new bottle.
- Nursing staff was not writing the registration on the patient's medicines that were kept in refrigerator.

4.

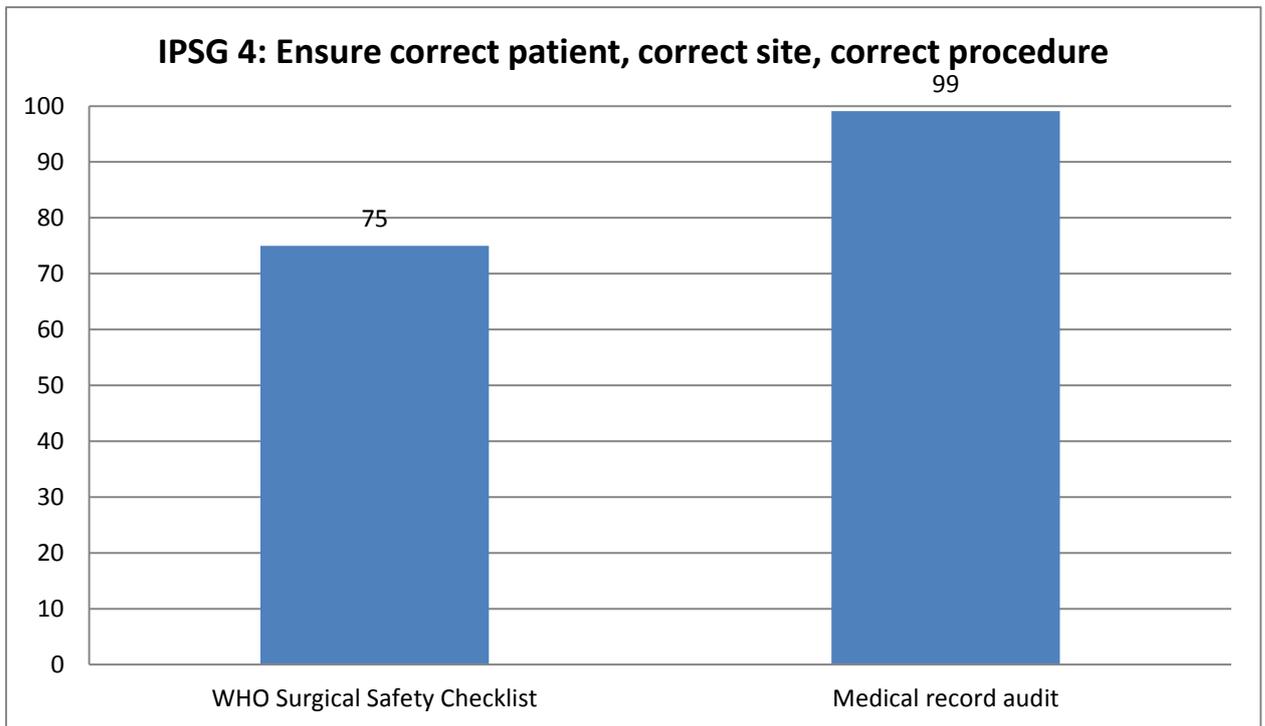


Figure 4: The above graph is of IPSG 4, which is to ensure correct patient, correct site, and correct procedure.

Interpretation:

It can be interpreted from the given graph that the parameter WHO Surgical Safety Checklist shows the sudden increase from February to April. In the month of February it was observed during the time of surgeries staff was not filling the checklist as many of them did not know about the criteria of filling it.

5.

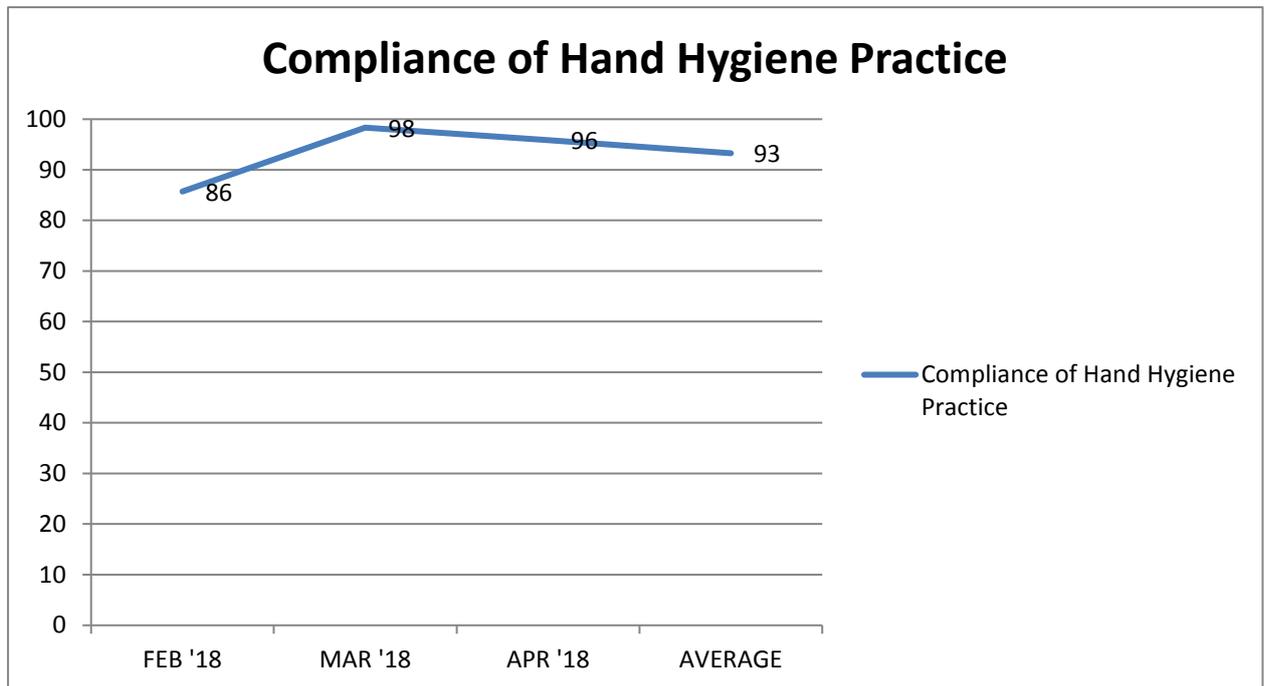


Figure 5: The above graph is of IPSG 5, which is to reduce risk of hospital acquired infection.

Interpretation:

- The nursing staff was not following the hand hygiene practices as they were not well trained about the hand hygiene and hand washing movements.
- They were not aware about that when should hand hygiene practice should take place.
- They were not aware about the six steps of hand washing.

6.

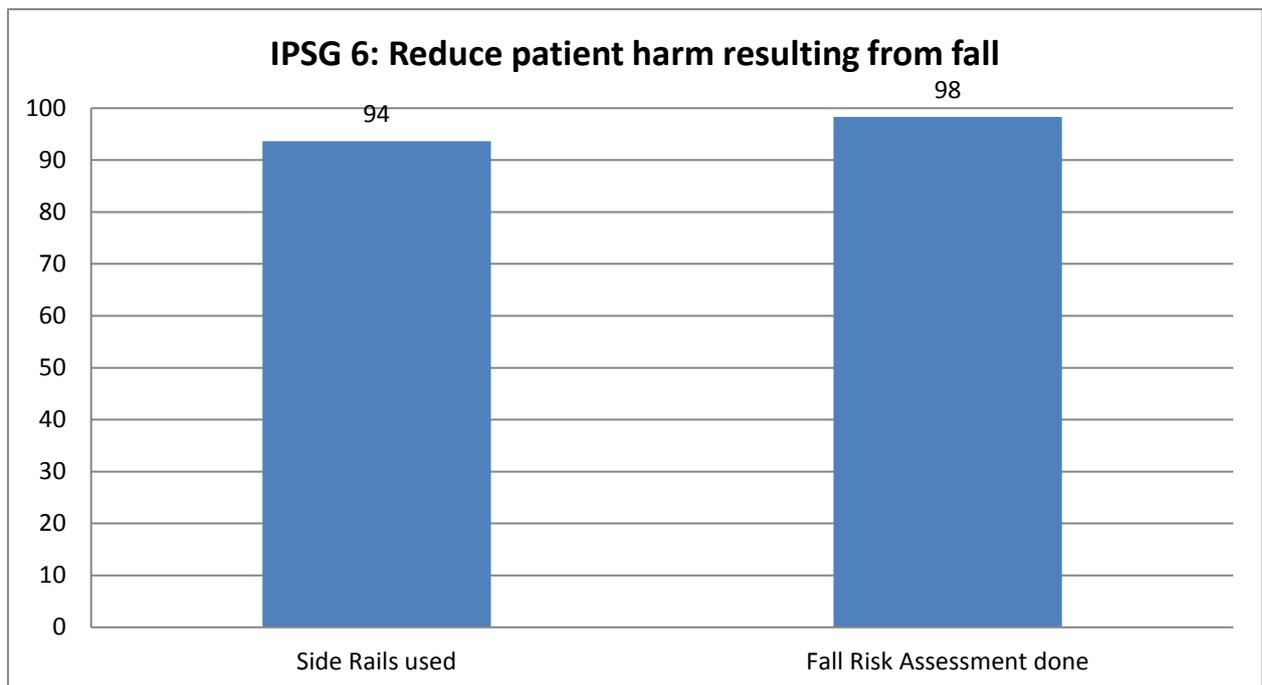


Figure 6: The above graph shows the IPSG 6, which is to reduce patient harm resulting from fall.

Interpretation:

It can be depicted that side rails and belts were not used while transferring the patients from one place to another on stretcher as well as on wheel chairs. The main problem was observed during the transfer of vulnerable patients who were unconscious and needed extra care. The gap was found because the staff was not trained on this matter.

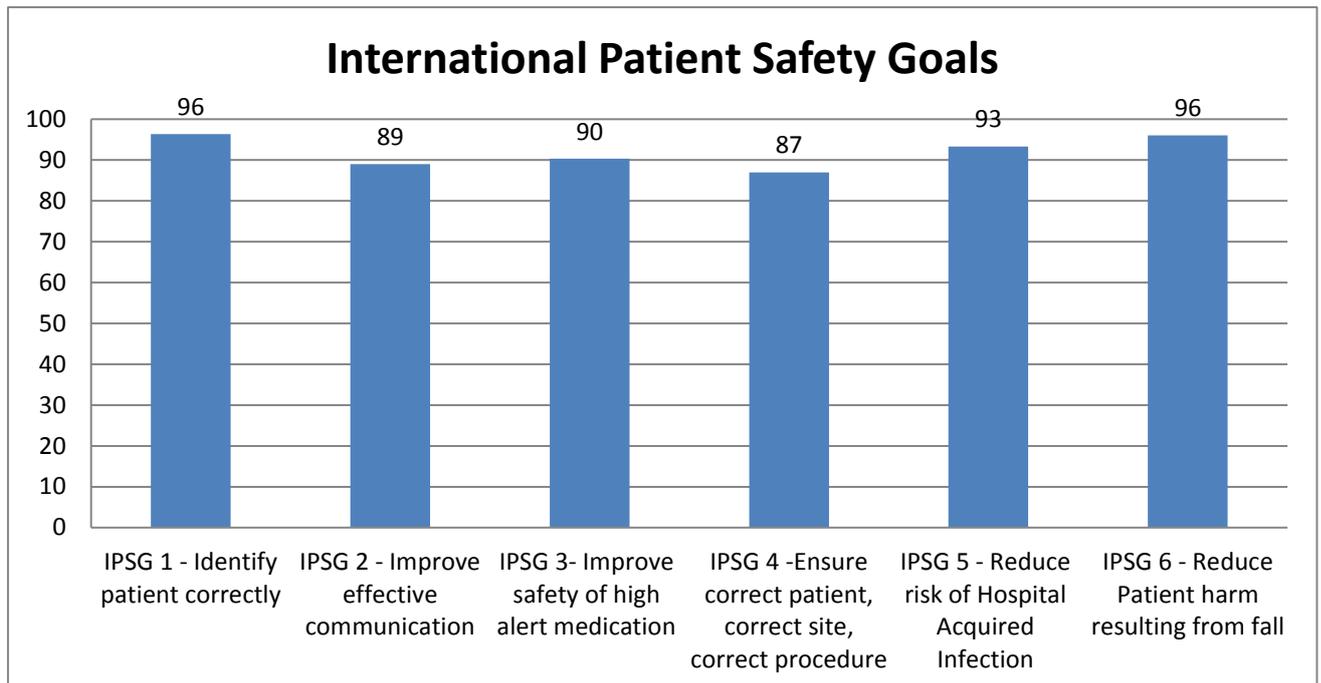


Figure 7: The above graph shows the average compliance of all the six International Patient Safety Goals from the month of February to April.

Discussion

Based on the data collected, staff was not aware of the standard practices. The failure to correctly identify patients continues to result in medication errors, wrong person procedures, etc. Fortunately, available interventions and strategies can significantly reduce the risk of patient misidentification.

The major areas where patient misidentification can occur include drug administration, blood transfusion and surgical intervention. Color coding of wristbands facilitates rapid visual recognition of specific issues. In order to improve the compliance the management will continue to conduct awareness for all staff, to perform regular audit (Thomas P, 2004).

From the data collected it was observed that the main reason for the lower compliance was due to insufficient knowledge among staff and lack of confidence in giving recommendation to consultant.

The gaps in communication can cause serious breakdowns in the continuity of care, inappropriate treatment and potential harm to the patient (Patient Safety Solutions, Volume 1, solution 3, 2007).

Based on the data collected, high risk medicines were not kept separated before, they were not labeled and were not identified from other medications as there was no inventory as well.

High alert medications have risk of significant harm if the wrong route is chosen or a system failure occurs. Mistakes involving medications are among the most common healthcare errors.

Recommendations/ Suggestions:

- **Identify Patient Correctly**

- a) To use two patient identifiers during and before any procedure or treatment which are Name and the Registration Number.
- b) To compare the two identifiers with the arm band to ensure the correct patient receives the correct treatment.

- **Improve Effective Communication**

- a) To get the important test results to the right people timely.
- b) Documentation of who called and the time for all the critical values.
- c) To conduct bedside shift reports.
- d) To ensure that verbal order registers are signed by the Doctor by whom the order was received.

- **Improve safety of high alert medication**

- a) To label all the medicines, syringes with proper labels and stickers.
- b) To use bedside scanning of patient reports and medication charts for confirming the medicines.
- c) To complete the medication history.

- **Ensure correct patient, correct site, correct procedure**

- a) To follow universal protocol policy (correct patient and the correct site)
 - b) To ensure that the physician marks the correct site on the patient's body prior to surgery/ procedure.
-
- **Reduce risk of Hospital Acquired Infection**
 - a) Following hand cleaning guidelines to improve hand cleaning.
 - b) Displaying the signages of hand washing step and hand hygiene movements on each and every nursing station.
-
- **Reduce patient harm resulting from fall**
 - a) Screening of patients to determine which patient is more vulnerable and needs extra care.
 - b) Arranging appropriate transferring methods to ensure patient safety and to reduce patient harm from the fall.
 - c) Ensuring that every bed and wheelchair is with side rails and belts so that while transferring a patient, they can be handled with care.

Conclusions

Patient safety is the cornerstone of high quality health care. Nurses are critical to the surveillance and coordination that reduce such adverse outcomes. Much work remains to be done in evaluating the impact of nursing care on positive quality indicators, such as appropriate self-care and other measures of improved health status.

References

1. Devine J, Chutkan N, Norvell DC, Dettori JR. Avoiding wrong site surgery: a systematic review. *Spine (Phila Pa 1976)* 2010;35:S28–S36.
2. Meinberg EG, Stern PJ. Incidence of wrong-site surgery among hand surgeons. *J Bone Joint Surg Am* 2003;85:193–197.
3. Schweitzer KM Jr, Brimmo O, May R, Parekh SG. Incidence of wrong-site surgery among foot and ankle surgeons. *Foot Ankle Spec* 2011;4:10–13.
4. Wong DA, Herndon JH, Canale ST, et al. Medical errors in orthopaedics. Results of an AAOS member survey. *J Bone Joint Surg Am* 2009;91:547–557.
5. (Sentinel Event Alert, 57 (2017), pp. 1–8 Accessed Apr 19, 2018 https://www.jointcommission.org/assets/1/18/SEA_57_Safety_Culture_Leadership_0317.pdf Mar 1)
6. Eisenberg JM. Continuing education meets the learning organization: the challenge of a systems approach to patient safety. *J Contin Educ Health Prof* 2000;20:197–207.
7. Laposata M, Dighe A. "Pre-pre" and "post-post" analytical error: high-incidence patient safety hazards involving the clinical laboratory. *Clin Chem Lab Med* 2007;45:712–719.

8. Stroobants AK, Goldschmidt HM, Plebani M. Error budget calculations in laboratory medicine: linking the concepts of biological variation and allowable medical errors. *Clin Chim Acta* 2003;333:169–176.
9. Valenstein PN, Raab SS, Walsh MK. Identification errors involving clinical laboratories: a college of American pathologists Q-Probes study of patient and specimen identification errors at 120 institutions. *Arch Pathol Lab Med* 2006;130:1106–1113.
10. Runciman WB, Helps SC, Sexton EJ *et al.* A classification for incidents and accidents in the health-care system. *J Qual Clin Prac* 1998; 18: 199–211.
11. Elder NC, Dovey SM. Classification of medical errors and preventable adverse events in primary care: A synthesis of the literature. *J Fam Pract* 2002; 51: 927–932.
12. Radecki RP, Sittig DF. Application of electronic health records to the Joint Commission's 2011 National Patient Safety Goals. *JAMA* 2011;306:92-93
13. Jha AK, Classen DC. Getting moving on patient safety -- harnessing electronic data for safer care. *N Engl J Med* 2011;365:1756-1758
14. Brennan TA, Leape LL, Laird N *et al.* Incidence of adverse events and negligence in hospitalised patients: results of the Harvard Medical Practice Study. *N Engl J Med* 1991; 324: 370–377.

15. Aspden P, Corrigan J, Wolcott J, et al., editors. Patient safety: achieving a new standard for care. Washington, DC: National Academies Press; 2004.
16. Nightingale F. I have done my duty. In: Goldie SM, editor. Florence Nightingale in the Crimean War, 1854–56. Manchester: Manchester University Press; 1987.
17. Donchin Y, Gopher D, Olin M, et al. A look into the nature and causes of human errors in the intensive care unit. *Qual Saf Health Care*. 2003;12:143–148.
18. Keyes C. Coordination of care provision: The role of the ‘handoff.’ *Int J Qual Health Care*. 2000;12:519.
19. Anderson, James G. 2002. Evaluation in health informatics: Computer simulation. *Computers and Biology in Medicine* 32 (3): 151-164.
20. Lingard I, Reznick R, Espin S, Regehr G, DeVito I. Team communications in the operating room: *talk patterns, sites of tension, and implications for novices*. *Acad Med* 2002; 77: 232-7
21. de Leval MR, Carthey JC, Wright DJ, Farewell VT, Reason JT. Human factors and cardiac surgery: a multicenter study. *J Thorac Cardiovasc Surg* 2000;119:661–72